文件说明 Document Remarks	机 型 Eng. Type	CMD-MAN B&W 6G60ME-C MK9.5
	台 份 Set No.	44#45#46#47#
	工程编号 Engine No.	CE0561Y/562Y/576A/580A
	船 厂 Shipyard	江苏新时代造船有限公司
	船 号 Hull No.	0311117/18/19/20
	船级社 Classification Society	ABS

CMD-MAN B&W 6G60ME-C MK9.5

LIST OF SPARE PARTS

备件清单

△1 1 G60MEC-160王勇20180729

	5
	4
	3
	2
	1

修 改 说 明
Corrected Description

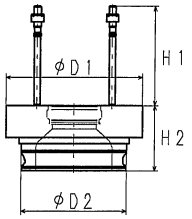
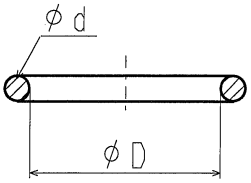
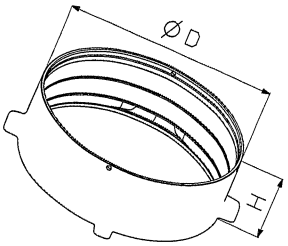
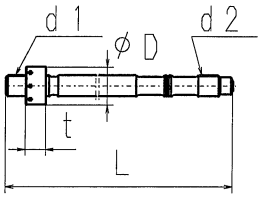
						5
						4
						3
						2
						1
王勇 2018.3.13	魏宇刚 2018.3.13	刘勇 2018 3.13				0
编 制 Compiled	校 对 Checked	审 核 Confirmed	审 定 Approved	会 签 Countersigned	批 准 Authorized	版本号 C.No.
被替代文件编号 Replace No.		设计参考文件编号 Reference No.		页数 Pages 1	总页数 Total Pages	34

上海中船三井造船柴油机有限公司 CSSC-MES Diesel Co., Ltd.	文件编号 Document No.	CE056143

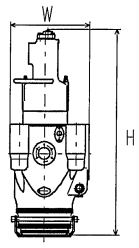
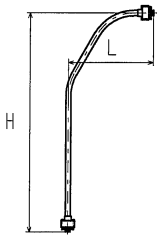
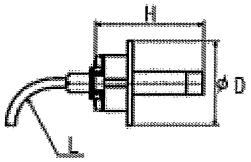
INDEX
目录

ITEM	Discription	Page
A	: Cylinder cover & indicator valve 缸盖与示功阀	3
B	: Exhaust valve 排气阀	4
C	: Starting valve 起动阀	5
D	: Fuel valve 喷油阀	6
E	: Indicator valve 示功阀	7
F	: Cylinder liner 缸套	8～9
G	: Piston complete & stuffing box 活塞总成与填料函	10～12
H	: Main & thrust bearing 主轴承与推力轴承	13
I	: Crankpin & crosshead bearing 曲柄销轴承与十字头轴承	14
J	: Telescopic pipe 伸缩套管	15
K	: Fuel oil high pressure pipe 高压燃油管	16
L	: Chain drive 链驱动	17
M	: Hydraulic cylinder unit(HCU) 液压缸单元	18～23
N	: Cylinder lubricator 气缸注油器	24～26
O	: Hydraulic power supply(HPS) 液压动力单元	27～31
P	: Engine control unit(ECU) 主机控制单元	32～33
Q	: SHIP OWNER's ADDITIONAL SPARE PARTS 船东额外备件	34

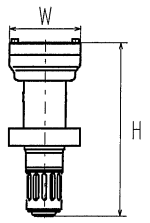
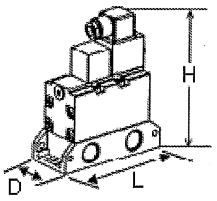
SPARES	CSSC-MES DIESEL Co., LTD.	Page 3	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
CYLINDER COVER			

NAME	SKETCH	MATERIAL	SUPPLY PER SHIP WORKING	SUPPLY PER SHIP SPARE	DRAWING NO.	BOX NO. / WEIGHT (kg)
A-1 缸盖总成(不含水套、阀件、密封圈) Cylinder cover complete with stud, nuts (excluding cooling jacket, valves, O-ring)	 D1=1100, D2=860, H1=748.5, H2=495	Components	1 × cyl	1	341A	1×1843.2
A-2 O型密封圈 O-ring	 D=775, d=8.4	5572	2 × cyl	2	341A9	For A-1 1×0.3
A-3 缸盖冷却水套 Cooling jacket for cyl. Cover	 D=860, H=228	Components	1 × cyl	1	341A12	1×106
A-4 缸盖螺柱、螺母 Stud & nut for cover tightening	 d1=M68×6, d2=M76×6, D=122, t=66, L=2455	Steel	8 × cyl	4	231E105 231E115	4×127.7

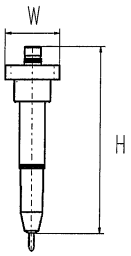
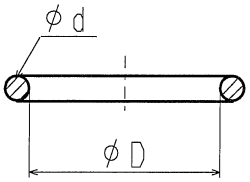
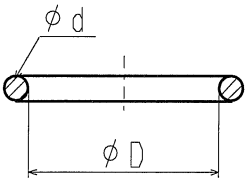
MANUFACTURER	CSSC-MES DIESEL Co., LTD.	CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 4	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
EXHAUST VALVE						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
B-1 排气阀总成 Exhaust valve complete	 H=1527,W=800	Components	1 × cyl	2	343A	2×775.5
B-2 排气阀液压管总成 High pressure pipe complete (Exh. valve)	 L=1044,H=2359	Components	1 × cyl	1	434B	1×72.5
B-3 传感器 Inductive sensor	 H=124, D=80,L=8m	Components	1 × cyl	1	343A146	1×0.7
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

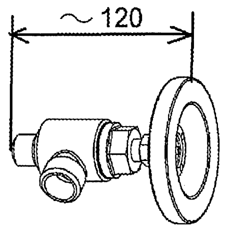
SPARES	CSSC-MES DIESEL Co.,LTD.	Page 5	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
STARTING VALVE			

NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
C-1 起动阀总成 Starting valve complete	 H=454, W=187	Components	1 × cyl	1	346A	1×30.8
C-2 两位三通电磁阀 3/2-way solenoid valve	 H=151, L=128, D=56	Components	1 × cyl	1	531L7	1×1.2

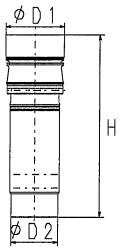
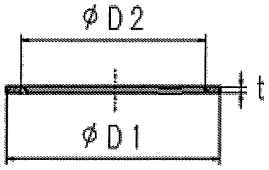
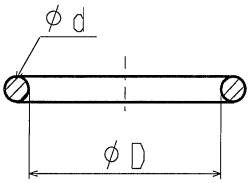
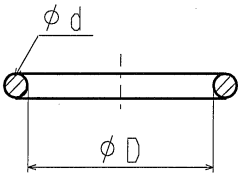
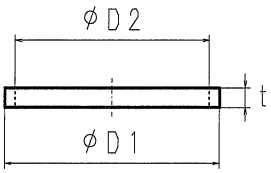
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.	CE056143

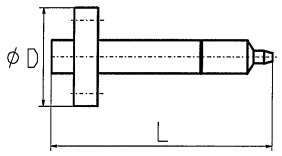
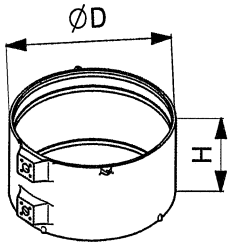
SPARES	CSSC-MES DIESEL Co., LTD.				Page 6	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
FUEL VALVE						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
D-1 喷油器总成 Fuel valve complete	 H=416.3, W=156	Components	3 ×cyl	15	344A	15×7.95
D-2 O型密封圈 O-ring	 D=54.5, d=3	5572	3 × cyl	6	344A8	6×0.003
D-3 O型密封圈 O-ring	 D=40, d=3	5572	3 × cyl	6	344A13	6×0.3
MANUFACTURER	CSSC-MES DIESEL Co., LTD.					CE056143

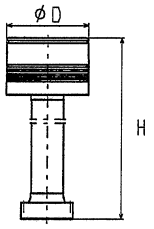
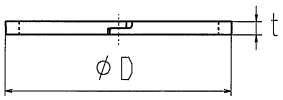
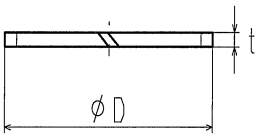
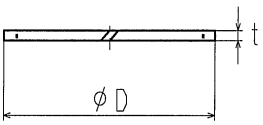
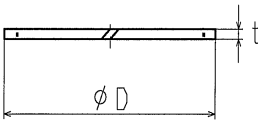
SPARES	CSSC-MES DIESEL Co., LTD.	Page 7	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
INDICATOR VALVE			

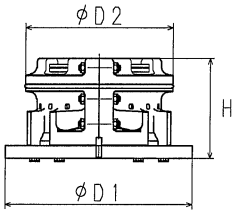
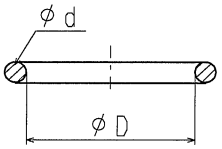
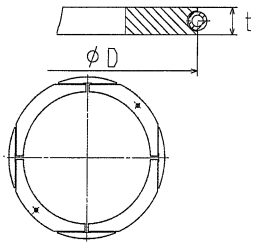
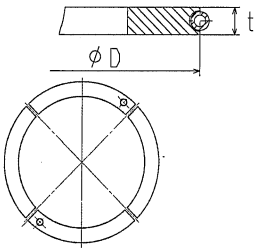
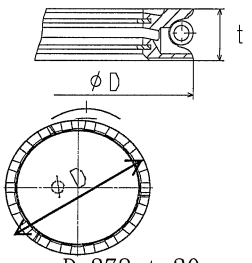
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT (kg)
E-1 示功阀总成 Indicator cock		Components	1 × cyl	1	453AE18	 1×1.00

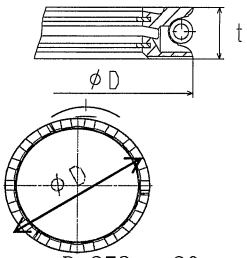
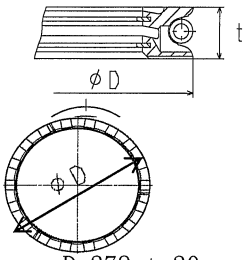
MANUFACTURER	CSSC-MES DIESEL Co., LTD.	CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 8	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
CYLINDER LINER						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
F-1 缸套(不含水套) Cylinder liner (excluding cooling jacket)	 H=3050, D1=860, D2=687	TARKALL-A	1 × cyl	1	231FG	1×3624.3
F-2 垫片 Gasket	 D1=795, D2=750, t=1.5	steel	1 × cyl	1	231F15	1×0.643
F-3 O型密封圈 O-ring	 D=652, d=7	5572	1 × cyl	1	231F12	1×0.181
F-4 O型密封圈 O-ring	 D=775, d=8.4	5572	2 × cyl	2	231F21	2×0.3
F-5 活塞清洁环 Piston cleaning ring	 D1=625, D2=598.7, t=18	4CR10SI2MO	1 X cyl	1	231F66	1×2.76
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

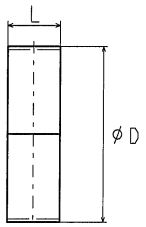
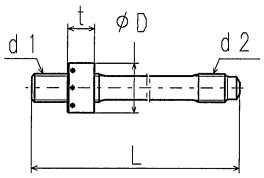
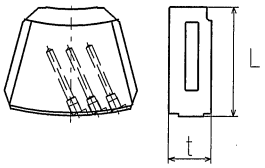
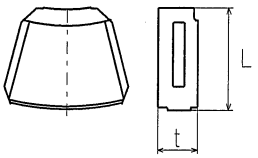
SPARES	CSSC-MES DIESEL Co., LTD.				Page 9	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
CYLINDER LINER						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
F-6 止回阀 Non-return valve for lubrication	 L=161, D2=62	Steel	8 × cyl	8	231FA	8×0.67
F-7 缸盖冷却水套 Cooling jacket for cyl. Cover	 D=860, H=496	Steel	1 × cyl	1	231F2	1×157
MANUFACTURER	CSSC-MES DIESEL Co., LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 10	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
POSTON COMPLETE & STUFFING BOX						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
G-1 活塞总成 Piston complete	 H=3815, D=595.5	Steel	1 × cyl	1	332B	1×1612.5
G-2 活塞环 Piston ring	 D=600, t=14	Cast iron	1 × cyl	1 1	332B5	For G-1 2×3.6
G-3 活塞环 Piston ring	 D=600, t=11	Cast iron	1 × cyl	1 1	332B6	For G-1 2×2.9
G-4 活塞环 Piston ring	 D=600, t=11	Cast iron	1 × cyl	1 1	332B7	For G-1 2×2.9
G-5 活塞环 Piston ring	 D=600, t=11	Cast iron	1 × cyl	1 1	332B8	For G-1 2×2.9
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

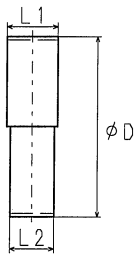
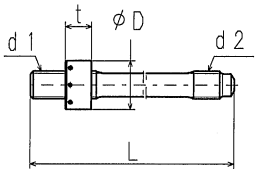
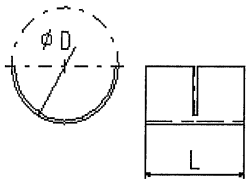
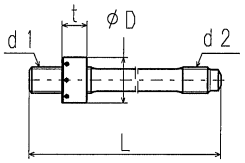
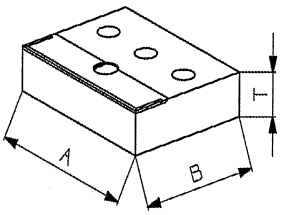
SPARES	CSSC-MES DIESEL Co., LTD.				Page 11	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
POSTON COMPLETE & STUFFING BOX						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
G-6 填料函壳体 Stuffing box (exclude G-7/8/9/10/11/12)	 D1=492, D2=404, H=240	Components	1 × cyl	1	332C	1×97.7
G-7 O型密封圈 O-ring	 D=380, d=8.4	Rubber	2 × cyl	2	332C14	For G-6 2×0.092
G-8 密封环 Sealing ring complete	 D=288, t=10	Steel	2 × cyl	2	332CD	For G-6 2×1.6
G-9 密封环 Sealing ring complete	 D=288, t=10	Steel	2 × cyl	2	332CE	For G-6 2×1.7
G-10 刮油环 Scraper ring complete	 D=278, t=20	Steel	3 × cyl	3	332CF	For G-6 3×1.26
MANUFACTURER	CSSC-MES DIESEL Co., LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 12	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
POSTON COMPLETE & STUFFING BOX						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
G-11 刮油环 Scraper ring complete	 D=278, t=20	Steel	1 × cyl	1	332CI	For G-6 1×1.6
G-12 刮油环 Scraper ring complete	 D=278, t=20	Steel	1 × cyl	1	332CK	For G-6 1×1.4
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

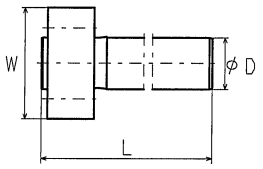
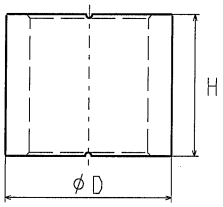
SPARES	CSSC-MES DIESEL Co.,LTD.	Page 13	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
MAIN & THRUST BEARING			

NAME	SKETCH	MATERIAL	SUPPLY PER SHIP WORKING	SUPPLY PER SHIP SPARE	DRAWING NO.	BOX NO. / WEIGHT(kg)
H-1 主轴瓦 Main bearing shell(UPPER AND LOWER)	 D=852, L=254	Bearing metal	1×cyl + 2	1	111E	1×73.2
H-2 主轴承螺柱螺母 Stud and nut for main bearing	 L=1011, d1=M64×6, d2=M64×6, t=64, D=115	Steel	4×cyl + 8	4	111D7 111D8	4×24.7
H-3 推力块 (AH) Thrust bearing segment (AH)	 L=265, t=100	Steel White metal	1	1	122A4	1×61.9
H-4 推力块 (AH) Thrust bearing segment (AH)	 L=265, t=100	Steel White metal	15	7	122A3	7×62.5

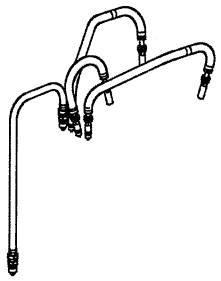
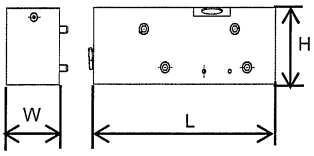
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.	CE056143

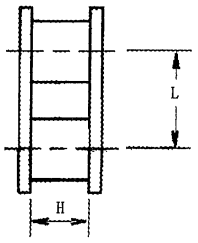
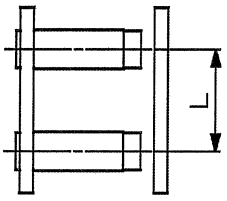
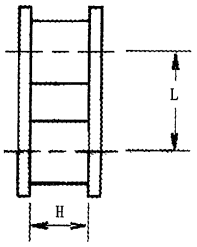
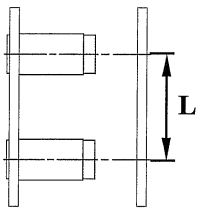
SPARES	CSSC-MES DIESEL Co.,LTD.				Page 14	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
CRANKPIN & CROSSHEAD BEARING						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
I-1 连杆大端轴瓦 Crank pin bearing shell(UPPER AND LOWER)	 L1=254, L2=190, D=934	Bearing metal	1 × cyl	1	311A5	1×80.6
I-2 连杆大端轴承用螺柱螺母 Stud and nut for crank pin bearing	 L=895, d1=M72×6 d2=M72×4 t=72, D=125	Steel	2 × cyl	2	311AB13 311AB14	2×52.1
I-3 十字头下轴瓦 Crosshead bearing-Lower	 L=638, D=686	Bearing metal	1 × cyl	1	311A9	1×66.2
I-4 连杆小端轴承用螺柱螺母 Stud and nut for crosshead bearing	 L=595, d1=M52x5 d2=M52x5 t=52, D=95	Steel	4× cyl	4	311AB5 311AB7	4×10.1
I-5 止推块 Thrust piece	 A=150, B=110, T=40	Steel	2 X cyl	2	311A11	2×3.8
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

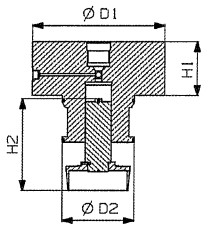
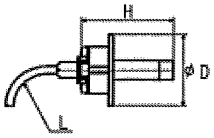
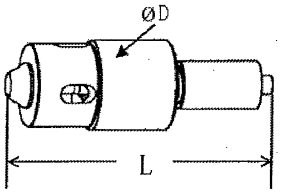
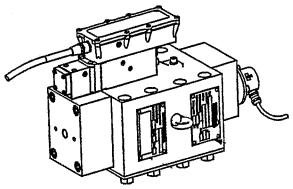
SPARES	CSSC-MES DIESEL Co.,LTD.	Page 15	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
TELESCOPIC PIPE			

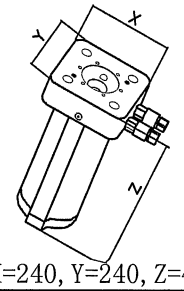
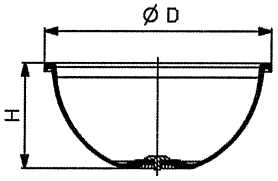
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
J-1 伸缩套管 Telescopic pipe	 L=3122, W=140, D=75	Steel	1 × cyl	1	311AD	1×39.5
J-2 衬套 （伸缩套管用） Bush for telescopic pipe	 H=100, D=120	Bronze	1 × cyl	1	231E8	1×6.19

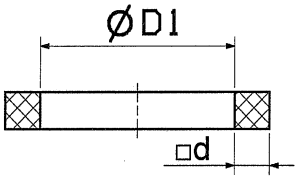
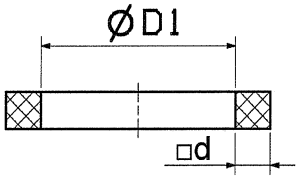
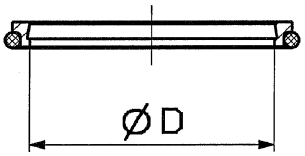
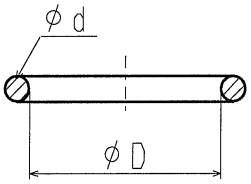
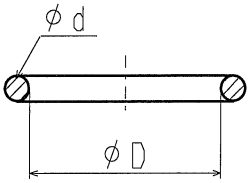
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.	CE056143

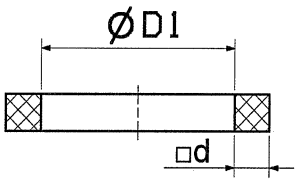
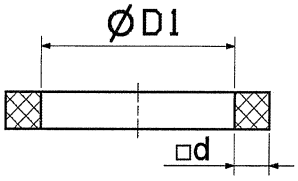
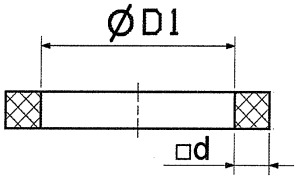
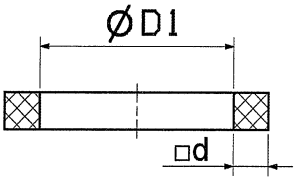
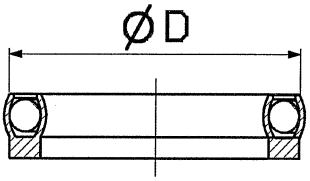
SPARES	CSSC-MES DIESEL Co.,LTD.				Page 16	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
FUEL OIL HIGH PRESSURE PIPE						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
K-1 高压油管总成 High pressure pipe complete		Components	1/each × cyl	1/each	345AE 345AG 345AH 345AI	85.1
K-2 分配块 Distributor block for high pressure pipe	 L×W×H=475×135×165	Steel	1 × cyl	1	345AL	1×76.4
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

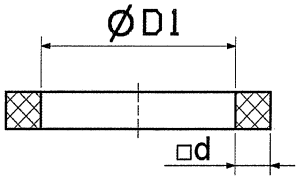
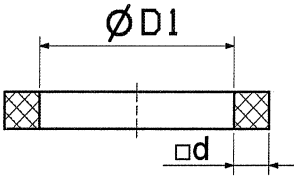
SPARES	CSSC-MES DIESEL Co.,LTD.				Page 17	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
CHAIN DRIVE						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
L-1 内链节 Inner link	 L=114.3,H=68.6	Steel	63×2 Links	6 Links	421AR2	6×6.8
L-2 外链节 Outer link	 L=114.3	Steel	63×2 Links	6 Links	421AR1	6×6.8
L-3 内链节 Inner link	 L=101.6 H=60.96	Steel	64×1 Links	6 Links	711AR2	6×4.85
L-4 外链节 Outer link	 L=101.6	Steel	64×1 Links	6 Links	711AR1	6×4.7
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 18	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC CYLINDER UNIT(HCU)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
M-1 燃油泵泵盖组件 Top cover complete	 D1=350, D2=190, H1=155, H2=265	Steel	1 × cyl	1	611ACA	1×133.9
M-2 传感器 Inductive sensor	 H=98, D=80, L=3000	Components	1 × cyl	1	611AC8	1×0.7
M-3 吸油阀组件 Suction valve	 D=30, L=93	Steel	1 × cyl	1	611ACB	1×0.27
M-4 FIVA多通阀 Mult-way valve		Components	1 × cyl	1	611A78	1×47.4
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

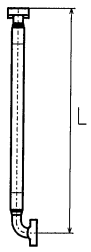
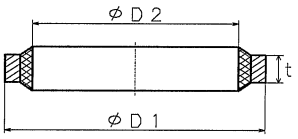
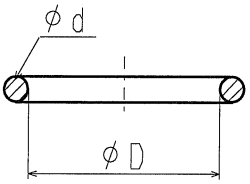
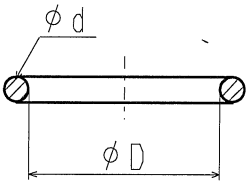
SPARES	CSSC-MES DIESEL Co.,LTD.				Page 19	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC CYLINDER UNIT(HCU)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
M-6 排气阀驱动机构 Hydraulic exhaust actuator	 X=240, Y=240, Z=445	Components	1 × cyl	1	611AB	1×106.4
M-7 10L蓄压罐膜瓣 Diaphragm for accumulater(10L)	 D=284, H=129(10L)	Components	1 × cyl	1	611AI1	1×0.5
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 20	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC CYLINDER UNIT(HCU)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
M-11 密封圈 Square-section sealing ring	 D=113.89, d=3.4	NBR	3 × cyl	3	611AB6	3×0.005
M-12 密封圈 Square-section sealing ring	 D=23.39, d=3.4	NBR	3 × cyl	3	611AB14	3×0.002
M-13 密封圈 Sealing ring	 D=106	Components	2 × cyl	2	611AC9	2×0.009
M-14 O型密封圈 O-ring	 D=24.5, d=3	5572	1 × cyl	1	611AC12	1×0.002
M-15 O型密封圈 O-ring	 D=34.5, d=3	5572	1 × cyl	1	611AC14	1×0.002
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

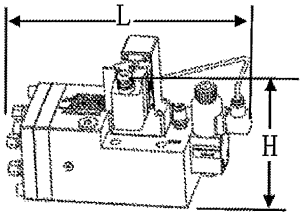
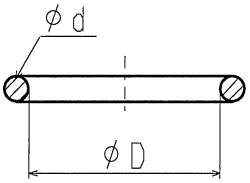
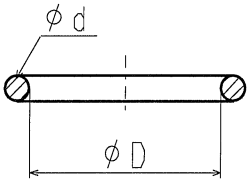
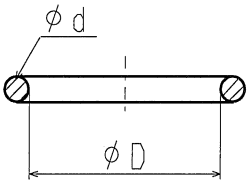
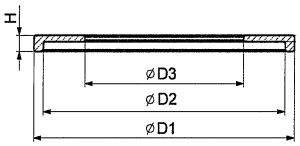
SPARES	CSSC-MES DIESEL Co.,LTD.				Page 21	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC CYLINDER UNIT(HCU)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
M-16 密封圈 Square-section sealing ring	 D=142.24, d=5.16	NBR	1 × cyl	1	611AC16	1×0.018
M-17 密封圈 Square-section sealing ring	 D=227.97, d=5.16	NBR	1 × cyl	1	611AC18	1×0.04
M-18 密封圈 Square-section sealing ring	 D=31.34, d=3.4	NBR	1 × cyl	1	611AC21	1×0.002
M-19 密封圈 Square-section sealing ring	 D=18.77, d=1.68	NBR	2 × cyl	2	611AC24	2×0.001
M-20 密封圈 Sealing ring	 D=190	5572	2 × cyl	2	611ACA6	2×0.009
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 22	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC CYLINDER UNIT(HCU)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
M-21 密封圈 Square-section sealing ring	 D=40.87, d=3.4	NBR	4 × cyl	4	611AF4	4×0.002
M-22 密封圈 Square-section sealing ring	 D=40.87, d=3.4	NBR	1 × cyl	1	611AI6	1×0.002
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

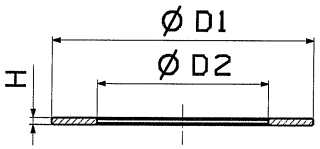
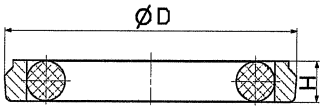
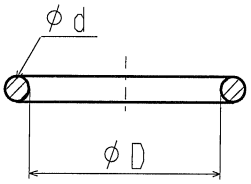
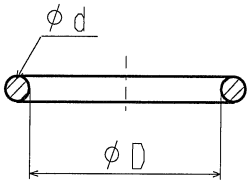
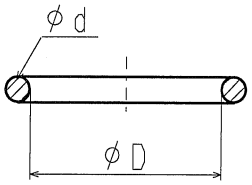
SPARES	CSSC-MES DIESEL Co.,LTD.	Page 23	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
HYDRAULIC CYLINDER UNIT(HCU)			

NAME	SKETCH	MATERIAL	SUPPLY PER SHIP WORKING	SUPPLY PER SHIP SPARE	DRAWING NO.	BOX NO. / WEIGHT(kg)
M-26 高压软管 Hose with 2 couplings	 L=570	Components	1 × cyl	1	611D1	1×12.4
M-27 垫圈 (HCU高压管用) Gasket, round special, for main hydraulic pipe	 D1=63.5, D2=51.7, t=3.3		2 × cyl +1	2	611D26	2×0.025
M-28 O型密封圈 (HCU高压软管用) O-ring for high-presssure hose	 D=24.99, d=3.53	NBR	1 × cyl	1	611D14	1×0.002
M-29 O型密封圈 (HCU高压软管用) O-ring for high-presssure hose	 D=32.92, d=3.53	NBR	1 × cyl	1	611D32	1×0.002

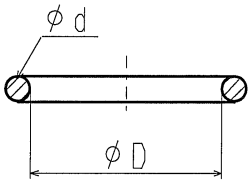
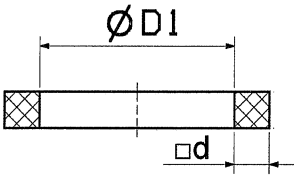
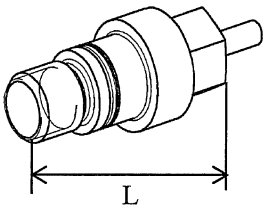
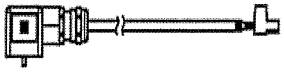
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.	CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 24	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
CYLINDER LUBRICATOR						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
N-1 缸套注油器组件 Lubricator	 L=360, H=260	Components	1 × cyl	1	611AH	1×28.93
N-2 O型密封圈 O-ring	 D=109.5, d=3	5572	1 × cyl	1	611AH13	1×0.465
N-3 O型密封圈 O-ring	 D=10, d=2	5572	1 × cyl	1	611AH14	1×0.225
N-4 O型密封圈 O-ring	 D=15, d=1.5	Viton	8 × cyl	8	611AH15	8×0.174
N-5 Disc special 垫圈	 D1=83, D2=77, D3=50.5, H=5	SFjR	1 × cyl	1	611AH27	1×0.07
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

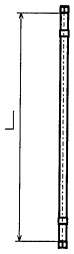
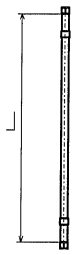
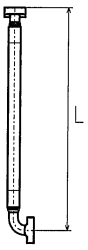
SPARES	CSSC-MES DIESEL Co.,LTD.	Page 25	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
CYLINDER LUBRICATOR			

NAME	SKETCH	MATERIAL	SUPPLY PER SHIP WORKING	SUPPLY PER SHIP SPARE	DRAWING NO.	BOX NO. / WEIGHT (kg)
N-6 Disc special 垫圈	 D1=77, D2=50.5, H=2	Components	1 × cyl	1	611AH28	1×0.04
N-7 密封圈 Sealing ring	 D=22, d=3	NBR	1 × cyl	1	611AH29	1×0.002
N-8 O型密封圈 O-ring	 D=9, d=1.5	5560	1 × cyl	1	611AH37B	1×0.001
N-9 O型密封圈 O-ring	 D=8.5, d=1	5560	8 × cyl	8	611AH45	8×0.013
N-10 O型密封圈 O-ring	 D=17.1, d=1.6	5572	1 × cyl	1	611AH46	1×0.174

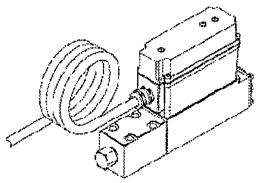
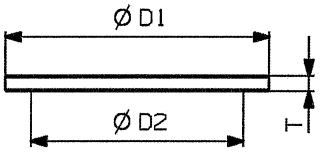
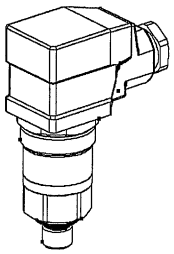
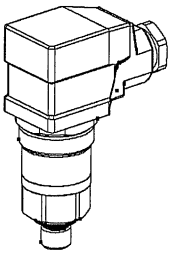
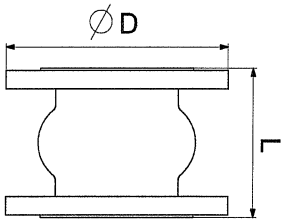
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.	CE056143

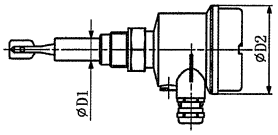
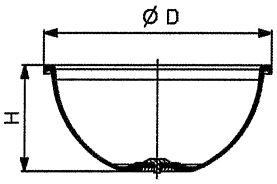
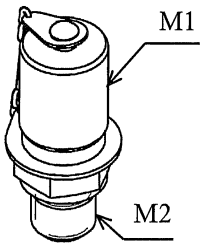
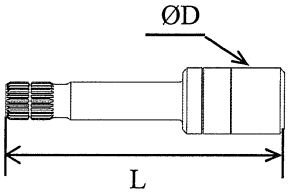
SPARES	CSSC-MES DIESEL Co.,LTD.				Page 26	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
CYLINDER LUBRICATOR						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
N-11 O型密封圈 O-ring	 D=12, d=1.5	5560	1 × cyl	1	611AH47	1×0.142
N-12 密封圈 Square-section sealing ring	 D=13.94, d=2.51	NBR	2 × cyl	2	611AH48	2×0.001
N-13 传感器 Inductive sensor	 L=35	Components	1 × cyl	1	611AH37	1×0.04
N-14 注油器应急电缆 Cable for lubrication back up signal	 cable 15m	Components		2	902AR	1×0.12
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

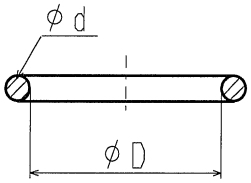
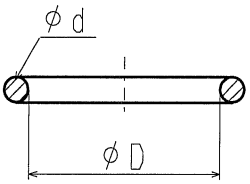
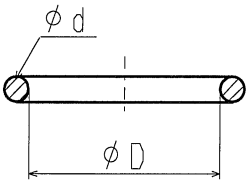
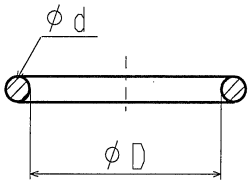
SPARES	CSSC-MES DIESEL Co.,LTD.	Page 27	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
HYDRAULIC POWER SUPPLY(HPS)			

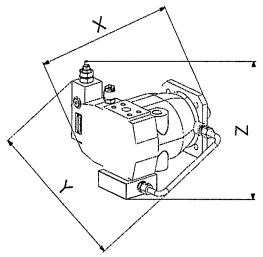
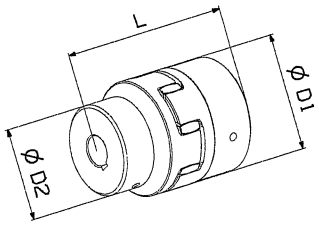
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
0-1 高压软管 Hose with 2 couplings	 L=660	Components	2	1	613BR30	1×1.7
0-1 高压软管 Hose with 2 couplings	 L=960	Components	2	1	613BR33	1×2.13
0-2 高压软管 Hose-steel with 2 flanges	 L=815	Components	3	1	613B28	1×3.87
0-3 高压软管 Hose-steel with 2 flanges	 L=1050	Components	3	1	613B30	1×4.3
0-4 高压软管 Hose with 2 couplings	 L=840	Components	2	1	613B32	1×2.0

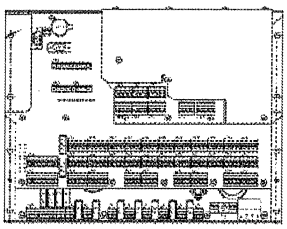
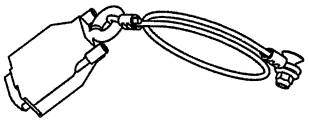
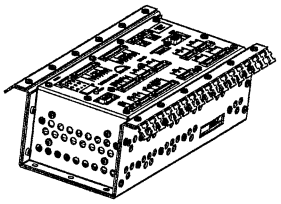
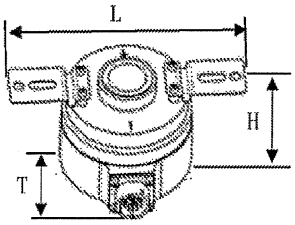
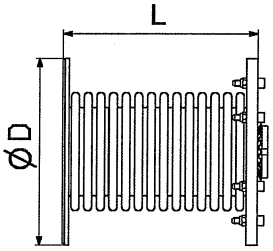
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.	CE056143

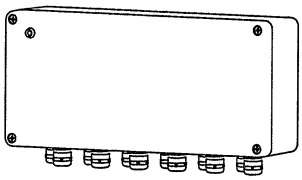
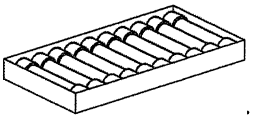
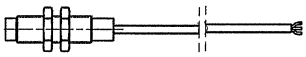
SPARES	CSSC-MES DIESEL Co.,LTD.				Page 28	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC POWER SUPPLY(HPS)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
0-6 3位4通比例阀 4/3 way proportional value		Components	3	1	612BDA3	1×10.4
0-7 垫片 Disc	 D1=53,D2=41,T=5	Components	3	1	612BEA3	1×0.034
0-8 压力传感器 Pressure transducer	 0-400Bar	Components	3	1	613A16	1×0.2
0-9 压力传感器 Pressure transducer	 0-4Bar	Components	3	1	615ZH2	1×0.2
0-10 膨胀接头 Rubber compensator, fluid type	 D=130, L=130	Components	3	1	615Z40	1×7.68
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

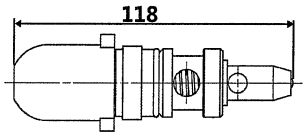
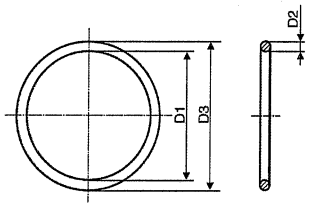
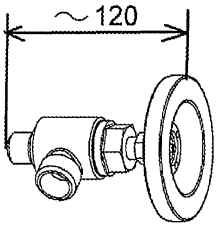
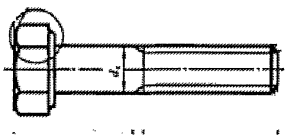
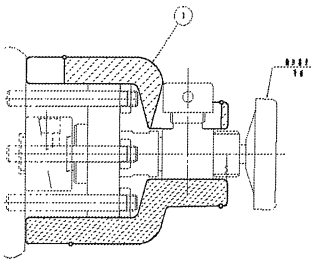
SPARES	CSSC-MES DIESEL Co.,LTD.				Page 29	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC POWER SUPPLY(HPS)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
0-11 液位开关 Level switch	 D1=28, D2=100	Components	1	1	612EC2	1×0.001
0-12 蓄压罐膜瓣 Repair kit for accumulator	 D=209, H=95(4L)	Components	3	1	612B97-C	1×0.2
0-13 快速接头 Quick coupling, Minimess	 M1=M16, M2=M14	Components	3	1	612B97-B	1×0.05
0-14 联轴器 Drive shaft	 L=340,D=70	Components	3	1	612BEA	1×6.6
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 30	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC POWER SUPPLY(HPS)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
O-16 密封圈 Square-section sealing ring	 D=32.92, d=3.53	NBR	6	1	612BH8	1×0.002
O-17 O型密封圈 O-ring	 D=24.99, d=3.53	NBR	3	1	612BH10	1×0.002
O-18 O型密封圈 O-ring	 D=24.99, d=3.53	NBR	4	1	613B111	1×0.006
O-20 O型密封圈 O-ring	 D=32.92, d=3.53	NBR	17	2	613B18	2×0.002
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 31	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
HYDRAULIC POWER SUPPLY(HPS)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
0-21 起动泵 Starting up pump	 X=252, Y=245, Z=230	Components	2	1	615BA4	1×7.0
0-22 爪型连接器 Claw coupling	 D1=94, D2=75, L=126	Components	2	1	615BAA	1×1.38
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 32	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
ENGINE CONTROL UNIT(ECU)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
P-1 多用途控制器 Multi purpose controller (MPC)	 370×283.4×83.7	Components		1	621AA2	1×4.25
P-2 钥匙 ID-Key		Components		1	621AA3	1×0.07
P-3 多用途控制器 Multi purpose controller (MPC-10)	 310×140.5×196.8	Components		1	621AA2-A	1×2.4
P-4 角度编码器 Angle encoder	 L×H×T=154×80×120	Components	2	1	623C1	1×1.00
P-5 轴承 Bearing complete	 D=160, L=154	Components	2	1	623C2	1×3.183
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 33	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
ENGINE CONTROL UNIT(ECU)						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
P-6 放大器 Amplifier	 360×160×91	Components	2	1	623C4	1×4.84
P-7 可熔保险丝 Fuse, cartridge	 3.15A, Φ5x20, 10 Pcs. 6.3A, Φ5x20, 10 Pcs. 10A, Φ5x20, 10 Pcs. 12.5A, Φ6.3x32, 10 Pcs.	Components		each 1	441U3	1×0.15
P-8 传感器 Sensor	 cable 2m	Components	1	1	441U4	1×0.09
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

SPARES	CSSC-MES DIESEL Co.,LTD.				Page 34	Total 34
MAIN DIESEL ENGINE 6G60ME-C9.5					SHIP NO.	
SHIP OWNER's ADDITIONAL SPARE PARTS 船东额外备件						
NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING NO.	BOX NO.
			WORKING	SPARE		WEIGHT(kg)
Q-1 安全阀组件 Safety valve		Components	1 × cyl	2	343AU1 343AU901	2×0.25
Q-2 起动阀密封圈 SEALING RING FOR STARTING VALVE	 D1=89.5,D2=5.7,D3=95.5	3590	1 × cyl	2	346A3	2×0.005
Q-3 示功阀总成 Indicator cock		Components	1 × cyl	1	453AE18	1×1.00
Q-4 排气阀液压管螺栓 Bolt for hydraulic pipe connection	 GB/T5782 M14*150	STEEL	16×cyl	16	434B14	16×0.2
Q-5 示功阀隔热保护 Packing for indicator valve		Components	1 × cyl	2	453B1	1×0.05
MANUFACTURER	CSSC-MES DIESEL Co.,LTD.					CE056143

文件说明 Document Remarks	机型 Eng. Type	CMD-MAN B&W 6G60ME-C MK9.5
	台份 Set No.	44#45#46#47#
	工程编号 Engine No.	CE0561Y/562Y/576A/580A
	船厂 Shipyard	江苏新时代造船有限公司
	Hull No.	0311117/18/19/20
	船级社 Classification Society	ABS

LIST OF TOOLS FOR
CMD-MAN B&W 6G60MEC MK9.5
工具清单

△1 1 G60MEC-159王勇20180727

	5
	4
	3
	2
	1

修改说明
Corrected Description

						5
						4
						3
						2
						1
王勇 2018.3.13	魏青刚 2018.3.13	刘[illegible] 2018 3.13				0
编制 Compiled	校对 Checked	审核 Confirmed	审定 Approved	会签 Countersigned	批准 Authorized	版本号 C.No.
被替代文件编号 Replace No.		设计参考文件编号 Reference No.		页数 Pages 1	总页数 Total Pages	71

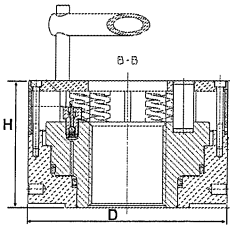
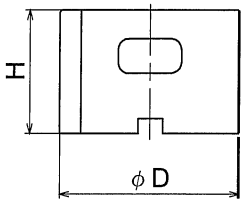
上海中船三井造船柴油机有限公司
CSSC-MES Diesel Co., Ltd.

文件编号
Document No. CE056144

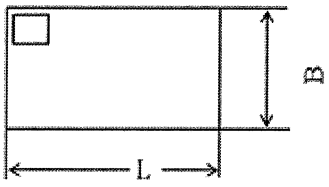
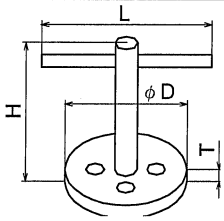
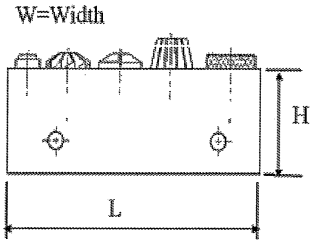
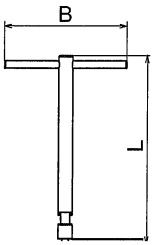
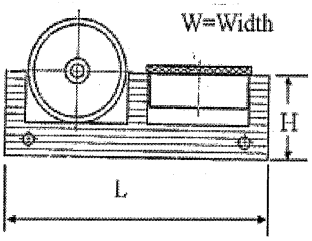
INDEX
目录

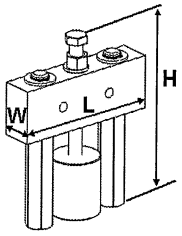
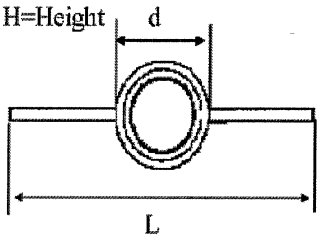
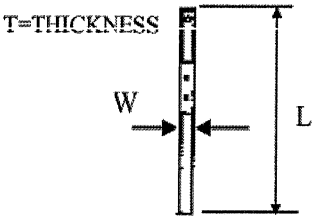
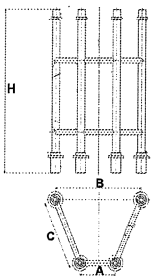
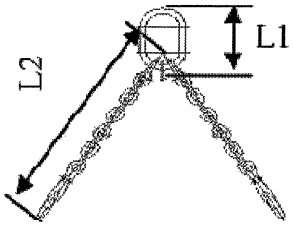
MS	DESCRIPTION	Page
901	CYLINDER COVER TOOLS 气缸盖工具	01-01～01-04
902	PISTON+ROD+STUFF.BOX,TOOLS 活塞填料函工具	02-01～02-06
903	CYLINDER LINER,TOOLS 活塞填料函工具	03-01
904	CONNECTING ROD+CROSSHEAD TOOLS 连杆十字头工具	04-01～04-07
905	CRANKSH.+THRUST BRG. TOOLS 曲轴推力轴工具	05-01～05-10
906	CHAIN AND ALPHA LUBR. TOOLS 链条和注油器工具	06-01～06-09
907	MAIN START VALVE TOOLS 主起动阀工具	07-01
908	EXHAUST VALVE, TOOLS 排气阀工具	08-01～08-06
909	FUEL OIL SYSTEM,TOOLS 燃油系统工具	09-01～09-07
910	T.C. AIR CHARGE SYSTEM TOOLS 增压系统工具	10-01～10-02
912	STAY BOLTS TOOLS 贯穿螺栓工具	12-01～12-02
913	HYDRAULIC PUMP AND GENERAL TOOLS 液压油泵和通用工具	13-01～13-11
924	END CHOCK BOLT TOOLS 端撑螺栓工具	24-01～24-02
930	SCR SYSTEM TOOLS SCR工具	30-01

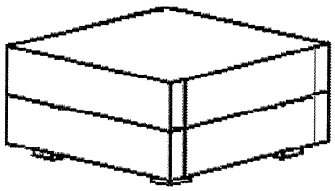
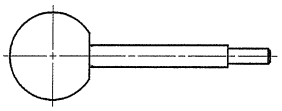
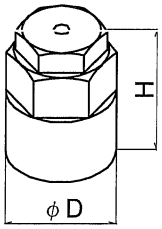
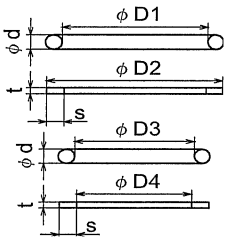
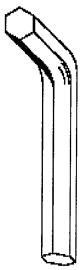
TOOLS		PAGE	01-01
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
CYLINDER COVER TOOLS		BOX NO.	

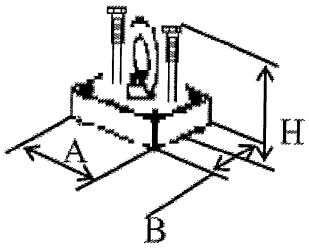
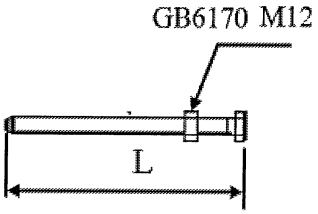
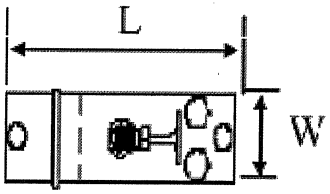
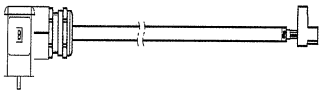
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
（适用于缸盖） 液压拉伸器 Hydraulic jack for cylinder cover	 D=195,H=123,M68×6	Components	8	901AA	In the box 装工具盒 （901C） 18.0× 8
承压圈 Support for hydraulic jack	 D=180，H=97	Steel	8	901AAB	In the box 装工具盒 （901C） 9.0 × 8

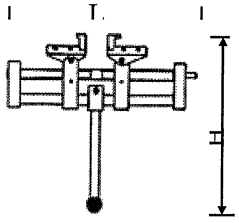
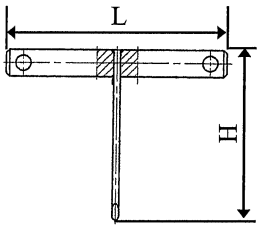
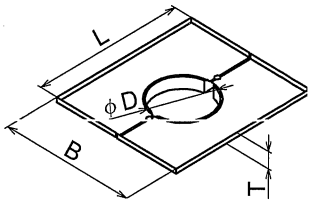
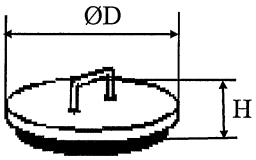
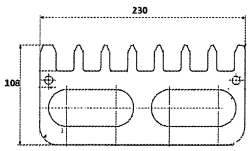
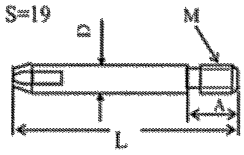
TOTAL WEIGHT 总重	216.00 kg	
CSSC-MES DIESEL CO.,LTD.		

TOOLS				PAGE	01-02
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CYLINDER COVER TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具板 Panel for tools MS901	 L=1350，B=900	Components	1	901P	43.5
排气阀座研磨工具 Grinding tool for exh. valve seat	 L=560, H=1100 D=393, T=40	Components	1	901AI	In the panel 装在工具板 (901P) 27.6
喷油器座研磨工具 Milling and grinding tool for fuel valve seat	 L×H×W=675×75×75	Components	1	901AJ	In the panel 装在工具板 (901P) 2.54
扳手 Handle-sunduy	 L=690, B=210	Steel	1	901AK	In the panel 装在工具板 (901P) 2.8
起动阀座研磨工具 Milling and grinding tool for starting valve seat	 L×W×H=335×160×100	Components	1	901AL	In the panel 装在工具板 (901P) 8.9
TOTAL WEIGHT 总重				85.34 kg	
	CSSC-MES DIESEL CO.,LTD.				

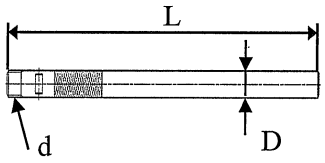
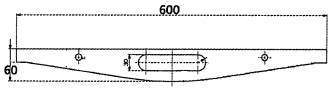
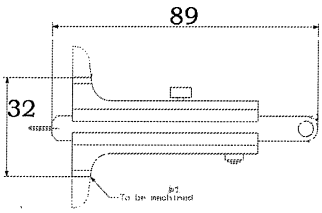
TOOLS				PAGE	01-03
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CYLINDER COVER TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
喷油器取出工具 Dism. level for fuel valve	 L=180，W=40，B=223	Steel	1	901AN	In the panel 装在工具板 (901P) 6.2
起动阀壳研磨工具 Grinding ring for starting valve	 L=265, H=56 d=Ø95	Steel	1	901AO	In the panel 装在工具板 (901P) 1.2
起动阀研磨扳手 Pin wrench for starting valve	 L=400,W=20,T=6	Steel	1	901AP	In the panel 装在工具板 (901P) 0.354
气缸盖架 Cylinder cover rack	 A=361,B=873,C=668,H=1600	Steel	1	901AE	129.2
缸盖起吊链条 Lifting chains for cylinder cover	 L1=150, L2=617	Steel	2	901AG	6.14 × 2
TOTAL WEIGHT 总重				149.20 kg	
	CSSC-MES DIESEL CO.,LTD.				

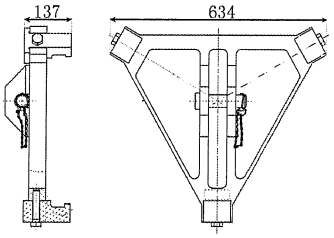
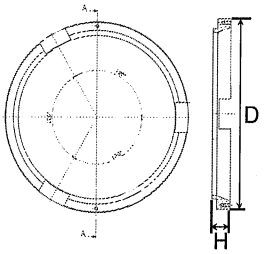
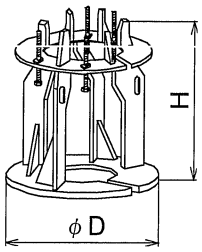
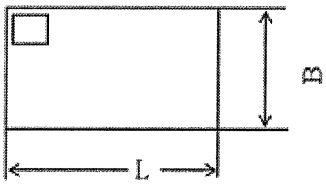
TOOLS				PAGE	01-04
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CYLINDER COVER TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tool box-hydraulic jack for cylinder cover		Components	1	901C	4.3
球形手柄 Tommy bar		Components	1	901CB	In the box 装工具盒 （901C） 0.1
拧紧螺母 Stud setter M60x4	 H=163, D=110	Steel	1	901CD	In the box 装工具盒 （901C） 7.5
带挡圈的密封圈 Sealing ring with back-up ring	 D1=134.3,D2=148,D3=94.1, D4=97,d=5.7,t=2,s=5	Components	each 8	901C10 901C3	In the box 装工具盒 （901C） 0.05 × 8
内六角扳手 Allen wrenches GB5356-85 4MMR		Steel	1	901C4	In the box 装工具盒 （901C） 0.01
TOTAL WEIGHT 总重				12.31 kg	
	CSSC-MES DIESEL CO.,LTD.				

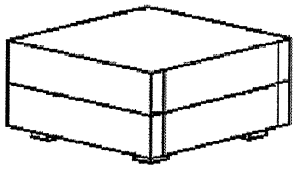
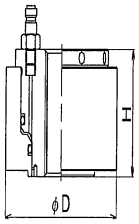
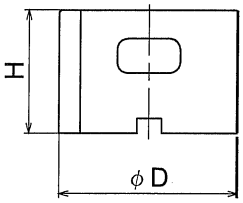
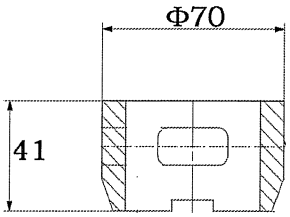
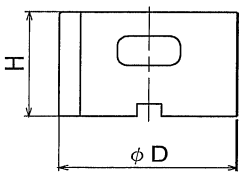
TOOLS				PAGE	02-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
PISTON+ROD+STUFF.BOX,TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
活塞杆起吊工具 Lifting tool for piston rod foot	 A=390,B=100,C=194	Steel	1	902AL	In the panel 装在工具板 (902P) 15.1
填料函拔取工具 Pulling tool for stuffing box	 L=220	Steel	2	902AM	In the panel 装在工具板 (902P) 0.23×2
压力试验工具 Pressure test tool，piston	 L×W×H=380×150×176	Components	1	902AQ	In the panel 装在工具板 (902P) 14.7
电缆 Cable	 cable length=15m	Components	1	902AR	0.12
TOTAL WEIGHT 总重				30.38 kg	
	CSSC-MES DIESEL CO.,LTD.				

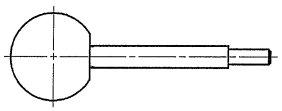
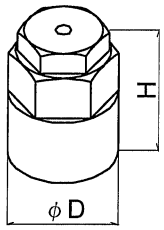
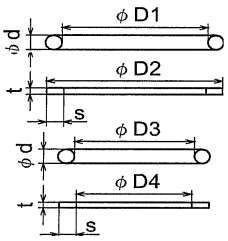
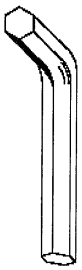
TOOLS				PAGE	02-02
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
PISTON+ROD+STUFF.BOX,TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
活塞环拆装工具 Piston ring expander	 L=332.5,H=292.5	Steel	1	902AU	In the panel 装在工具板 (902P) 3.1
弹簧安装工具 Mounting tool, stuffing box springs	 L=130,H=100	Steel	2	902AX	In the panel 装在工具板 (902P) 0.2 × 2
填料函拆装工作台 Work table for stuffing box	 L=700,B=520,T=47,D=235	Steel	1	902AY	In the panel 装在工具板 (902P) 16.5
填料函孔防护盖 Cover for stuffing box hole	 D=438,H=44	Steel	1	902AZ	In the panel 装在工具板 (902P) 7.67
填料函导板 Gauge stuffing box	 T=5	Steel	3	902A20	In the panel 装在工具板 (902P) 0.527
导向螺栓 Guide screw, piston crown	 L=225,D=Ø28, A=34,M=m27×2	Steel	1	902A48	In the panel 装在工具板 (902P) 0.99
TOTAL WEIGHT 总重				29.19 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS		PAGE	02-03
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
PISTON+ROD+STUFF.BOX,TOOLS		BOX NO.	

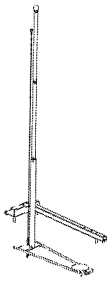
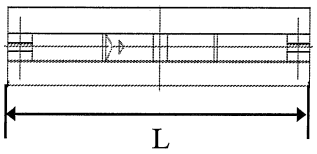
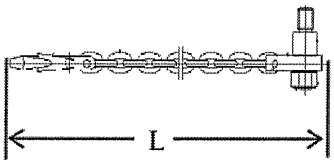
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
定距杆 distance pipe, stuffing box	 D=Ø24, L=660, d=M24	Steel	4	902A55	In the panel 装在工具板 (902P) 2.35 × 4
活塞样板 Template, piston top	 T=3	Steel	1	902A71	In the panel 装在工具板 (902P) 0.543
卡尺 Slide caliper		Steel	1	902A22	In the panel 装在工具板 (902P) 0.2
TOTAL WEIGHT 总重				10.14 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	02-04
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
PISTON+ROD+STUFF.BOX,TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
活塞起吊工具 Lifting tool, piston		Steel	1	902AI	39
活塞导向环 Guide ring for piston	 D=700,H=70	Steel	1	902H	32.76
活塞支座 Support for piston	 D=660,H=1223	Steel	2	902AN	74.3×2
工具放置板 Panel for tools MS902	 L=1800, B=900	Components	1	902P	63.1
TOTAL WEIGHT 总重				283.46 kg	
	CSSC-MES DIESEL CO.,LTD.				

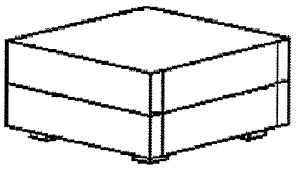
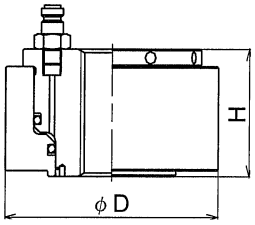
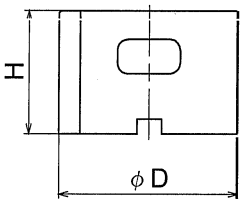
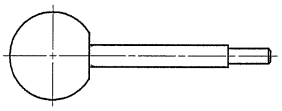
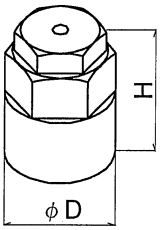
TOOLS				PAGE	02-05
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	902J	11.5
适用于十字头螺栓，HCU螺柱，活塞头 液压拉伸器 Hydraulic jack for crosshead	 M27×3 D=85,H=128	Components	4	902JB	In the box 装工具盒 （902J） 4.74 × 4
承压圈 Support for hydraulic jack	 D=70,H=50	Steel	4	902JC	In the box 装工具盒 （902J） 0.6× 4
承压圈 Support for hydraulic jack		Steel	4	902JG	In the box 装工具盒 （902J） 0.45× 4
承压圈 Support for hydraulic jack	 D=70,H=41	Steel	4	902JI	In the box 装工具盒 （902J） 0.56× 4
TOTAL WEIGHT 总重				36.90 kg	
	CSSC-MES DIESEL CO.,LTD.				

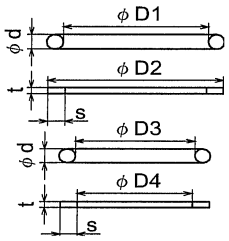
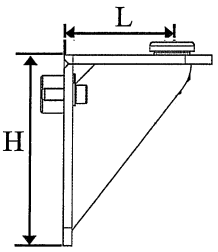
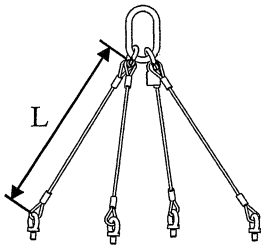
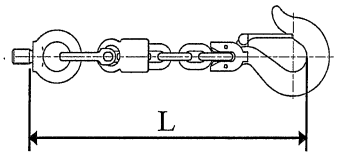
TOOLS				PAGE	02-06
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
球形手柄 Tommy bar		Components	1	902JD	In the box 装工具盒 （902J） 0.09
拧紧螺母 Stud setter	 H=105, D=50，M27×3	Steel	1	902JF	In the box 装工具盒 （902J） 0.9
带挡圈的密封圈 Sealing ring with back-up ring	 D1=44.2,D2=57,D3=34.2, D4=35,d=5.7,t=2,s=5	Components	each 4	902J6 902J5	In the box 装工具盒 （902J） 0.02×4
内六角扳手 Allen wrenches GB5356-85 4MMR		Steel	1	902J8	In the box 装工具盒 （902J） 0.01
TOTAL WEIGHT 总重				1.08 kg	
	CSSC-MES DIESEL CO.,LTD.				

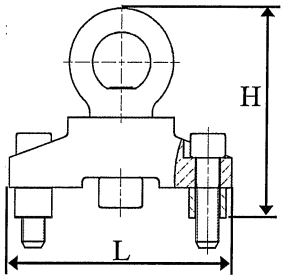
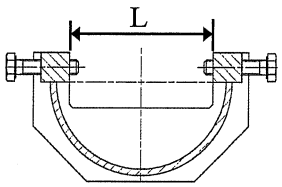
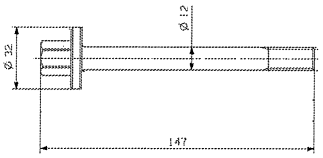
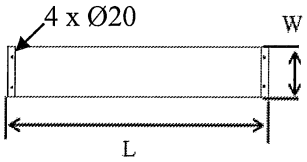
TOOLS		PAGE	03-01
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
CYLINDER LINER,TOOLS		BOX NO.	

NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
缸径规 Measuring tool for cylinder liner		Components	1	903AC	15.40
气缸套横向杆 Cross bar for cylinder liner	 L=1015	Steel	1	903AH	42.5
气缸套提升工具 Lifting tool for cylinder liner	 L=1168	Steel	2	903AL	In the panel 装在工具板 (902P) 5.7× 2

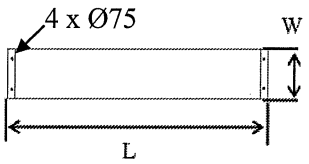
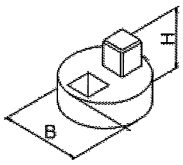
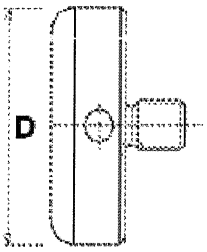
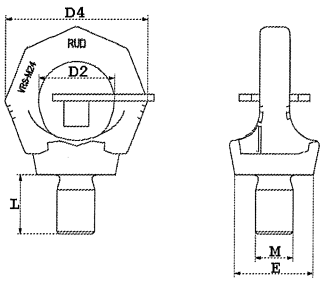
TOTAL WEIGHT 总重	69.30 kg
CSSC-MES DIESEL CO.,LTD.	

TOOLS				PAGE	04-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	904AA	11.5
十字头螺栓 液压拉伸器 Hydraulic jack for crosshead	 M52×5 D=147,H=111	Components	4	904AAB	In the box 装工具盒 （904AA） 10.76 × 4
承压圈 Support for hydraulic jack	 D=135,H=68	Steel	4	904AAC	In the box 装工具盒 （904AA） 3.2 × 4
球形手柄 Tommy bar		Components	1	904AAD	In the box 装工具盒 （904AA） 0.09
拧紧螺母 Stud setter	 H=136, D=95，M52×5	Steel	1	904AAE	In the box 装工具盒 （904AA） 4.6
TOTAL WEIGHT 总重				72.03 kg	
	CSSC-MES DIESEL CO.,LTD.				

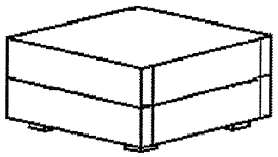
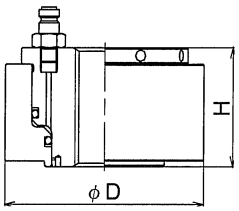
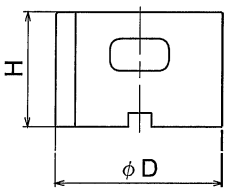
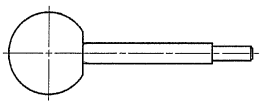
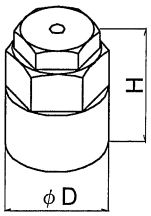
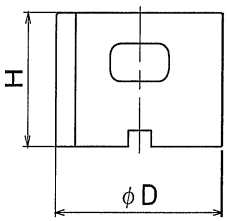
TOOLS				PAGE	04-02
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
带挡圈的密封圈 Sealing ring with back-up ring	 D1=99.1,D2=113,D3=64.2, D4=67,d=5.7,t=2,s=5	Components	each 8	904AA5 904AA6	In the box 装工具盒 （904AA） 0.034×4
内六角扳手 Allen wrenches GB5356-85 4MMR		Steel	1	904AA9	In the box 装工具盒 （904AA） 0.01
十字头支架 Bracket，support of crosshead	 L=109,H=254	Steel	2	904AH	In the panel 装在工具板 (904P) 11.4 × 2
起吊钢丝 Wire sling	 L=600	Components	1	904AI	In the panel 装在工具板 (904P) 3.92
吊活塞链条 Chain for suspending piston	 L=439	Steel	2	904AK	In the panel 装在工具板 (904P) 2.26 × 2
TOTAL WEIGHT 总重				31.39 kg	
	CSSC-MES DIESEL CO.,LTD.				

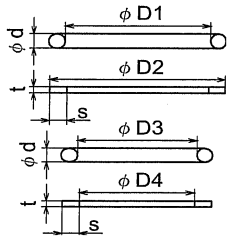
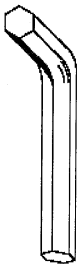
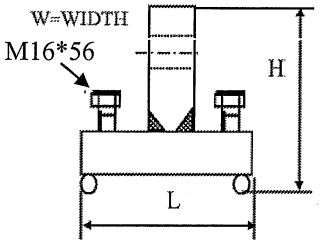
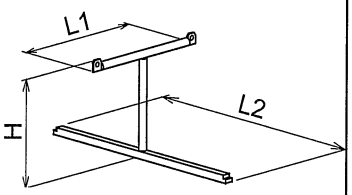
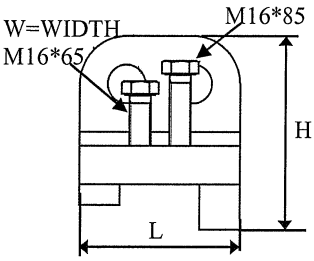
TOOLS				PAGE	04-03
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
十字头起吊工具 Lifting tool for crosshead	 L=230,H=229,wid.=70	Steel	1	904AM	In the panel 装在工具板 (904P) 8.13
绳索导向座 Wire gudie	 L=80	Steel	1	904AN	In the panel 装在工具板 (904P) 1.7
伸缩工具 Ret. tool telescope pipe		Steel	2	904A8	In the panel 装在工具板 (904P) 0.17 × 2
十字头罩盖 Rubber cover for crosshead	 L=3000,W=675	Rubber	1	904A70	In the panel 装在工具板 (904P) 3
TOTAL WEIGHT 总重				13.17 kg	
	CSSC-MES DIESEL CO.,LTD.				

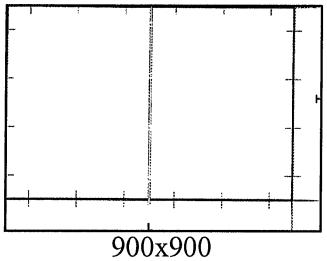
TOOLS		PAGE	04-04
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS		BOX NO.	

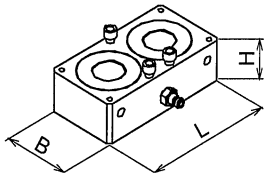
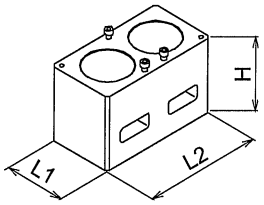
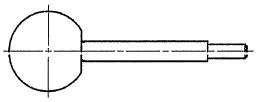
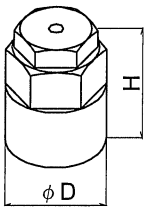
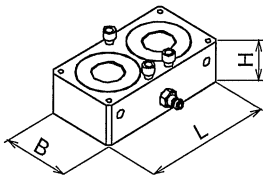
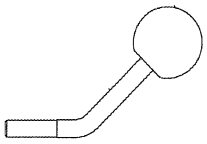
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
十字头罩盖 Rubber cover for crosshead	 L=2840,W=490	Rubber	1	904A69	In the panel 装在工具板 (904P) 2.1
偏心转矩扳手 Torque wrench offset tool	 B=Ø48,H=30	Steel	1	904A86	In the panel 装在工具板 (904P) 0.21
防护螺栓 Protective screw	 D=72,M16	Steel	2	904A88	In the panel 装在工具板 (904P) 0.27
吊耳 Eye bolt	 D4=65,D2=35,L=24,M16,E=35	Steel	2	904A90	In the panel 装在工具板 (904P) 0.35
TOTAL WEIGHT 总重				2.93 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS		PAGE	04-05
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS		BOX NO.	

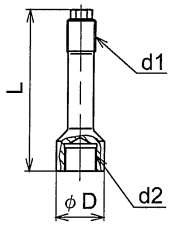
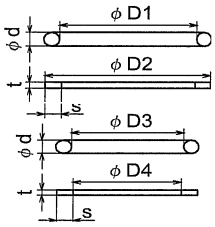
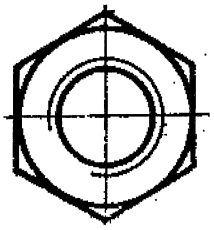
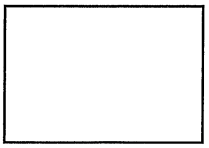
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	904BA	1.6
连杆大端 液压拉伸器 Hydraulic jack	 M72×6 D=206,H=105	Components	2	904BAC	In the box 装工具盒 （904BA） 19.8 × 2
承压圈 Support for hydraulic jack	 D=195,H=88	Steel	2	904BAD	In the box 装工具盒 （904BA） 11.2 × 2
球形手柄 Tommy bar		Components	1	904BAE	In the box 装工具盒 （904BA） 0.1
拧紧螺母 Stud setter	 H=163, D=110，M72x6	Steel	1	904BAF	In the box 装工具盒 （904BA） 7.73
承压圈 Support for hydraulic jack	 H=88，D=190	Steel	1	904BAJ	In the box 装工具盒 （904BA） 9.76
TOTAL WEIGHT 总重				81.19 kg	
	CSSC-MES DIESEL CO.,LTD.				

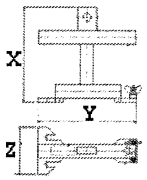
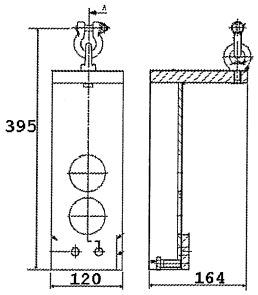
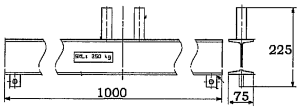
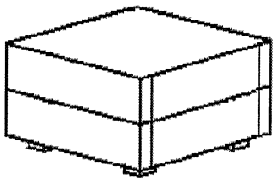
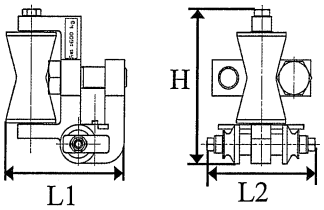
TOOLS				PAGE	04-06
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
带挡圈的密封圈 Sealing ring with back-up ring	 D1=144.3,D2=159,D3=94.1, D4=96,d=5.7,t=2,s=5	Components	each 4	904BA5 904BA6	In the box 装工具盒 （904BA） 0.048 × 2
内六角扳手 Allen wrenches GB5356-85 4MMR		Steel	1	904BA14	In the box 装工具盒 （904BA） 0.01
连杆起吊工具 Lift. Attachment connecting rod	 L=135,W=150,H=123	Steel	2	904BE	In the panel 装在工具板 (904P) 6.13 × 2
连杆大端轴承起吊工具 Lifting tool for crankpin shell	 L1=360,L2=940,H=497	Steel	1	904BF	5.5
连杆起吊工具 Lift. Attachment connecting rod	 L=135,W=175,H=147	Steel	2	904BH	7.4 × 2
TOTAL WEIGHT 总重				32.67 kg	
	CSSC-MES DIESEL CO.,LTD.				

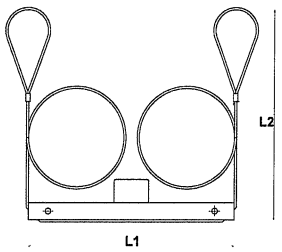
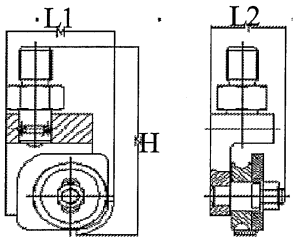
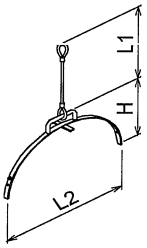
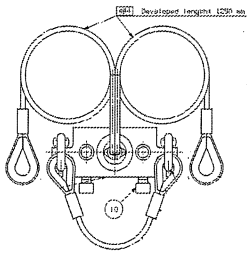
TOOLS				PAGE	04-07
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CONNECTING ROD+CROSSHEAD TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具板 Panel for tools MS904	 900x900	Steel	1	904P	34.9
TOTAL WEIGHT 总重				34.90 kg	
	CSSC-MES DIESEL CO.,LTD.				

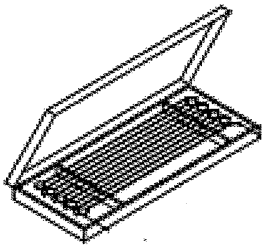
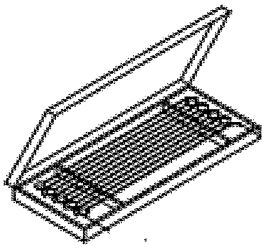
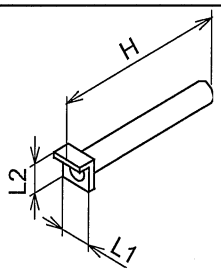
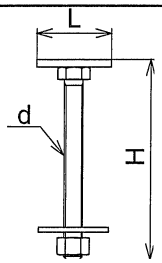
TOOLS				PAGE	05-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
主轴承螺柱 液压拉伸器 Hydraulic jack	 M64×6,L=270,B=160,H=141	Components	2	905AAB	In the box 装工具盒 （905AA） 30.4 × 2
承压圈 Support for hydraulic jack	 L1=160,L2=260,H=220	Components	2	905AAC	In the box 装工具盒 （905AA） 33.3 × 2
球形手柄 Tommy bar		Components	1	905AAD	In the box 装工具盒 （905AA） 0.1 × 2
拧紧螺母 Stud setter	 H=163, D=110，M64×6	Steel	1	905AAE	In the box 装工具盒 （905AA） 7.65 × 2
主轴承螺柱 液压拉伸器 Hydraulic jack	 M64×6, L=270,B=160,H=112	Components	2	905AAF	In the box 装工具盒 （905AA） 20.6 × 2
球形手柄 Tommy bar		Components	1	905AAG	In the box 装工具盒 （905AA） 0.1
TOTAL WEIGHT 总重 161.40 kg					
	CSSC-MES DIESEL CO.,LTD.				

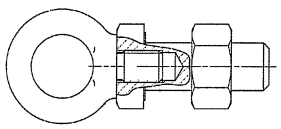
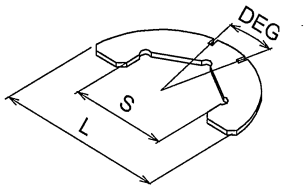
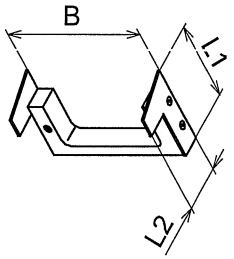
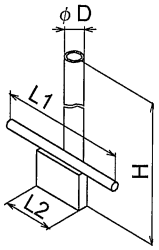
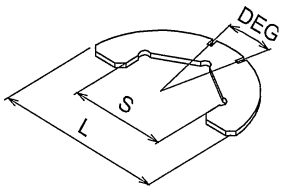
TOOLS		PAGE	05-02
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS		BOX NO.	

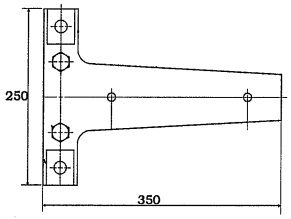
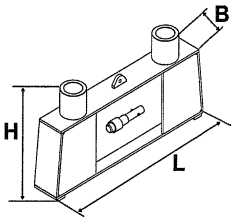
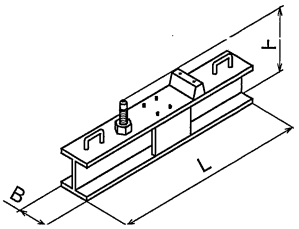
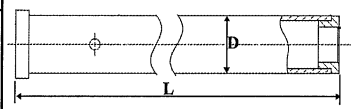
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
伸长螺柱 Extension Stud. reduced shank	 d1=M60×5.5, d2=M64×6 D=115, L=410	Steel	4	905AAH	In the box 装工具盒 （905AA） 12.2 × 4
内六角扳手 Allen wrenches GB5356-85 4MMR		Steel	1	905AA9	In the box 装工具盒 （905AA） 0.01
带挡圈的密封圈 Sealing ring with back-up ring	 D1=104.1,D2=115,D3=79.2, D4=83,d=5.7,t=2,s=5	Components	each 8	905AA19 905AA20	In the box 装工具盒 （905AA） 0.037 × 8
螺母 Nut	 M60×5.5	Steel	4	905AA18	In the box 装工具盒 （905AA） 2.8 × 4
铭牌 Name plate	 301x214x1	Plastic	Each:1 Total:3	905AA10 905AA31 905AA32	In the box 装工具盒 （905AA） 0.1 × 3
TOTAL WEIGHT 总重				57.33 kg	
	CSSC-MES DIESEL CO.,LTD.				

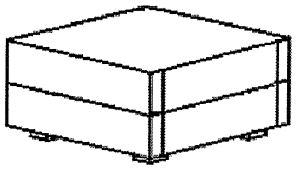
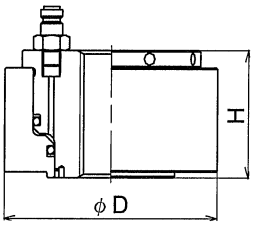
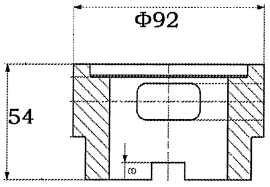
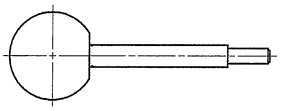
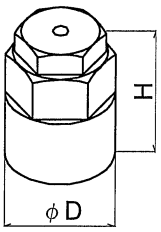
TOOLS				PAGE	05-03
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
提升架 Lifting tools	 X=101,y=141,Z=70	Steel	2	905AAI	In the box 装工具盒 （905AA） 1.0 × 2
提升架 Lifting attachment		Steel	2	905AAK	In the box 装工具盒 （905AA） 7.4 × 2
提升架 Lifting tools		Steel	1	905AAL	In the box 装工具盒 （905AA） 14
工具盒 Tools box		Components	1	905AA	18.9
主轴承提升工具 Pulley for wire for main bearing	 L1=180,L2=166,H=216	Components	1	905AI	In the panel 装在工具板 (905P) 9.2
TOTAL WEIGHT 总重				57.76 kg	
	CSSC-MES DIESEL CO.,LTD.				

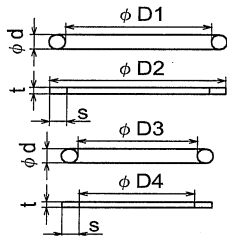
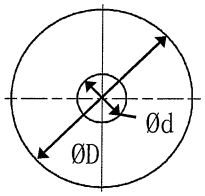
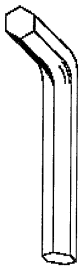
TOOLS				PAGE	05-04
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
主轴瓦拆卸工具 Dismantling tool for main bearing shell	 L1=256,L2=3000	Components	1	905AK	In the panel 装在工具板 (905P) 0.49
主轴承提升工具 Pulley for wire for main bearing	 L1=100,L2=75,H=210	Components	1	905AM	In the panel 装在工具板 (905P) 6.65
主轴瓦提升工具 Lifting tool for main bearing shell	 L1=2000,L2=856,H=429.5	Components	1	905AN	In the panel 装在工具板 (905P) 2.2
轴承盖提升工具 Lifting tool for main bearing cap	 Length=1250	Components	1	905AO	In the panel 装在工具板 (905P) 4.94
TOTAL WEIGHT 总重				14.28 kg	
	CSSC-MES DIESEL CO.,LTD.				

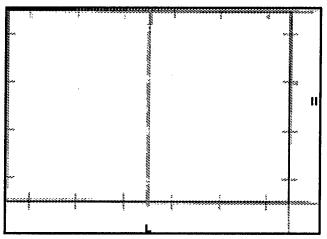
TOOLS				PAGE	05-05
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
厚薄规 Feeler gauge set		Components	1	905AS	thickness: 0.05, 0.10, 0.15, 0.20, 0.25, 0.30, 0.35 2.38
厚薄规 Feeler gauge set		Components	1	905AT	thickness: 0.40, 0.45, 0.50, 0.55, 0.60, 0.65, 0.70 2.4
主轴瓦固定工具 Retaining tool for main bearing shell	 L1=90,L2=98.5,H=558	Steel	2	905AX	In the panel 装在工具板 (905P) 5.53 × 2
防爆门提升工具 Lifting tool for relief valve	 L=150,H=388,d=M20	Steel	1	905A25	In the panel 装在工具板 (905P) 1.13
TOTAL WEIGHT 总重				16.97 kg	
	CSSC-MES DIESEL CO.,LTD.				

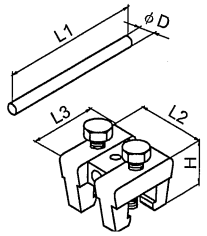
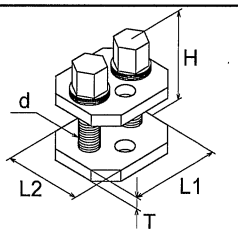
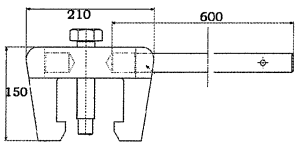
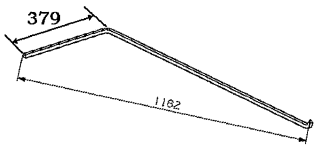
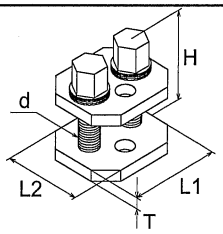
TOOLS				PAGE	05-06
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
吊环螺钉 Eye bolt	 M=30	Steel	1	905A27	In the panel 装在工具板 (905P) 1.37
紧固卡板 Tightn. Template A.V.D	 L=70,S=46,DEG=40°	Steel	1	905A28	In the panel 装在工具板 (905P) 0.02
轴瓦安装工具 mounting tool for thin bearing shell	 B=261,L1=130,L2=60	Steel	1	905A58	In the panel 装在工具板 (905P) 3.68
薄壁轴瓦安装工具 mounting tool for thin bearing shell	 L1=180,L2=70,H=620,D=20	Steel	1	905A59	In the panel 装在工具板 (905P) 1.4
紧固卡板 Tightn. Template A.V.D	 L=90,S=55,DEG=45°	Steel	1	905A71	In the panel 装在工具板 (905P) 0.04
TOTAL WEIGHT 总重				6.51 kg	
	CSSC-MES DIESEL CO.,LTD.				

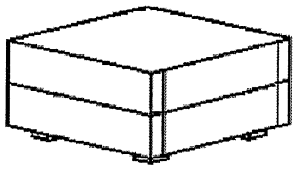
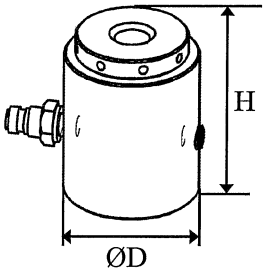
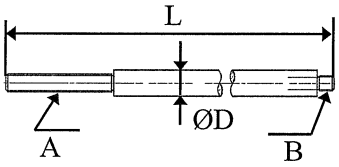
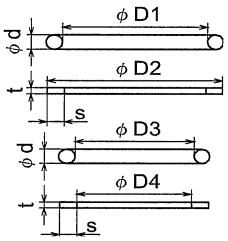
TOOLS				PAGE	05-07
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
推力块转出工具 Turning-out tool for thrust segment		Steel	1	905BH	In the panel 装在工具板 (905P) 7
曲轴顶升工具 Lifting tool for crankshaft	 L=940，B=160，H=505	Steel	1	905BL	118.7
推力轴顶升工具 Lifting tool for thrust shaft	 B=125，L=1500，H=397	Steel	1	905BM	51.6
取出工具 Extractor	 L=466, D=42	Steel	1	905BE	0.8
TOTAL WEIGHT 总重				178.10 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	05-08
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	905K	11.58
适用于盘车机 液压拉伸器 Hydraulic jack	 M30×3.5 D=100,H=75	Components	2	905KB	In the box 装工具盒 （905K） 3.95 × 2
承压圈 Support for hydraulic jack		Steel	2	905KC	In the box 装工具盒 （905K） 1.19 × 2
球形手柄 Tommy bar		Components	2	905KD	In the box 装工具盒 （905K） 0.09
拧紧螺母 Stud setter	 H=103, D=55，M30×3.5	Steel	2	905KG	In the box 装工具盒 （905K） 1.13
TOTAL WEIGHT 总重				23.08 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	05-09
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
带挡圈的密封圈 Sealing ring with back-up ring	 D1=69.2,D2=80,D3=64.2,D4=65,d=5.7,t=2,s=5	Components	each 2	905K12 905K11	In the box 装工具盒 （905K） 0.03 × 2
垫圈 Disk，round-plain	 D=11,d=3,height=9	Steel	2	905K21	In the box 装工具盒 （905K） 0.06 × 2
放气螺钉 Venting screw		Steel	2	905K22	In the box 装工具盒 （905K） 0.01 × 2
内六角扳手 Allen wrenches GB5356-85 6mmR		Steel	2	905K30	In the box 装工具盒 （905K） 0.03 × 2
TOTAL WEIGHT 总重				0.26 kg	
	CSSC-MES DIESEL CO.,LTD.				

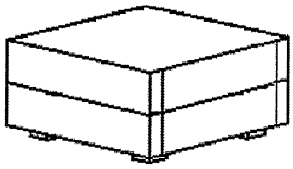
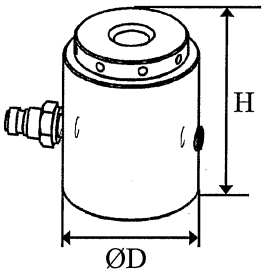
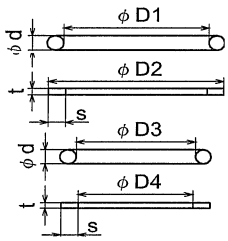
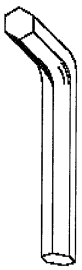
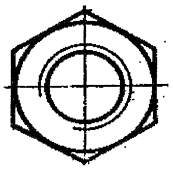
TOOLS				PAGE	05-10
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CRANKSH.+THRUST BRG. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具板 Panel for tools MS905	 1350×900	Steel	1	905P	42.9
TOTAL WEIGHT 总重				42.90 kg	
	CSSC-MES DIESEL CO.,LTD.				

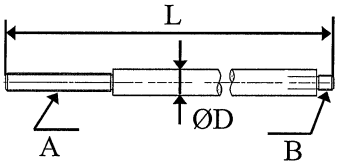
TOOLS				PAGE	06-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
链条拆卸工具 Chain disassembling tool	 L1=450,L2=158,L3=196, H=142,D=25	Steel	1	906BA	In the panel 装在工具板 (906P) 17.8
链条装配工具 Chain assembling tool	 H=239, T=25 L1=175, L2=160, d=M30	Steel	1	906BB	In the panel 装在工具板 (906P) 11.5
链条拆卸工具 Chain disassembling tool	 width=170	Steel	1	906BE	In the panel 装在工具板 (906P) 22.1
曲轴定时量规 Pin gauge for crankshaft		Steel	1	906BG	In the panel 装在工具板 (906P) 1.66
链条装配工具 Chain assembling tool	 H=259, T=30 L1=195, L2=190, d=M30	Steel	1	906BL	In the panel 装在工具板 (906P) 14.9
TOTAL WEIGHT 总重				67.96 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	06-02
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	906BP	12.4
后端链条张紧器 液压拉伸器 Hydraulic jack	 D=85,H=133	Components	2	906BPA	In the box 装工具盒 （906BP） 4.94× 2
螺柱 Stud，thread both ends	 L=1210,D=35, A=M24×3,B=M24×3	Steel	2	906BP2	In the box 装工具盒 （906BP） 7.78 × 2
带挡圈的密封圈 Sealing ring with back-up ring	 D1=39.69,D2=46,D3=34.6, D4=36,d=3.53,t=2,s=2.5	Components	each 2	906BP7 906BP10	In the box 装工具盒 （906BP） 0.01 × 2
内六角扳手 Allen wrenches GB5356-85 6mmR		Steel	1	906BP8	In the box 装工具盒 （906BP） 0.03
TOTAL WEIGHT 总重				37.89 kg	
	CSSC-MES DIESEL CO.,LTD.				

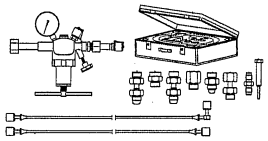
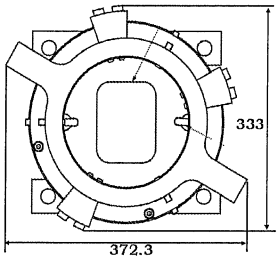
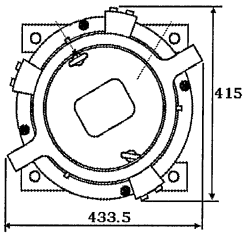
TOOLS		PAGE	06-03
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS		BOX NO.	

NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
螺母 Nut	 GB/T6170 M24	Steel	2	906BP22	In the box 装工具盒 （906BP） 0.13 × 2
TOTAL WEIGHT 总重				0.26 kg	
	CSSC-MES DIESEL CO.,LTD.				

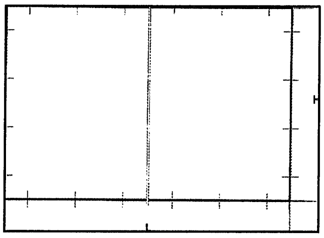
TOOLS				PAGE	06-04
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	906E	18.1
前端链条张紧器 液压拉伸器 Hydraulic jack	 D=80,H=133	Components	2	906EE	In the box 装工具盒 （906E） 4.57× 2
带挡圈的密封圈 Sealing ring with back-up ring	 D1=32,D2=37,D3=33.6, D4=34,d=3.53,t=2,s=2.5	Components	2	906E 5 906E 6	In the box 装工具盒 （906E） 0.02 × 2
内六角扳手 Allen wrenches GB5356-85 6mmR		Steel	1	906E 8	In the box 装工具盒 （906E） 0.03
螺母 Nut	 GB/T6170 M16	Steel	2	906E 9	In the box 装工具盒 （906BP） 0.038 × 2
TOTAL WEIGHT 总重				27.39 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	06-05
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
螺柱 Stud, thread both ends	 L=1335,D=25, A=M16,B=M20	Steel	2	906E 20	In the box 装工具盒 （906BP） 4.39 × 2
TOTAL WEIGHT 总重				8.78 kg	
	CSSC-MES DIESEL CO.,LTD.				

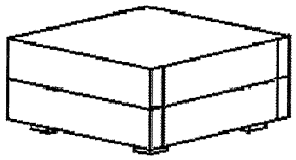
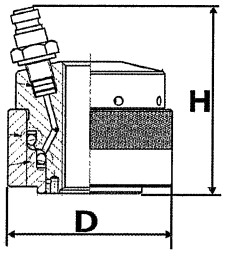
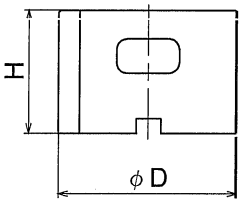
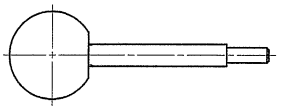
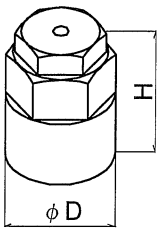
TOOLS		PAGE	06-06
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS		BOX NO.	

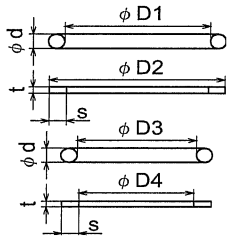
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
注油器工具 Test equipment for accumulators. Alpha lubracator	 310×280×100 Tool box(工具盒): 1pc/reducing valve(减压阀): 1pc/adapter(接头)7pcs/screw-special(螺栓)1pc/quick coupling,minimess(挠性管组)2pcs,quick coupling(快速接头)2pcs	Components	1	906D	3.3
支架 Pin wrench-special	 height=310	Steel	1	906IB	40.5
扳手 Hook wrench	 height=402.3	Steel	1	906IC	79.8
TOTAL WEIGHT 总重				123.60 kg	
	CSSC-MES DIESEL CO.,LTD.				

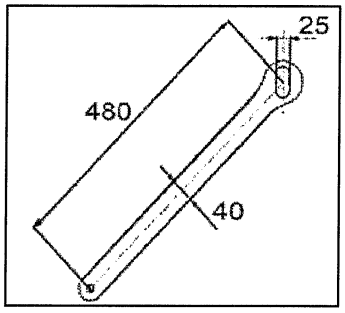
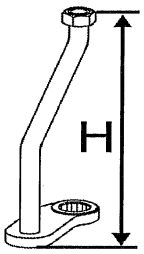
TOOLS		PAGE	06-07
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS		BOX NO.	

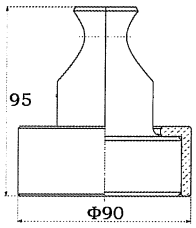
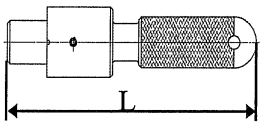
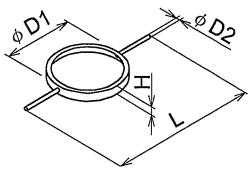
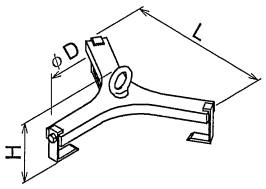
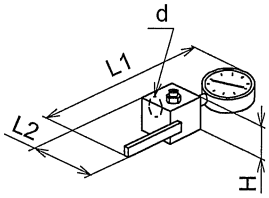
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS / WEIGHT重量(kg)
工具板 Panel for tools MS906	 900×900	Steel	1	906P	28.2

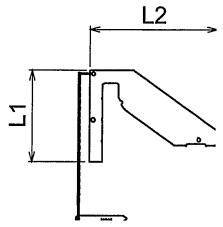
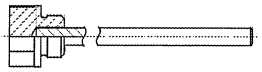
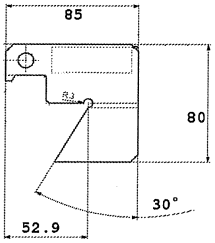
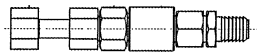
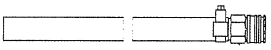
TOTAL WEIGHT 总重	28.20 kg	
	CSSC-MES DIESEL CO.,LTD.	

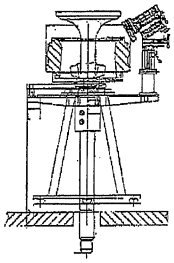
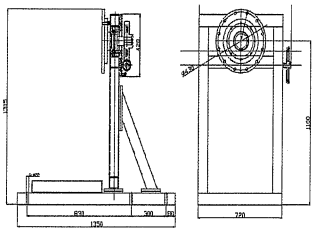
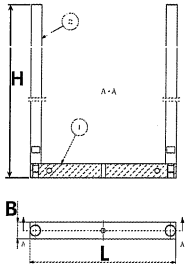
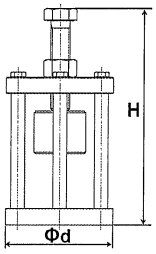
TOOLS				PAGE	06-08
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	906C	5
排气阀驱动螺柱 液压拉伸器 Hydraulic jack	 H=108.8,D=Φ88,M30×2	Components	2	906CB	In the box 装工具盒 （906C） 2.78 × 2
承压圈 Support for hydraulic jack	 D=75,H=54	Steel	2	906CC	In the box 装工具盒 （906C） 0.6 × 2
球形手柄 Tommy bar		Components	1	906CD	In the box 装工具盒 （906C） 0.1
拧紧螺母 Stud setter	 H=95, D=55，M30×2	Steel	1	906CE	In the box 装工具盒 （906C） 1.13
TOTAL WEIGHT 总重				13.00 kg	
	CSSC-MES DIESEL CO.,LTD.				

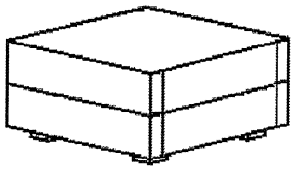
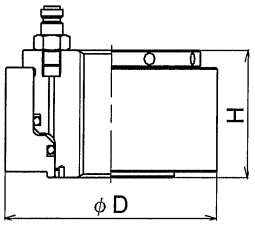
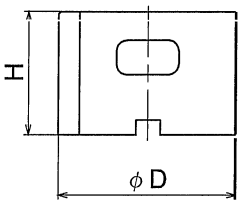
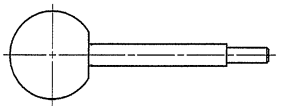
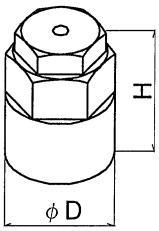
TOOLS				PAGE	06-09
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
带挡圈的密封圈 Sealing ring with back-up ring	 D1=54.2,D2=68,D3=44.2,D4=47,d=5.7,t=2,s=5	Components	each 2	906C5 906C6	In the box 装工具盒 （905C） 0.03 × 2
内六角扳手 Allen wrenches GB5356-85 6mmR		Steel	1	906C9	In the box 装工具盒 （906C） 0.03 ×1
TOTAL WEIGHT 总重				0.09 kg	
	CSSC-MES DIESEL CO.,LTD.				

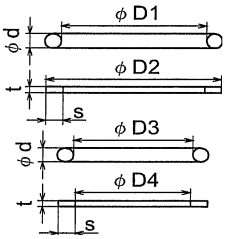
TOOLS				PAGE	07-01
MAIN DIESEL ENGINE 6G60MEC mk9				SHIP NO.	
CHAIN AND ALPHA LUBR. TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
扳手 Lever for main starting valve		Steel	1	907B51	此件不装箱，随主机交货。 2.49
扳手 Lever for main starting valve	 H=344	Steel	1	907A85	2.24
TOTAL WEIGHT 总重				4.73 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	08-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
EXHAUST VALVE, TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
提升工具 Lift tool for exhaust valve		Steel	1	908AF	In the panel 装在工具板 (908P) 1.88
高压管研磨工具 Grinding tool for high pressure pipe	 L=190	Components	1	908AG	In the panel 装在工具板 (908P) 1.93
研磨环 grinding tool for exhaust valve bottom	 D1=410,D2=20,H=30, L=808	Cast iron	1	908AH	In the panel 装在工具板 (908P) 8.085
排气阀提升工具 Lifting tool for exhaust valve	 L=347,D=380,H=157	Steel	1	908AJ	In the panel 装在工具板 (908P) 3.88
压力表 Test equipment for exhaust valve	 L1=242,L2=90,H=75, d=M30×1.5	Components	1	908AN	In the panel 装在工具板 (908P) 4.93
TOTAL WEIGHT 总重				20.71 kg	
	CSSC-MES DIESEL CO.,LTD.				

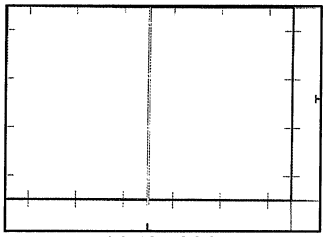
TOOLS				PAGE	08-02
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
EXHAUST VALVE, TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
排气阀测量样板 Gauge for exhaust valve spindle	 L1=200.5,L2=290	Steel	1	908AE	In the panel 装在工具板 (908P) 1.04
开启工具 Tool for emergency open. exhaust valve	 L=301	Steel	1	908AM	In the panel 装在工具板 (908P) 0.39
阀座测量样板 Gauge for exhaust valve seat		Steel	1	908A76	In the panel 装在工具板 (908P) 0.11
连接螺栓 Coupling	 L=130.2	Steel	1	908AT	In the panel 装在工具板 (908P) 0.25
软管 Hose with 1 coupling	 L=500.3	Steel	1	908AU	In the panel 装在工具板 (908P) 0.2
TOTAL WEIGHT 总重				1.99 kg	
	CSSC-MES DIESEL CO.,LTD.				

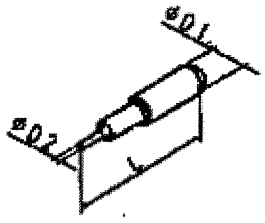
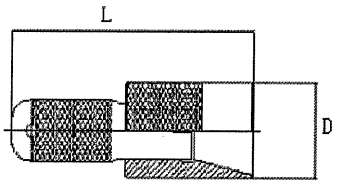
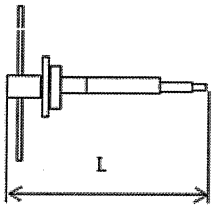
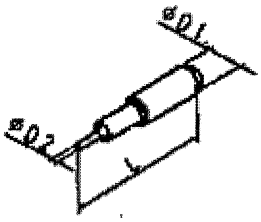
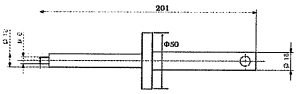
TOOLS				PAGE	08-03
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
EXHAUST VALVE, TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
排气阀研磨机 Exhaust valve grinding machine	 H×L×W=1490×980×750	Components	1	908AZ_2	290
排气阀回转台 work table-exhaust valve	 1350×720×1315	Components	1	908AZ_5	183
桥规 bridge gauge, exhaust valve	 L×B×H=27030×449.8	Components	1	908AR	3.63
缓冲活塞取出工具 tool for hydraulic piston	 d×H=135×264.8	Components	1	908AL	7.25
TOTAL WEIGHT 总重				483.88 kg	
	CSSC-MES DIESEL CO.,LTD.				

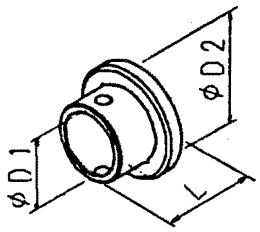
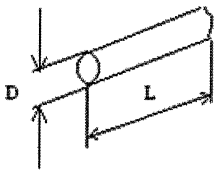
TOOLS				PAGE	08-04
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
EXHAUST VALVE, TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	908D	5.8
适用于排气阀 液压拉伸器 Hydraulic jack	 M85×6 D=225,H=116	Components	2	908DB	In the box 装工具盒 （908D） 25.9× 2
承压圈 Support for hydraulic jack	 D=202,H=101	Steel	2	908DC	In the box 装工具盒 （908D） 10.1 × 2
球形手柄 Tommy bar		Components	1	908DD	In the box 装工具盒 （908D） 0.01
拧紧螺母 Stud setter	 H=202, D=140，M85×6	Steel	1	908DG	In the box 装工具盒 （908D） 15.79
TOTAL WEIGHT 总重				93.60 kg	
	CSSC-MES DIESEL CO.,LTD.				

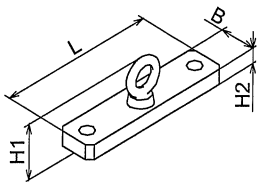
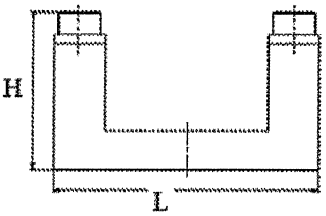
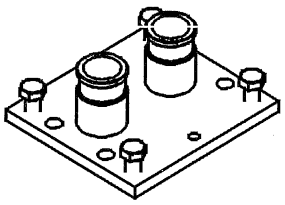
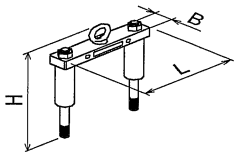
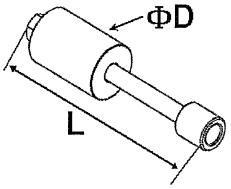
TOOLS				PAGE	08-05
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
EXHAUST VALVE, TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
带挡圈的密封圈 Sealing ring with back-up ring	 D1=159.3,D2=173,D3=109.1 , D4=112,d=5.7,t=2,s=5	Components	each 2	908D5 908D6	In the box 装工具盒 （908D） 0.05 × 2
内六角扳手 Allen wrenches GB5356-85 4MMR		Steel	1	908D9	In the box 装工具盒 （908D） 0.03
TOTAL WEIGHT 总重				0.13 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS		PAGE	08-06
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
EXHAUST VALVE, TOOLS		BOX NO.	

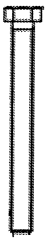
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具板 Panel for tools MS908	 1350×900	Steel	1	908P	42.3
TOTAL WEIGHT 总重				42.30 kg	
	CSSC-MES DIESEL CO.,LTD.				

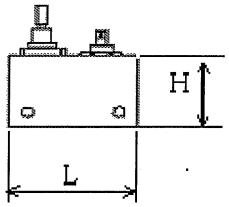
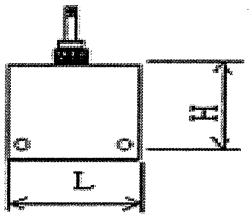
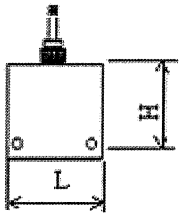
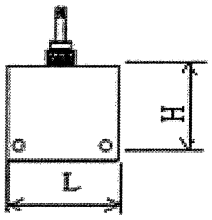
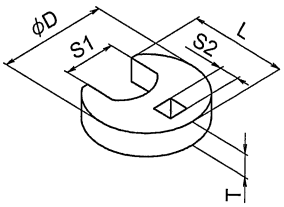
TOOLS				PAGE	09-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
FUEL OIL SYSTEM,TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
喷油器研磨芯 Grinding mandrel-valve head	 L=166,D1=40,D2=7.5	Special steel	1	909AB	In the panel 装在工具板 (909P) 1.22
喷油器体研磨工具 Grinding mandrel-holder-outs	 L=193,D=68	Steel	1	909AC	In the panel 装在工具板 (909P) 2.66
喷油器体研磨工具 Grinding mandrel-holder-insi	 L=460	Components	1	909AD	In the panel 装在工具板 (909P) 1.95
推力轴研磨芯 Grinding mandrel for thrust spindle	 L=136,D1=37,D2=11	Steel	1	909AE	In the panel 装在工具板 (909P) 0.95
锁紧轴 Locking device	 L=201	Steel	1	909A32	In the panel 装在工具板 (909P) 0.38
TOTAL WEIGHT 总重				7.16 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	09-02
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
FUEL OIL SYSTEM,TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
法兰 Flange-dism. non-return valve	 L=47,D1=60,D2=80	Steel	1	909A56	In the panel 装在工具板 (909P) 0.29
导向轴芯 Draft-spindle guide	 L=220,D=Ø24	Steel	1	909B25	In the panel 装在工具板 (909P) 0.838
TOTAL WEIGHT 总重				1.13 kg	
	CSSC-MES DIESEL CO.,LTD.				

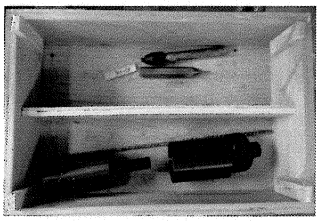
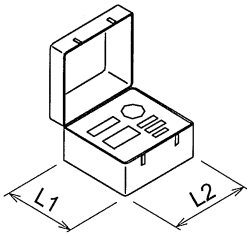
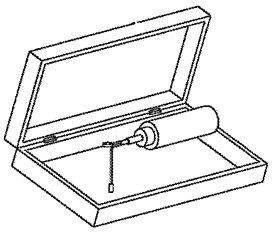
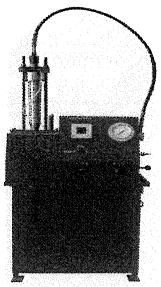
TOOLS				PAGE	09-03
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
FUEL OIL SYSTEM,TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
燃油泵起吊工具 Lifting tool for fuel pump house	 L=270,B=50,H1=116,H2=25	Steel	1	909BA	In the panel 装在工具板 (909P) 3.12
安装工具 Assembly tool	 L=135,H=110	Steel	1	909BF	In the panel 装在工具板 (909P) 0.96
清洁阀 Flushing valve	 160×144×60	Steel	1	909BH	In the panel 装在工具板 (909P) 2.15
燃油泵提升工具 Lifting tool for hydraulic plunger	 L=100,H=110,B=20	Steel	1	909BM	In the panel 装在工具板 (909P) 0.52
吸油阀取出工具 Extract. Tool-suct. Valve	 L=175, D=40	Steel	1	909BJ	In the panel 装在工具板 (909P) 0.76
TOTAL WEIGHT 总重				7.52 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS		PAGE	09-04
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
FUEL OIL SYSTEM,TOOLS		BOX NO.	

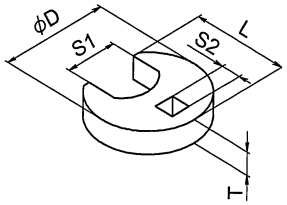
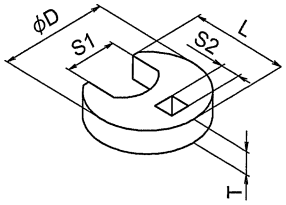
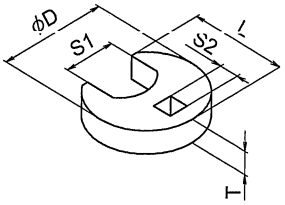
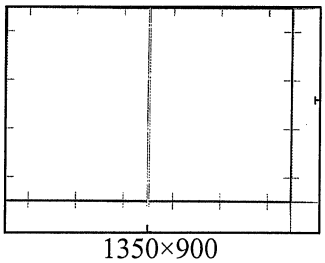
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
螺栓 Screw EN61V16200	 M16×200	Steel	2	909B20	In the panel 装在工具板 (909P) 0.35 × 2
TOTAL WEIGHT 总重				0.70 kg	
	CSSC-MES DIESEL CO.,LTD.				

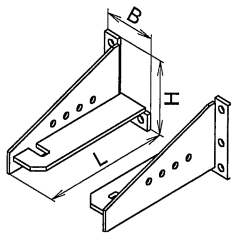
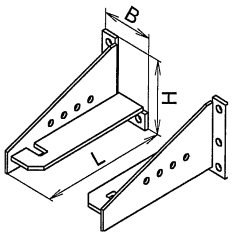
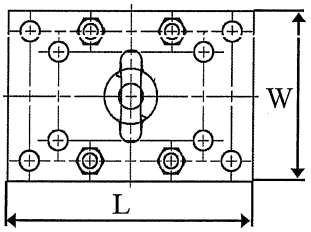
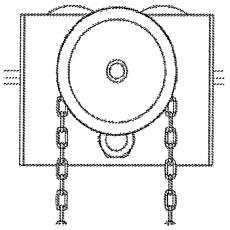
TOOLS				PAGE	09-05
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
FUEL OIL SYSTEM,TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
铣削工具 Mill tool for seat of fuel oil pipe	 L=180,H=110,Width=100	Components	1	909DB	In the panel 装在工具板 (909P) 3.41
燃油管铣削工具 Mill tool for fuel oil pipe	 H=110,L=185,Width=80	Components	1	909DE	In the panel 装在工具板 (909P) 3.14
铣削工具 Cut. Tool-seat-distr. Piece	 H=110,L=120,Width=100	Components	1	909DF	In the panel 装在工具板 (909P) 2.53
燃油管铣削工具 Mill tool for fuel oil pipe	 H=125,L=165,Width=90	Components	1	909DG	In the panel 装在工具板 (909P) 3.92
扳手 Crowfoot wrench head	 D=130, L=118, T=22 S1=65, S2=19	Steel	1	909D81	In the panel 装在工具板 (909P) 1.52
TOTAL WEIGHT 总重				14.52 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS		PAGE	09-06
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
FUEL OIL SYSTEM,TOOLS		BOX NO.	

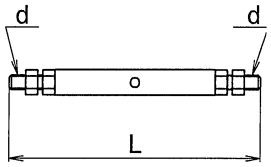
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
喷油器清洁工具 Cleaning tool for fuel valve nozzle	 drill for atomizer(钻头):1pc/ pin vice(钻头夹):1pc/ extractor for atomizer(喷油器拆卸工具):1pc/ drift for atomizer(喷油器冲头):1pc/ test pin(通针):1pc/ cleaming rush(清洗刷子):1pcs LxHxW=280x185x110	Components	1	909EA 909EC	3.23
密封圈安装工具 Mounting tool for sealing rings	 L1=350,L2=550,height=220	Components	1	909EG	7.8
探测光源 Probe light		Components	1	909E4	1.1
压力试验工具 Pressure test device. fuel valve		Components	1	909E72	125
TOTAL WEIGHT 总重				137.13 kg	
	CSSC-MES DIESEL CO.,LTD.				

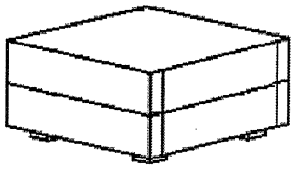
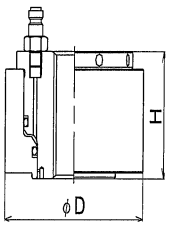
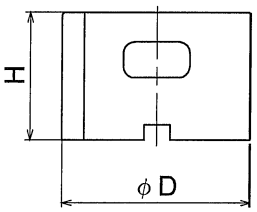
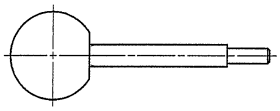
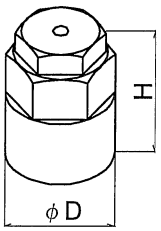
1

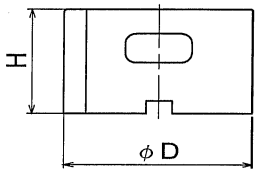
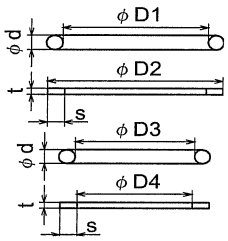
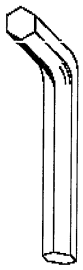
TOOLS				PAGE	09-07
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
FUEL OIL SYSTEM,TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
扳手 Crowfoot wrench head	 D=105, L=98, T=22 S1=50, S2=19	Steel	1	909D82	In the panel 装在工具板 (909P) 1.03
扳手 Crowfoot wrench head	 D=140, L=128, T=22 S1=70, S2=20	Steel	1	909D83	In the panel 装在工具板 (909P) 1.79
扳手 Crowfoot wrench head	 D=110, L=100, T=22 S1=55, S2=19	Steel	1	909D84	In the panel 装在工具板 (909P) 1.07
工具板 Panel for tools MS909	 1350×900	Steel	1	909P	43.7
TOTAL WEIGHT 总重				47.59 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	10-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
T.C. AIR CHARGE SYSTEM TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
空冷器前端导轨 Guide rail for A.C fore end	 L=313,H=235,B=200	Steel	1 set	910AE	14
空冷器后端导轨 Guide rail for A.C rear end	 L=233,H=235,B=200	Steel	1 set	910AF	11.73
空冷器起吊工具 Lifting attachment for A.C fore end	 L=300,W=200,HIGHT=139	Steel	1	910AG	15.33
起吊车 Travelling trolley	 2000Kg	Components	2	910A11	14 × 2
TOTAL WEIGHT 总重				69.06 kg	
	CSSC-MES DIESEL CO.,LTD.				

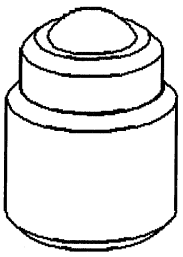
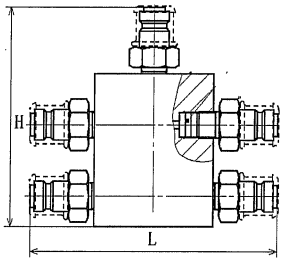
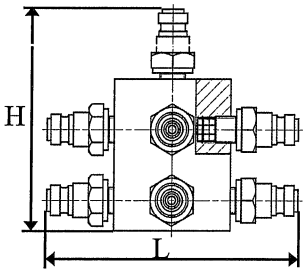
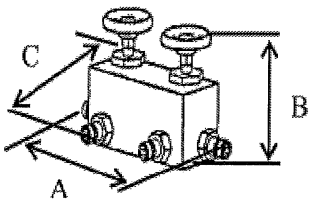
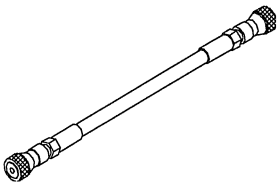
TOOLS		PAGE	10-02
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
T.C. AIR CHARGE SYSTEM TOOLS		BOX NO.	

NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
拉伸工具 Pulling tool	 L=350-610,d=M12	Steel	3	910BA	0.407 × 3
吊环螺钉 Eye bolt	 EN69R12	Steel	2	910B2	0.2 × 2
TOTAL WEIGHT 总重				1.62 kg	
	CSSC-MES DIESEL CO.,LTD.				

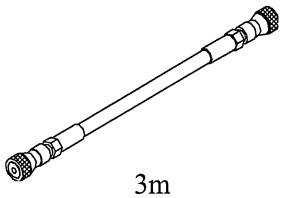
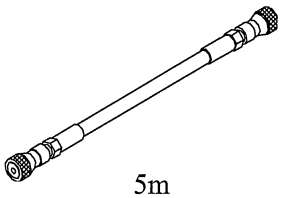
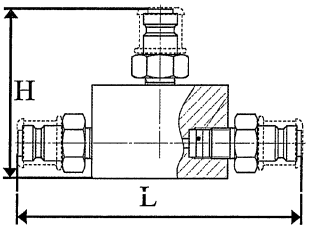
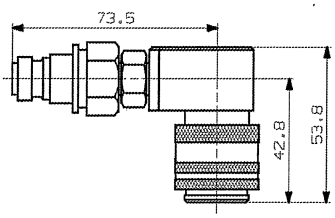
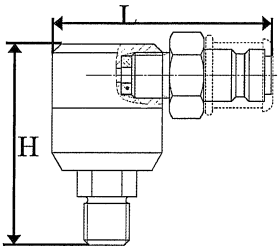
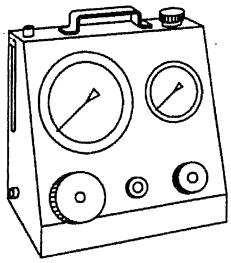
TOOLS				PAGE	12-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
STAY BOLTS TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box		Components	1	912A	2.6
贯穿螺栓、端部螺栓、TVD 液压拉伸器 Hydraulic jack	 M64×6 D=180,H=188	Components	2	912AA	In the box 装工具盒 （912A） 25.22 × 2
承压圈 Support for hydraulic jack	 D=170,H=102	Steel	2	912AF	In the box 装工具盒 （912A） 7.29 × 2
球形手柄 Tommy bar		Components	1	912AG	In the box 装工具盒 （912A） 0.1
拧紧螺母 Stud setter	 H=163, D=110，M64×6	Steel	1	912AH	In the box 装工具盒 （912A） 7.65
TOTAL WEIGHT 总重				75.37 kg	
	CSSC-MES DIESEL CO.,LTD.				

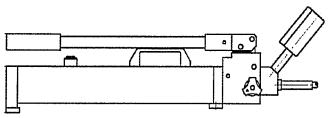
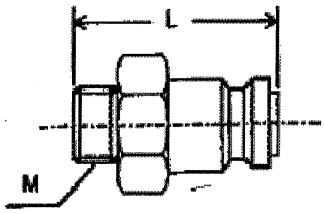
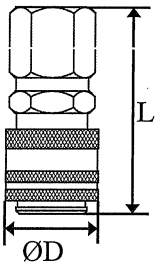
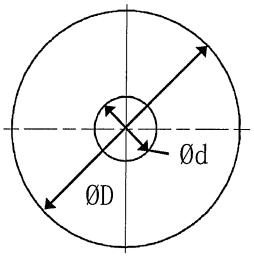
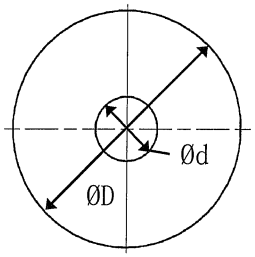
TOOLS				PAGE	12-02
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
STAY BOLTS TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
承压圈 Support for hydraulic jack	 D=170,H=87	Steel	2	912AI	In the box 装工具盒 （912A） 7.09 × 2
带挡圈的密封圈 Sealing ring with back-up ring	 D1=124.3,D2=137,D3=84,D4=85,d=5.7,t=2,s=5	Components	each 2	912A5 912A6	In the box 装工具盒 （912A） 0.04 × 2
内六角扳手 Allen wrenches GB5356-85 6mmR		Steel	1	912A8	In the box 装工具盒 （912A） 0.03
TOTAL WEIGHT 总重				14.29 kg	
	CSSC-MES DIESEL CO.,LTD.				

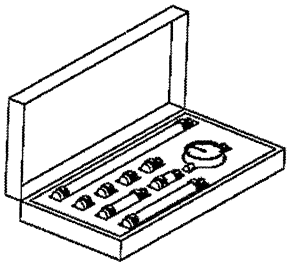
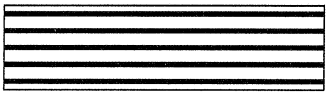
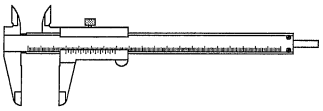
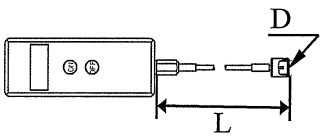
TOOLS		PAGE	13-01
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS		BOX NO.	

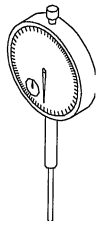
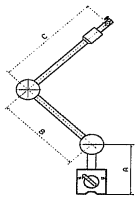
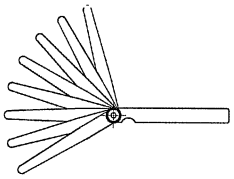
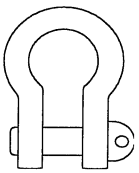
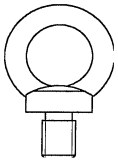
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
放气螺钉 Venting screw	 L=17,G1/4	Steel	5	913A23	0.02 × 5
分配器 Distributor block	 L=125,H=108	Components	2	913AD	1.17 × 2
分配器 Distributor block	 L=106.5,H=106.5	Components	1	913AE	2.59
带针阀的分配器 Conical valve	 A=195,B=88,C=115	Components	1	913AG	3.46
挠性管组 Hose with unions	 1.5m	Components	8	913AH	1.91 × 8
TOTAL WEIGHT 总重				23.77 kg	
	CSSC-MES DIESEL CO.,LTD.				

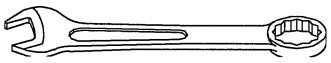
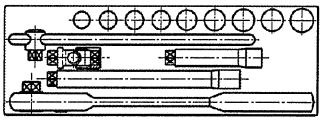
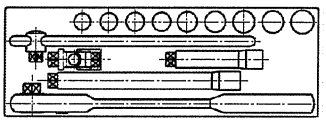
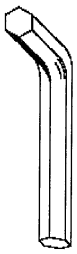
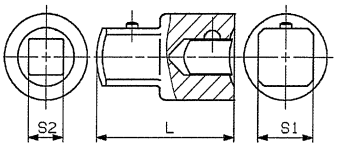
TOOLS		PAGE	13-02
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS		BOX NO.	

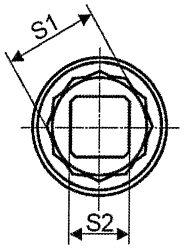
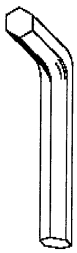
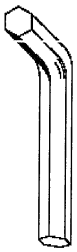
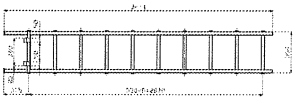
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
挠性管组 Hose with unions	 3m	Components	2	913AI	3.17 × 2
挠性管组 Hose with unions	 5m	Components	1	913AL	4.87
三通接头 Distributor block	 L=123,H=71.5	Components	1	913AN	0.657
接头体组合件 Angle union	 	Components	2	913AO	0.36 × 2
接头体组合件 Angle union	 L=65.5,H=58	Components	2	913AP	0.30 × 2
高压泵 Pneumatic and hydraulic pump		Components	1	913A1	30
TOTAL WEIGHT 总重				43.19 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	13-03
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
手动高压泵 Hydraulic pump hand operated		Components	1	913AA	13.3
快速接头 Quick coupling, male	 L=42.5,M=G1/4	Steel	3	913A20	0.06 × 3
快速接头 Quick coupling, female	 L=64.3,D=30	Steel	2	913A21	0.21 × 2
垫圈 Disc, round-plain	 D=11,d=4.5,height=3	Steel	10	913A22	0.003 × 10
垫圈 Disc, round-plain	 D=11,d=3,height=9	Steel	10	913A24	0.06 × 10
TOTAL WEIGHT 总重				14.47 kg	
	CSSC-MES DIESEL CO.,LTD.				

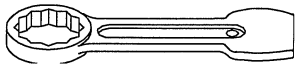
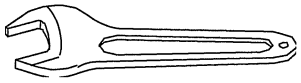
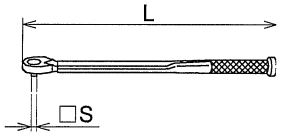
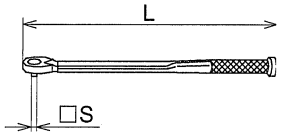
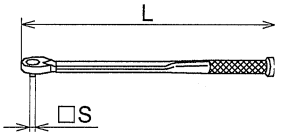
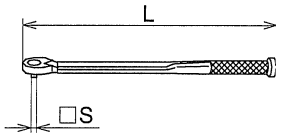
TOOLS				PAGE	13-04
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
甩档表 Crankshaft dail gauge		Components	1	913CB	0.457
脚踏板 Platform board	 948×250×40	Components	4	913C68	4.35× 4
游标卡尺 Slide caliper	 measuring range:0-140mm	Steel	1	913C70	0.153
压力表 Pressure gauge	 L=1000,D=M16×2	Components	1	913C71	0.54
TOTAL WEIGHT 总重				18.55 kg	
	CSSC-MES DIESEL CO.,LTD.				

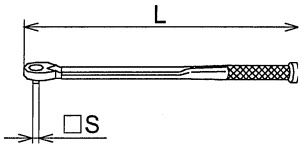
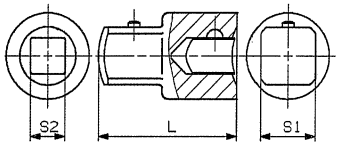
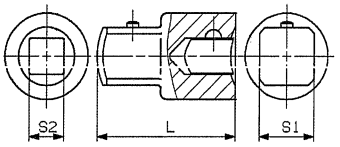
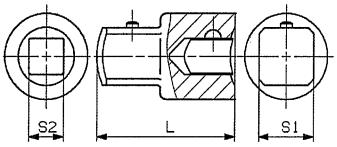
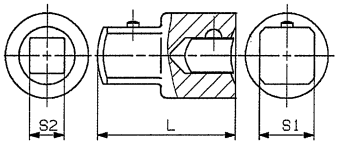
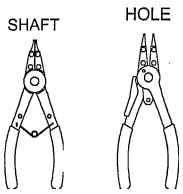
TOOLS				PAGE	13-05
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
千分表 Dial gauge	 measuring range:0-20mm	Components	1	913C73	0.161
千分表支架 Stand for dial gauge	 A:min.70mm, B:min.110mm,C:min.145mm	Components	1	913C74	2
厚薄规 Feeler gauge set	 measuring range:0.05-1mm	Steel	1	913C75	0.09
卸扣 Shackle	 EN518KA0008/09/12/15/18/ 21/24/33	Steel	each : 4	913BB1/2/3 /4/5/6/7/8	36.08
吊环螺钉 Eye bolt	 EN69 R10/R12/R16/ R20/R24/R30/R8/R36	Steel	EN69R24: 8 EN69R36: 6 Others : 4	913BC1/2/3 /4/5/6/11/ 7	14.76
TOTAL WEIGHT 总重				53.09 kg	
	CSSC-MES DIESEL CO.,LTD.				

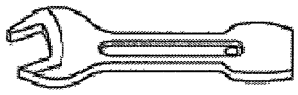
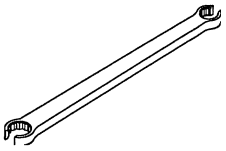
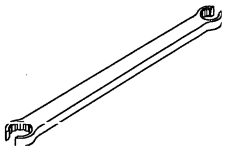
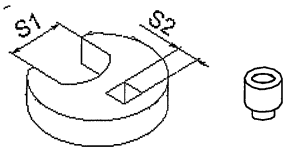
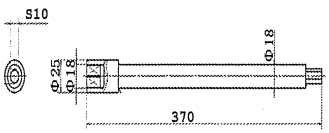
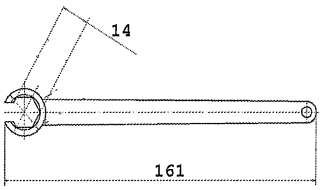
TOOLS				PAGE	13-06
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
两用扳手 Combination spanner	 GB4388-84 MC*MA 10,11,12,13,14,15,16,17,18, 19,21,22,24,27,30,32,34,36, EN554K41,46,50,55,60	Steel	each 2	913DA	45.55 × 2
套筒扳手 Tool sets complete EN563H1	 EN563H1	Components	1 set	913DB1	5.7
套筒扳手 Tool sets complete EN563H2	 EN563H2	Components	1 set	913DB2	14.3
内六角扳手 Allen wrenches EN549G1	 7,12,14,17,19	Steel	1 set	913DB3	0.4
方孔接头 Adapter for socket wrench	 L=50,S1=20,S2=12.5	Steel	1	913DB4	0.2
TOTAL WEIGHT 总重				111.70 kg	
	CSSC-MES DIESEL CO.,LTD.				

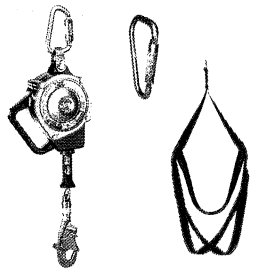
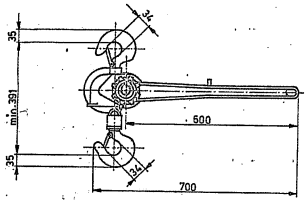
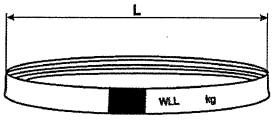
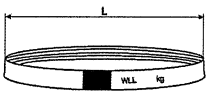
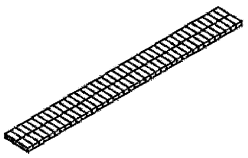
TOOLS				PAGE	13-07
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
套筒 Socket EN506L46	 S1=46，S2=20	Steel	1	913DB5	0.2
内六角扳手 Allen wrenches GB5356-85 22MMR		Steel	1 set	913DB6	0.4
内六角扳手 Allen wrenches GB5356-85 24MMR		Steel	1 set	913DB7	0.4
梯子 Ladder	 L*W=3411*504	Components	1 set	913B54	5
TOTAL WEIGHT 总重				6.00 kg	
	CSSC-MES DIESEL CO.,LTD.				

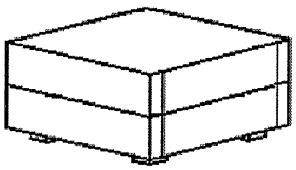
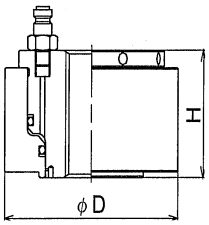
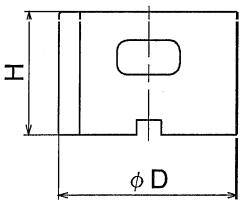
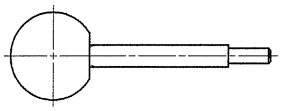
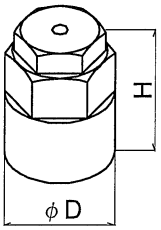
TOOLS		PAGE	13-08
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS		BOX NO.	

NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS / WEIGHT重量(kg)
敲击梅花扳 Ring impact spanner	 EN554L30,32,34,36,41,46 GB4392-84 MA 50,55,60, 65,70,75,80,85,90,95	Steel	each 1	913DD	37.95
单头扳手 Single-ended spanner	 GB4388-84 MD 65,75,80 EN551F85,90	Steel	each 1	913DH	16.1
扭力扳手 Torque spanner	 L=305, S=10 4～20 Nm	Steel	1	913DJ1	0.8
扭力扳手 Torque spanner	 L450, S=12.5 20～100 Nm	Steel	1	913DJ1	1.5
扭力扳手 Torque spanner	 L=614, S=12.5, torque 80～300 Nm	Steel	1	913DJ3	2.2
扭力扳手 Torque spanner	 L=814, S=20, torque 280～760 Nm	Steel	1	913DJ4	3.7
TOTAL WEIGHT 总重				62.25 kg	
	CSSC-MES DIESEL CO.,LTD.				

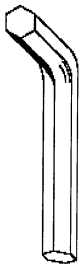
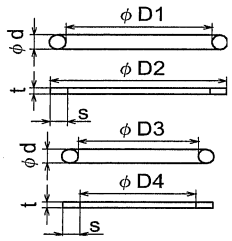
TOOLS				PAGE	13-09
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
扭力扳手 Torque spanner	 L=1998, S=25, 750～2000 Nm	Steel	1	913DJ5	6
方孔接头 Adapter for socket wrench	 L=38,S1=12.5,S2=10	Steel	1	913DJ7	0.1
方孔接头 Adapter for socket wrench	 L=58,S1=12.5,S2=20	Steel	1	913DJ8	0.1
方孔接头 Adapter for socket wrench	 L=85,S1=20,S2=25	Steel	1	913DJ9	0.3
方孔接头 Adapter for socket wrench	 L=68,S1=25,S2=20	Steel	1	913DJ10	0.5
尖嘴钳 Pliere for circlip	 EN515D3/40/85,HD430702 5/7, HD430701 5/7/9, EN515H85	Steel	each 1	913DK	1.845
TOTAL WEIGHT 总重				8.85 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	13-10
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
敲击扳手 Impact spanner	 GB4392-84 MC 85	Steel	1	913DN	6.8
双头扳手 Open ring wrench	 S14×S17	Steel	1	913DO1	0.13
双头扳手 Open ring wrench	 S19×S22	Steel	1	913DO2	0.25
扳手套筒 Socket&Crowfoot spanner	 Spanner扳手 S1×S2: 120×25, 95×20, 85×20, 115×20, 100×25, 46×19, 41×19. Socket套筒 GB3390.1 75×25, 65×25, 55×25, 50×25, 60×25, 70×25, 80×25	Steel	each 1	913DP	11.86
扳手 Spanner for FIVA	 	Steel	each 1	913D89	0.11
扳手 Spanner	 L=161, S14	Steel	each 1	913D90	0.11
TOTAL WEIGHT 总重				19.26 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS				PAGE	13-11
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
HYDRAULIC PUMP AND GENERAL TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
防坠落设备 Fall arrest equipment		Components	1	913F	10.6
葫芦 Chain tackle	 500Kg*1, 1000kg*2, 2000kg*2, 5000kg*1	Components	500Kg:1pc, 1000kg:2pcs, 2000kg:2pcs, 5000kg:1pcs	913BI1/2/3/5	98.9
拉紧葫芦 Pull lift		Components	2	913BI4	26
环形吊带 Roundsling	 WLL=4T,L=5000	Polyamid	1	913BJ1	2.25
环形吊带 Roundsling	 WLL=4T,L=1500	Polyamid	1	913BJ2	0.68
防擦装置 Chafing device for roundslings	 L=1000	Polyurethane	1	913BJ3	1.98
TOTAL WEIGHT 总重				140.41 kg	
	CSSC-MES DIESEL CO.,LTD.				

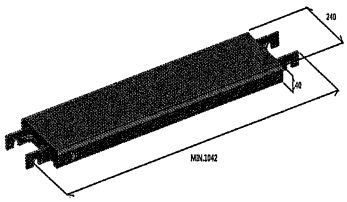
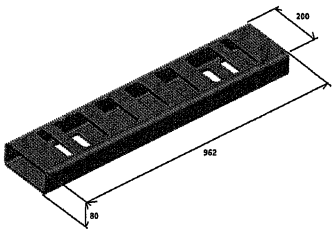
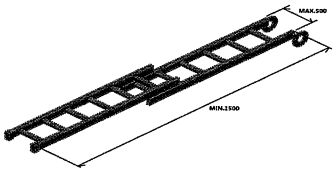
TOOLS				PAGE	24-01
MAIN DIESEL ENGINE 6G60MEC mk9.5				SHIP NO.	
END CHOCK BOLT TOOLS				BOX NO.	
NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
工具盒 Tools box	 520×460×245	Components	1	924A	11.58
端部螺栓 液压拉伸器 Hydraulic jack	 M45×4.5 D=120,H=102	Components	2	924AA	In the box 装工具盒 （924A） 8.31 × 2
承压圈 Support for hydraulic jack	 D=110,H=72	Steel	2	924AB	In the box 装工具盒 （924A） 2.62 × 2
球形手柄 Tommy bar		Components	2	924AH	In the box 装工具盒 （924A） 0.1 × 2
拧紧螺母 Stud setter	 H=113, D=80，M45×4.5	Steel	2	912AH	In the box 装工具盒 （912A） 2.61 × 2
TOTAL WEIGHT 总重				40.86 kg	
	CSSC-MES DIESEL CO.,LTD.				

TOOLS		PAGE	24-02
MAIN DIESEL ENGINE 6G60MEC mk9.5		SHIP NO.	
END CHOCK BOLT TOOLS		BOX NO.	

NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
内六角扳手 Allen wrenches GB5356-85 4MMR		Steel	2	924A7	In the box 装工具盒 （924AD） 0.03 × 2
带挡圈的密封圈 Sealing ring with back-up ring	 D1=74.2,D2=88,D3=59, D4=61,d=5.7,t=2,s=5	Components	each 2	924A8 924A9	In the box 装工具盒 （924AD） 0.04 × 2

TOTAL WEIGHT 总重	0.10 kg	
	CSSC-MES DIESEL CO.,LTD.	

TOOLS		PAGE	30-01
MAIN DIESEL ENGINE 6G60ME-C9.5		SHIP NO.	
SCR SYSTEM TOOLS		BOX NO.	

NAME 名称	SKETCH 简图	MATERIAL 材料	SUPPLY PER SHIP 数量/船	DRAWING NO. 组立区分号	REMARKS WEIGHT重量(kg)
踏板 Platform board		Component	1	930AA	10.2
矩形钢管 Rectangle pipe		Component		930A2	22.97
梯子 Ladder for reactor		Component		930A3	10
TOTAL WEIGHT 总重				43.10 kg	
	CSSC-MES DIESEL CO.,LTD.				

文件说明 Document Remarks	机型 Eng. Type	CMD-MAN B&W6G60ME-C9.5 Tier III
	台份 Set No.	44#45#46#47#
	工程编号 Engine No.	CE0561Y/562Y/576A/580A
	船厂 Shipyard	江苏新时代造船有限公司
	船号 Hull No.	0311117/18/19/20
	船级社 Classification Society	ABS

CMD-MAN-B&W 6G60ME-C MK9.5

LIST OF SPARE PARTS AND TOOLS FOR ACCESSORIES

主机附件备件工具清单（正稿）

△1 1 G60MEC-160王勇20180729

	5
	4
	3
	2
	1

修改说明
Corrected Description

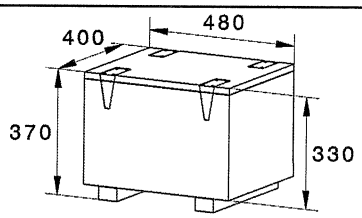
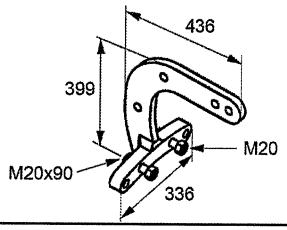
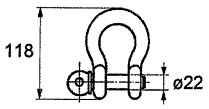
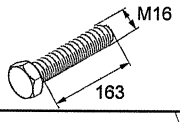
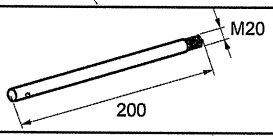
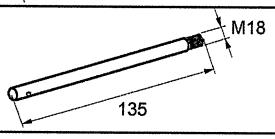
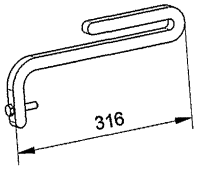
						5
						4
						3
						2
						1
王勇2018.5.12	魏荣刚2018.5.12	刘闯 2018 5-14				0
编制 Compiled	校对 Checked	审核 Confirmed	审定 Approved	会签 Countersigned	批准 Authorized	版本号 C.No.
被替代文件编号 Replace No.		设计参考文件编号 Reference No.		页数 Pages 1	总页数 Total Pages	25

上海中船三井造船柴油机有限公司 CSSC-MES Diesel Co., Ltd.	文件编号 Document No.	CE056151

1	Spare parts and Tools for MET60MA 增压器备件工具	3~4
2	Spare parts and tools for GEA Air Cooler 空冷器备件及工具	5~7
3	Spare parts for Turning Gear 盘车机备件	8
4	Spare parts and tools for Aux. Blowers 辅助鼓风机备件及工具	9
5	Spare parts for Main Starting Valve 主起动阀备件	10~11
6	Spare parts for Oil Mist Detector 油雾探测器备件	12
7	Spare parts for Starter of Turning Gear and Starter of Aux. Blowers 盘车机起动器及辅助鼓风机起动器备件	13~14
8	Spare parts for High Pressure Pump 高压泵备件	15
9	Spare parts and tools for Exhaust Valve Grinding Machine 排气阀磨机备件及工具	16~17
10	Spare parts for Fuel Valve Test Equipment 喷油器试验台备件	18
11	Spare parts and tools for Hydraulic Oil Filter 液压油滤器备件和工具	19
12	Spare parts for heating tank 滑油加热柜备件	20
13	Spare parts for HPS starter HPS 起动泵起动箱备件清单	21
14	Spare parts and tools for Hydraulic top bracing 液压顶撑备件和工具	22~24
15	Spare parts for LDCL pump LDCL 循环泵起动器备件	25

Spare parts and tools for A270-L
增压器备件及工具

Part List / IHL-TECH	Document Number
A270-L: Tools for customer ZT10 ZTV01	**HZTL454602R0001**

No	Name	Sketch	Quantity	Part no	Weight/ piece(kg)
1	Wooden box		1	90011	11.500
2	Lifting device		1	90190	20.750
3	Shackle		2	90195	1.000
4	Press-off screw		6	90900	0.250
5	Guide bolt		3	90320	0.451
6	Guide bolt		3	90317	0.245
7	Angle		1	94020	1.030

The representations in the diagrams can differ slightly from the actual parts supplied
The listed weights are rounded off

Resp.dep.	Change-No	Page No.	No.of pages	Document	Part	Version	Revision
ZT	137680	1	2	IHL	E	00	-

ABB Turbo Systems Ltd

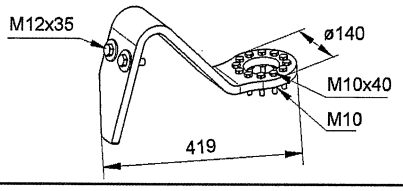
© Copyright 2015 ABB. All rights reserved.

HZTL454602R0001_IHL_E_00 Druckdatum: 2015.10.23 13:17:47 / H102200

FR(Freigegeben)

Spare parts and tools for A270-L
增压器备件及工具

Part List / IHL-TECH	Document Number
A270-L: Tools for customer ZT10 ZTV01	**HZTL454602R0001**

No	Name	Sketch	Quantity	Part no	Weight/ piece(kg)
8	Locking device		1	94003	7.100

The representations in the diagrams can differ slightly from the actual parts supplied
The listed weights are rounded off

Spare parts and tools for air cooler

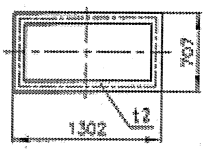
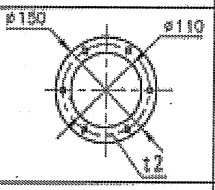
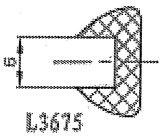
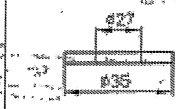
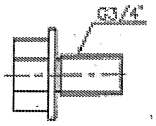
空冷器芯子备件和工具（配一台空冷器）

LIST OF AIR COOLER FITTINGS
空冷器配套件清单

DRWG NO: 13 10 4062 WH-SL Rev.A
Page: 1 Total Page: 1

Kelvion
Spare parts
备件

XLQ768.1(167/36/16/4-NSv-S141-34N223)

NO. 序号	Part.No 件号 / Description 名称	Sketch and Dim 简图和尺寸	Quantity 数量	Material 材料 / Mass 重量 (Kg)	Code In DWG. 代号
1	13 17 0087 WH Rev.5 Header gasket 端盖垫片		2 / cooler	No-asbestos fiber reinforced rubber gaskets 非石棉纤维增强橡胶板 1.0	垫片盒内 In the gasket box
2	GIC-17-012-12 Round Gasket 圆形垫片		10 / cooler	NBR-70 丁腈橡胶 0.2	工具箱内 In the toolbox
3	GIC-17-002-12 "U" Gasket "U" 型垫		1 / cooler	NBR 丁腈 橡胶 0.26	工具箱内 In the toolbox
4	100117123 Gasket 垫片		4 / cooler	T3 铜 0.078	工具箱内 In the toolbox
5	100147906 Plugs 螺塞		4 / cooler	HSn62-1 黄铜 0.88	工具箱内 In the toolbox

Remark

Prep.	Zhu QF
Date	2017.1.19
Chk.	Wang Qiwei
Date	17.2.11
Appr.	
Date	7.11

Manufacture's Name 制造厂商: 凯络文换热器(中国)有限公司 Kelvion Heat Exchangers (China) Co.,Ltd

For this drawing, Kelvion Heat Exchangers (China) Co.;Ltd reserves all right as per ISO 16016.
凯络文换热器（中国）有限公司将根据德国工业ISO 16016标准对此图纸保留所有权

Spare parts and tools for air cooler

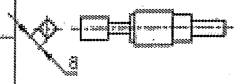
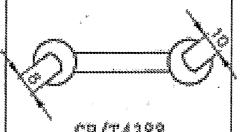
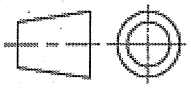
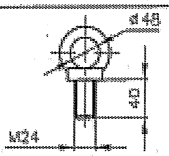
空冷器芯子备件和工具（配一台空冷器）

LIST OF AIR COOLER FITTINGS 空冷器配套件清单	DRWG NO: 13 10 4062 WH-TL Rev. A Page: 1 / Total Page: 1

Kelvion

Tools
工具

KLQ768.1(167/36/16/4-NSv-S141-34N223)

NO. 序号	Part. No 件号 Description 名称	Sketch and Dim 简图和尺寸	Quantity 数量	Material 材料 Mass 重量 (Kg)	Code in DWG. 代号
1	100139847 Tube expander 胀管器	 S140/S141	1 / engine	Steel 钢 件 0.2	工具箱内 In the toolbox
2	100116528 Handle 扳手	 GB/T4388	1 / engine	Steel 钢 件 0.25	工具箱内 In the toolbox
3	100143471 Tube plug 管堵塞	 S140/S141	12 / cooler	HSn62-1 黄铜 1.27	工具箱内 In the toolbox
4	100116893 Tube brush with pin 管刷	 S140/S141	1set / engine	St/Nylon 钢/尼龙 0.1	空冷器包装箱内 In the box of air cooler
5	100116971 Eye bolt 起吊螺栓	 GB/T 825	4 / engine	Steel 钢 1.14	工具箱内 In the toolbox

Remark	
Prep.	Zhu Q?
Date	2013.7.10
Chk.	Wang Jiang
Date	13.7.11
Appr.	
Date	

Manufacture's Name 制造厂商: 凯络文换热器(中国)有限公司 Kelvion Heat Exchangers (China) Co., Ltd

For this drawing, Kelvion Heat Exchangers (China) Co.; Ltd reservos all right as per ISO 16016.
凯络文换热器（中国）有限公司将根据德国工业ISO 16016标准对此图纸保留所有权

Spare parts and tools for air cooler（ONLY FOR ENGINE MAKER MOUNTING）

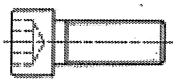
空冷器芯子备件和工具（配一台空冷器）(只用于主机厂安装)

LIST OF AIR COOLER FITTINGS 空冷器配套件清单	DWG NO: 13 10 4062 WH-AL Rev. A	
	Page: 1	Total Page: 1

Kelvion

Assembly Items 装机附件

KLQ768.1(167/36/16/4-NSv-S141-34N223)

NO. 序号	Part.No 件号 / Description 名称	Sketch and Dim 简图和尺寸	Quantity 数量	Material 材料 / Mass 重量 (Kg)	Code In DWG. 代号
1	GB/T70.1 Bolt 螺钉	M16x45 	42 cooler	Steel (8.8热浸锌) 钢（8.8+热浸锌） 1.5	工具箱内 In the toolbox

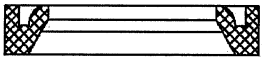
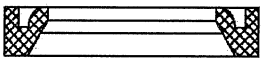
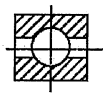
Remark	
Preg.	Zhu QF
Date	2017.7.10
Chk.	Wang Qiang
Date	17.7.11
Appr.	Zhu Ke
Date	7.11

Manufacture's Name 制造厂商	凯络文换热器(中国)有限公司 Kelvion Heat Exchangers (China) Co.,Ltd

For this drawing, Kelvion Heat Exchangers (China) Co.; Ltd reserves all right as per ISO 16016.
凯络文换热器（中国）有限公司将根据德国工业ISO 16016标准对此图纸保留所有权

Spare parts for Turning gear
盘车机备件

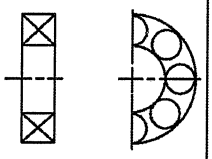
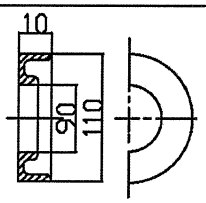
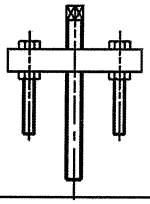
LIST OF SPARE PARTS FOR ACCESSORIES FOR MAIN DIESEL ENGINE 主机附件备件清单		DRWG.NO.:	
		PAGE:	TOTALPAGE:
LECHUN	LIST OF SPARE PARTS FOR TURNING GEAR 盘车机备件清单	MAIN ENGINE TYPE 5-6G60ME-C 主机型号	
SPARE PARTS			

No. 序号	Name 名称	Sketch 简图和尺寸	Supply 供应数量 Working 工作数量	Supply 供应数量 Spare 备件数量	Remarks 备注
1	HG4-692-67 Oil Seal 骨架油封	 PD190x240x15	1pcs	2pcs	减速器输出端用 For output end of speed reducer use
2	HG4-692-67 Oil Seal 骨架油封	 PD45x75x10	1pcs	2pcs	减速器输入端用 For input end of speed reducer use
3	GB279-64 Rolling Bearing 轴承	 6207	2pcs	2pcs	电机用 For electric motor use

MFR'S NAME 制造商	SHANGHAI LECHUN HEAVY MACHINERY & ELECTRONIC EQUIPMENT CO.,LTD. 上海乐春重工机电设备有限公司 TEL:86 21 51961688 51961699 FAX:86 21 51961688-8007

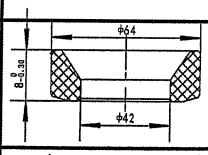
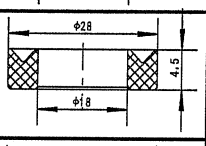
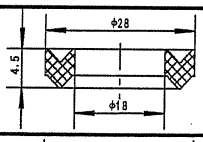
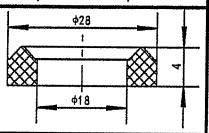
Spare parts and tools for Aux. blowers
辅助鼓风机备件及工具

List of for Aux. Blower with Hoyer motor 200L/225M
配hoyer 200L/225M电机的辅助风机备件清单

SPARE PARTS&TOOLS LIST 工具备件清单		Aux. Blower of 辅助鼓风机		
No.	Name 名称	Sketch 简图	Spare 备件数量	Remarks 备注
1	Ball Bearing 轴承		1	6312/C3
2	PS-Sealing 气封		1	Ø110XØ90X10
3	Impeller tool 拉模		1	
MFR'S NAME	Qiyao Power Systems Co. Ltd TEL:86 21 65687121 FAX:86 21 65680330			

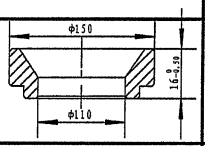
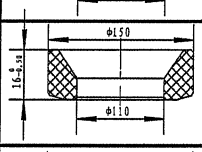
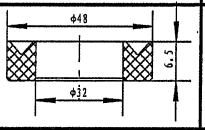
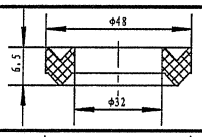
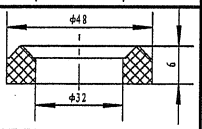
Spare parts for Main Starting Valve（DN40）
主起动阀备件 （DN40）

Q641 F-40系列DN40气动球阀备件清单
Spare Parts List of the Q641 F-40 Serie DN40 Pneumatic Ball Valves

序号 No.	名 称 Name	主要尺寸 Main dimension	材 料 Material	数量 Quantity
1	密封圈 Sealing ring		聚四氟乙烯 Polyper Fluorethylene	2
2	上填料 Upper filler DN18（FQCB-005-83）		聚四氟乙烯 Polyper Fluorethylene	1
3	中填料 Middle filler DN18（FQCB-005-83）		聚四氟乙烯 Polyper Fluorethylene	2
4	下填料 Lower filler DN18（FQCB-005-83）		聚四氟乙烯 Polyper Fluorethylene	1
5	O型密封圈 O-ring	φ16X2.4	丁腈橡胶 GB1235-76 NBR	1
6	O型密封圈 O-ring	φ24X2.5	丁腈橡胶 GB1235-76 NBR	1
7	O型密封圈 O-ring	φ54.5X5.3	丁腈橡胶 GB/T 3452.1 NBR	2
8	O型密封圈 O-ring	φ65X3.1	丁腈橡胶 GB1235-76 NBR	2
9	挡圈(GB894.2-86) Elastic ring	φ16	65Mn	1

Spare parts for Main Starting Valve（DN150）
主起动阀备件 （DN150）

Q641F-40系列DN150气动球阀备件清单
Spare Parts List of the Q641F-40 Series
DN150 Pneumatic Ball Valves

序号 No.	名 称 Name	主要尺寸 Main dimension	材 料 Material	数量 Quantity
1	密封圈 Sealing ring		铝青铜 ZQAL9-4	1
2	密封圈 Sealing ring		聚四氟乙烯 Polyper Fluorethylene	1
3	上填料 Upper filler DN32 (FQCB-005-83)		聚四氟乙烯 Polyper Fluorethylene	1
4	中填料 Middle filler DN32 (FQCB-005-83)		聚四氟乙烯 Polyper Fluorethylene	2
5	下填料 Lower filler DN32 (FQCB-005-83)		聚四氟乙烯 Polyper Fluorethylene	1
6	O型密封圈 O-ring	Φ35X3.1	丁腈橡胶 GB1235-76 NBR	1
7	O型密封圈 O-ring	Φ50X3.1	丁腈橡胶 GB1235-76 NBR	1
8	O型密封圈 O-ring	Φ150X5.3	丁腈橡胶 GB/T 3452.1 NBR	2
9	O型密封圈 O-ring	Φ160X3.1	丁腈橡胶 GB1235-76 NBR	2
10	挡圈 (GB894.2-86) Elastic ring	Φ35	65Mn	1

Spare parts and tools for Oil Mist Detector
油雾探测器备件及工具

Spare parts and tools for oil mist detector

油雾探测器备件和工具

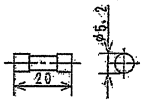
SPARE PARTS

PAGE

SHIP NO.

TYPE: MD-SX OILMIST DETECTOR

BOX No.

NO.	NAME / PARTS NO.	SKETCH	QUANTITY WORKING PER SET	QUANTITY WORKING PER VESS	QUANTITY SPARE	REMARKS
1	FUSE 保険 ヒューズ		2	-	2	F-7142-125-6A SATO PARTS

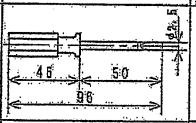
TOOLS

PAGE

SHIP NO.

TYPE: MD-SX OILMIST DETECTOR

BOX No.

NO.	NAME / PARTS NO.	SKETCH	QUANTITY WORKING PER SET	QUANTITY WORKING PER VESS	QUANTITY SPARE	REMARKS
1	DRIVER 螺丸ろ ドライバー		-	-	1	210-119S WAGO

MFR'S NAME & ADDRESS	DAIHATSU DIESEL MFG. CO., LTD. 45-BANTI. AMURA. NORIYAMA. SHIGA. JAPAN

Spare parts for Starter of Turning Gear
盘车机起动器备件

NO. 序号	NAME 名称	DESCRIPTION AND SPECIFICATION 型号规格	OUTLINE 外形	QTY. 数量	REMARK 备注	MANUFACTURER 生产厂家
1	INDICATING LAMP 指示灯	XB2BW31LC		1	AC/DC24V WH AC/DC24V 白色	Schneider 施耐德
2	RELAY 中间继电器（4触点）	RXM 4AB2P7		1		Schneider 施耐德
3	RELAY SOCKET (2/4 Contact) 中间继电器基座(2/4触点)	RXZE2M114		1		Schneider 施耐德
4	SELECT SWITCH 两位选择开关	XB2BD25C		1	1NO +1NC BLK 1NO+1NC 黑色	Schneider 施耐德
5	button 平头按钮(红色)	XB2BA42C		1	RD, 1NC 红色 1NC	Schneider 施耐德
6	BUTTON WITH LAMP 带灯按钮	XB2BW33B1C		1	1NO green 1NO 绿色	Schneider 施耐德
7	CONTACT ELEMENT ...常闭按钮本体	ZB2BE102C		1	1NC 1NC	Schneider 施耐德
1	SOCKET 插座	NM3041		2	16A 5P AC110V 50~60HZ 16A 5P AC110V 50~60HZ	NANJING MENNEKES 南京曼奈柯斯电器有限公司

以下插座为附件，由船厂安装

Rev. 标记	Modify. 修改原因	Qty. 数量	Name 姓名	Date 日期
A	根据船厂要求修改	1	张文涛	2017.5.25

DESIGNED 设计	张文涛	CONFIRMED 审核	2017-05-25
CHECKED 校对	蔡志清	APPROVED 批准	2017-05-25

Turning Gear Starter Panel 盘车机起动箱

CSSC 安庆船用电器有限责任公司 ANQING MARINE ELECTRIC DEVICE CO., LTD

SPARE PARTS LIST 备附件清单

Drg. No. 图号 AD106-17003-900

PAGE 14 页 TOTAL: 14 共 14 页

Spare parts for Starter of Aux. Blowers
辅助鼓风机起动器备件

NO. 序号	NAME 名称	DESCRIPTION AND SPECIFICATION 型号规格	OUTLINE 外形	QTY. 数量	REMARK 备注	MANUFACTURER 生产厂家
1	INDICATING LAMP 指示灯	XB2BVB1LC		1	AC/DC24V White AC/DC24V 白色	Schneider 施耐德
2	INDICATING LAMP 指示灯	XB2BVB3LC		1	AC/DC24V GRN AC/DC24V 绿色	Schneider 施耐德
3	INDICATING LAMP 指示灯	XB2BVB4LC		1	AC/DC24V RED AC/DC24V 红色	Schneider 施耐德
4	INDICATING LAMP 指示灯	XB2BVB6LC		1	AC/DC24V BLU AC/DC24V 蓝色	Schneider 施耐德
5	RELAY 中间继电器	RXM2AB2P7		1		Schneider 施耐德
6	RELAY 中间继电器	RXM 4AB2B7		1		Schneider 施耐德
7	RELAY SOCKET (2/4 Contact) 中间继电器基座(2/4触点)	RXZE2M114		4		Schneider 施耐德
8	SELECT SWITCH 三位选择开关	XB2BD33C		1	2NO BLK 2NO 黑色	Schneider 施耐德
9	INDICATING LAMP 平头按钮	XB2BA31C		1	1NO Green 1NO 绿色	Schneider 施耐德

Rev. 标记	Modif. 修改原因	Qty. 数量	Name 姓名	Date 日期
DESIGNED 设 计	陈文永	CONFIRMED 审 核	石小陆	2017-03-11
CHECKED 校 对	蔡立涛	APPROVED 批 准	林吉治	2017-03-11

AUX. BLOWER STARTER PANEL
辅助鼓风机起动箱

CSSC
安庆船用电器有限责任公司
ANQING MARINE ELECTRIC DEVICE CO.,LTD

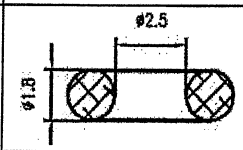
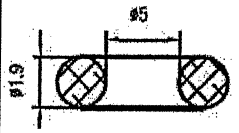
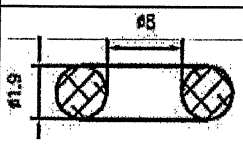
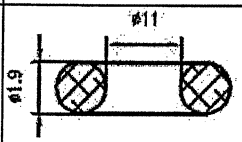
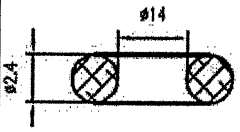
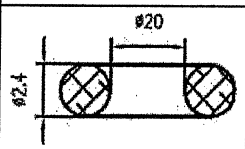
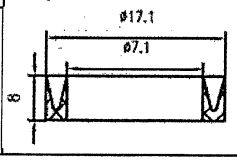
SPARE PARTS LIST
备件清单

Drg. No. 图 号: AD264-17003-700

PAGE 12
第 12 页
TOTAL: 12
共 12 页

Spare parts for High Pressure Pump（Type: HPU-225）
高压泵备件

HPU-225风动液压泵配件清单

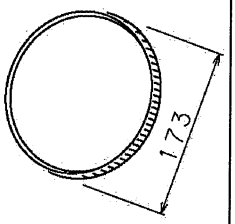
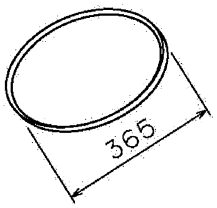
序 号	订货号	名 称	规 格	简 图	数 量	备注
1	19	O型密封圈	d2.5×1.8		1件	
2	16	O型密封圈	d5×1.9		1件	
3	10	O型密封圈	d8×1.9		3件	
4	11	O型密封圈	d11×1.9		1件	
5	2	O型密封圈	d14×2.4		4件	
6	25	O型密封圈	d20×2.4		1件	
7	29	V型密封圈	UN7.1		1件	

常州市陆氏船舶机械有限公司

Spare parts and tools for Exhaust Valve Grinding Machine
排气阀磨机备件/工具

TR2308 0

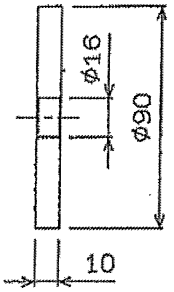
SPARE		PAGE	1/1
YGS-B**MC		SHIP NO.	
EXHAUST VALVE SPINDLE&SEAT GRINDING MACHINE		BOX NO.	

	NAME	SKETCH	MATERIAL	SUPPLY PER SHIP WORK-ING	SUPPLY PER SHIP SPARE	DRAWING NO.	DRAWING PART NO.	REMARKS
1	传动皮带 WORK SPINDLE PULLEY BELT 砥石軸 プーリベルト		RUBBER	1				5M545 0.004Kg
2	V型皮带 V BELT Vベルト		RUBBER	1				A-45 0.13Kg

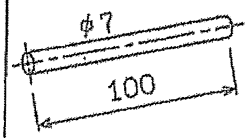
YASEC YAMASHINA SEIKI CO.,LTD.

Spare parts and tools for Exhaust Valve Grinding Machine
排气阀磨机备件/工具

TR1654 0

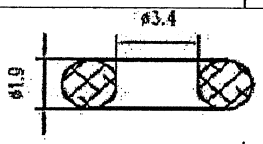
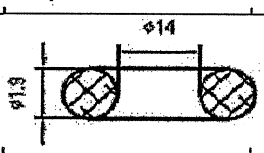
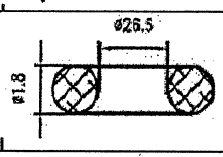
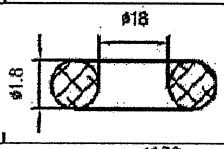
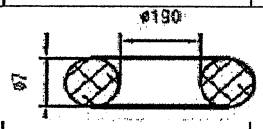
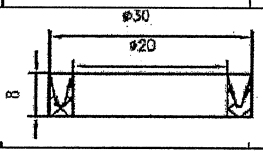
SPARE									PAGE	1/1
YGS-B**MC									SHIP NO.	
EXHAUST VALVE SPINDLE&SEAT GRINDING MACHINE									BOX NO.	
No.	NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING		REMARKS
				WORK-ING	SPARE	NO.	PART NO.	
1	WHEEL 砥 石 砂轮			1	1			YS001 0.1Kg

TR1654 0

TOOL									PAGE	1/1
YGS-B**MC									SHIP NO.	
EXHAUST VALVE SPINDLE&SEAT GRINDING MACHINE									BOX NO.	
No.	NAME	SKETCH	MATERIAL	SUPPLY PER SHIP		DRAWING		REMARKS
				WORK-ING	SPARE	NO.	PART NO.	
1	GRINDING WHEEL LOCKING BAR 砥石軸 ロックハンドル 锁紧棒			1				0.02Kg

Spare parts for fuel valve test equipment
喷油器试验台备件

HDP1100-D2喷试台配件清单

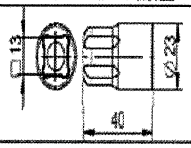
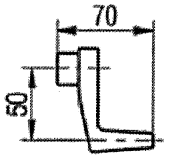
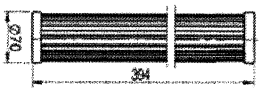
序号	订货号	名 称	规 格	简 图	数量	备注
1	13	O型密封圈	d3.4×1.9		2件	
2	11	O型密封圈	d14×1.9		3件	
3	2	O型密封圈	d26.5×1.8		3件	
4	6	O型密封圈	d18×1.8		4件	
5	21	O型密封圈	d190×7		1件	
6	52	V型密封圈	UN 20		1件	

常州市陆氏船舶机械有限公司

Spare parts and tools for Hydraulic Oil Filter
液压油滤器备件

BOLLFILTER
Protection Systems
Marine & Power

List of tools & spare parts

Item 序号	P/N 零件号	Description 名称	QTY 数量	Remark 备注
1	6700750	Key for unscrewing the filter element 拆滤芯专用工具	1 pc	
2	2380014	Crank handle for manual operation 应急操纵手柄	1 pc	
3	1980343	Boll 6μm bypass element 波尔 6μm 旁通滤芯	1 set	

Spare parts and tools for heating tank
滑油加热柜备件

序号 NO.	产品型号 Product type	备件 Spare part	规格 Size	数量 Qty	单位 Unit	备注 Remarks
1	[illegible]	滤芯 filter element	200μm	1	[illegible]	
2	[illegible]	电磁阀 Pilot	[illegible]	1	[illegible]	
3	[illegible]	温度传感电缆 relay	[illegible]	1	[illegible]	

HEATING TANK FOR CYLINDER OIL

SPARE PARTS LIST 备件清单

HTC037A-BU

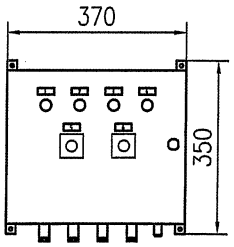
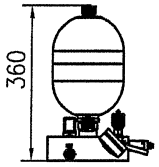
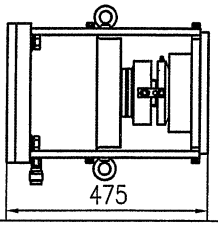
Spare parts for HPS starter
HPS 起动泵起动箱备件清单

NO. 序号	NAME 名称	DESCRIPTION AND SPECIFICATION 型号规格	OUTLINE 外形	QTY. 数量	REMARK 备注	MANUFACTURER 生产厂家
1	INDICATING LAMP 指示灯	XB2BVB1LC		1	AC/DC24V White AC/DC24V 白色	Schneider 施耐德
2	INDICATING LAMP 指示灯	XB2BVB4LC		1	AC/DC24V White AC/DC24V 红色	Schneider 施耐德
3	INDICATING LAMP 指示灯	XB2BVB3LC		1	AC/DC24V GRN AC/DC24V 绿色	Schneider 施耐德
4	INDICATING LAMP 指示灯	XB2BVB6LC		1	AC/DC24V BLU AC/DC24V 蓝色	Schneider 施耐德
5	RELAY 中间继电器（4触点）	RXM 4AB2P7		1		Schneider 施耐德
6	RELAY SOCKET（2/4 Contact） 中间继电器基座(2/4触点)	RXZE2M114 △		5		Schneider 施耐德
7	RELAY 中间继电器	RXM 4AB2B7		1		Schneider 施耐德
8	SELECT SWITCH 三位选择开关	XB2BD33C		1	2NO BLK 2NO 黑色	Schneider 施耐德
9	CONTACT ELEMENT 一常开按钮本体	ZB2BE101C		1	1NO 1NO	Schneider 施耐德
10	INDICATING LAMP 平头按钮	XB2BA31C		1	1NO Green 1NO 绿色	Schneider 施耐德

A	更换电气型号	1	徐文涛	2017-06-21	HPS STARTER PANELS HPS起动箱	安庆船用电器有限责任公司 ANQING MARINE ELECTRIC DEVICE CO.,LTD	SPARE PARTS LIST 备件清单	PAGE 12 第 12 页
Rev. 标记	Modif. 修改原因	Qty. 数量	Name 姓名	Date 日期				
DESIGNED 设 计	陈文东	CONFIRMED 审 核	石小龙	2017-06-21			Drg. No. 图 号 AD326-17003-800	TOTAL: 12 共 12 页
CHECKED 校 对	蔡文涛	APPROVED 批 准	林吉心	2017-06-21				

Scope of hydraulic top bracing
液压顶撑供货范围

DYDZ200-GH

NO. 序号	Code 代号	Name 名称	Material 材料	Qty. 数量	Remark 标记
3	DYDZ200-DK	Electric control box 电气控制箱	component 组件	1	
2	DYDZ200-FK	Control unit and accumulator include O ring seal 控制单元与蓄能器 含"O"型圈	component 组件	4	
1	DYDZ200-YG	Cylinder unit 液压缸单元	component 组件	4	

借通用件登记
描 图
校 描
旧底图总号
签 字
日 期

该图纸所有权属于南通航海机械集团有限公司，未经南通航海机械集团有限公司许可不得以任何方式将本图透露给第三方。
This drawing is the exclusive property of Nantong Navigation Machinery Group Co.,Ltd,and cannot be disclosed in any way to any third party without the specific prior written permission of Nantong Navigation Machinery Group Co.,Ltd.

标记	处数	更改文件号	签字	日期

设计		标准化	
校对		审定	
审核			
工艺		日期	

供货范围
scope of supply

图样标记	重量	比例
		1:1

第 共 页 第 共 页

南通航海机械集团有限公司

液压顶推支撑
hydraulic top bracing

DYDZ200-GH

Tool for hydraulic top bracing
液压顶撑工具清单

DYDZ200-FJ

NO.	Code	Name	Material	Qty.	Remark
6	CQJ284x.5	charge tool 充气工具	component 组件	1	G5/8" M28x1.5
5	GB/T 827	regulation pole M10 吊环螺栓M10	Q235A	1	M10
4	YDZZ240A-12	regulation pole 调节杆	component 组件	2	295 ø10
3	RG	Drain hose 空气排放软管	component 组件	1	M16X1.5
2	GYB6	Hand pump (with hose &coupling) 手摇泵(含软管、接头)	component 组件	1	680 400
1	DYDZ200-GJ	Fitting tool 安装工具	component 组件	1	435~450

借通用件登记
描 图
校 描
旧底图总号
签 字
日 期

该图纸所有权属于南通航海机械集团有限公司，未经南通航海机械集团有限公司许可不得以任何方式将本图透露给第三方。
This drawing is the exclusive property of Nantong Navigation Machinery Group Co.,Ltd,and cannot be disclosed in any way to any third party without the specific prior written permission of Nantong Navigation Machinery Group Co.,Ltd.

标记	处数	更改文件号	签字	日期

tool & accessories list

南通航海机械集团有限公司

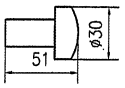
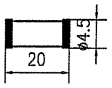
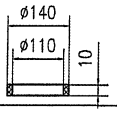
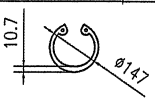
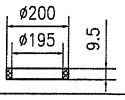
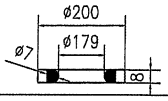
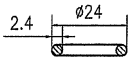
hydraulic top bracing

设计		标准化		图样标记	重量	比例
校对		审定				1:1
审核						
工艺		日期		共 页	第 页	

DYDZ200-FJ

Spare parts for hydraulic top bracing
液压顶撑备件清单

DYDZ200-BJ

NO. 序号	Code 代号	Name 名称	Material 材料	Qty. 数量	Remark 标记
7		indicator lamp red、green、white 1pc 指示灯(红绿白各一)	component 组件	3	
6		Fuse 熔芯6A	component 组件	4	
5	JB/ZQ4606-86	Dust seal 防尘圈110	Wool 半粗羊毛	8	
4	GB893-76	Block ring 挡圈140	65Mn	8	
3	GST5909-2000	Slide ring 斯来圈	PTFE 聚四氟乙烯	8	
2	GSF2000-01	Combined ring 格来圈	PTFE 聚四氣乙烯	8	
1	GB1235-76	"O" ring O型密封圈	NBR 丁晴橡胶	4	

借通用件登记 | 描 图 | 校 描 | 旧底图总号 | 签 字 | 日 期

该图纸所有权属于南通航海机械集团有限公司。未经南通航海机械集团有限公司许可不得以任何方式将本图透露给第三方。
This drawing is the exclusive property of Nantong Navigation Machinery Group Co.,Ltd,and cannot be disclosed in any way to any third party without the specific prior written permission of Nantong Navigation Machinery Group Co.,Ltd.

标记	处数	更改文件号	签字	日期

独立式主机液压顶推支撑
Hydraulic top bracing stand-Alone type

南通航海机械集团有限公司

设计		标准化		图样标记	重量	比例
校对		审定				1:1
审核						
工艺		日期		共 页	第 页	

备件清单
Spare parts

DYDZ200-BJ

Spare parts for LDCL pump
LDCL 循环泵起动器备件

NO. 序号	NAME 名称	DESCRIPTION AND SPECIFICATION 型号规格	OUTLINE 外形	QTY. 数量	REMARK 备注	MANUFACTURER 生产厂家
1	INDICATING LAMP 指示灯	XB2BVB1LC		1	AC/DC24V White AC/DC24V 白色	Schneider 施耐德
2	INDICATING LAMP 指示灯	XB2BVB4LC		1	AC/DC24V White AC/DC24V 红色	Schneider 施耐德
3	INDICATING LAMP 指示灯	XB2BVB3LC		1	AC/DC24V GRN AC/DC24V 绿色	Schneider 施耐德
4	INDICATING LAMP 指示灯	XB2BVB6LC		1	AC/DC24V BLU AC/DC24V 蓝色	Schneider 施耐德
5	RELAY 中间继电器（4触点）	RXM 4AB2P7		1		Schneider 施耐德
6	RELAY SOCKET（2/4 Contact） 中间继电器基座(2/4触点)	RXZE2M114		1		Schneider 施耐德
7	RELAY 中间继电器	RXM 4AB2B7		1		Schneider 施耐德
8	SELECT SWITCH 三位选择开关	XB2BD33C		1	2NO BLK 2NO 黑色	Schneider 施耐德
9	CONTACT ELEMENT 一常开按钮本体	ZB2BE101C		1	1NO 1NO	Schneider 施耐德
10	INDICATING LAMP 平头按钮	XB2BA31C		1	1NO Green 1NO 绿色	Schneider 施耐德

Rev. 标记	Modif. 修改原因	Qty. 数量	Name 姓名	Date 日期	LDCL CIRCULATION PUMP STARTER CABINET LDCL 循环泵启动箱	安庆船用电器有限责任公司 ANQING MARINE ELECTRIC DEVICE CO.,LTD	SPARE PARTS LIST 备件清单			PAGE 12 第 12 页
DESIGNED 设计		CONFIRMED 审核		2017-03-11						TOTAL: 12 共 12 页
CHECKED 校对		APPROVED 批准		2017-03-11				Drg. No. 图号	AD404-17003-700	

文件说明 Document Remarks	机 型 Eng. Type	CMD-MAN B&W 6G60ME-C9.5 Tier III
	台 份 Set No.	44#45#46#47#
	工程编号 Engine No.	CE0561Y/562Y/576A/580A
	船 厂 Shipyard	江苏新时代造船有限公司
	船 号 Hull No.	0311117/18/19/20
	船级社 Classification Society	ABS

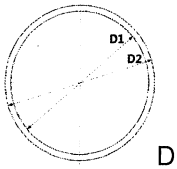
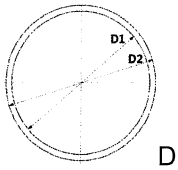
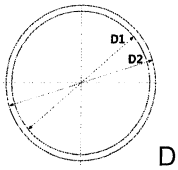
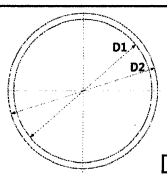
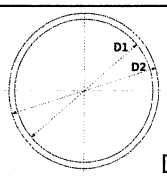
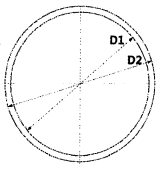
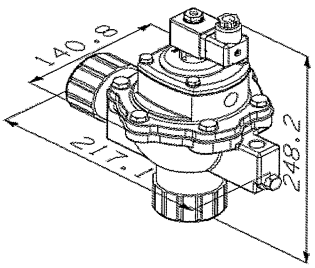
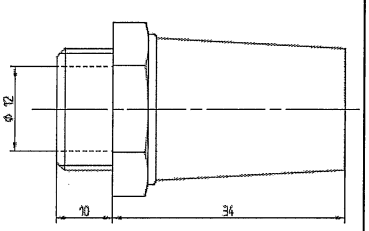
CMD-MAN B&W 6G60ME-C9.5 Tier III

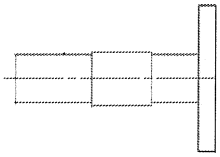
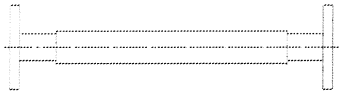
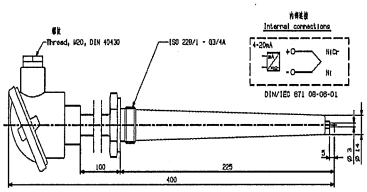
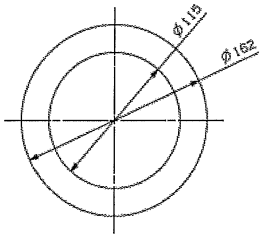
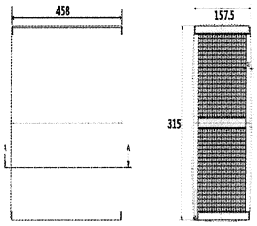
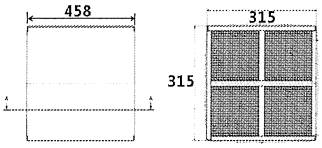
LIST OF SPARE PARTS FOR SCR

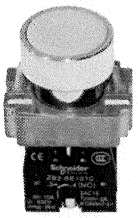
SCR系统备件清单

						5
						4
						3
						2
						1
修 改 说 明 Corrected Description						
						5
						4
						3
						2
						1
石勇 08.7.29	魏宇翔 08.8.5	刘向阳				0
编 制 Compiled	校 对 Checked	审 核 Confirmed	审 定 Approved	会 签 Countersigned	批 准 Authorized	版本号 C.No.
被替代文件编号 Replace No.		设计参考文件编号 Reference No.		页数 Pages 1	总页数 Total Pages	6

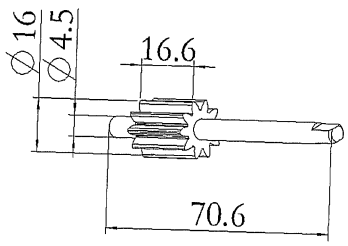
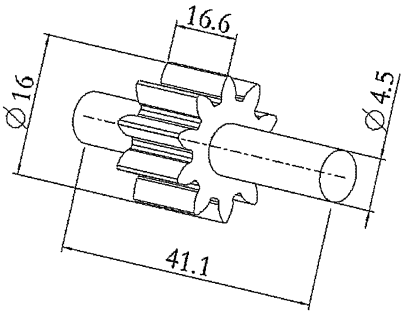
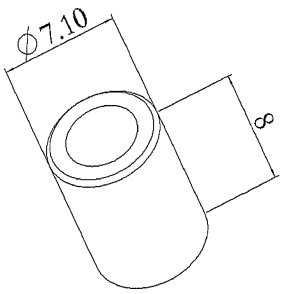
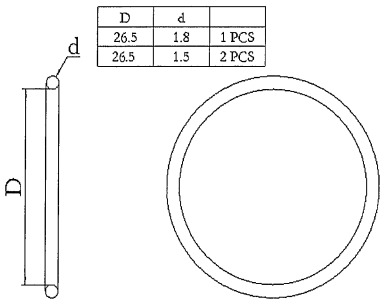
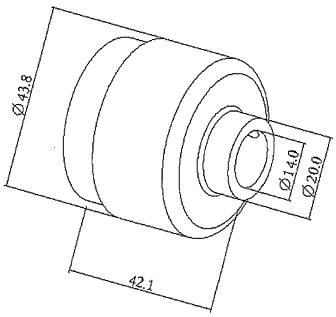
上海中船三井造船柴油机有限公司 CSSC-MES Diesel Co., Ltd.	文件编号 Document No.	D6521509-0.

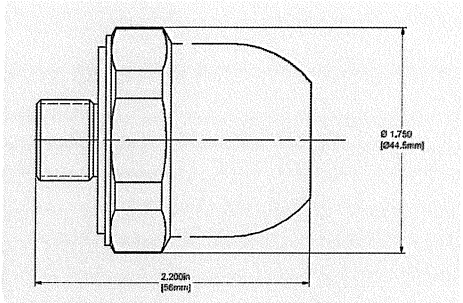
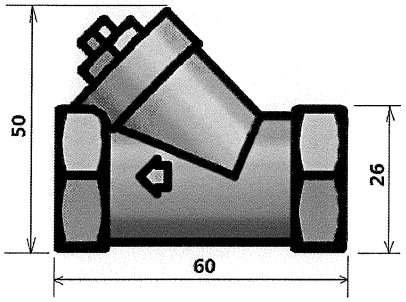
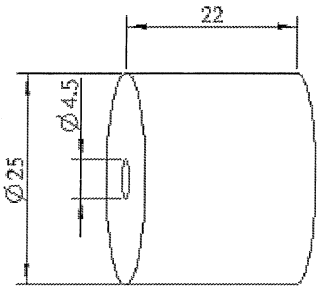
	SCR SPARE PARTS			D6521509-0.		
	备件清单					
PART OR/AND DRAWING	DESCRIPTION 名称	SKETCH 简图	QTY. 数量	MASS 重量(kg)	MATERIAL 材料	Remark 备注
801D5	Gasket 垫片	 D1=618,D2=670	2		Carbon steel,1Cr18 Ni9 and expanded graphite	Used in manhole cover sealing of reactor
801A3&801B13&801Q2	Gasket 垫片	 D1=825,D2=885	2		Carbon steel,1Cr18 Ni9 and expanded graphite	Used in flange sealing of RSV/RBV/RTV and pipe
801F4	Gasket 垫片	 D1=117,D2=158	2		Carbon steel,1Cr18 Ni9 and expanded graphite	Used in flange sealing of RVV and pipe
801R4	Gasket 垫片	 D1=260,D2=310	1		Carbon steel,1Cr18 Ni9 and expanded graphite	Used in flange sealing of CBV and pipe
801R5	Gasket 垫片	 D1=277,D2=328	1		Carbon steel,1Cr18 Ni9 and expanded graphite	Used in flange sealing of CBV and pipe
801B12	Gasket 垫片	 D1=90,D2=126	1		Carbon steel,1Cr18 Ni9 and expanded graphite	Used in flange sealing of RTV bypass pipe
801G24	SOOT BLOWER VALVE 吹灰阀		2	4.079×2	component	Used for Soot Blowing System
801G25	Silencer 消音器		2	0.026×2	component	Used for Soot Blowing Valve

	SCR SPARE PARTS			D6521509-0.		
	备件清单					
801G18	Reinforced Hose 软管	 length=212	1		Stainless Steel:022Cr 17Ni12Mo2	Used for Soot Blowing Valve connection
801G19	Reinforced Hose 软管	 length=599	2		Stainless Steel:022Cr 17Ni12Mo2	Used for gas pipe connection
806C1	Temperature sensor 温度传感器		1	1.2kg	NICR-NI	
801M4	Gasket 垫片		1	160g	FJ2815	Used for Injection lance
801E2	Catalyst block 催化剂		3	15.4kg	component	Used for reactor
801E3	Catalyst block 催化剂		6	28.9kg	component	Used for reactor

	SCR Aux. System Control Cabinet SPARE PARTS			D6521509-0.
	辅助控制箱备件清单			
PART OR/AND DRAWING NO. 料号和图号	DESCRIPTION 名称	SKETCH 简图	QTY. 数量	Remark 备注
XB2-BVB1LC 24V	指示灯 Indicator		1	
XB2-BVB3LC 24V	指示灯 Indicator		1	
XB2-BVB4LC 24V	指示灯 Indicator		1	
ZB2-BD2C 1NO+1NC	开关 Select switch		1	
ZB2-BA5C 1NO+1NC	按钮 Butten		1	

	UREA INJECTIONG SYSTEM SPARE PARTS	D6521509-0.
	尿素喷射系统备件	

NO.	DESCRIPTION 名称	SKETCH 简图	QTY. 数量	MASS 重量(kg)	MATERIAL 材料	REPLACEMENT CONDITION 更换条件
1	MRB170SZKLF用主动齿轮 Active Gear		2	9.6g*2	Gear: PEEK Draft:Ceramics	being used for 20000h; or impaired
2	MRB170SZKLF用从动齿轮 Passive Gear		2	6.8g*2	Gear: PEEK Draft:Ceramics	being used for 20000h; or impaired
3	MRB170SZKLF用轴套组件 Pump shaft sleeve		10	0.2g*10	NdFeB	being used for 20000h; or impaired
4	MRB170SZKLF用密封圈组件 Seal ring	 D d 26.5 1.8 1 PCS 26.5 1.5 2 PCS	2 set	0.2g*6	PTEF	being used for 20000h; or impaired
5	MRB170SZKLF用外磁驱 External magnetic drive		2	127g*2	NdFeB	being used for 20000h; or impaired

6	喷嘴137420-00050-316L Injector		1	270g	316L	being used for 20000h; or impaired
7	液体过滤器 Filter		2	300g	200目	impaired
8	MRB170SZKLF用内磁驱 internal magnetic drive		2	46g*2	NdFeB	being used for 20000h; or impaired