



# TSE

# SIDE ENTRY

*Ball Valves.*



**RMT Valvomeccanica**



## Trunnion **Side Entry** Ball Valves

### **High In-Time Reliability**

- Critical Areas Protection from External Particles
- Partial or Full Internal C.R.A. Overlay (625).

### **Material Selection**

- In Accordance with Dedicate International Standards and Additional Client Requirements.
- Soft and Metal-to-Metal Seat to Ball Design.



***Fully  
Customizable  
Static &  
Dynamic  
Seal Design***

***Suitable for any  
Required Operator***



# Material Specification

Parts	CARBON STEELS	MARTENSITICSS	AUSTENITICSS	DUPLEX SS SUPERDUPLEX SS	OTHER SS	NICKEL ALLOYS
<b>Body</b>	A105	A182 F6a	AISI 316	A182 F51	-	Monel 400
<b>Closure</b>	A350 LF2	(AISI 410)	AISI 321	A182 F53		Inconel 625
<b>Glandplate</b>	A350 LF3 (notes 1-2)		A182 F44	A182 F55		
<b>Ball &amp; Seats</b>	A105 + ENP 75µm A350 LF2 + ENP 75 µm A350 LF3 + ENP 75 µm (note 3)	A182 F6a (AISI 410) (notes 3-4)	AISI 316 AISI 321 A182 F44 A182 F XM-19 (Nitronic 50) (notes 3-4)	A182 F51 A182 F53 A182 F55 (notes 3-4)	A564 Gr. 630 (17-4PH) (notes 3-4)	Monel 400 Monel K500 Inconel 625
<b>Seat Insert</b>	<b>Soft Seated:</b> <b>Metal-to-Metal Seated:</b>	PTFE - RPTFE - Nylon 12 - Devlon - Peek - KEL-F - Vespel. Tungsten Carbide Coated (TCC) - Chromium Carbide Coated (CCC), 120 µm minimum thickness.				
<b>Stem</b>	AISI 4140 + ENP 75 µm	A182 F6a (AISI 410) (note 4)	AISI 316 A182 F XM-19 (note 4)	A182 F51 A182 F53 A182 F55 (note 4)	A564 Gr. 630 (17-4PH) (note 4)	Monel K500 Inconel 718
<b>Bolting</b>	A193 B7/A194 2H A193 B7M/A194 2HM A320 L7/A194 Gr.4 A320 L7M/A194 Gr.7M (notes 5-6-7)	-	A193 B8/A194 Gr.8 A193 B8M/A194 GR.8M	A182 F51 A182 F53 A182 F55	A453 Gr. 660 -	
<b>Springs</b>	-	-	-	-	-	Inconel X750 Inconel 718
<b>Seals</b>	<b>O-Rings</b> (Std Temp.): <b>Lipseals</b> (Low Temp.): <b>Graphite or Spiral</b> <b>Wound</b> (High Temp.):	Fluoroelastomer (Viton® - Viton GLT®), Hydrogenate Nitrile (HNBR), Perfluoroelastomer (Kalrez®) RPTFE + ELGILOY® Graphite 98%, SS316 + Graphite.				

**All combinations of the above materials are possible.**

## OPTIONAL FEATURES

- 3mm. Inconel 625 weld overlay on dynamic seals areas.
- 3mm. Inconel 625 weld overlay on all wetted parts.
- Hard coating (TCC-CCC) on ball and seat contact surfaces (metal-to-metal design), 120 µm minimum thickness.
- ENP 25 µm
- Zinc plated (10-20 µm)
- Hot Dip Galvanized - HDG (ASTM A153 or ISO 1461)
- Fluorocarbon Coated



**Construction and testing in accordance with API 6D / API 6DSS / API 6A / ASME B16.34.**



**RMT Valvomeccanica**

## RMT Valvomeccanica srl

Via dei Patrioti • 21058 Solbiate Olona (VA) Italy

Ph. +39 0331 375441 • Fax +39 0331 376847

info@rmtvalvomeccanica.com

[www.rmtvalvomeccanica.com](http://www.rmtvalvomeccanica.com)