

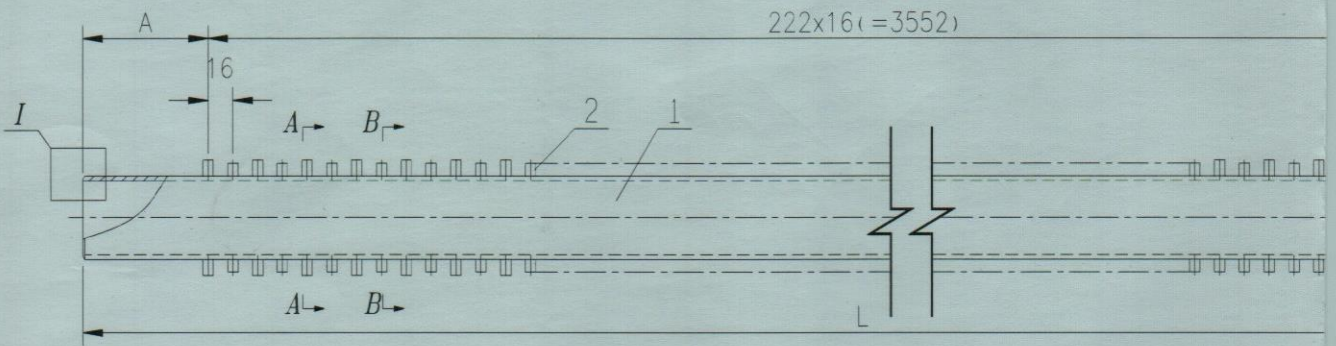
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2

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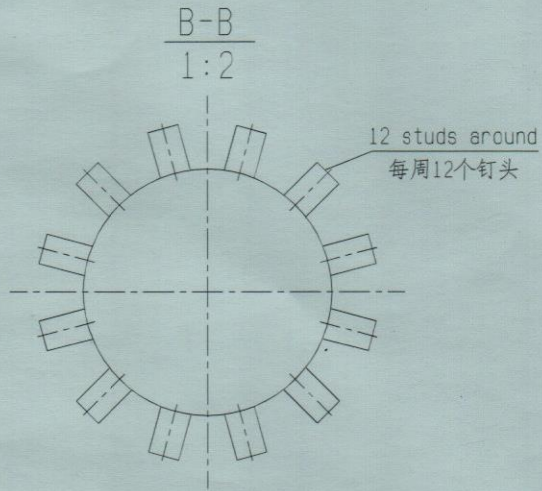
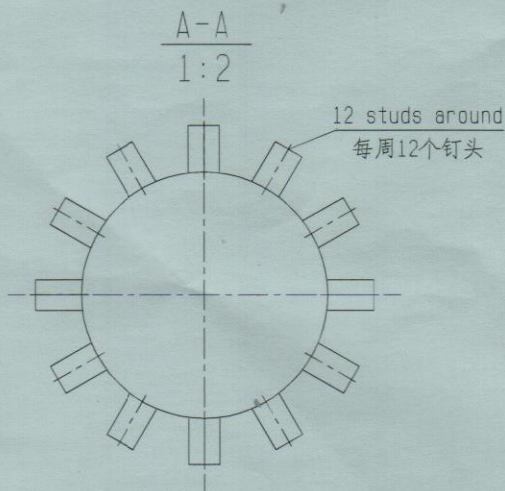
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A



B

C



D

表1 sheet 1

件号 Item No.	数量 Q.ty	管子规格 Specification	管子材质 material	钉头规格 studs Specification			L	A	B	单根管子重量lb Sin.Tube weight	钉头重量lb studs weight	单根钉头管重量lb Sin.stubbing tube weight	装 Assemb
				高度mm height	直径mm diameter	材质 material							
2	10	3.5"SCH40	ASTM A106 Gr.B	25.4	∅12.7	C.S	3886	167	167	116.2	147.7	263.9	18A31
7	38	3.5"SCH40	ASTM A335 P5	19.05	∅12.7	C.S	3886	167	167	116.2	111.8	228	18A31
8	2	3.5"SCH40	ASTM A335 P5	19.05	∅12.7	C.S	4532	167	813	135.6	111.8	247.4	18A31
9	1	3.5"SCH40	ASTM A106 Gr.B	25.4	∅12.7	C.S	3938	167	219	118	147.7	265.7	18A31
11	1	3.5"SCH40	ASTM A106 Gr.B	25.4	∅12.7	C.S	4532	167	813	135.6	147.7	283.3	18A31

E

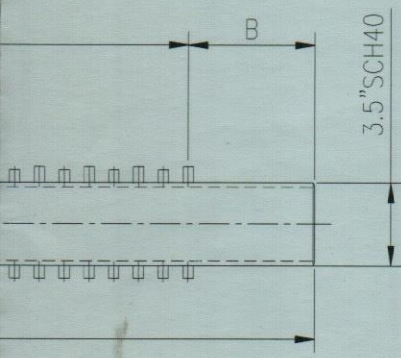
F

1

2

3

4



技术要求

1. 钉头管应符合API 560-2016《一般炼油装置用火焰加热炉》的规定。
2. 碳钢材质钉头的化学成分及机械性能应符合API 560-2016《一般炼油装置用火焰加热炉》的规定。
3. Gr.B炉管材质的化学成分及机械性能应符合ASTM A106的规定。
4. P5炉管材质的化学成分及机械性能应符合ASTM A335的规定。
5. 炉管壁厚为平均壁厚。
6. 所有炉管均为无缝钢管。

technical requirements

1. studded tube should be accord with The requirement of "API STANDARD 560-2016 Fired Heaters for General Refinery Service".
2. The Chemical composition and mechanical properties of studs should be accord with The requirement of "API STANDARD 560-2016 Fired Heaters for General Refinery Service".
3. The Chemical composition and mechanical properties of Gr.B should be accord with The requirement of "ASTM A106".
4. The Chemical composition and mechanical properties of P5 should be accord with The requirement of "ASTM A335".
5. The thickness of the tubes are the average thickness.
6. Tubes are the seamless steel tubes.



2	钉头 stud	see sheet 1	see sheet 1	PCS			see sheet 1
1	炉管 tube	3.5" SCH40	see sheet 1	PCS			see sheet 1

编号 Item No.	名称 Name	规格 Specification	材料 material	单位 Unit	数量 Q.ty	单重 Sin. 重量Weight(lb)	共计 Tot.	备注 remark
非金属总重 ~ lb The total weight of the nonmetal				金属总重 ~ lb The total weight of the metal				

0								
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修改 REV. NO.	说明 DESCRIPTION	设计 DRAWN	校核 CHKD.	审核 APPR.	审定 FINAL APPR.	日期 ISSUE DATE
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NRL TSDU REVAMP PROJECT



NATIONAL REFINERY LTD.
7-B KORANGI INDUSTRIAL AREA
KARACHI - PAKISTAN



华陆工程科技有限责任公司
HUALU ENGINEERING & TECHNOLOGY CO.,LTD.
(化学工业部第六设计院)

ITEM	01-F51	DOC. NO.	18A31-01-D-006
SERVICE	VACUUM FIRED HEATER	PO NO.	18022-00J2410-PPM-001-00

				NRL TSDU改造工程减压炉 NRL TSDU Revamp Project Vacuum Fired Heater		 宁波连通设备集团有限公司 Ningbo Liantong Equipment Group Co., Ltd.	
				钉头管图 Studded tube drawing		项目号 JOB.NO. 18A31	
						版次 REV. 2 比例 SCALE 1:8 重量 WEIGHT	
						第 张 OF 共 张	
						图号 DRAWING NO. 18A31-01-D-006	
标记 MARK	次数 NO.	更改单号 REV. NO.	签字 SIND	日期 ISSUE DATE			
设计 DES.	李俊超	标准 STD.					
校对 CHK.	郝宝初	批准 APP.					
审核 REV.	刘巧香						
工艺 PRO.		日期 DATE	2019-9-9				

图号 drawing no.
01-D-003
01-D-003
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