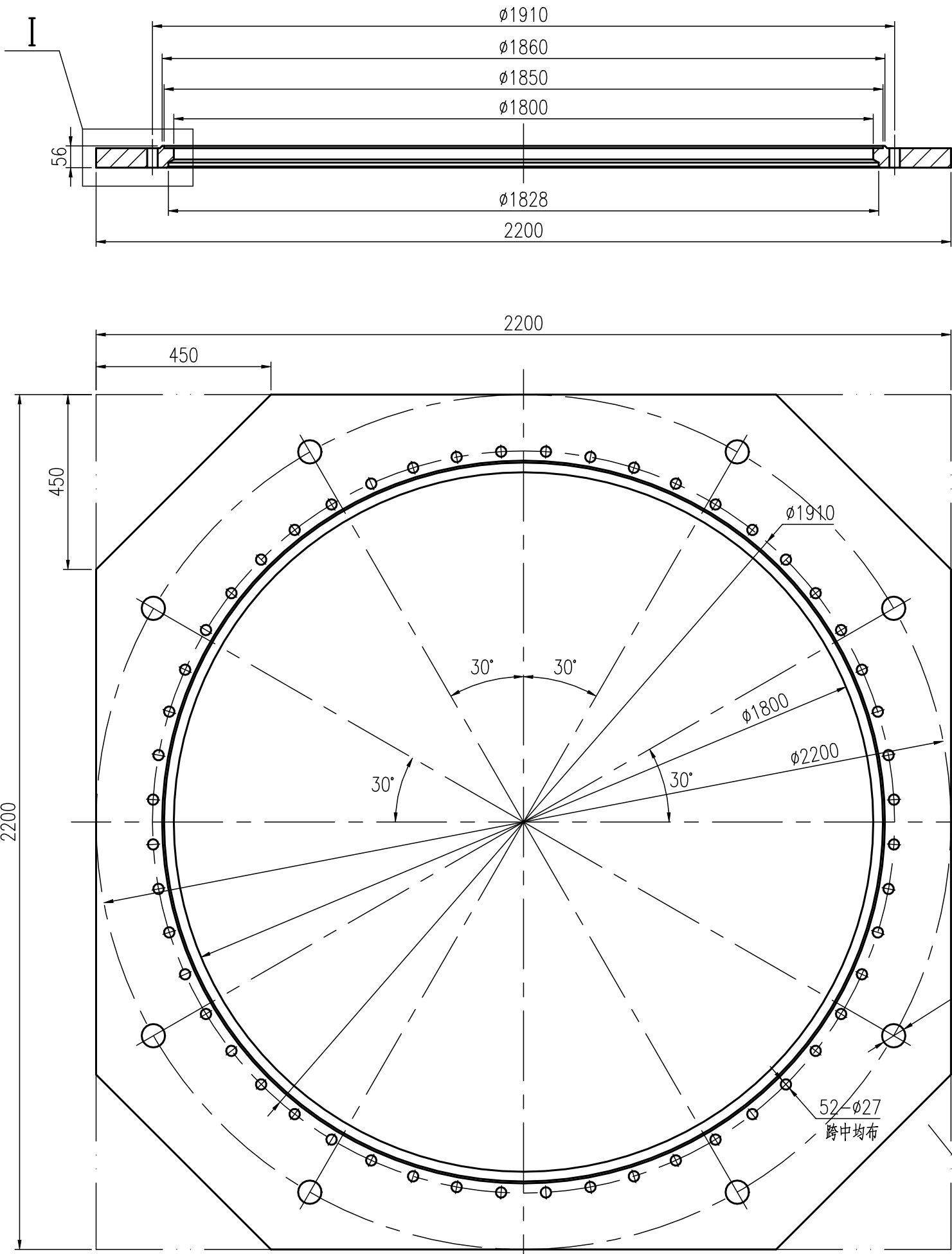
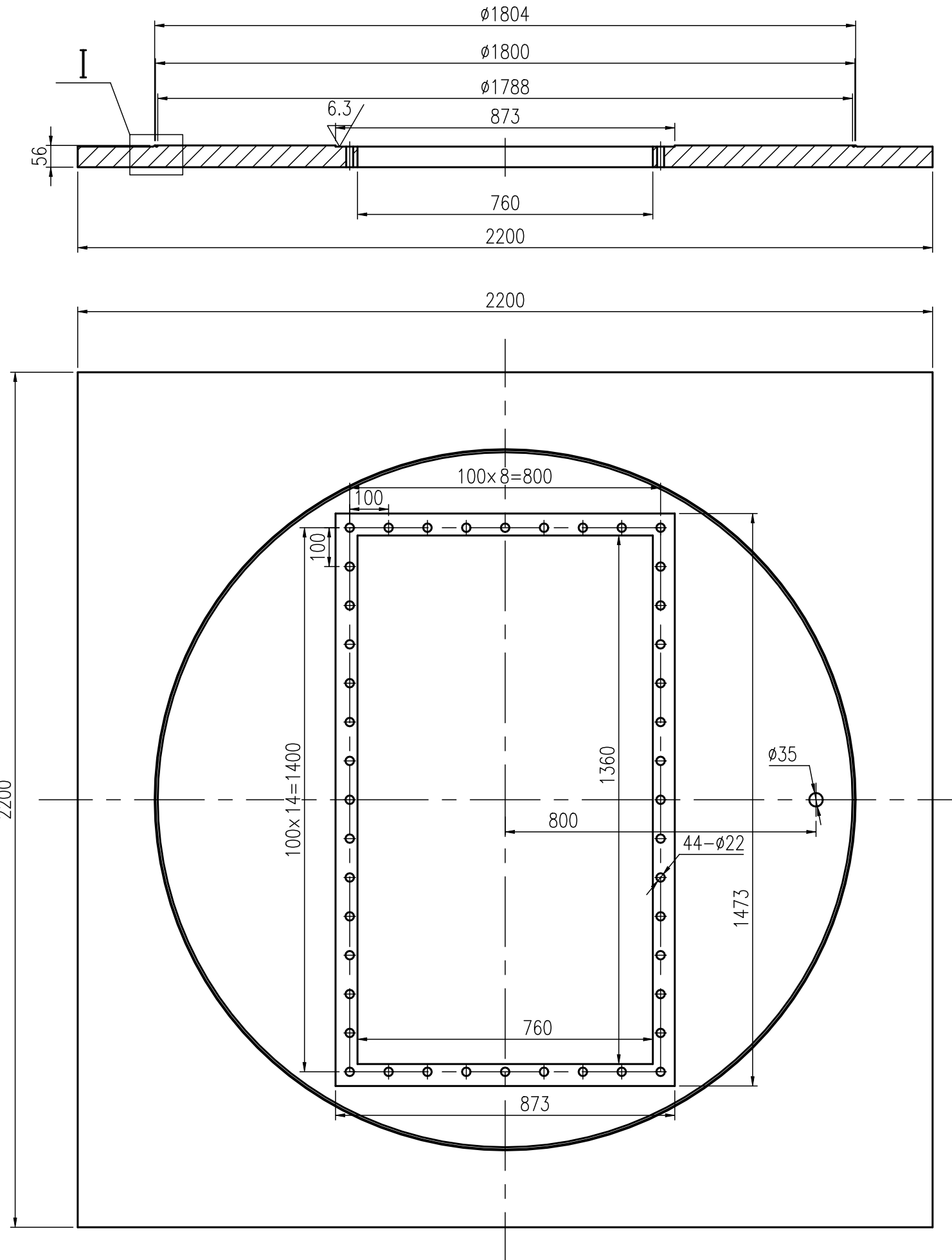




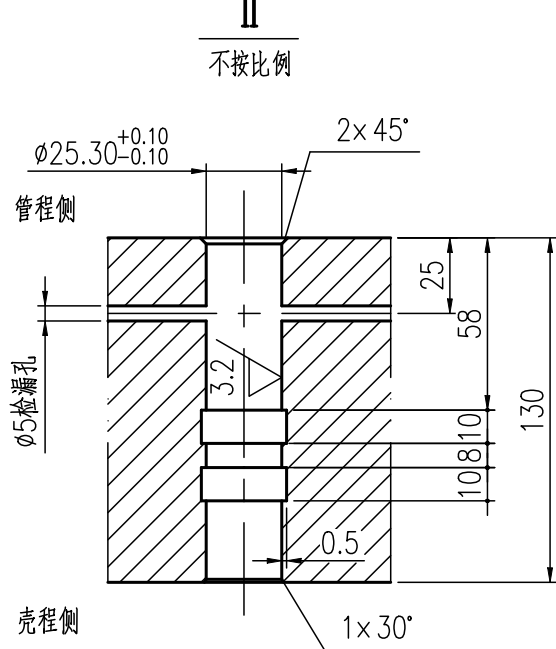
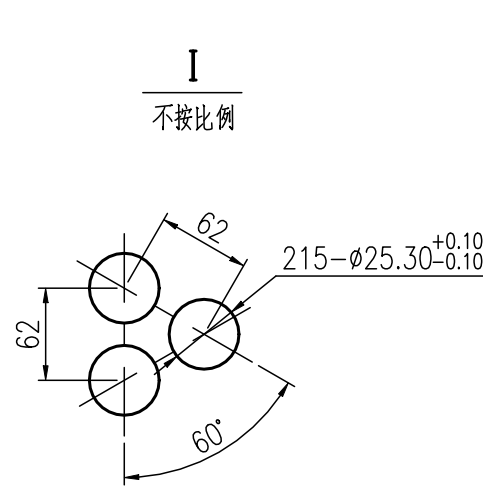
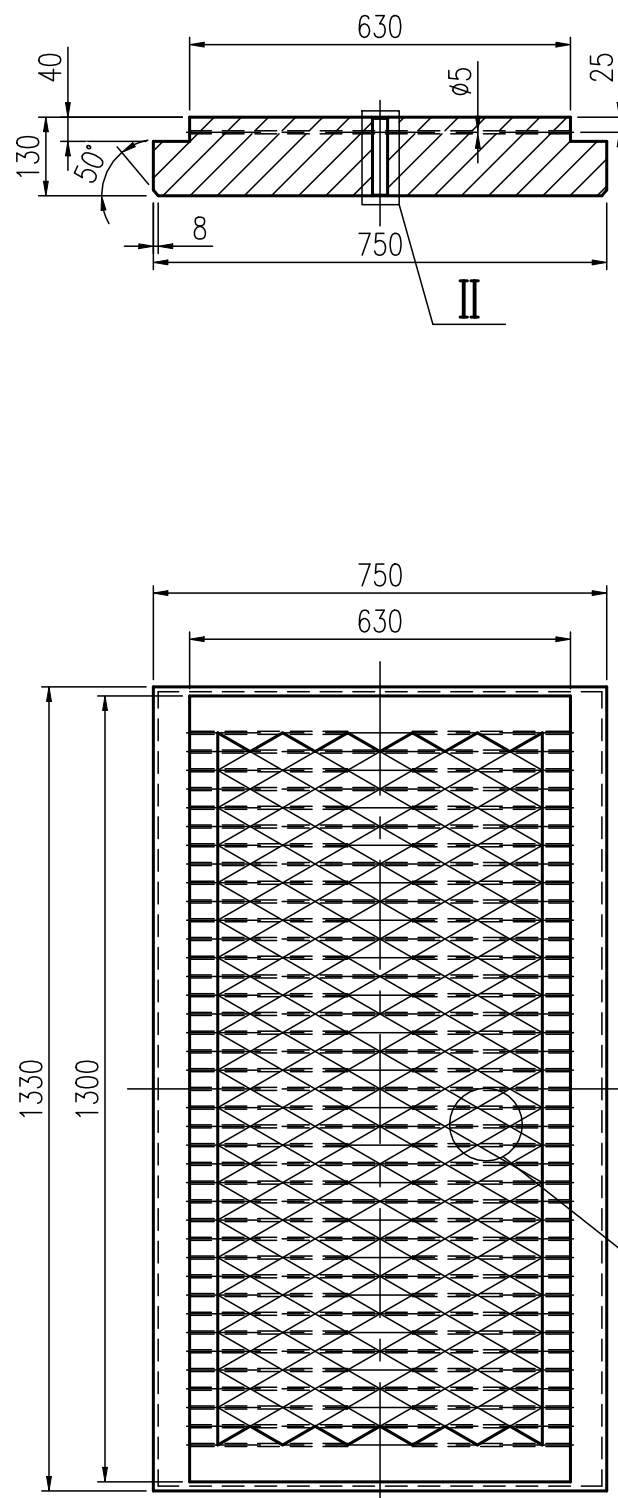
技术要求:
1、螺栓孔中心圆直径和相邻两螺栓孔弦长公差为±0.6mm;任意两螺栓孔弦长公差±2.0mm。
2、机加工面未注尺寸的公差等级按GB/T 1804—2000《一般公差未注公差的线性和角度尺寸的公差》中的m级精度。
3、起吊孔上下端面需加工C5倒角。

13	上法兰	Q345R	870	/	SCR-78-2	SCR-78-0
件号 PART NO.	名 称 DESCRIPTION	材 料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.



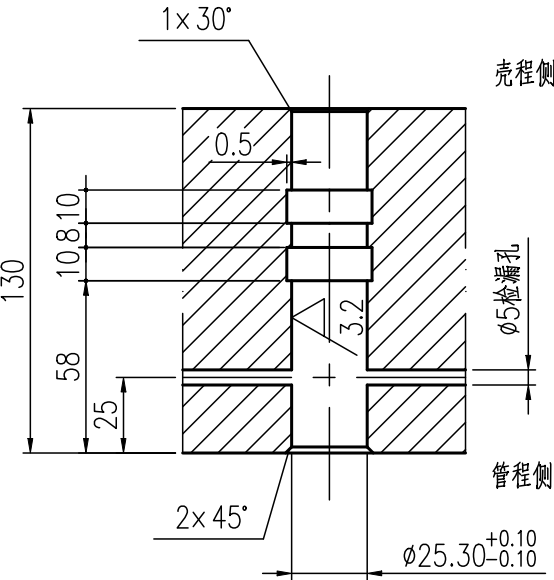
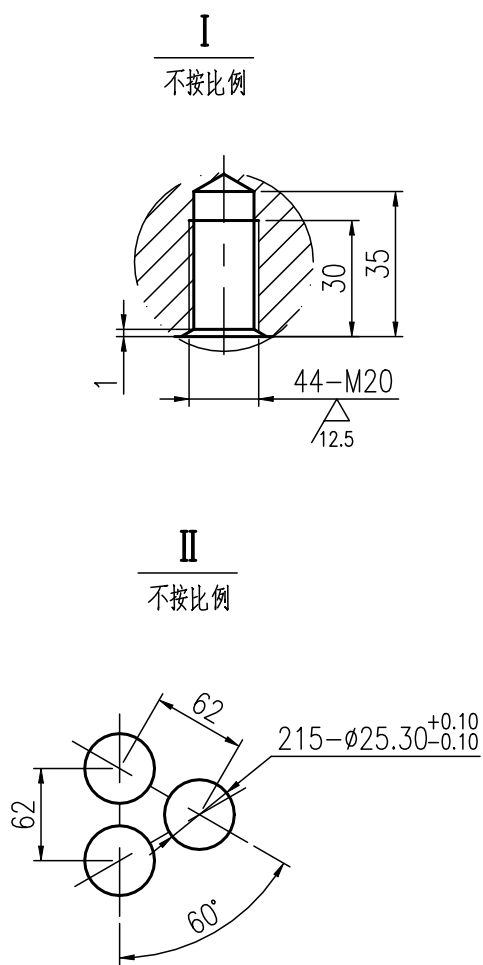
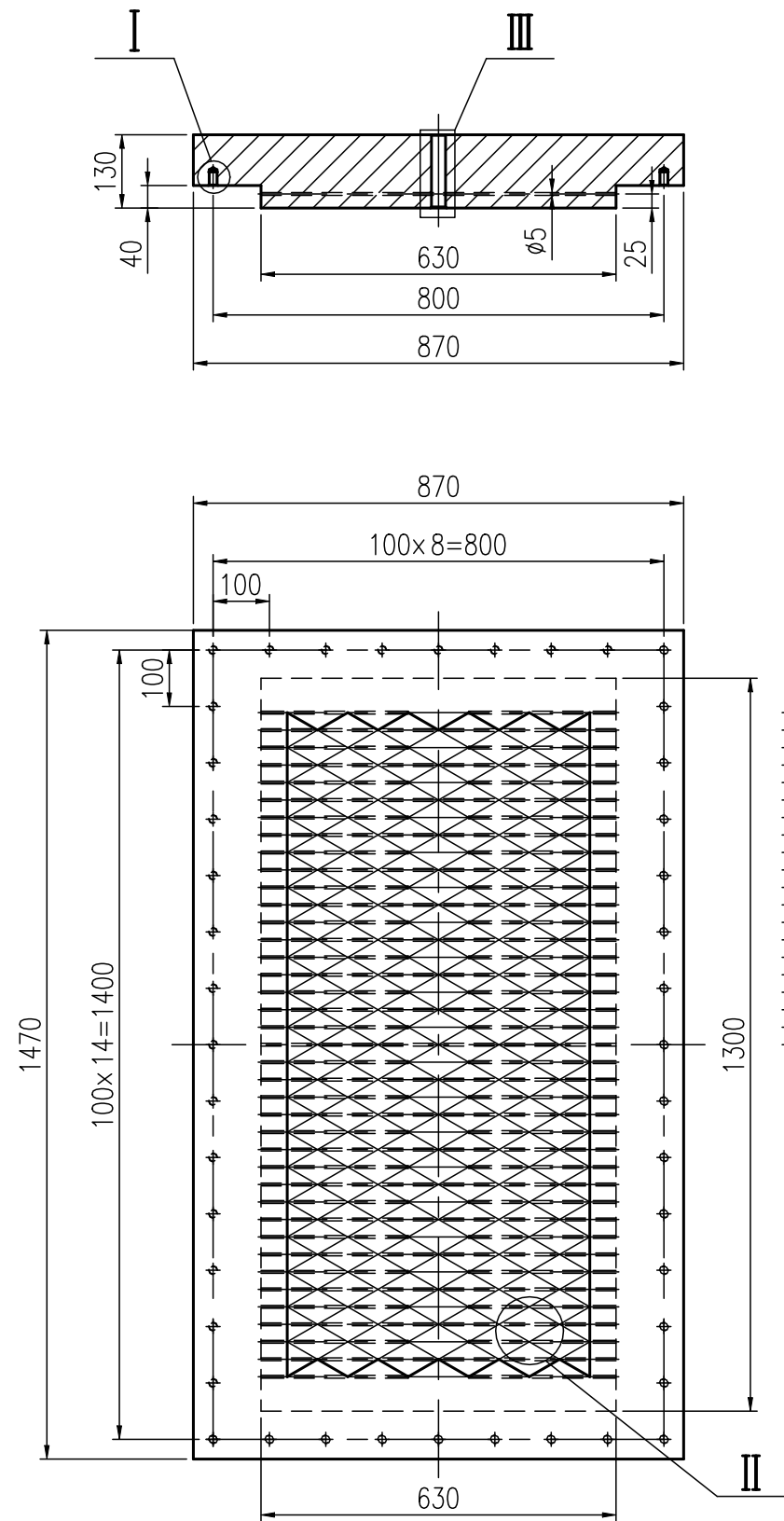
技术要求:
1、机加工面未注尺寸的公差等级按GB/T 1804—2000《一般公差未注公差的线性和角度尺寸的公差》中的m级精度。

5	下盖板	Q345R	1620	/	SCR-78-2	SCR-78-0
件号 PART NO.	名 称 DESCRIPTION	材 料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.



技术要求:
1. 锻件应按NB/T47008—2017《承压设备用碳素钢和合金钢锻件》中规定的III级进行制造、检验和验收;
2. 管板密封面应与轴线垂直,其垂直度公差为0.150mm。
3. 管孔应严格垂直于管板密封面,其垂直度公差为0.050mm,孔表面不允许存在贯通的纵向条痕。
4. 管板钻孔后(出钻侧)≥96%的孔桥宽度必须≥35.52mm,最小孔桥宽度为22.02mm。
5. 机加工面未注尺寸的公差等级按GB/T 1804—2000《一般公差 未注公差的线性和角度尺寸的公差》中的m级精度。
注:检漏孔必须连通每一行的管孔,且钻孔后换热管孔表面不得有毛刺。

10-8	上管板	16MnⅢ	852	/	SCR-78-1	SCR-78-0
件号 PART NO.	名 称 DESCRIPTION	材 料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.



技术要求:
1. 锻件应按NB/T47008—2017《承压设备用碳素钢和合金钢锻件》中规定的III级进行制造、检验和验收;
2. 管板密封面应与轴线垂直,其垂直度公差为0.150mm。
3. 管孔应严格垂直于管板密封面,其垂直度公差为0.050mm,孔表面不允许存在贯通的纵向条痕。
4. 管板钻孔后(出钻侧)≥96%的孔桥宽度必须≥35.52mm,最小孔桥宽度为22.02mm。
5. 机加工面未注尺寸的公差等级按GB/T 1804—2000《一般公差 未注公差的线性和角度尺寸的公差》中的m级精度。
注:检漏孔必须连通每一行的管孔,且钻孔后换热管孔表面不得有毛刺。

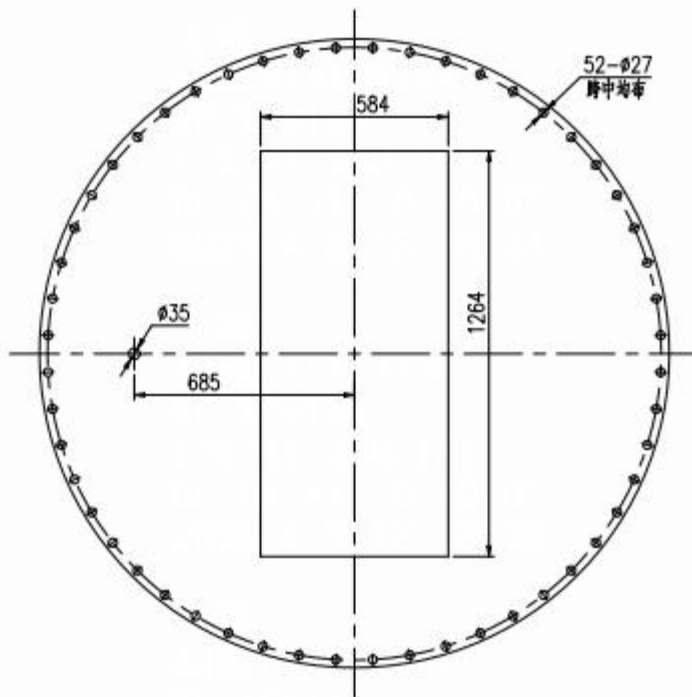
10-5	下管板	16MnⅢ	/	1060	SCR-78-1	SCR-78-0
件号 PART NO.	名 称 DESCRIPTION	材 料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.

版次	修 改 内 容	日期	修改	校对	审核
----	---------	----	----	----	----

本图纸及图样文件版权属于江苏索普赛瑞装备制造有限公司所有,任何单位和个人未经江苏索普赛瑞装备制造有限公司许可,不得以任何方式复制或传播至第三方,违者必究相关法律责任。
THIS DRAWING AND RELEVANT DOCUMENTS COPYRIGHT BELONGS TO SOPO CERE EQUIPMENT MANUFACTURING CO., LTD. THEY MAY NOT BE REPRODUCED OR DISCLOSED TO ANY THIRD PARTY IN ANY FORM WITHOUT THE PRIOR WRITTEN PERMISSION OF SOPO CERE EQUIPMENT MANUFACTURING CO., LTD. THE OFFENDERS SHALL BEAR THE CORRESPONDING LEGAL RESPONSIBILITY.

 江苏索普赛瑞装备制造有限公司 JIANGSU SOPO-CERE EQUIPMENT MANUFACTURING CO., LTD.		项目名称 ENTRY NAME	江苏索普化工股份有限公司		
设计 DESIGN		蒸汽加热器 部件图	设计阶段 DESIGN PHASE	施工 图	
校对 CHECK			比例 SCALE 1: 12	版本 REV.	0
标准化审查 S.T.D			第 1 张 SHEET	共 4 张 TOT.	
审核 REVIEW			图 号	SCR-78-2	
批准 RATIFY			DWG NO.		

其余 $\frac{25}{\nabla}$

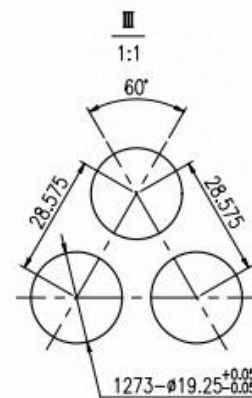
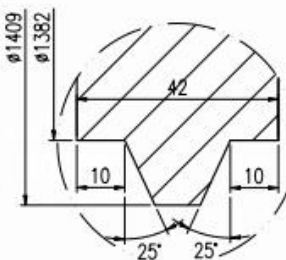
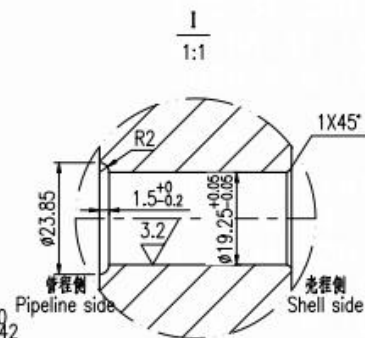
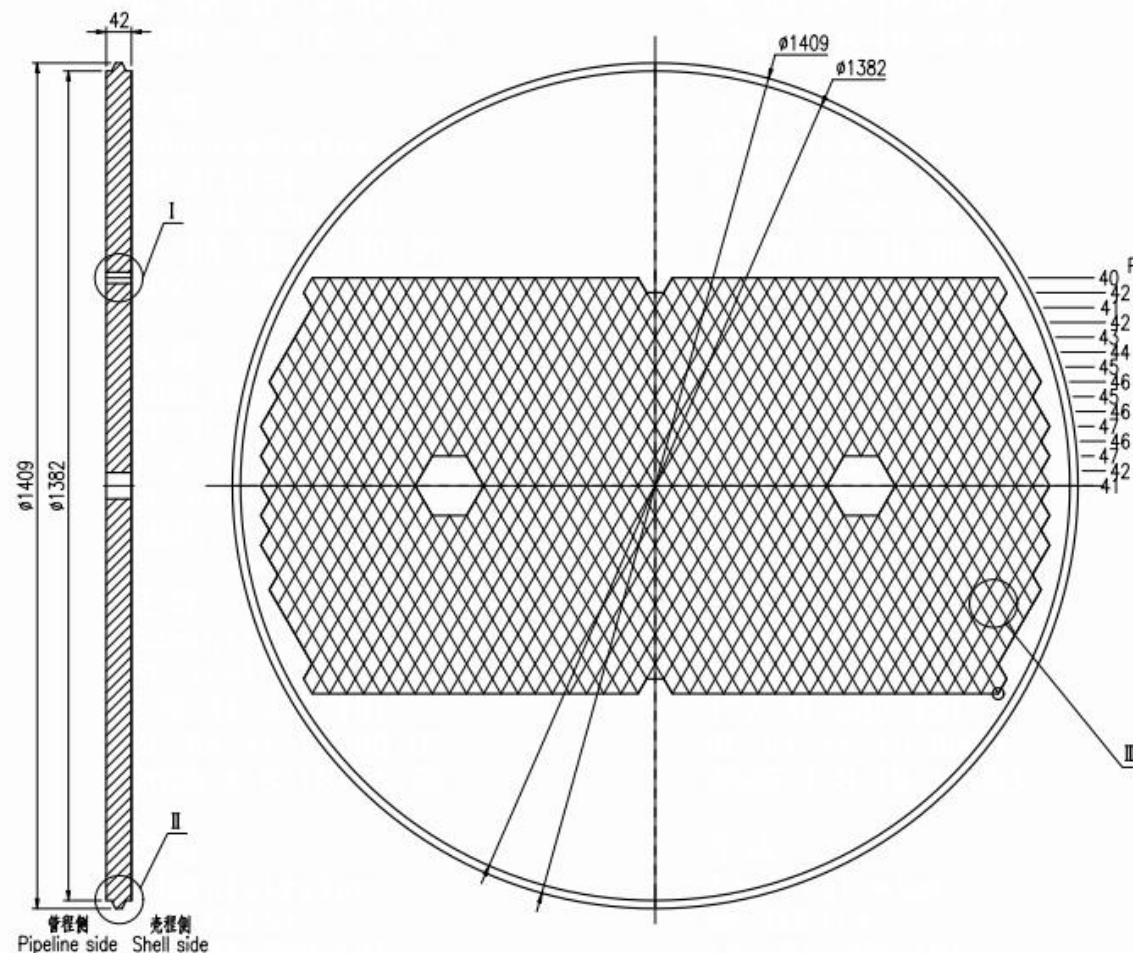


技术要求:

1. 螺栓孔中心圆直径和相邻两螺栓孔弦长允差为 $\pm 0.6\text{mm}$; 任意两螺栓孔弦长允差 $\pm 2.0\text{mm}$ 。
2. 机械加工面未注尺寸的公差等级按GB/T 1804—2000《一般公差未注公差的线性和角度尺寸的公差》中的m级精度。

10-7	上端盖 t=56	Q345R	975	/	SCR-78-3	SCR-78-1
件号 PART NO.	名 称 DESCRIPTION	材 料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.

其余 $\frac{25}{\sqrt{}}$
The remaining
II
1:1



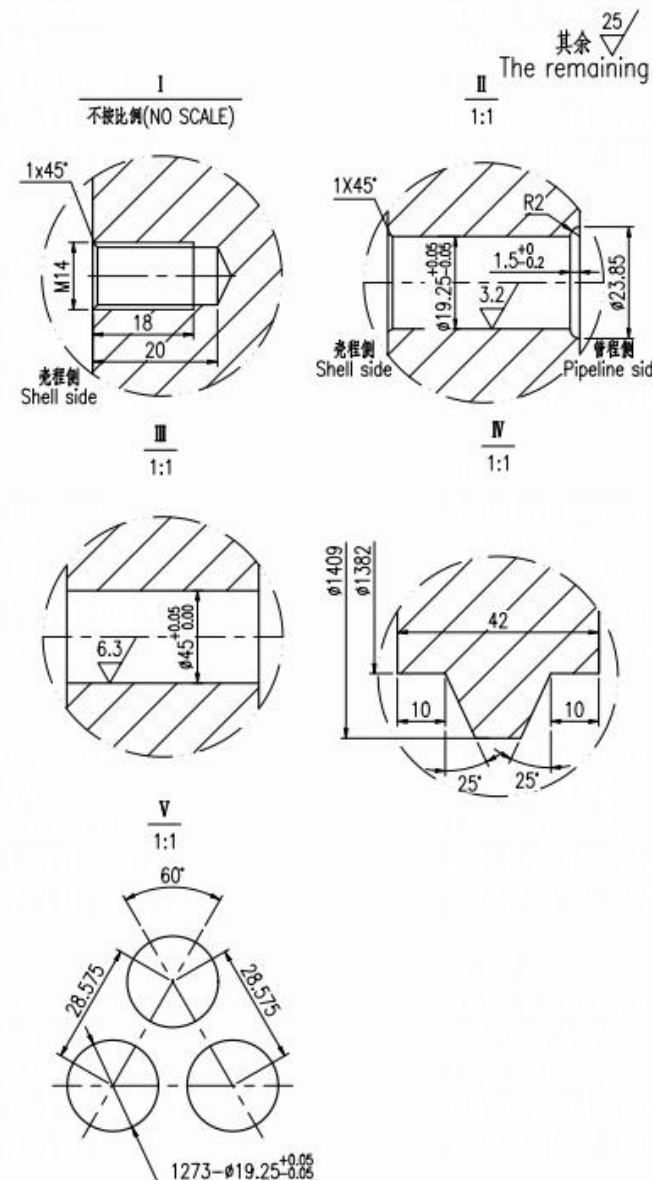
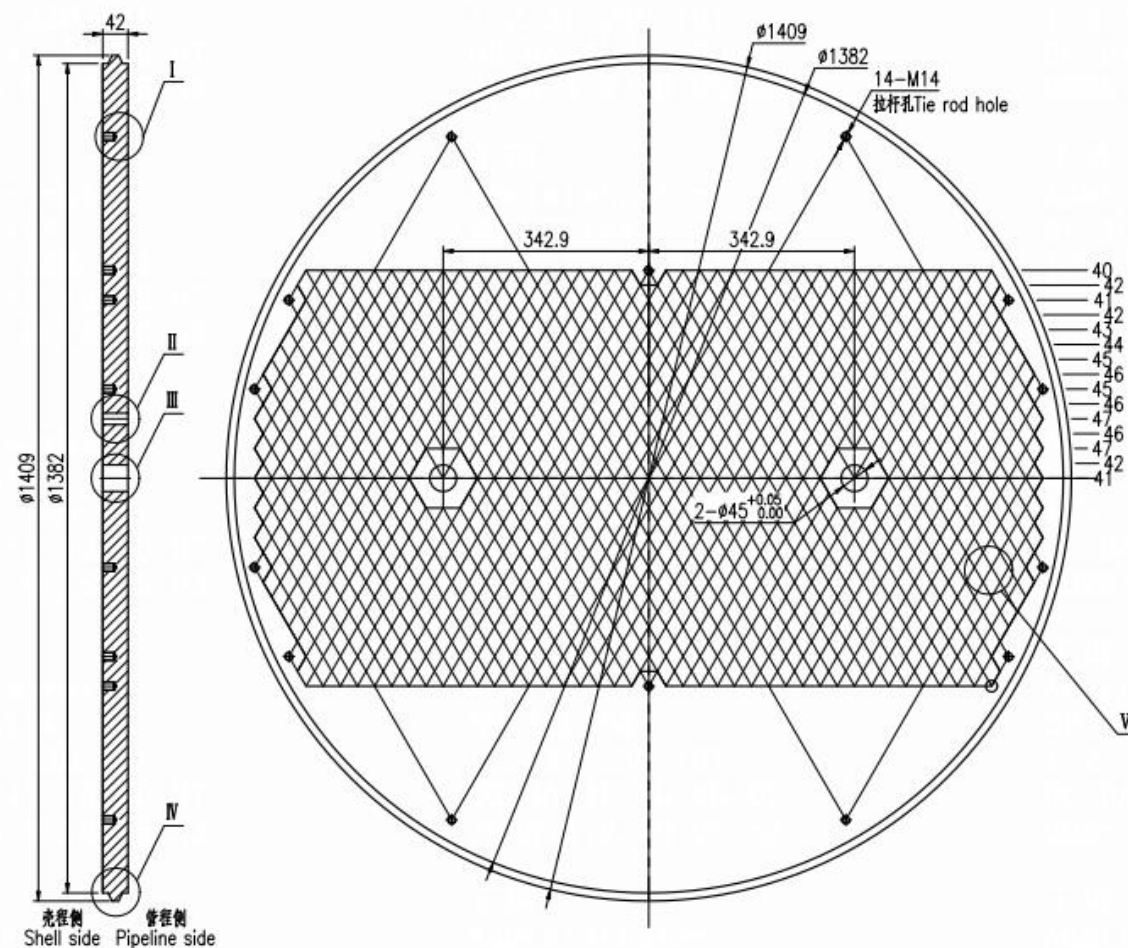
技术要求:

1. 管板密封面应与轴线垂直,其垂直度公差为0.400mm
2. 管孔应严格垂直于管板密封面,其垂直度公差为0.080mm,孔表面不允许存在贯通的纵向条纹。
3. 管板钻孔后(出钻侧)≥96%允许孔桥宽度必须≥8.38mm,允许最小孔桥宽度为5.595mm
4. 除注明外,加工面和非加工面线性尺寸未注公差按GB/T1804-2000m级和c级。

Technical requirements:

1. The sealing surface of the tube plate should be perpendicular to the axis, with a perpendicularity tolerance of 0.400mm
2. The pipe hole should be strictly perpendicular to the sealing surface of the pipe plate, with a perpendicularity tolerance of 0.080mm, and there should be no longitudinal stripes passing through the surface of the hole.
3. After drilling the tube plate (exit side), the allowable hole bridge width must be ≥ 8.38mm for ≥ 96%, and the minimum allowable hole bridge width is 5.595mm.
4. Unless otherwise noted, the unmarked tolerance of linear dimensions of machined and non machined surfaces shall be in accordance with GB/T1804-2000m and C.

6	管板 I Tube sheet	S31603	404	1:8	SCR-71-3	SCR-71-0
件号 PART NO.	名称 DESCRIPTION	材料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.



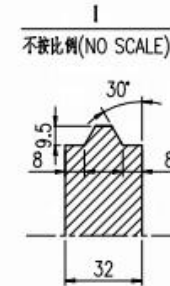
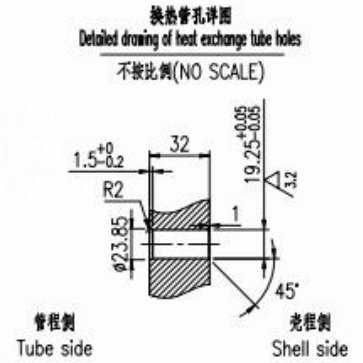
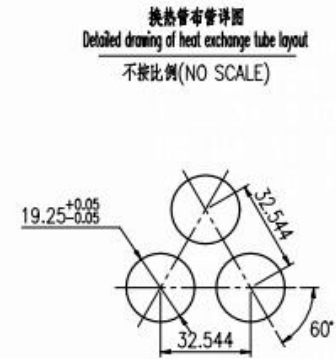
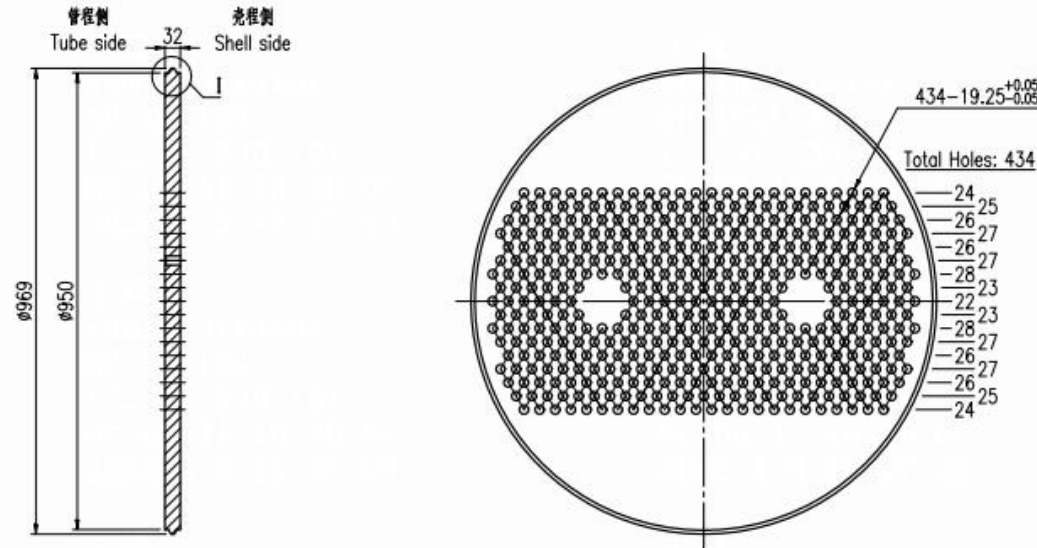
技术要求:

- 管板密封面应与轴线垂直,其垂直度公差为0.400mm
- 管孔应严格垂直于管板密封面,其垂直度公差为0.080mm,孔表面不允许存在贯通的纵向条纹。
- 管板钻孔后(出钻侧)≥96%允许孔桥宽度必须≥8.38mm,允许最小孔桥宽度为5.595mm。
- 除注明外,加工面和非加工面线性尺寸未注公差按GB/T1804-2000m级和c级。

Technical requirements:

- The sealing surface of the tube plate should be perpendicular to the axis, with a perpendicularity tolerance of 0.400mm
- The pipe hole should be strictly perpendicular to the sealing surface of the pipe plate, with a perpendicularity tolerance of 0.080mm, and there should be no longitudinal stripes passing through the surface of the hole.
- After drilling the tube plate (exit side), the allowable hole bridge width must be ≥ 8.38mm for ≥ 96%, and the minimum allowable hole bridge width is 5.595mm.
- Unless otherwise noted, the unmarked tolerance of linear dimensions of machined and non machined surfaces shall be in accordance with GB/T1804-2000m and C.

21	管板II Tube Sheet	S31603	404	1:8	SCR-71-3	SCR-71-0
件号 PART NO.	名称 DESCRIPTION	材料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.



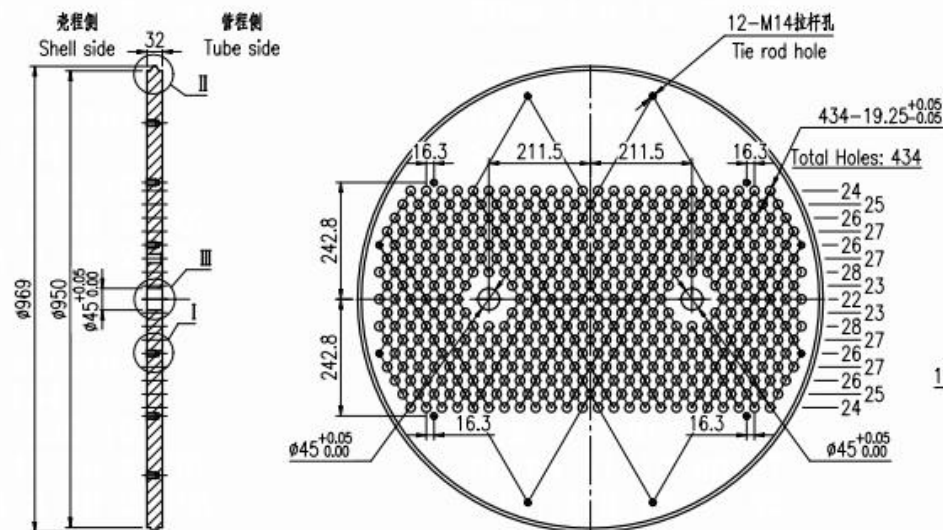
技术要求:

- 1、管板密封面应与轴线垂直,其垂直度公差为0.30mm。
- 2、管孔应严格垂直于管板密封面,其垂直度公差为0.060mm,孔表面不允许存在贯通的纵向条痕。
- 3、管板钻孔后出钻侧≥96%的孔桥宽度必须≥12.40mm,最小孔桥宽度为7.98mm。
- 4、除图样注明外,零件机械加工表面的线性尺寸的极限偏差,按GB/T 1804《一般公差未注尺寸公差》中的m级的规定。

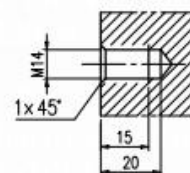
Technical requirements:

1. The sealing surface of the tube plate should be perpendicular to the axis, with a perpendicularity tolerance of 0.300mm
2. The pipe hole should be strictly perpendicular to the sealing surface of the pipe plate, with a perpendicularity tolerance of 0.060mm, and there should be no longitudinal stripes passing through the surface of the hole.
3. After drilling the tube plate (exit side), the allowable hole bridge width must be $\geq 12.40\text{mm}$ for $\geq 96\%$, and the minimum allowable hole bridge width is 7.98mm
4. Unless otherwise indicated in the drawing, the limit deviation of the linear dimension of the machined surface of the part shall be in accordance with the provisions of Grade m in General Tolerances – Tolerances – Tolerances for Dimensions with End Notes (GB/T 1804).

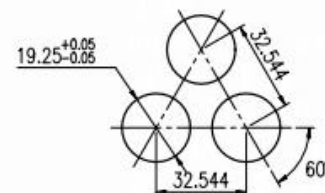
7	左管板 t=32 Left tube plate	S31603II	157	/	SCR-72-2	SCR-72-0
件号 PART NO.	名 称 DESCRIPTION	材 料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.



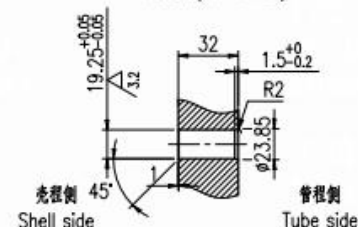
1
不按比例(NO SCALE)



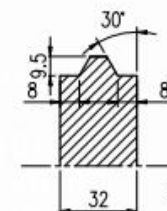
换热管布管详图
Detailed drawing of heat exchange tube layout
不按比例(NO SCALE)



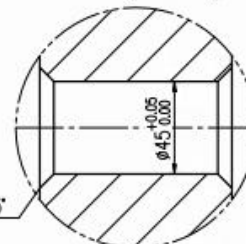
换热管孔详图
Detailed drawing of heat exchange tube holes 其余 25
不按比例(NO SCALE)



II
不按比例(NO SCALE)



III
不按比例(NO SCALE)



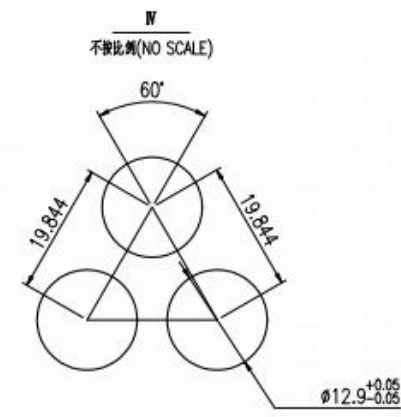
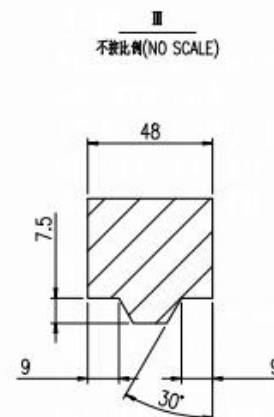
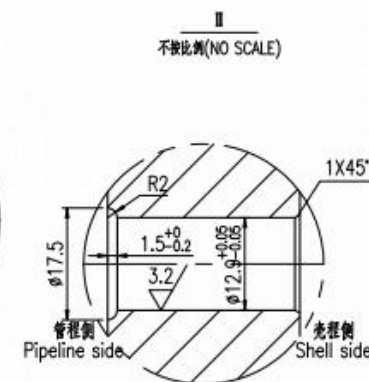
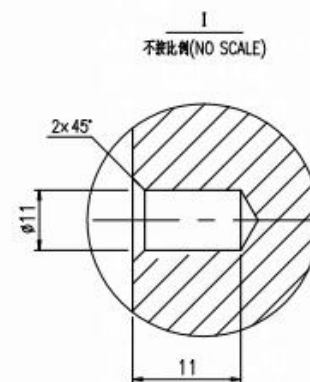
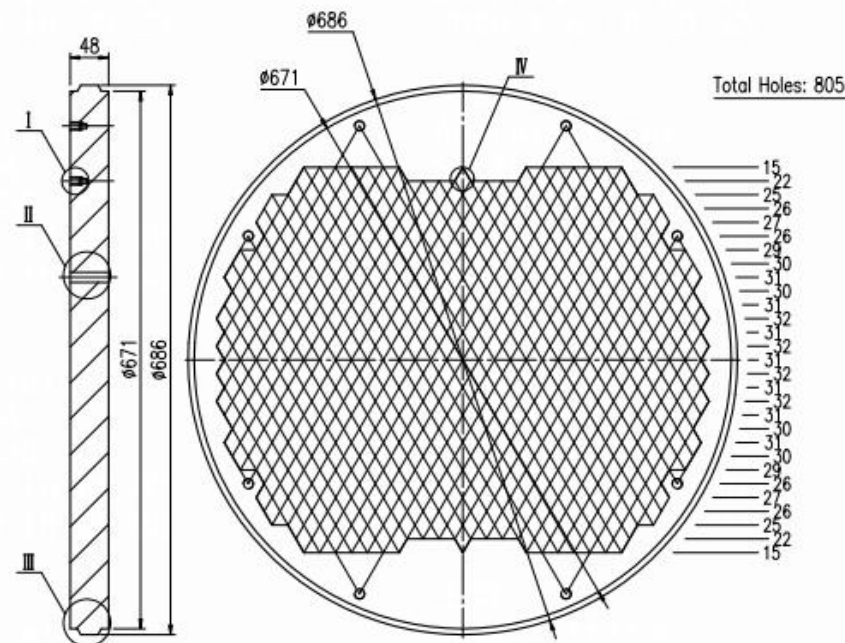
技术要求:

1. 管板密封面应与轴线垂直,其垂直度公差为0.30mm。
2. 管孔应严格垂直于管板密封面,其垂直度公差为0.060mm,孔表面不允许存在贯通的纵向条痕。
3. 管板钻孔后出钻侧≥96%的孔桥宽度必须≥12.40mm,最小孔桥宽度为7.98mm。
4. 除图样注明外,零件机械加工表面的线性尺寸的极限偏差,按GB/T 1804《一般公差未注尺寸公差》中的m级的规定。

Technical requirements:

1. The sealing surface of the tube plate should be perpendicular to the axis, with a perpendicularity tolerance of 0.300mm
2. The pipe hole should be strictly perpendicular to the sealing surface of the pipe plate, with a perpendicularity tolerance of 0.060mm, and there should be no longitudinal stripes passing through the surface of the hole.
3. After drilling the tube plate (exit side), the allowable hole bridge width must be ≥ 12.40mm for ≥ 96%, and the minimum allowable hole bridge width is 7.98mm
4. Unless otherwise indicated in the drawing, the limit deviation of the linear dimension of the machined surface of the part shall be in accordance with the provisions of Grade m in General Tolerances – Tolerances – Tolerances for Dimensions with End Notes (GB/T 1804).

24	右管板 t=32 Right tube plate	S31603II	157	/	SCR-72-2	SCR-72-0
件号 PART NO.	名称 DESCRIPTION	材料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.
本图样中包含的信息和/或设计是江苏索普赛瑞装备制造有限公司的知识产权,未经许可,不得复制或向他人披露本图样中包含的任何信息。所有权利均归江苏索普赛瑞装备制造有限公司所有。未经江苏索普赛瑞装备制造有限公司许可,不得复制或向他人披露本图样中包含的任何信息。所有权利均归江苏索普赛瑞装备制造有限公司所有。未经江苏索普赛瑞装备制造有限公司许可,不得复制或向他人披露本图样中包含的任何信息。 THE INFORMATION AND DESIGNS CONTAINED IN THIS DRAWING ARE THE CONFIDENTIAL AND PROPRIETARY PROPERTY OF ELESSENT CLEAN TECHNOLOGIES INC. ("ELESSENT"). NEITHER THIS DRAWING NOR ANY INFORMATION CONTAINED HEREIN MAY BE USED, REPRODUCED OR DISCLOSED TO OTHERS WITHOUT THE EXPRESS WRITTEN CONSENT OF ELESSENT. ANY REPRODUCTIONS IN WHOLE OR IN PART, INCLUDING ALL SHOP DRAWINGS, SHALL BEAR OR REFER TO THIS STAMP.						
版次	修改内容	日期	修改	校对	审核	
本图样及相关资料版权属于江苏索普赛瑞装备制造有限公司所有,任何单位和个人未经许可不得复制或向他人披露本图样中包含的任何信息。所有权利均归江苏索普赛瑞装备制造有限公司所有。未经江苏索普赛瑞装备制造有限公司许可,不得复制或向他人披露本图样中包含的任何信息。所有权利均归江苏索普赛瑞装备制造有限公司所有。未经江苏索普赛瑞装备制造有限公司许可,不得复制或向他人披露本图样中包含的任何信息。 THIS DRAWING AND RELEVANT DOCUMENT'S COPYRIGHT BELONGS TO SOPO CERE EQUIPMENT MANUFACTURING CO., LTD. THEY MAY NOT BE REPRODUCED OR DISCLOSED TO ANY THIRD PARTY IN ANY FORM WITHOUT THE PRIOR WRITTEN PERMISSION OF SOPO CERE EQUIPMENT MANUFACTURING CO., LTD. THE OFFENDERS SHALL BEAR THE CORRESPONDING LEGAL RESPONSIBILITY.						
江苏索普赛瑞装备制造有限公司 JIANGSU SOPO-CERE EQUIPMENT MANUFACTURING CO., LTD.				项目名称 ENTRY NAME	年产9万吨镍金属量湿法项目 PT.SULAWESI NICKEL COBALT	
设计 DESIGN			二吸酸冷却器 Final Absorption Tower Acid Cooler 零件图 Part Drawing		设计阶段 DESIGN PHASE	详细设计(Detailed Design)
校对 CHECK					比例 SCALE	1:20 版本 REV. /
标准化审查 S.T.D					第 3 张 SHEET	共 5 张 TOT.
审核 REVIEW					图号	SCR-72-2
批准 RATIFY					DWG NO.	



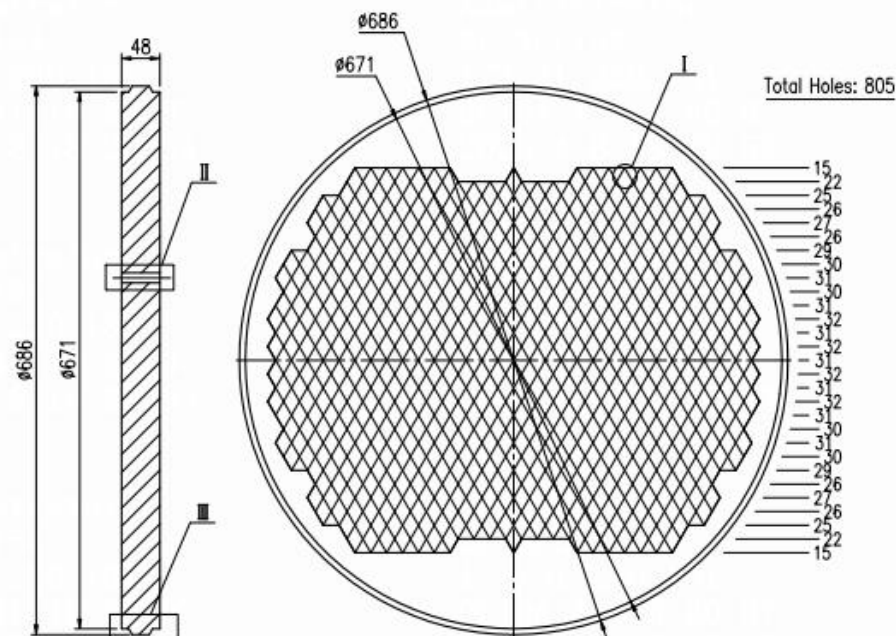
技术要求:

1. 管板密封面应与轴线垂直,其垂直度公差为0.300mm;
2. 管孔应严格垂直于管板密封面,其垂直度公差为0.080mm,孔表面不允许存在贯通的纵向条纹;
3. 管板钻孔后(出钻侧)≥96%孔桥宽度必须≥6.124mm,允许的最小孔桥宽度(≤4%的孔桥数)为4.166mm;
4. 机械加工面未注尺寸的公差等级按GB/T1804-2000《一般公差未注公差的线性和角度尺寸的公差》中的m级精度。

Technical requirements:

1. The sealing surface of the tube plate should be perpendicular to the axis, with a perpendicularity tolerance of 0.400mm
2. The pipe hole should be strictly perpendicular to the sealing surface of the pipe plate, with a perpendicularity tolerance of 0.080mm, and there should be no longitudinal stripes passing through the surface of the hole.
3. After drilling the tube plate (exit side), the allowable hole bridge width must be ≥ 6.120mm for ≥ 96%, and the minimum allowable hole bridge width is 4.166mm.
4. The tolerance level for machining surfaces without specified dimensions shall be in accordance with the m-level accuracy specified in GB/T1804-2000 "General tolerances for linear and angular dimensions without specified tolerances".

13	右管板 Right Tube Sheet	S31008II	101	/	SCR-73-2	SCR-73-0
件号 PART NO.	名 称 DESCRIPTION	材 料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.

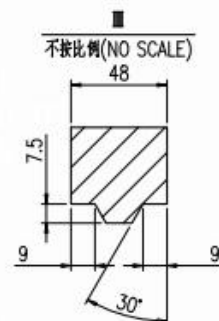
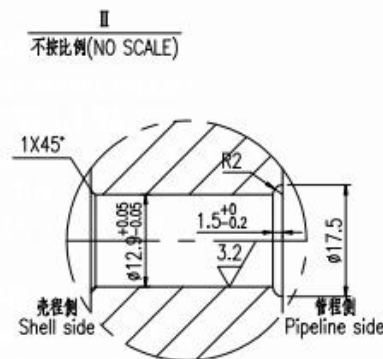
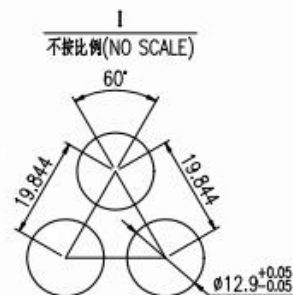


技术要求:

1. 管板密封面应与轴线垂直,其垂直度公差为0.300mm;
2. 管孔应严格垂直于管板密封面,其垂直度公差为0.080mm,孔表面不允许存在贯通的纵向条痕;
3. 管板钻孔后(出钻侧)≥96%孔桥宽度必须≥6.124mm,允许的最小孔桥宽度(≤4%的孔桥数)为4.166mm;
4. 机加加工面未注尺寸的公差等级按GB/T1804-2000《一般公差未注公差的线性和角度尺寸的公差》中的m级精度。

Technical requirements:

1. The sealing surface of the tube plate should be perpendicular to the axis, with a perpendicularity tolerance of 0.400mm
2. The pipe hole should be strictly perpendicular to the sealing surface of the pipe plate, with a perpendicularity tolerance of 0.080mm, and there should be no longitudinal stripes passing through the surface of the hole.
3. After drilling the tube plate (exit side), the allowable hole bridge width must be ≥ 6.120mm for ≥ 96%, and the minimum allowable hole bridge width is 4.166mm.
4. The tolerance level for machining surfaces without specified dimensions shall be in accordance with the m-level accuracy specified in GB/T1804-2000 "General tolerances for linear and angular dimensions without specified tolerances".



21	左管板 Left Tube Sheet	S31008II	101	/	SCR-73-2	SCR-73-0
件号 PART NO.	名称 DESCRIPTION	材料 MATERIAL	重量(kg) WEIGHT	比例 SCALE	所在图号 DRAWING NO.	装配图号 ASS. DWG. NO.
本图样及相关资料为江苏索普赛瑞装备制造有限公司所有,任何单位和个人未经许可不得擅自复制或传播,不得用于其他用途,违者必究。The information and designs contained in this drawing are the confidential and proprietary property of ELESSENT CLEAN TECHNOLOGIES INC. (ELESSENT). NEITHER THIS DRAWING NOR ANY INFORMATION CONTAINED HEREIN MAY BE USED, REPRODUCED OR DISCLOSED TO OTHERS WITHOUT THE EXPRESS WRITTEN CONSENT OF ELESSENT. ANY REPRODUCTIONS IN WHOLE OR IN PART, INCLUDING ALL SHOP DRAWINGS, SHALL BEAR OR REFER TO THIS STAMP.						
版次	修改内容	日期	修改	校对	审核	
本图样及相关资料为江苏索普赛瑞装备制造有限公司所有,任何单位和个人未经许可不得擅自复制或传播,不得用于其他用途,违者必究。THIS DRAWING AND RELEVANT DOCUMENTS' COPYRIGHT BELONGS TO SOPO CERE EQUIPMENT MANUFACTURING CO., LTD. THEY MAY NOT BE REPRODUCED OR DISCLOSED TO ANY THIRD PARTY IN ANY FORM WITHOUT THE PRIOR WRITTEN PERMISSION OF SOPO CERE EQUIPMENT MANUFACTURING CO., LTD. THE OFFENDERS SHALL BEAR THE CORRESPONDING LEGAL RESPONSIBILITY.						
 江苏索普赛瑞装备制造有限公司 JIANGSU SOPO-CERE EQUIPMENT MANUFACTURING CO., LTD.			项目名称 ENTRY NAME	年产9万吨镍金属量湿法项目 PT.SULAWESI NICKEL COBALT		
设计 DESIGN			除盐水预热器 Boiler Feedwater Preheater 零件图Part drawing		设计阶段 DESIGN PHASE	详细设计(Detailed Design)
校对 CHECK					比例 SCALE	1:6 版本REV. 0
标准化审查 S.T.D					第 3 张 SHEET	共 5 张 TOT.
审核 REVIEW					图号 DWG NO.	SCR-73-2
批准 RATIFY						