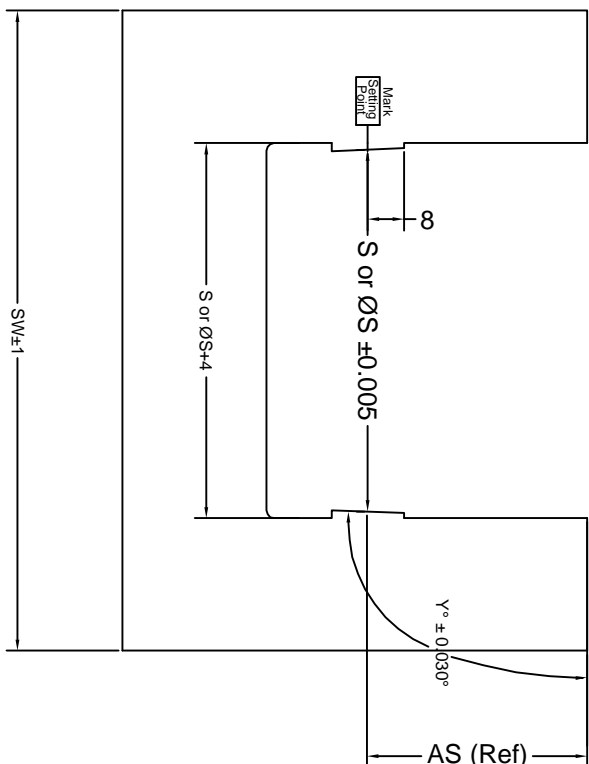
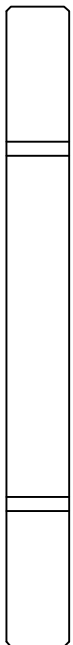


Option 1 (Circular surface)



Option 2 (Flat surface)



- Notes:
- 1.- Engrave "TSH-GD.04.0006 Rev ... Pos"
 - 2.- Engrave Seal Words shall be 0.8mm deep.
 - 3.- Material: Thyrodur 2990 Heat treatment:
 - a) Stress Relief at 650°C X 2 hours, as an intermediate step between machining and grinding.
 - b) Vacuum quenching since a temperature of austenitising 1070-1080 °C at room temperature
 - c) Cooling: Subzero up to -80°C and then tempered twice at 520°C. Hardness requested 58-60 HRC
 - 4.- Serial Number- (according to the supplier identification)
 - 5.- Taper surfaces for thread and seal axes shall be perpendicular to the reference surface.
 - 6.- Dimensions S, AS and Angle Y shall be certified.
 - 7.- The Corrosion Protection and Packaging shall be according to TenarisConnections specification.
 - 8.- The Certificate shall be according to TenarisConnections specification.



MODIFICATIONS				OBJECT:	
Rev	Description	Draw	Chk	App	Date
02	Added pos. 3,2 and increased seal length	JPA	ELT	NCR	17.12.10
03	New positions added.	JPA	BTL	NCR	Inclosed
DETAIL:					
Box Internal Seal Standard					

Drawn by: JPA	Checked by: ELT	Approved by: NCR	DRAWING N.:	TSH-GD.04.0006	03	1/3
			Scale: NOT	Date: 30/Sep/04	R E V	N

[illegible]

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S</th><th>SL</th><th>SW</th><th>SR</th></tr><tr><td>01</td><td>9.625</td><td>47.00</td><td>0.47</td><td>11</td><td>94.764</td><td>138.569</td><td>224.040</td><td>233.6</td><td>351.0</td><td>70.0</td></tr><tr><td>01</td><td>9.625</td><td>53.50</td><td>0.55</td><td>12</td><td>94.764</td><td>142.552</td><td>222.566</td><td>237.6</td><td>349.6</td><td>70.0</td></tr><tr><td>03</td><td>9.625</td><td>58.40</td><td>0.60</td><td>43</td><td>94.764</td><td>144.921</td><td>220.810</td><td>239.9</td><td>347.8</td><td>70.0</td></tr><tr><td>0</td><td>9.625</td><td>64.90</td><td>0.67</td><td>0</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>01</td><td>9.875</td><td>62.80</td><td>0.63</td><td>13</td><td>94.764</td><td>144.921</td><td>224.942</td><td>239.9</td><td>351.9</td><td>70.0</td></tr><tr><td>03</td><td>9.875</td><td>65.30</td><td>0.65</td><td>44</td><td>94.764</td><td>157.620</td><td>223.333</td><td>252.6</td><td>350.3</td><td>70.0</td></tr><tr><td>0</td><td>9.875</td><td>68.80</td><td>0.70</td><td>0</td><td>0.000</td><td>0.000</td><td>0.000</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>01</td><td>10</td><td>68.80</td><td>0.70</td><td>14</td><td>94.764</td><td>144.921</td><td>224.942</td><td>239.9</td><td>351.9</td><td>70.0</td></tr><tr><td>01</td><td>10.75</td><td>51.00</td><td>0.45</td><td>15</td><td>94.764</td><td>137.967</td><td>254.043</td><td>233.0</td><td>381.0</td><td>70.0</td></tr><tr><td>01</td><td>10.75</td><td>55.50</td><td>0.50</td><td>16</td><td>94.764</td><td>150.669</td><td>251.896</td><td>245.7</td><td>378.9</td><td>70.0</td></tr><tr><td>01</td><td>10.75</td><td>60.70</td><td>0.55</td><td>17</td><td>94.764</td><td>130.892</td><td>250.092</td><td>225.9</td><td>377.1</td><td>70.0</td></tr><tr><td>01</td><td>10.75</td><td>65.70</td><td>0.60</td><td>18</td><td>94.764</td><td>150.669</td><td>249.290</td><td>245.7</td><td>376.3</td><td>70.0</td></tr><tr><td>03</td><td>10.75</td><td>71.10</td><td>0.65</td><td>45</td><td>94.764</td><td>131.620</td><td>247.138</td><td>226.6</td><td>374.1</td><td>70.0</td></tr><tr><td>01</td><td>11.75</td><td>54.00</td><td>0.44</td><td>19</td><td>94.764</td><td>131.619</td><td>279.651</td><td>236.6</td><td>425.7</td><td>80.0</td></tr><tr><td>01</td><td>11.75</td><td>60.00</td><td>0.49</td><td>20</td><td>94.764</td><td>144.317</td><td>277.623</td><td>249.3</td><td>423.6</td><td>80.0</td></tr><tr><td>01</td><td>11.75</td><td>65.00</td><td>0.53</td><td>21</td><td>94.764</td><td>125.269</td><td>277.837</td><td>230.3</td><td>423.8</td><td>80.0</td></tr><tr><td>01</td><td>11.75</td><td>71.00</td><td>0.58</td><td>22</td><td>94.764</td><td>137.971</td><td>273.842</td><td>243.0</td><td>419.8</td><td>80.0</td></tr><tr><td>01</td><td>11.875</td><td>71.80</td><td>0.58</td><td>23</td><td>94.764</td><td>137.969</td><td>277.939</td><td>243.0</td><td>423.9</td><td>80.0</td></tr><tr><td>01</td><td>13.375</td><td>61.00</td><td>0.43</td><td>24</td><td>94.764</td><td>127.440</td><td>322.046</td><td>232.4</td><td>468.0</td><td>80.0</td></tr><tr><td>01</td><td>13.375</td><td>68.00</td><td>0.48</td><td>25</td><td>94.764</td><td>131.019</td><td>319.449</td><td>236.0</td><td>465.4</td><td>80.0</td></tr><tr><td>01</td><td>13.375</td><td>72.00</td><td>0.51</td><td>26</td><td>94.764</td><td>154.353</td><td>317.824</td><td>259.4</td><td>463.8</td><td>80.0</td></tr><tr><td>01</td><td>13.375</td><td>77.00</td><td>0.55</td><td>27</td><td>94.764</td><td>143.720</td><td>316.245</td><td>248.7</td><td>462.2</td><td>80.0</td></tr><tr><td>01</td><td>13.375</td><td>80.70</td><td>0.58</td><td>28</td><td>94.764</td><td>137.369</td><td>315.391</td><td>242.4</td><td>461.4</td><td>80.0</td></tr><tr><td>01</td><td>13.375</td><td>86.00</td><td>0.63</td><td>29</td><td>94.764</td><td>131.021</td><td>314.318</td><td>236.0</td><td>460.3</td><td>80.0</td></tr><tr><td>01</td><td>13.625</td><td>88.20</td><td>0.63</td><td>30</td><td>94.764</td><td>137.370</td><td>320.694</td><td>242.4</td><td>466.7</td><td>80.0</td></tr></table>																														Std Rev	Diameter	lb/ft	Wall Thickness	Position	Angle Y°	AS Ref	S or Diam S	SL	SW	SR	01	9.625	47.00	0.47	11	94.764	138.569	224.040	233.6	351.0	70.0	01	9.625	53.50	0.55	12	94.764	142.552	222.566	237.6	349.6	70.0	03	9.625	58.40	0.60	43	94.764	144.921	220.810	239.9	347.8	70.0	0	9.625	64.90	0.67	0	0.000	0.000	0.000	0.0	0.0	0.0	01	9.875	62.80	0.63	13	94.764	144.921	224.942	239.9	351.9	70.0	03	9.875	65.30	0.65	44	94.764	157.620	223.333	252.6	350.3	70.0	0	9.875	68.80	0.70	0	0.000	0.000	0.000	0.0	0.0	0.0	01	10	68.80	0.70	14	94.764	144.921	224.942	239.9	351.9	70.0	01	10.75	51.00	0.45	15	94.764	137.967	254.043	233.0	381.0	70.0	01	10.75	55.50	0.50	16	94.764	150.669	251.896	245.7	378.9	70.0	01	10.75	60.70	0.55	17	94.764	130.892	250.092	225.9	377.1	70.0	01	10.75	65.70	0.60	18	94.764	150.669	249.290	245.7	376.3	70.0	03	10.75	71.10	0.65	45	94.764	131.620	247.138	226.6	374.1	70.0	01	11.75	54.00	0.44	19	94.764	131.619	279.651	236.6	425.7	80.0	01	11.75	60.00	0.49	20	94.764	144.317	277.623	249.3	423.6	80.0	01	11.75	65.00	0.53	21	94.764	125.269	277.837	230.3	423.8	80.0	01	11.75	71.00	0.58	22	94.764	137.971	273.842	243.0	419.8	80.0	01	11.875	71.80	0.58	23	94.764	137.969	277.939	243.0	423.9	80.0	01	13.375	61.00	0.43	24	94.764	127.440	322.046	232.4	468.0	80.0	01	13.375	68.00	0.48	25	94.764	131.019	319.449	236.0	465.4	80.0	01	13.375	72.00	0.51	26	94.764	154.353	317.824	259.4	463.8	80.0	01	13.375	77.00	0.55	27	94.764	143.720	316.245	248.7	462.2	80.0	01	13.375	80.70	0.58	28	94.764	137.369	315.391	242.4	461.4	80.0	01	13.375	86.00	0.63	29	94.764	131.021	314.318	236.0	460.3	80.0	01	13.625	88.20	0.63	30	94.764	137.370	320.694	242.4	466.7	80.0	02											03											04											05
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										<p>Notes: - Tolerances S +/- 0.005 mm (+/- .0002") are for the manufacturing supplier and +/- 0.010 mm (+/- .0004") for the hubs.</p> <p>-The standard will be verify once arrives to the hubs and the measurement will be loaded into the MTR.</p> <p>- No compensation values will be allowed. If the hub find tolerances out of +/- 0.010 mm (+/- .0004") has to contact Tenaris Connection.</p>																														01											02											03											04											05																																																																																																																																																																																																																																																																																			
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