


















| 图纸履历 PLAN HISTORY | | | | | | |
|-------------------|------------|------------|--------------------|-------------|-------------|-------------|
| 日期 DATE | 版本 REV. | 标记 MARK | 说 明 DESCRIPTION | 设绘 DSN'D | 审核 CHK'D | 审定 APP'D |
| 02/07-08 | A | | INITIAL DESIGN | JQC | JC | BG |
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|---|---|---|--------------|---|--|
| Title : | | L.T. FRESH WATER COOLING SYSTEM 低温淡水冷却系统 | |  China Ship Design & Research Center Shanghai Co.,Ltd. No.185 Gaoxiong Rd.Shanghai China Tel: +86-21-63169750 Fax: +86-21-63169752 | |
| Drawing No : DCS081510-463-003 | | Revision: A | Scale : ~ | Page: 2/10 | |
| | | | | | |
| | | | | | |
|  | 调节阀 | | | | |
| | REGULATING VALVE | | | | |
|  | 真空压力表及旋塞 | | | | |
| | COMPOUND GAUGE WITH COCK | | | | |
|  | 压力表及旋塞 | | | | |
| | PRESSURE GAUGE WITH COCK | | | | |
|  | 温度显示 | | | | |
| | PRESSURE INDICATION | | | | |
|  | 压力开关 | | | | |
| | PRESSURE SWITCH | | | | |
|  | 压力显示 | | | | |
| | PRESSURE INDICATION | | | | |
|  | 两端带自闭阀液位计 | | | | |
| | LEVEL INDICATER WITH SELF-CLOSING VALVE AT EACH END | | | | |
|  | 低位报警 | | | | |
| | LOW LEVEL ALARM | | | | |
|  | 液位开关 | | | | |
| | LEVEL SWITCH | | | | |
|  | 异径接头 | | | | |
| | REDUCING PIECE | | | | |
|  | 截止阀 | | | | |
| | STOP VALVE | | | | |
|  | 直角截止阀 | | | | |
| | ANGLE STOP VALVE | | | | |
|  | 截止止回阀 | | | | |
| | STOP CHECK VALVE | | | | |
|  | 蝶阀 | | | | |
| | BUTTERFLY VALVE | | | | |
|  | 温控三通阀 | | | | |
| | TEMP.CONTROL V/V | | | | |
| 符号 SYMBOL | 名 称 NAME | 符号 SYMBOL | 名 称 NAME | | |


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|--|--------------------------|--------------------|-----------------------------|-----------------------------|--|-------------------------------|-------------|---------------------------|---|--------------|--------------|
| Title : L.T. FRESH WATER COOLING SYSTEM 低 温 淡 水 冷 却 系 统 | | | | | <div>CSDCSH</div> <div>China Ship Design & Research Center Shanghai Co.,Ltd.</div> <div>No.185 Gaoxiong Rd.Shanghai China Tel: +86-21-63169750 Fax: +86-21-63169752</div> | | | | | | |
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| SERVICE 用途 | FLUID(DESIGN) 流体 (设计) | | DN 通径 (mm) | PIPE 管子 | | VALVE 阀门 | INSUL 绝缘 | HYD.TEST 液压试验 (MPa) | | CLASS 船级社 | REMARK 备注 |
| | PRESS 压力 (MPa) | TEMP 温度 (°C) | | MATERIAL 材料 | TREAT 处理 | MATERIAL (BODY) 材料 (阀体) | | SHOP 车间 | SHIP 船上 | CCS | |
| COOLING F.W. PIPE (IN E.R.) 冷却淡水管 (机舱内) | 0.4 | | >=50mm | SMLS.S.P. 无缝钢管 SCH.40 | | CAST STEEL 铸钢 | | 0.6 | NO LEAK. UNDER WORKING CONDITION 工作状态下 不允许泄漏 | | |
| | | <=40mm | SMLS.S.P. 无缝钢管 SCH.40 | | BRONZE 青铜 | | | | | | |

TECHNICAL REQUIREMENTS


1. ANNOTATED SIZES OF PIPES IN THE DRAWING TO BE NOMINAL DIAMETER
2. THE FITTINGS WITH * AND IN DASH DOT LINE ARE SUPPLIED BY MAKER.
3. THE COPPER PIPE OF $\phi 8 \times 1 \text{mm}$ TO BE USED FOR THE PRESSURE GAUGE.
4. STEEL PIPE WALL THICKNESS TO BE OF SCH.40. INDICATION UNLESS OTHERWISE SPECIFICALLY INDICATION
5. ALL STEEL PIPES SHOULD BE PHOSPHATE TREATMENT.
6. REGARDING AUTOMATIC ITEM, PLEASE SEE DRAWING NO.DCS081510-420-007QD TITLED "MEASURING AND ALARM POINT LIST".


技术说明

1. 图中所注管子尺寸为公称直径。
2. 图中注有*号和点划线框内的附件为设备自带。
3. 压力表接管为 $\phi 8 \times 1 \text{mm}$ 无缝铜管。
4. 除有特别标注外钢管厚度均为SCH40。
5. 所有钢管作磷化处理。
6. 自动化项目请见图DCS081510-420-007QD“机舱检测及报警点清单”。

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| STEEL PIPE 钢管 | | | | | COPPER PIPE 铜管 | | | | |
| NOMINAL SIZE 通径 (DN) (mm) | OUT.DIA. 外径 (mm) | WALL THICKNESS 壁厚 (mm) | | | NOMINAL SIZE 通径 (DN) (mm) | OUT.DIA. 外径 (mm) | WALL THICKNESS 壁厚 (mm) | | |
| | | Sch.40 | Sch.80 | Sch.160 | | | <30bar | <70bar | <140bar |
| 10 | 14 | 2.5 | 3 | 3.5 | 4 | 6 | 1.0 | — | — |
| 15 | 22 | 3 | 3.5 | 5 | 5 | 8 | 1.2 | — | — |
| 20 | 27 | 3 | 4 | 5.5 | 6 | 10 | 1.2 | 2.0 | 3.0 |
| 25 | 34 | 3.5 | 4.5 | 6.5 | 8 | 12 | 1.2 | — | — |
| 32 | 42 | 3.5 | 5 | 6.5 | 10 | 15 | 1.6 | 2.3 | 4.0 |
| 40 | 48 | 4 | 5 | 7 | 15 | 20 | 2.0 | 3.0 | 5.0 |
| 50 | 60 | 4 | 5.5 | 9 | 20 | 25 | 2.0 | 3.5 | 6.0 |
| 65 | 76 | 5 | 7 | 9.5 | 25 | 30 | 2.0 | 4.0 | — |
| 80 | 89 | 5.5 | 7.5 | 11 | 32 | 35 | 2.0 | — | — |
| 100 | 114 | 6 | 9 | 14 | 40 | 45 | 2.0 | — | — |
| 125 | 140 | 7 | 9.5 | 16 | 50 | 55 | 2.5 | — | — |
| 150 | 168 | 7 | 11 | 16 | | | | | |
| 200 | 219 | 8 | 13 | 16 | | | | | |
| 250 | 273 | 9 | 13 | 16 | | | | | |
| 300 | 325 | 10 | 13 | 16 | | | | | |
| 350 | 377 | 10 | 13 | 16 | | | | | |
| 400 | 426 | 10 | 13 | 16 | | | | | |
| 450 | 480 | 10 | 13 | 16 | | | | | |
| 500 | 530 | 10 | 13 | 16 | | | | | |
| 550 | 560 | 10 | 13 | 16 | | | | | |
| 600 | 610 | 10 | 13 | 16 | | | | | |
| 700 | 711 | 10 | 13 | 16 | | | | | |
| 900 | 914 | 10 | 13 | 16 | | | | | |
| 1000 | 1014 | 10 | 13 | 16 | | | | | |
| | | | | | STAINLESS STEEL PIPE 不锈钢管 | | | | |
| NOMINAL SIZE 通径 (DN) (mm) | OUT.DIA. 外径 (mm) | WALL THICKNESS 壁厚 (mm) | | | NOMINAL SIZE 通径 (DN) (mm) | OUT.DIA. 外径 (mm) | WALL THICKNESS 壁厚 (mm) | | |
| | | SCH5S | SCH10S | SCH20S | | | SCH5S | SCH10S | SCH20S |
| 8 | 13.8 | 1.2 | 1.65 | 2.0 | 8 | 13.8 | 1.2 | 1.65 | 2.0 |
| 10 | 17.5 | 1.2 | 1.65 | 2.0 | 10 | 17.5 | 1.2 | 1.65 | 2.0 |
| 15 | 21.7 | 1.65 | 2.1 | 2.5 | 15 | 21.7 | 1.65 | 2.1 | 2.5 |
| 20 | 27.2 | 1.65 | 2.1 | 2.5 | 20 | 27.2 | 1.65 | 2.1 | 2.5 |
| 25 | 34.0 | 1.65 | 2.8 | 3.0 | 25 | 34.0 | 1.65 | 2.8 | 3.0 |
| 32 | 42.7 | 1.65 | 2.8 | 3.0 | 32 | 42.7 | 1.65 | 2.8 | 3.0 |
| 40 | 48.6 | 1.65 | 2.8 | 3.0 | 40 | 48.6 | 1.65 | 2.8 | 3.0 |
| 50 | 60.5 | 1.65 | 2.8 | 3.5 | 50 | 60.5 | 1.65 | 2.8 | 3.5 |
| 65 | 76.3 | 2.1 | 3.0 | 3.5 | 65 | 76.3 | 2.1 | 3.0 | 3.5 |
| 80 | 89.1 | 2.1 | 3.0 | 4.0 | 80 | 89.1 | 2.1 | 3.0 | 4.0 |
| 100 | 114.3 | 2.1 | 3.0 | 4.0 | 100 | 114.3 | 2.1 | 3.0 | 4.0 |
| 125 | 139.8 | 2.8 | 3.4 | 5.0 | 125 | 139.8 | 2.8 | 3.4 | 5.0 |
| 150 | 165.2 | 2.8 | 3.4 | 5.0 | 150 | 165.2 | 2.8 | 3.4 | 5.0 |
| 200 | 216.3 | 2.8 | 4.0 | 6.5 | 200 | 216.3 | 2.8 | 4.0 | 6.5 |

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|--|--------------------------------------|------------------|----------------------------|--|------------------|------------|-------------------|----------------|
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| 20 | XLV20 AS25020 GB/T587-93 | 截止阀 | 20 | 2.5 | 青铜 | 1 | | |
| | | STOP VALVE | | | BRONZE | | | |
| 19 | XLV19 AS25080 GB/T584-1999 | 截止阀 | 80 | 2.5 | 铸钢 | 1 | | |
| | | STOP VALVE | | | CAST STEEL | | | |
| 18 | XLV18 AS25080 GB/T584-1999 | 截止阀 | 80 | 2.5 | 铸钢 | 1 | | |
| | | STOP VALVE | | | CAST STEEL | | | |
| 17 | XLV17 AS25080 GB/T584-1999 | 截止阀 | 80 | 2.5 | 铸钢 | 1 | | |
| | | STOP VALVE | | | CAST STEEL | | | |
| 16 | XLV16 AS25080 GB/T584-1999 | 截止阀 | 80 | 2.5 | 铸钢 | 1 | | |
| | | STOP VALVE | | | CAST STEEL | | | |
| 15 | XLV15 AS25080 GB/T584-1999 | 截止阀 | 80 | 2.5 | 铸钢 | 1 | | |
| | | STOP VALVE | | | CAST STEEL | | | |
| 14 | XLV14 AS25080 GB/T584-1999 | 截止阀 | 80 | 2.5 | 铸钢 | 1 | | |
| | | STOP VALVE | | | CAST STEEL | | | |
| 13 | XLV13 参考: 1FSG10200MNS-B | 手动蝶阀 | 200 | 1.0 | 球铁 | 1 | | 中心型法兰蜗杆式 |
| | | BUTTERFLY VALVE | | | NOD.CS.IRON | | | |
| 12 | XLV12 参考: 1FSG10200MNS-A | 手动蝶阀 | 200 | 1.0 | 球铁 | 1 | | 中心型法兰蜗杆式 |
| | | BUTTERFLY VALVE | | | NOD.CS.IRON | | | |
| 11 | XLV11 参考: 1FSG10200MNS-B | 手动蝶阀 | 200 | 1.0 | 球铁 | 1 | | 中心型法兰蜗杆式 |
| | | BUTTERFLY VALVE | | | NOD.CS.IRON | | | |
| 10 | XLV10 参考: 1FSG10200MNS-A | 手动蝶阀 | 200 | 1.0 | 球铁 | 1 | | 中心型法兰蜗杆式 |
| | | BUTTERFLY VALVE | | | NOD.CS.IRON | | | |
| 9 | XLV9 | 温控三通阀 | 250 | 1.0 | 组合件 | 1 | | |
| | | TEMP.CONTROL V/V | | | ASSEMBLY | | | |
| 8 | XLV8 AS16200 GB/T585-1999 | 截止止回阀 | 200 | 1.6 | 铸钢 | 1 | | |
| | | STOP CHECK VALVE | | | CAST STEEL | | | |
| 7 | XLV7 AS16200 GB/T585-1999 | 截止止回阀 | 200 | 1.6 | 铸钢 | 1 | | |
| | | STOP CHECK VALVE | | | CAST STEEL | | | |
| 6 | XLV6 AS16200 GB/T585-1999 | 截止止回阀 | 200 | 1.6 | 铸钢 | 1 | | |
| | | STOP CHECK VALVE | | | CAST STEEL | | | |
| 5 | XLV5 参考: 1FSG10200MNS-B | 手动蝶阀 | 200 | 1.0 | 球铁 | 1 | | 中心型法兰蜗杆式 |
| | | BUTTERFLY VALVE | | | NOD.CS.IRON | | | |
| 4 | XLV4 参考: 1FSG10200MNS-B | 手动蝶阀 | 200 | 1.0 | 球铁 | 1 | | 中心型法兰蜗杆式 |
| | | BUTTERFLY VALVE | | | NOD.CS.IRON | | | |
| 3 | XLV3 参考: 1FSG10200MNS-B | 手动蝶阀 | 200 | 1.0 | 球铁 | 1 | | 中心型法兰蜗杆式 |
| | | BUTTERFLY VALVE | | | NOD.CS.IRON | | | |
| 2 | XLV2 AS25050 GB/T584-1999 | 截止阀 | 50 | 2.5 | 铸钢 | 1 | | |
| | | STOP VALVE | | | CAST STEEL | | | |
| 1 | XLV1 BS25015 GB/T587-93 | 截止阀 | 15 | 2.5 | 青铜 | 1 | | |
| | | STOP VALVE | | | BRONZE | | | |
| 序 号 NO. | 标准和代号 STANDARD AND DRAWING NO. | 名 称 NAME | 口径 NOM. DIA. (mm) | 压力 PN (MPa) | 材 料 MATIERIAL | 数量 QTY. | 重量 WT. (kg) | 附 注 REMARKS |

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| 40 | XLV40 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 39 | XLV39 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 38 | XLV38 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 37 | XLV37 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 36 | XLV36 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 35 | XLV35 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 34 | XLV34 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 33 | XLV33 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 32 | XLV32 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 31 | XLV31 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 30 | XLV30 参考: 1SB10125MNS | 手动蝶阀 BUTTERFLY VALVE | 125 | 1.0 | 球铁 NOD.CS.IRON | 1 | | 中心型手柄式对夹式 |
| 29 | XLV29 参考: 1SB10125MNS | 手动蝶阀 BUTTERFLY VALVE | 125 | 1.0 | 球铁 NOD.CS.IRON | 1 | | 中心型手柄式对夹式 |
| 28 | XLV28 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 27 | XLV27 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 26 | XLV26 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 25 | XLV25 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 24 | XLV24 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 23 | XLV23 AS25032 GB/T587-93 | 截止阀 STOP VALVE | 32 | 2.5 | 青铜 BRONZE | 1 | | |
| 22 | XLV22 AS25020 GB/T587-93 | 截止阀 STOP VALVE | 20 | 2.5 | 青铜 BRONZE | 1 | | |
| 21 | XLV21 AS25020 GB/T587-93 | 截止阀 STOP VALVE | 20 | 2.5 | 青铜 BRONZE | 1 | | |
| 序 号 NO. | 标准和代号 STANDARD AND DRAWING NO. | 名 称 NAME | 口径 NOM. DIA. (mm) | 压力 PN (MPa) | 材 料 MATIERIAL | 数量 QTY. | 重量 WT. (kg) | 附 注 REMARKS |

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