

Name Plate and Abbreviations

ITEM NO.	编号	STANDARD NO. OR DRAWING NO.	标准号或图号
NAME	名称	DN	通径
PN	压力	MATERIAL	材料
NAME PLATE STD. NO.	铭牌标准	WORDS ON NAME PLATE	铭牌刻字内容
REMARKS	备注	BLIND FLANGE	盲板法兰
LEVEL INDICATOR (PLANK TYPE)	板式液位计	BELL MOUTH	吸口 (喇叭口/钟形口)
STOP VALVE	截止阀	SELF-CLOSING VALVE, SPRING LOADED	自闭式放泄阀
SAFETY VALVE	安全阀	STOP CHECK VALVE	截止止回阀
QUICK CLOSING VALVE, PNEUMATICALLY OPERATED			气动快关阀
DIAGRAM OF FO TRANSFER SYSTEM			燃油输送系统
DIAGRAM OF FO PURIFYING SYSTEM			燃油净化系统
DIAGRAM OF FO DRAIN SYSTEM			燃油泄放系统
SANDWICH NON-RETURN FLAP			板式止回阀
DIAGRAM OF LO TRANSFER SYSTEM			滑油输送系统
DIAGRAM OF L.O. PURIFYING SYSTEM			滑油净化系统
NO.	序号	NOM. DIA.	通径 mm
O.D. & THK.	外径 x 壁厚 mm x mm	ABOUT LENGTH	近似长度
WEIGHT	重量	CLASS II	II 级管
SEAMLESS STEEL	无缝钢管	SEAMLESS COPPER	无缝铜管
SLUDGE PIPE OF PURIFYING	分油机排渣管	DRAIN PIPE OF PURIFYING	分油机排水管
LO DIRTY PIPE	滑油污油管	LO CLEAN PIPE	滑油净油管
PRESS. G. CONN. PIPE	压力表接管	LO SERVICE SYSTEM	滑油日用系统
QTY.	数量	WT.	重量
NAME PLATE STD. NO.			铭牌标准
MANO-VACUUMMETER AND VALVE			压力真空表和阀
L.O. DRAIN SYSTEM	滑油泄放系统	FRESH WATER COOLING SYSTEM	淡水冷却系统
BALL COCK	浮球阀	BUTTERFLY VALVE	手动蝶阀
COMPRESSED AIR SYSTEM			压缩空气系统
HOSE VALVE	软管接头阀		
E/R OIL TANK QUICK-CLOSING VALVE CONTROL SYSTEM	机舱油舱柜快关阀控制系统		
APPLICATION OF PIPES			管子用途
NOM. DIA.	通径	TYPE	牌号
QUICK-CLOSING VALVE CONTROL PIPES			快关阀控制管
DRAIN PIPE	泄放管	E/R STEAM SYSTEM DIAGRAM	蒸汽系统
0.68Mpa STEAM PIPE	0.68Mpa 蒸汽管	BOILER FEED WATER PIPE	锅炉给水管
BOILER BLOWDOWN PIPE	锅炉排污管/放水管	0.68Mpa CONDENSATE PIPE	0.68Mpa 凝水管
OVERFLOW PIPE	溢流管	AIR PIPE	透气管
DRAIN PIPE	放泄管	REMOTE THERMOMETER	温度计
DIAGRAM OF TANKS STEAM HEATING SYSTEM	舱柜加热系统原理图		
BLANK FLANGE	盲板法兰	BILGE WATER PIPE	舱底水管
BALLAST WATER PIPE	压载水管	FIRE WATER PIPE	消防水管
DIAGRAM OF WHOLE SHIP BILGE & BALLAST SYSTEM	全船舱底、压载管系原理图		

BUTTERFLY VALVE HYDRAULIC ACTUATOR	液压遥控蝶阀		
DISCHARGE CHECK VALVE	吸入止回阀		
DISCHARGE VALVE OF SELF CLOSED	自闭式放泄阀		
CAST IRON	铸铁	CAST STEEL	铸钢
OILY WATER SEPARATOR SYSTEM	舱底水油水分离器系统		
BILGE WATER CLARIFIER	舱底水油水分离器		
S. W. PIPE	海水管	BILGE PIPE	舱底水管
DRAIN PIPE	处理水排出管	WASTE OIL PIPE	废油管
F. W. PIPE	淡水管	STEAM/CONDEN. PIPE	蒸汽/凝水管
DIAGRAM OF E/R AIR, SOUNDING & TRANSFUSE SYSTEM	机舱空气、测深、注入管系图		
AIR PIPE (WEATHER DECK)	空气管(露天甲板)		
SOUNDING PIPE	测深管	DRAIN PIPE	泄放管
SHIP'S AIR SOUNDING AND FILLING	全船空气、测深、注入管系图		
VENT. HEAD	空气管头	INJECT HEAD	注入接头
SOUNDING HEAD	测深头		
ONE SIDE WELDED BED PLATE FOR FLANGES	法兰焊接单面座板		
THE HEAD LOSS IN PIPE FROM PUMP TO THE HYDRANT OF THE HIGHEST POSITION	至最高位置处消防栓，管路水力损失		
SEGMENT OF PIPE	管路编号	LENGTH OF PIPE	直管段长 L (m)
I. DIA.	管子内径 d_i (m)	FLOWRATE	管中水流量 Q (m ³ /h)
MODULUS	局部阻力系数	NAME OF RESISTANCE	局部阻力名称
NU.	个数 n	SING.	单个 ξ
FLOW VEL.	管中水流速 v (m/s)	RENAULT	雷诺数 Re
RESISTANCE TRAIT VALUE	阻力特性值 N	COEFFICIENT OF FRICTION	流体摩擦系数 λ (Re>N)
EQUIVALENT PIPE	管子当量长度 l_d (m)	CALCULATING LENGTH	管子折算长度 l_c (m)
HEAD LOSS IN PIPE	管段压力损失 h (MPa)		
THE HEAD LOSS IN PIPE FROM PUMP TO THE HYDRANT ON THE UPPER DECK FORSIDE	至上甲板首部消防栓处，管路水力损失 H ₃		
DIAGRAM OF FIRE FIGHTING SYSTEM	全船消防水管系图		
ASSEMBLY	组合件		
ISOLATING VALVE BETWEEN FIRE MAIN AND E/R			
HAWSEHOLE (P) FLUSH			
HAWSEHOLE (S) FLUSH			
FROM EMERGENCY FIRE PUMP			
TO CARGO HOLD EJECTOR			
VENT		BRONZE	青铜
DIAGRAM OF E/R WATER SUPPLY SYSTEM	机舱供水管系原理图		
SCREW DOWN VALVE	截止阀	SCREW DOWN STOP AND CHECK VALVE	截止止回阀
ARRANGEMENT OF WHOLE SHIP WATER SUPPLY SYSTEM	全船供水管系布置图		
FLUSH VALVE	冲洗阀	STRAIGHT CONNECT VALVE	直通阀
BASIN MIX VALVE	面盆混合放水阀		
DIAGRAM OF SEWAGE WATER TREATMENT SYSTEM	生活污水处理装置管系原理图		
GATE VALVE	闸阀	STOP & CHECK VALVE	截止止回阀
STOP VALVE	截止阀	CHECK VALVE	止回阀

STORM VALVE	可闭立式防浪阀	TO SEWAGE DISCH. MP. (P)
SOIL TO SEWAGE TR. UNIT		
CLINIC SOIL TO SEWAGE TR. UNIT		
SANI. TO SEWAGE TR. UNIT		
F. W. FLUSHING TO SEWAGE TR. UNIT		
SEWAGE TO SEWAGE STORAGE TK.	生活污水至生活污水存放舱	
SEWAGE DISCH. OVERSIDE		
CUTTING PUMP IN		
CUTTING PUMP OUT		
SEWAGE TR. UNIT OUT		
DRAINAGE DISCH. TO SEWAGE STORAGE TK.		
DRAINAGE DISCH. TO MP		
DRAINAGE DISCH. OVERSIDE		
DISCH. OVERSIDE		
DIAGRAM OF DECK SCUPPERS	甲板疏排水管系图	
DECK SCUPPER PIPE	甲板疏排水管	
GALV.	镀锌	
ARRANGEMENT OF SEWAGE WATER SYSTEM (GREY WATER)	卫生水疏排水管系布置图 (灰水)	
ARRANGEMENT OF SEWAGE WATER SYSTEM (BLACK)	粪便污水管系布置图 (黑水)	
MARINE AIR PIPE HEAD	船用空气管头	WITH FIREPROOF NET 带防火网
MECHNICAL VENTILATION LAYOUT	舱室机械通风布置图	
EXHAUST NOZZLE	圆形抽风头	FIRE DAMPER 船用防火风闸
VENTILATOR COAMING		
WC EXHAUST FAN	裕厕所抽风机	MUSHROOM VENTILATORS 菌形风帽
HOSPITAL EXHAUST FAN		医务室抽风机
VENT LOUVER WITH WEATHERTIGHT COVER	风雨密钢质百叶	
EXHAUST NOZZLE	圆形抽风头	GOOSENECK VENTILATORS 鹅颈式通风筒
MESS & MEETING EXHAUST FAN		餐厅兼会议室抽风机
LAUNDRY AND CHANGING EXHAUST FAN		西意见、更衣室抽风机
GELLY SUPPLY FAN	厨房送风风机	GELLY EXHAUST FAN 厨房抽风风机
WIRE GRILLING	通风栅	VENTILATOR COAMING 甲板接管
GALLEY PROVISION AND PROVISION STORE EXHAUST FAN	粮库, 厨房, 储物间抽风机	
FIRE DAMPER	船用防火风闸	MUSHROOM VENTILATORS 菌形风帽
LAYOUT OF REF. MACHINE RM. VENTILATION	制冷机室通风管系布置图	
REF. MACHINE EXHAUST FAN	制冷机室抽风机	
VENTILATOR COAMING	甲板接管	WIRE GRILLING 通风栅
GOOSENECK VENTILATORS	鹅颈式通风筒	STAINLESS STEEL 不锈钢
TOTAL	总重	REF. PROV. PLANT SYSTEM 伙食冷库管系原理图
PRESSURE GAUGE VALVE	压力表阀	METAL-SHELL THERMOMETER 金属壳水银温度计
NO. 1 CONDENSER C.S.W. INLET		NO. 2 CONDENSER C.S.W. OUTLET
LAYOUT OF DECK COMPRESSED AIR PIPING	甲板压缩空气管系布置图	
HOSE JOINT VALVE	软管接头阀	REDUCING VALVE 减压阀
SCREW DOWN VALVE	截止阀	SCREW DOWN VALVE 旋压阀/螺旋阀
MALE SCREW	外螺纹	EMER. GEN. ROOM 应急发电机室

A/C ROOM		POOP DECK (P)	尾楼甲板 (左)
POOP DECK (S)	尾楼甲板 (右)	CREW DECK (P)	船员甲板 (左)
BOAT DECK (S)	救生艇甲板 (右)	CAPTAIN DECK	船长甲板
NAVIGATION DECK	驾驶甲板	UPPER DECK (P)	上甲板(左)
FORECASTLE DECK(P)	首楼甲板 (左)	STORE	储物间
EMER. FIRE PUMP ROOM	应急消防泵室	INLET OF REDUCING VALVE	减压阀入口
TO AIR HORN	至汽笛	DRAIN	
BYPASS VALVE	旁通阀	OUTLET OF RECUDING VALVE	减压阀出口
FLANGE ACCORDING TO ISO		法兰按照 ISO	
SETTING 0.22MPa	设定值 0.22MPa		
OXYGEN & ACETYLENE PIPING DIAGRAM		氧气/乙炔管系图	
OXYGEN BOTTEN	氧气瓶组	ACETYLENE CYLINDER	乙炔瓶组
OXYGEN REDUCING VALVE		氧气减压阀	
ACETYLENE BACKFIRE VALVE		乙炔回火阀	
ACETYLENE REDUCING VALVE		乙炔减压阀	
2 – LEFT OPENED	2 – 左开	5 – RIGHT OPENED	5 – 右开
1 – DOWN OPENED	1 – 下开		
NATURAL VENTILATION LAYOUT		全船自然通风布置图	
STRAINER	粗滤器, 滤网, 过滤器		
EXPANSION BELLOW	膨胀伸缩式波纹管		
SLEEVE	套管	伸缩的	TELESCOPIC/RETRACTILE
EXTENSION LADDER	伸缩梯		
Buffer	缓冲器		
Adjust valve	调节阀		
OIL AND AIR SEPARATOR OF BOILER			
FO PUMP OF BOILER			
FO PUMP OF BOILER			
FO BOOSTER MODULE			
STEAM TRACE INLET DN10			
PIPING SYMBOL:	管子符号		
MGO PIPE:	燃料油管 轻柴油管:		
STEAM TRACE PIPE:	蒸汽伴行管:		
MGO SERVICE TK	轻柴油日用舱		
HFO SERVICE TK	燃料油日用舱		
NO.2AUX.ENGINE GEN.SETNO.2	柴油发电机组		
FR. RETURN OIL OF SPRAY	喷油回油		
NO.1AUX.ENGINE GEN.SETNO.1	柴油发电机组		
HFO SERV.TK OF BOILER	锅炉燃料油日用柜		
MDO TK OF BOILER	锅炉点火轻柴油柜		
FO BOOSTER MODULE	燃油供油单元		
粗滤器	FILTER		
燃油供给泵	FO SUPPLY PUMP		
调压阀	REGULATING PRESS. VALVE		
手动逆洗滤器	HAND BACK FLUSH FILTER		

精滤器 FINE FILTER
 流量计 FO FLOW METER
 空气分离器 AIR SEPARATOR
 燃油循环泵 FO CIRCULATING PUMP
 燃油加热器 FO HEATER
 自动排气浮阀 AUTO. DEGAS VALVE
 控制屏 CONTROL PANEL
 均质机 OMEGA-FIRE
 三通切换阀 THREE WAY VALVE
 粘度传感器 VSICOSITY SENSOR
 蒸汽控制阀 STEAM CONTROL VALVE
 HAND QUICK-CLOSING VALVE 手动快关阀
 FO AND EXCUSED BOILER 燃油废气组合锅炉
 DIAGRAM OF FO SERVICE SYSTEM 燃油日用系统
 供油单元柴油进口 FO INLET OF FO BOOSTER MODULE
 供油单元燃料油进口 HFO INLET OF FO BOOSTER MODULE
 供油单元加热蒸汽进口 STEAM INLET OF FO BOOSTER MODULE
 供油单元加热蒸汽冷凝水出口 COAGULATE WATER OUTLET OF FO BOOSTER MODULE
 供油单元精滤器残油泄放口
 LEAKAGE OIL OUTLET OF THIN STRAINER OF FO BOOSTER MODULE
 供油单元燃油出口 FO OUTLET OF FO BOOSTER MODULE
 供油单元燃油回油接口 RETURN OIL OUTLET OF FO BOOSTER MODULE
 供油单元泄放口 1 No.1 LEAKGE OIL OUTLET OF FO BOOSTER MODULE
 供油单元泄放口 2 No.2 LEAKGE OIL OUTLET OF FO BOOSTER MODULE
 供油单元回油筒放气口 AIR OUTLET OF MIXING TANK OF FO BOOSTER MODULE

TECHNICAL REQUIREMENTS

1. ANNOTATED SIZES OF PIPE IN THE DRAWING ARE OUT DIA.xTHICK(mm).
2. HERE PIPES PENETRATE THROUGH WATER TIGHT BULKHEADS OR DECK TO BE FITTED WITH PENETRATION PIECE ACCORDING TO CB/T3480-92.
3. ALL PIPING TO BE SECURELY SUPPORTED AND BRACED IN ACCORDING WITH CB/T3780-1997 OR SHIPYARD STANDARD.
4. THE ITEMS WITH `` * " OR `` " TO BE SUPPLIED WITH EQUIPMENT.

5. HYDROSTATIC TEST:

DESIGN PRESS. MPa

BEFORE INSTALLATION MPa

AFTER INSTALLATION MPa

HFO PIPE 燃料油管

MGO PIPE 轻柴油管

6. THE MARK Item mark/Item No. REFER TO LIST OF AUTOMATIC CONTROL、MONITORING & ALARM POINTS FOR E/R(-440-01MX).
7. THE H.F.O. PIPING MUST BE PROVIDED WITH DN10(\varnothing 15X1.5) STEAM TRACING PIPE AND TO BE COVERED WITH GLASS WOOL OR OTHER EQUIVALENT.

技术要求

1. 图中管子所注尺寸均为外径 x 壁厚(mm)。

2. 管子通过水密舱壁,甲板或舱壁时,应按 CB/T3480-92 或船厂标准设置通舱管件。
3. 管子应按 CB/T3780-1997 或船厂标准设置牢固的支架,管卡。
4. 图中带`*`或 符号为设备所带附件。
5. 液压试验: 设计压力 Mpa, 装船前 Mpa 装船后 MPa
6. 图中自动化符号 项目代号/项目序号 详见"轮机自动化项目明细表"
7. 燃料油管系需设 DN10(\varnothing 15X1.5)蒸汽伴行管,在外包覆玻璃棉或其它适当的绝热材料。

DIAGRAM OF FO TRANSFER SYSTEM 燃油输送系统

'STANDARD NO. OR DRAWING NO. 标准号或图号

'DN '通径 mm

NAME PLATE STD. NO. 铭牌标准 CB/T84-1998

PN 压力 Mpa

QTY.数量

WT.重量 kg

轮机说明书 SPECIFICATION OF MACHINERY PART

生 产 设 计 PRODUCTION DESIGN

NOTES: 说明:

1. ALL DUCT SHOULD BE FIXED WITH HANGER .THE DISTANCE BETWEEN TOWHANGERS IS 2 METERS MAXIMUM.

风管至多每隔 2 米设一固定吊架。

2. ALL VENTLATORS SHOULD BE INSTALLED WITH RATPROOF WIRES.

所有通风筒应设有防鼠网。

3. AFTER FITTED ON BOARD,THE OUTSIDE SURFACE OF NON GALVANIZED FITTINGS AND DUCT SHOULD BE PAINTED 2 COATS OF RUST PREVENTIVE PAINT AND1 COAT OF FINISHING PAINT.

凡是没有镀锌的附件及管道,在装船后,其表面应涂防锈漆 2 度及色漆 1 度。

4. THE FLANGES UESD FOR RECTANGULAR DUCTS IN THIS DRAWING SHOULD BE MADE IN ACC. WITH GB1561-79.

风管法兰按 GB1561-79 设置。

5. PENETRATING PIECES USED FOR DUCTS TO PASS THROUGH THE A CLASS BULKHEAD OR DECK SHALL BE PROVIDED IN ACC. WITH "FIRE RESISTING DIVISION PLAN " (-103-04) and "TYPICAL NODE OF FIRE RESISTING STRUCTURE"(-362-02).

风管穿过 A 级舱壁或甲板的贯通件按《防火分隔图》(-103-04)和《典型防火节点图》(-362-02)设置。

6. PENETRATION HAS TO BE INSULATED ACC. THE REQUIRED FIRE INTEGRITY OF THE BULKHEAD/DECK.

贯通件按照它所穿越的舱壁或甲板的防火等级进行绝缘。

7. THE LOWEST DUCT OF SHIP STRUCTURE SHOULD BE OPENED HOLE, AS TO BE DRAIN WATER.

在通风静压箱的最低处开泄水孔。

CADET 甲板见习生

DECK STORE 甲板物料间

HOSPITAL 医务室

A/C ROOM 空调机室

UPPER DECK 上甲板

GALLEY STORE 厨房储物间

POOP DECK 尾楼甲板

STEEL PLATE 钢板

GALVANIZED STEEL 镀锌钢板

ASSEMBLY 组合件

DUCT 风管

WIRE GRILLING 通风栅

VENTILATOR COAMING 甲板接管

EXHAUST FAN 轴流抽风风机

GOOSENECK VENTILATORS 鹅颈式通风筒

MUSHROOM VENT. HEAD 菌形通风筒

LAYOUT OF AIR CONDITION ROOM 空调机室通风布置图

DETAIL DESIGN 详细设计

REVERSIBLE 可逆转

NOTES: 说明:

1. ALL DUCT SHOULD BE FIXED WITH HANGER .THE DISTANCE BETWEEN TOW HANGERS IS 2~3 METERS MAXIMUM.

风管至多每隔 2~3 米设一固定吊架。

2. ALL VENTILATORS SHOULD BE INSTALLED WITH RATPROOF WIRES.

所有通风筒应设有防鼠网。

3. AFTER FITTED ON BOARD,THE OUTSIDE SURFACE OF NON GALVANIZED FITTINGS AND DUCT SHOULD BE PAINTED 2 COATS OF RUST PREVENTIVE PAINT AND 1 COAT OF FINISHING PAINT.

凡是没有镀锌的附件及管道，在装船后，其表面应涂防锈漆 2 度及色漆 1 度。

4. THE FLANGES USED FOR RECTANGULAR DUCTS IN THIS DRAWING SHOULD BE MADE IN ACC. WITH GB1561-79.

风管法兰 GB1561-79 设置。

5. PENETRATING PIECES USED FOR DUCTS TO PASS THROUGH THE A CLASS BULKHEAD OR DECK SHALL BE PROVIDED IN ACC. WITH "FIRE RESISTING DIVISION PLAN " (-103-04) and "TYPICAL NODE OF FIRE RESISTING STRUCTURE"(-362-02).

风管穿过 A 级舱壁或甲板的贯通件按《防火分隔图》(-103-04) 和《典型防火节点图》(-362-02) 设置。

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贯通件按照它所穿越的舱壁或甲板的防火等级进行绝缘。

7. THE LOWEST DUCT OF SHIP STRUCTURE SHOULD BE OPENED HOLE, AS TO BE DRAIN WATER.

在通风静压箱的最低处开泄水孔。

TECHNICAL REQUIREMENTS

技术要求

1. EQUIPMENTS, FITTINGS/ACCESSORIES, BUSHINGS, CLAMPS, WARNING NOTICES AND INSTRUCTIONS FOR THE INSTALLER IN THIS SYSTEM TO BE SUPPLIED BY MAKER. AND TO BE OF APPROVE TYPE. WARNING NOTICES TO BE PROVIDED AS PER NS 6033

本系统设备，附件，通舱套管，管夹，警告牌及安装要求等均由设备商提供，且应为认可型。警

告牌按标准提供。

2. THE CONNECTION OF PIPES TO BE BUTT WELDED AND TO BE LAID WITH FEW JOINTS AS POSSIBLE. THE PATH OF PIPE PASSAGE AND MOUNTED POSITION OF BULKHEAD PENETRATION ARE DETERMINED AT SITE.

管路连接采用对接焊形式，要求尽量减少接头，管路穿越的路径及通舱件的安装位置由现场定。

3. THE PIPES TO BE FASTENED TO THE BULKHEAD WITH PIPE CLAMPS AT INTERVALS NOT EXCEEDING 2.5m.

管子沿舱壁布置，且每隔 2.5m 左右设一个管夹。

4. PIPE & FITTINGS TO BE CLEANED IN SHOP SO TO REMOVE RUST GREASER ETC. BY DEGREASING WITH TRICHLOROETHANE OR ANOTHER EQUALLY EFFECTIVE AGENT (PETROL MUST NOT BE USED) TO BE USED, AFTER DEGREASING THE PIPES TO BE RINSED WITH 10% SOLUTION OF TRISODIUMPHOSPHATE IN WATER, WITH 10% SOLUTION OF TRISODIUMPHOSPHATE IN WATER,

管子和附件应在车间用三氯乙烯或其他等效化学剂（不能用汽油）除锈，除油；除油后用 10%磷酸三钠溶液冲洗。

5. BEFORE MOUNTING ON SHIP, PIPE & FITTINGS TO BE BLOWN WITH NITROGEN, COMPRESSED AIR OR OXYGEN MUST NOT BE USED.

船上安装前，需用氮气吹洗管子，附件，绝对不能使用压缩空气或氧气。

6. AFTER ALL THE PIPES CONSTRUCTED ON BOARD, TO SEAL TEST AS FOLLOWS:

全部管路在船上施工后进行气密试验如下：

a. AFTER INSTALLATION ON SHIP PIPES TO BE BLOWN CLEAN WITH NITROGEN AT A PRESSURE OF ABOUT 0.3MPa, WHICH TO BE INCREASED UP TO ABOUT 1.0MPa FOR ABOUT 10 MINUTES.

管路安装后，用压力约为 0.3MPa 的氮气将管路吹净，压力在 10 分钟内逐渐升至 1.0 MPa.

b. ON THE ACETYLENE PIPING NITROGEN TO BE USED, AND THE TEST PRESSURE TO BE OF 1.0 MPa. ALL VALVES, JOINTS AND OTHER CONNECTIONS TO BE SWABBED WITH SOAPY WATER. AFTER 8 HOURS, THE PRESSURE DROP SHALL NOT EXCEED 0.04MPa.

乙炔管路用压力 1.0 MPa 的氮气进行试验，抹肥皂水检查附件，接头的密封性，保持 8 小时，压力降不得超过 0.04 MPa.

c. NON LEAKAGE OF OXYGEN PIPES TO BE PERFORMED SAME AS ACETYLENE PIPES TEST PRESSURE TO BE 1.2Mpa

氧气管路的密封试验与乙炔相同，试验压力为 1.2 MPa.

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SHAFT LINE 机组轴线
FRAME 600 肋距 600

BORED TOGETHER 8-∅ 19 配钻

CENTER LINE OF EMERG. GEN. 应急发电机组中心线

UPPER DECK 上甲板 8600

BASE FOUNDATION 船体基座

BASE OF E/G 机组底座

OTHERS: (其余)

TECHNICAL REQUIREMENTS 技术要求

1. THE WELDING CHOCKS TO BE WELDED ON THE BASE PLATE ALL AROUND, AND THE WELDED SEAMS TO BE 5mm HEIGHT.

1. 焊接垫块沿四周焊于基座面板上,焊缝高度为 5mm。

2. THE SURFACES OF THE ADJUSTMENT CHOCK SHOULD BE GRINDED, AND THE INTERVAL BETWEEN THE ADJUST CHOCK AND WELDING CHOCK SHOULD NOT TO BE INSERTED IN BY PLUG GAUGE OF 0.05mm.

2. 调整垫块于现场铰平安装,垫块间用 0.05mm 塞尺检查应插不进。

BEVEL WASHER 方斜垫圈

WELDING CHOCK 焊接垫块

THIN NUT 薄螺母

CLASS: 8 强度等级: 8

ACTUATOR

SOLENOID VALVE BOX 电磁阀箱

ACCUMULATOR 蓄能器

POWER PUMP STATION

LAL

PAH

PAL

OIL TANK

PT

DETAIL DESIGN 详细设计

HYDRAULIC REMOTE CONTROL VALVE SYSTEM 阀门液压遥控系统

TECHNICAL REQUIREMENTS 技术要求


1. ANNOTATED SIZES OF PIPE IN THE DRAWING ARE OUT DIA. X THICKNESS(mm x mm). 1. 图中管子所注尺寸均为外径×壁厚。

2. WHERE PIPES PENETRATE THROUGH WATER TIGHT BULKHEADS OR DECK TO BE FITTED WITH PENETRATION PIECE ACCORDING TO CB/T3480-92 OR SHIPYARD STANDARDS. 2. 管子通过水密舱壁,甲板或舱壁时,应按 CB/T3480-92 或船厂标准设置通舱管件。

3. ALL PIPING TO BE SECURELY SUPPORTED AND BRACED IN ACCORDING WITH CB/T3780-1997 OR SHIPYARD STANDARDS.

3. 管子应按 CB/T3780-1997 或船厂标准设置牢固的支架,管卡。

4. THE ITEMS WITH "*" OR "  " TO BE SUPPLIED WITH EQUIPMENT.

4. 图中带 "*" 或  符号为设备所带附件。

5. HYDRAULIC TEST:

5. 液压试验:

NAME 名 称	DESIGN PRESSURE 设计压力 MPa	BEFORE INSTALLATION ON BOARD 装船前 (MPa)	AFTER ASSEMBLY ON BOARD 装船后 (MPa)
HYDRAULIC OIL PIPES	6.0	9.0	9.0

6. ALL BUTTERFLY VALVES IN THE SYSTEM ARE SUPPLIED BY NANTONG NAVIGATION MACHINERY CO., LTD. THE USAGE AND THE POSITION OF THESE VALVES CAN REFER TO "DIAGRAM OF WHOLE SHIP BILGE & BALLAST SYSTEM"(-510-02).

6. 本系统中所有液压蝶阀由南通航海机械有限公司配套提供，具体作用及布置见"全船舱底、压载管系布置图 " (-510-02)。

1. ANNOTATED SIZES OF PIPE IN THE DRAWING ARE OUT DIA. x THICK (mm).

1. 图中管子所注尺寸均为外径 x 壁厚(mm)。

2. WHERE PIPES PENETRATE THROUGH WATER TIGHT BULKHEADS OR DECK TO BE FITTED WITH PENETRATION PIECE ACCORDING TO CB/T3480-92 OR SHIPYARD STANDARD.

2. 管子通过水密舱壁,甲板或舱壁时,应按 CB/T3480-92 或船厂标准设置通舱管件。

3. ALL PIPING TO BE SECURELY SUPPORTED AND BRACED IN ACCORDING WITH CB/T3780-1997 OR SHIPYARD STANDARD.

3. 管子应按 CB/T3780-1997 或船厂标准设置牢固的支架，管卡。


4. THE ITEMS WITH `` * " OR `` " TO BE SUPPLIED WITH EQUIPMENT.

4. 图中带``*"或 `` 符号为设备所带附件。

5. HYDROSTATIC TEST: 液压试验:

NAME 名称	DESIGN PRESS.设计 压力 MPa	BEFORE INSTALLATION 装船前 MPa	AFTER INSTALLATION 装船后 MPa
HFO PIPE 燃料油输送管	0.57	0.855	0.855
MDO PIPE 轻柴油输送管	0.57	0.855	0.855

6. THE MARK  REFER TO LIST OF AUTOMATIC CONTROL、MONITORING & ALARM POINTS FOR E/R(-440-01MX).

图中自动化符号  项目代号
项目序号 详见"轮机自动化项目明细表"(-440-01MX)

7. THE H.F.O. PIPING MUST BE PROVIDED WITH DN10 (∅ 15X1.5) STEAM TRACING PIPE AND TO BE COVERED WITH GLASS WOOL OR OTHER EQUIVALENT.

7. 燃料油管系需设 DN10(∅ 15X1.5)蒸汽伴行管,在外包覆玻璃棉或其它适当的绝热材料。

DIAGRAM OF FO TRANSFER SYSTEM 燃油输送系统

HFO TK(PS) 燃料油舱 (左)

FTF37

LAH

LS

FTV50

MDO TK(SB) 柴油舱(右)

AREA: 0.1875m

H.F.O. SLUDGE TK 燃油油渣舱

FTF45

FO OVERFLOW TK 燃油溢油舱

PIPING SYMBOL: 管子符号:

MDO PIPE: 轻柴油管:

HFO PIPE: 燃料油管:

TRACE HEATING PIPE 伴行管:

DIRTY FO TK 污燃油舱

TO HFO SEPARATOR SEE: -461-02

至燃油分油机见: -461-02

FROM LO SLUDGE TK. SEE: -462-02

来自滑油油渣舱见: -462-02

HFO TK(SB) 燃料油舱 (右)

通舱管件 pipe penetration piece/ pipe penetrating piece

pipe pieces 管件

1.This drawing is PS block, the SB block is symmetric except as noted,

2.IN this drawing the end style of stiffener draw according to CB 3183-83

3.IN this drawing the cutout & doubling plates draw according to CB 3182-83

4.The form and dimension of welding reference to "scheme of welding"SC4386-190-01JB

5.All notch to be 10X10 can weld full unless otherwise specified;

6. Layout of pipe tunnel ventilation seeSC4386-541-10.

1.本分段除注明外, 左右对称。

2.本图中型材端部形状按 《船体结构型材端部形状》标准设绘。

2.本图中型材端部形状按 《船体结构型材端部形状》标准设绘。

4.本分段构件焊接见《船体结构焊接规格表》图号 施焊。

5.本图中未注明切口均为 可焊没。

6.管弄通风, 详见管弄通风布置图, SC4386-541-10.

7.货舱通风, 详见货舱通风布置图, SC4386-541-01.

货舱通风修改

man hole modify

货舱梯修改

BL4423 STRINGER 舷侧纵桁

INNER BOTTOM 内底板

SHELL EXPANSION 外板 展 开

ICE STRENGTHEN(7000WL~3150WL) 冰带加强区域 (7000 水线~3150 水线)

BOTTOM LONGITUDINAL STIF.,FRAME BP180x40x9

船底纵骨 BP200x44x10 肋骨 BP180x40x9

UPPER DECK 上 甲 板

BOTTOM 船 底

INNER BOTTOM 内底

A/C ROOM 空调室

REF.MACHINE 冷冻机, 制冷机	ENGINE STORE
EMERGENCY GEN.应急发电机	STEERING GEAR ROOM 舵机室
CHANGE RM 更衣室	PROVISION STORE 食品库, 储备库存/粮食库
CREW MESS 船员餐厅	LAUNDRY 洗衣间
LINEN 亚麻(布)/制品	GALLEY 船上厨房
OFFICER MESS 高级船员餐厅	OFFICER PANTRY 高级船员配膳间/室/餐具室
PNEUMATIC LOADING PIPE SYSTEM	气动装料管系统
DUST COLLECTOR 吸尘器/集尘器/除尘器	AERATION PANELS 通风板
UPPER DECK 上甲板	CARPENTER'S ROOM 木工室
WINDLASS CONTROL ROOM	锚机控制室/起锚控制室
CL=CENTER LINE 中心线	DESIGN DRAFT 设计吃水
BOND 封关库	CABLE HOLD 缆索舱
STORE 仓库	ENGINE CASING 机舱围壁
PAINT LOCKER 喷漆室/油漆间	COMPRESSOR ROOM 压缩机室/舱
PNEUMATIC UNLOADING 气动卸载	OUTLET TO HOLD 至货舱出口
LOADING POINT 装载点	
HORIZONTAL SCREW CONVEYOR	卧式螺旋输送机/器
VERTICAL SCREW CONVEYOR	立式螺旋输送机/螺旋升运器
TRUCK LOADING SYSTEM(FUTURE OPTION)	装车系统(期货选项)
BLOW PUMP SYTEM	鼓风机系统
TRANSFER BOX	中间电缆/无配电板的分线箱
LEVEL INDICATOR	液面指示器/液位计/水平仪/水平指示器
ALL MEASUREMENTS ARE PRELIMINARY	所有的测量都是初步的
PRINCIPAL PARTICULARS	主要参数/规范/详细数据/要素
LENGTH O.A.	117.00M
LENGTH B.P.	110.00M
BREADTH	19.7.M
DEPTH	8.50M
DRAFT DESIGN/SCANTLING	6.40/6.45M
DEADWEIGHT DESIGN/SCANTLING	APPROX. 7660/7756t
7700DWT Container Vessel Converted to Self-Unloading Cement Carrier	
7700DWT 集装箱改装为自卸水泥船	
Scale 比例尺	Dwg. No. 图号
Drawn by pw	Total weight [Kg]
ISO methode E	Design checked by
Rev.修改	Spec. nr.
Indicates Ra in μ m	
Sweden	

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主要参数

PRINCIPAL DIMENSIONS

主要尺度

MAIN CHARACTERISTICS OF THE VESSEL 主尺度

Length between perpendiculars	垂线间长	110.00	m
Breadth, moulded	型 宽	19.70	m
Design draught	设计吃水	6.40	m
Scantling draught	结构吃水	6.45	m
X-coord. of after perpendicular	尾垂线坐标	0.00	m
X-coord. of midship section	船中坐标	55.00	m
X-coord. of building frame 0	0 号肋位坐标	0.00	m

EXPLANATION OF SYMBOLS 符号说明

HEIGHT	height	距舱底高度	m
FILL	filling degree	装载率	%
VNET	net volume	净容积	m ³
MASS	weight of load	重量	t
LCG	x-coordinate of center of gravity	重心纵坐标	m
TCG	y-coordinate of center of gravity	重心横坐标	m
VCG	z-coordinate of center of gravity	重心竖坐标	m
AWP	area of waterplane	表面积	m ²
FRS. MOM	free surf. mom/real	自由液面矩	tm

Compartment : HOLD1
Description : NO.1 CARGO HOLD
Contents : A). Cargo

Rho : 1.000 t/m³

Max. Capacity : 100 %
2282.3 m3
2282.3 t
Free surfaces : 4198.3 tm (Maximum)
5919.1 tm (IMO (A749))

Extreme coordinates: aft end: frame nr. 122.0 (from AP: 78.85 m)
fore end: frame nr. 156.0 (from AP: 100.95 m)
lowest point above BL: 1.300 m
highest point above BL: 10.200 m