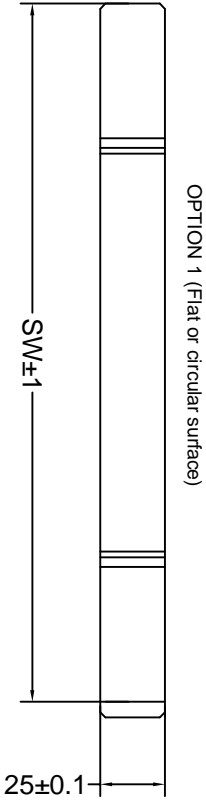
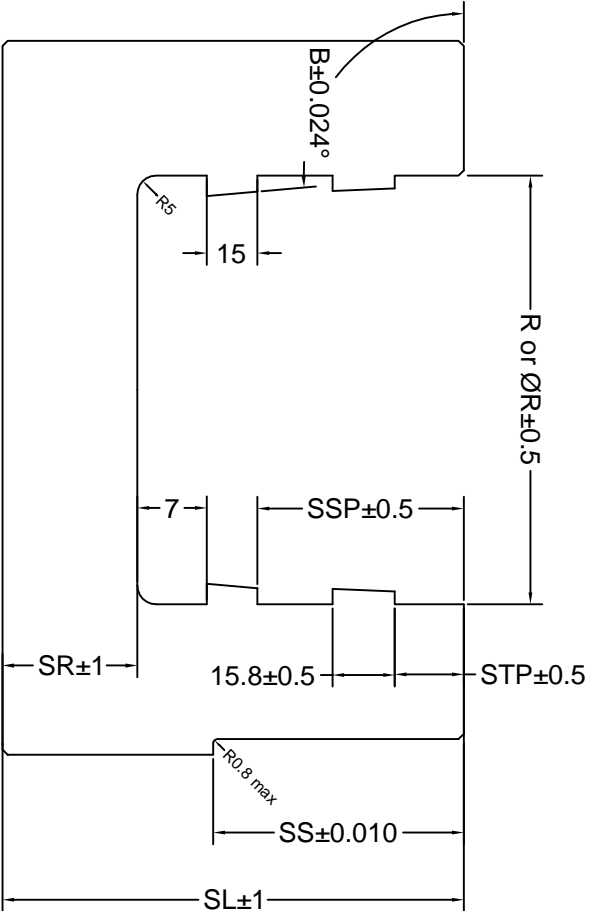
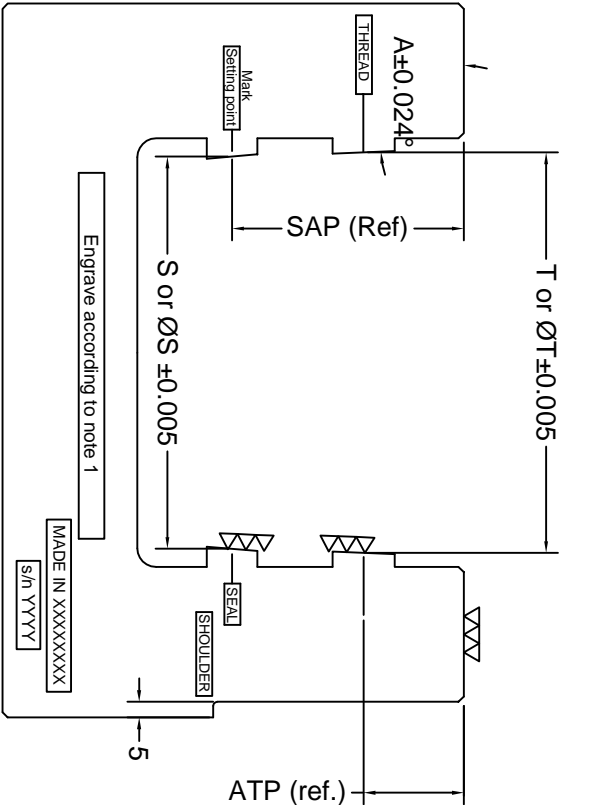


REVISIONS			
Rev	DESCRIPTION	DATE	APPROVED
02	Changed Pos. 1 SS value. Was 164.629, is 164.626. Changed Pos. 2 SS value. Was 172.609, is 172.606. Updated notes 10 and 11. Corrected SAP line. Added Pos. 3 and 4.	03-Sep-13	NCRDWELEY
03	Pos 1 S or ØS is 242.980 was 243.000 Pos 2 S or ØS is 334.600 was 334.620	17-Sep-13	NCRDWELEY
04	Added pos. 5 and pos. 6; Updated note 10	31-Mar-14	NCRDWELEY
05	Added pos. 7 & Pos. Rev. column; Updated notes 1 & 10.	17-Jul-14	NCRDWELEY



ENGINEERING CHANGE									
PARTS DISPOSITION	USE	REWORK	SCRAP	NOTED	DWG NO.	TSH-GD-79.0002	REV		
RAW MAT'L	1	5	9	13	CHECKED	ADJGEERD	17/4/74		
IN PROCESS	2	6	10	14	APPROVED	NORDVLEY	17/4/74		
COMPLETED	3	7	11	15	ECR NLD.				
ASSEMBLED	4	8	12	16	EFF	UPON RELEASE			
REASON FOR CHANGE/S AND/OR DISPOSITION NOTED									
Added position 7									
Updated notes 1 & 10									


REVISIONS			
Rev.	DESCRIPTION	DATE	APPROVED
01	First issued.	23-Aug-13	NCRDOWLEY
02	Changed Pos. 1 SS value. Was 164629, is 164626. Changed Pos. 2 SS value. Was 172609, is 172606. Updated notes 10 and 11. Corrected SMP line. Added Pos. 3 and 4.	03-Sep-13	NCRDOWLEY
03	Pos 1 S or OS is 242,980 was 234,000 Pos 2 S or OS is 334,600 was 234,620	17-Sep-13	NCRDOWLEY
04	Added pos. 5 and pos. 6i. Updated note 10	31-Mar-14	NCRDOWLEY
05	Added pos. 7 & Pos. Rev. column. Updated notes 1 & 10.	17-Jul-14	NCRDOWLEY

- Notes:
- 1.- Engrave "TSH-GD-07 0010 Rev ... Pos" Rev. number according to Pos. Revision column of the table. Pos. Revision is independent from drawing revision.
 - 2.- Engrave Thread and Seal. Words shall be 0,8mm deep.
 - 3.- Material: Thyrodur 2990.

Heat treatment:

- a) Stress Relief at 650°CX 2 hours, as an intermediate step between machining and grinding.
- b) Vacuum quenching from an austenitising temperature of 1070 - 1080°C to room temperature.
- c) Cooling: Subzero up to -80°C and then tempered twice at 520°C. Hardness required 58-60 HRC.
- 4.- Serial Number - (according to vendor's identification).
- 5.- Taper surfaces for thread and seal axis shall be perpendicular to the reference surface.
- 6.- Dimensions S, SAP, T, ATP, SS, Angle A and Angle B shall be certified.
- 7.- Corrosion protection and packaging shall be according to TenarisConnections specification.
- 8.- Certificate shall be according TenarisConnections specification.
- 9.- Mark seal setting point on both seal pads.
- 10.- Setting standard Pos. 1 IAW PREN drawings PREN-PC- TBM Rev. 02 and TBM-19875-6880-SD-PDDS-C.
Setting standard Pos. 2 IAW PREN drawings PREN-PC- TBM Rev. 02 and TBM-13625-8820-PDDS-D.
Setting standard Pos. 3 IAW PREN drawings PREN-PC- TBM Rev. 02 and TBM-10125-7930-PDDS-D.
Setting standard Pos. 4 IAW PREN drawings PREN-PC- TBM Rev. 02 and TBM-14000-11400-PDDS-B.
Setting standard Pos. 5 IAW PREN drawings PREN-PC- TBM Rev. 02 and TBM-7000-4100-PDDS-C.
Setting standard Pos. 6 IAW PREN drawings PREN-PC- TBM Rev. 02 and TBM-10000-7380-PDDS-A.
Setting standard Pos. 7 IAW PREN drawings PREN-PC- TBM Rev. 03 and TBM-7750-4610-PDDS-B.
- 11.- Face to shoulder gage contact tip diameter shall be 0,200".

TSH-GD-71 0002 - Box Seal and Thread Standard																
Position	Pos.	Revision	Diameter	A	ATP (ref.)	T or ØT	B	SAP (ref.)	S or ØS	STP	SL	SR	R or ØR	SSP	SW	SS
5		01	7"	92.519	80.301	172.810	94.086	120.970	168.680	72.3	202	67	178	113.5	298	138.886
7		01	7 3/4"	92.519	75.031	192.010	94.086	115.700	187.880	67.0	197	67	197	108.2	317	133.616
1		03	9 7/8"	92.519	101.861	247.310	94.086	141.710	242.980	93.9	237	81	252	134.2	372	164.626
6		01	10"	92.519	111.791	247.310	94.086	151.640	242.980	103.8	247	81	252	144.1	372	174.556
3		01	10 1/8"	92.519	101.471	251.410	94.086	141.320	247.100	93.5	237	81	256	133.8	376	164.236
2		03	13 5/8"	92.519	108.081	339.210	94.086	149.690	334.600	100.1	255	91	344	142.2	464	172.606
4		01	14"	92.519	118.981	348.710	94.086	160.600	344.120	111.0	266	91	354	153.1	474	183.516

NOTICE									
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PREPARED	ADGGERO	23/Aug/13	<div> TenarisHydril</div> <div>TenarisHydril Blue Max</div> <div>Box Seal and Thread Standard</div>						
CHECKED	EMARTINEZ	23/Aug/13							
ENGINEER									
MFG									
QA									
APPROVED	NCROWLEY	23/Aug/13	SIZE	CODE	IDENT NO.	DRAWING NO.	REVISION		
APPROVED			A4			TSH-GD-79.0002	05		
RELEASED			SCALE		WT.	SHEET	2 OF 2		