



REVISION HISTORY		
DATE	DESCRIPTION	REV
04/09/2020	ORIGINAL RELEASE	A
25/11/2022	Standard Approved Drawing Format	B

Design Review Checks		Yes	No
Chamfers			
Engraving			
Material			
Finish			
Quantity			
TE No.			
Job No.			
Revision No.			
Customer Name			
IPT			
BOM			
dx/figs			
Loc. holes/slots offset			
Loc. holes/slots tol.			
Thread details			
Assembly part list			
Parts/fittings sourced			
All assembly ok			
Correspondence			
Job No.	See Process Card		
Quantity	See Process Card		
Material	316L Stainless Steel		
Finish	SF1		
D or () Denotes IPT Dimension			

Biobore Tube/ Stainless Part Requirements - SF1:

- Any blemishes such as porosity, pinholes, undercutting, cracks, are not permitted on any surface of the part. See Table SF-2.2-1 in ASME BPE 2019 (page 248) for full details.
- Maximum size of scratches permitted - cumulative length to be less than 6.4mm (0.25") and if depth less than 0.08mm (0.003 in and Ra max). is met. See Table SF-2.2-1 in ASME BPE 2019 (page 248) for full details.
- Internal Surface roughness max. = 0.51 micro meter RA (SF1). See Table SF-2.4-1 in ASME BPE 2019 (page 249) for full details.
- External Surface roughness max. = 0.8 micro meter RA (SF1).
- All deburring to be completed as per WI - 150 - 0038 for SF1 requirements.
- Ends of open tubes to have small lead in blended edge on both internal and external diameters as per drawing details.
- Engineer to be informed if the dimensional tolerances cannot be achieved prior to manufacturing.
- No contact permitted with internal surface during machining.
- No contact permitted with internal surface with files or other deburring tools.
- All chamfers to be machined on.
- Part to be packaged before and after machining to prevent damage.
- Internal and external surfaces to be visually inspected with Borescope & under Magnifying Lamp to ensure they conform to latest ASME BPE Standards.
- Ensure IPT form is completed correctly.

Preferred Material Blank Size 1.5" Tube x 700mm

Customer: See Process Card
File saved in folder named below
Laminated Copy in circulation - rev B

1.5 inch Tube
316L Stainless Steel
SF1 Finish

Design Stamp		Released F.Digan		Date 25/11/22	
		Name	Date		
	Drawn	B Barry	25/11/2022		
	Checked	C Gilsenan	25/11/2022		
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TECHNICAL ENGINEERING GROUP. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF TECHNICAL ENGINEERING GROUP IS PROHIBITED.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN mm TOLERANCES: ANGULAR: ± 0.5° GENERAL MACHINE: ± 0.10 SHEET METAL: ± 0.5 INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5		Title	
				1.5" Tube	
				Size	Drawing No.
				A3	50020-3018-002-12_dwg
				Rev	B
		Scale	NTS	Standard Washer Racks	Sheet 1 of 1