

NOTICE: PROPRIETARY RIGHTS INVOLVED

THIS DOCUMENT AS WELL AS THE INFORMATION OR DATA CONTAINED HEREIN ARE CONFIDENTIAL AND SHALL NOT BE COPIED, REPRODUCED, TRANSMITTED, DISCLOSED OR DISTRIBUTED TO OTHERS OR OTHERWISE USED FOR ANY PURPOSE WITHOUT THE EXPRESS, PRIOR AND WRITTEN PERMISSION OF TENARIS CONNECTIONS AG AND/OR HYDRIL COMPANY AND/OR ITS AFFILIATED COMPANIES ("TENARIS"). THIS DOCUMENT AS WELL AS THE INFORMATION OR DATA CONTAINED HEREIN ARE THE EXCLUSIVE PROPERTY OF TENARIS, AND ARE TO BE RETURNED UPON REQUEST THEREFOR. ALL RIGHTS IN PROPRIETARY AND NOVEL FEATURES OF THE SUBJECT MATTER ARE EXPRESSLY RESERVED BY TENARIS. RECIPIENT'S AGREEMENT TO THE FOREGOING IS INDICATED BY ACCEPTANCE OF THIS DOCUMENT. COPYRIGHTED 2008 AS UNPUBLISHED WORK. ALL RIGHTS RESERVED

REVISIONS

LTR	DESCRIPTION	DATE	CHECKED
01	First issued.	20/Feb/14	N. Crowley
02	Modified 55° intersection geometry. Replaced marking lines with notches. Added Detail E. Changed Note 9. Changed material. Added thickness to the chart.	24/Feb/14	N. Crowley

ENGINEERING CHANGE

PARTS DISPOSITION	USE	REWORK	SCRAP	NOTED	DWG NO. TSH-GD-25.0004		REV 02
					PREPARED	A.OGGERO	24/Feb/14
RAW MAT'L	1	5	9	13	CHECKED	N.CROWLEY	24/Feb/14
IN PROCESS	2	6	10	14	APPROVED	N.CROWLEY	24/Feb/14
COMPLETED	3	7	11	15	ECR NO.		
ASSEMBLED	4	8	12	16	EFF	UPON RELEASE	
REASON FOR CHANGE/S AND/OR DISPOSITION NOTED							
MODIFIED GEOMETRY. ADDED NOTCHES AND THICKNESS. CHANGED NOTE 9 AND MATERIAL.							

MATERIAL: SAE 4130 HRC 28-38		PREPARED	A.OGGERO	20/Feb/14	<div><div></div><div></div><div></div></div> TenarisHydril				
		CHECKED	E.MARTINEZ	20/Feb/14					
		ENGINEER			TenarisXP Buttress Pin External Bevel Diameter Template				
		MFG							
		GAGE							
		QA							
RELEASED	DATE	APPROVED	N.CROWLEY	20/Feb/14	SIZE A	CODE IDENT.NO.	DRAWING NO. TSH-GD-25.0004	REV. 02	
		APPROVED			SCALE	WT.	SHEET 1 OF 3		

NOTES:

- 1 Surface treatment: titanium nitride or equivalent.
- 2 Engrave "TenarisXP Buttress - External Bevel Diam."
Engrave "TSH-GD-25.0004 Rev. ... Pos. ..."
- 3 Engrave D1 value.
- 4 Engrave D2 value.
- 5 Engrave D3 value.
- 6 Engrave D4 value.
7. Words shall be 0.5 mm deep.
8. Unless otherwise specified the tolerance is +/- 0.5 mm
on lengths and +/-1° in angles. All dimensions are in mm.
9. Template thickness tolerance: +/- 0.25 mm

Pos.	D1	A	D2	B	D3	C	D4	D	Thickness
1	4 1/2"	107.13	5"	119.65	5 1/2"	132.25	6 5/8"	160.54	3.17
2	7"	169.74	7 5/8"	185.34	8 5/8"	210.55	9 5/8"	235.43	3.17
3	10 3/4"	264.50	11 3/4"	290.45	13 3/8"	331.20	16"	398.55	6.30

SIZE A	CODE IDENT.NO.	DRAWING NO. TSH-GD-25.0004
SCALE	REV. 02	SHEET 3 of 3