

## Process Automation

IMI Truflo Italy



Breakthrough engineering for a better world

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# Breakthrough engineering for a better world





## Introduction

## Control Valves

IMI Truflo Italy's advanced flow control technologies are state of the art. In flow control, industrial markets require the highest levels of performance and the best solutions to the satisfy the exacting requirements of severe service applications. High pressures, high temperatures, erosive and corrosive liquids, liquids containing solid particulates and by-phase fluids are becoming more and more commonplace in today's industrial environments, alongside more rigid rules for atmospheric emissions, making the need for the best components even more critical.

IMI Truflo Italy has some of the most advanced solutions in fluid control. The axial design of our quarter turn operating control valves offer a straight-through flow passage without the loss of pressure usually associated with the tortuous passages of traditional linear and angle globe design control valves. On top of this, H2S and CO<sub>2</sub> fluid content is also becoming a higher priority issue and the linear (up and down) stem movement of those valves decreases the valve integrity, resulting in leakage into the external environment.

IMI Truflo Italy's control family offers a complete range of control valves for easy to severe applications and ensures excellent control performance. We ensure that our valves perform as efficiently as possible and we strive to keep the following valve issues down to a minimum:

- Cavitation
- Noise
- Flashing
- Erosion & corrosion
- Vibration
- Flow velocity

The well-known robust body and trim design of IMI Truflo Italy's Flow-Rex, C-Rex and O-Rex control valve family provides ideal solutions for applications where noise generation and

cavitation control without any clogging are most challenging,

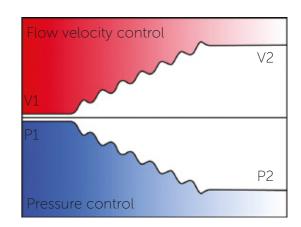
- Gas compressor anti-surge
- Cold and hot bypass

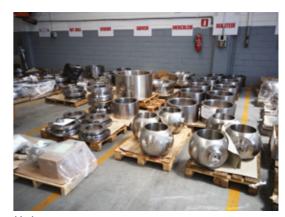
IMI Truflo Italy's control valve family plays a significant role in the control loop, this is where the loop's performance forms the basis for the quality of the final process output, and will satisfy the flow rate from unit to unit.

- Cryogenic to a high temperature (- 196°C to + 450°C)
- Flashing
- Multiple phase flow
- Slurry and polymerisation fluids
- Very low to very high pressure drops
- Chemically corrosive and erosive fluids



Trunnion mounted ball valve





Various components



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# 02 Applications

#### Oil & Gas Application

- Loading arm flow control
- Pumps and system start-up
- Depressurisation
- Balancing pressure control
- Gas to flare
- Metering and mixing stations
- Gas booster stations
- Transmission lines
- Liquified natural gas (LNG) & Heavy residue control valve gas-to-liquid (GTL)
- Compressor control
- Compressor anti-surge control
- General flow control

### Refinery & Petrochemical

- Blow down and venting (ESD/BDV/HIPPS)
- Catalyst handling
- Compressor anti-surge and
- General flow control inc. tight shut-off
- Fuel gas control to burners
- Cooling water
- Gas to flare
- Slurry and build-up control

#### **Power Generation and** Water

- Boiler feedwater
- Desuperheater
- Pump recirculation
- Steam dump to condenser
- Turbine bypass to condenser
- Cooling water
- Steam venting
- Pressure reduction
- Geothermal application
- Pumping stations
- Desalination
- Transmission line flow and pressure control

- Recirculation control
- Large capacity control
- Reverse osmosis (RO) brine pressure control













# 03 Production Range

#### **Control Valves Product Overview**

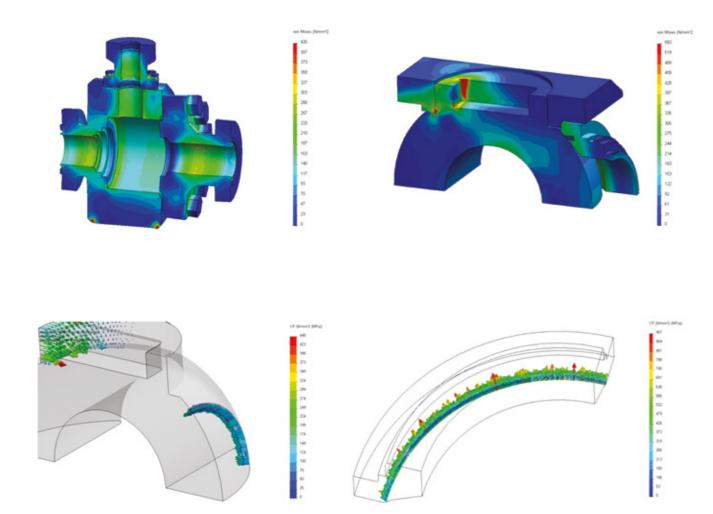
Туре	Axial flo	Flo-Rex	C-Rex	O-Rex	Stepcav Trim	Flo-Rex Labyrinth	C-Rex Stepped	O-Rex Stepped
Size	1"- 60"	1"- 60"	2"- 36"	1"- 40"	4"- 60"	1"- 36"	2"- 36"	1"- 40"
Pressure rating	150 - 2500 ANSI 2000 -15000	150 - 2500 ANSI 2000 -15000	150 - 2500 ANSI 2000 -15000	150 - 2500 ANSI 2000 -15000	150 - 2500 ANSI 2000 -15000	150 - 2500 ANSI 2000 - 15000	150 - 2500 ANSI 2000 -15000	150 - 2500 ANSI 2000 -15000
Rangeability	1 - 160	1 - 250	1 - 180	1 - 180	1 - 500 and up	1 - 500 and up	1 - 250	1 - 250
Capacity	Up to 400000	Up to 250000	Up to 85000	Up to 85000	Up to 120000	Up to 100000	Up to 50000	Up to 50000
Shut off pressure	Full rating	Full rating	Full rating	Full rating	Full rating	Full rating	Full rating	Full rating
Dp in control	Up to 15 bar	Up to 50 bar	Up to 35 bar	Up to 35 bar	Up to 120 bar	Up to 200 bar	Up to 50 bar	Up to 35 bar
Characteristic	Equal percentage	Equal percentage, linear & modified equal percentage	Equal percentage	Equal percentage	Equal percentage, linear & modified equal percentage			



## 04 Design Features

### 4.1 - General

A bolted construction solution allows full access to the internal components to more easily replace them when maintenance is needed. The structural design of the body is in accordance with the major design codes (e.g. API 6D or API 6A; ASME VIII; ANSI B16.34; ISO 17292, etc). The ball is trunnion mounted to allow it to be easily and reliably operated with a low running torque under the most extreme service conditions. The ball is supported by self-lubricated dry bearings to guarantee long-lasting maintenance-free performance.



F.E.A. analysis

# 04 Design Features

### 4.2 - Valve Design

The robust trim designs are tailor made for the application and project specifications, and the valves are long lasting and metal seated.

Our robust high-performance trunnion-mounted design is suitable for reliable operations and an excellent response from low to high differential pressure drops, including lower friction and lower operating torques.

The Flo-Rex and C-Rex axial control valve family is characterised by the integrity of the packing and the stability in terms of control, which ensure high rangeability in combination with large capacity.

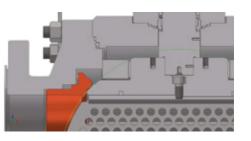
- Trunnion machined into spherical geometry
- Extra large support plate and bearing
- Extra long seat tail, single or double (for DB&B execution)
- Bi-directional characteristic
- Self-cleaning trim
- Customised to severe service applications tailored according to customer's requirements
- No clogging trim design
- Variable impedance trim design (high resistance at min. opening, low resistance at max opening)
- Very large rangeability (1-250 to more than 500).

IMI Truflo Italy's control valve trim family offers a complete range of valves for severe applications that ensure plant reliability by controlling cavitation, flashing, erosion, corrosion, vibration and flow velocity.

Our valve technology can help solve the most demanding applications, where fast and accurate operation is needed in extreme service conditions with high pressure differentials, including tight shutoff. The design of IMI Truflo Italy's axial ball control valves provides ideal solutions for noise generation and cavitation control, without any clogging









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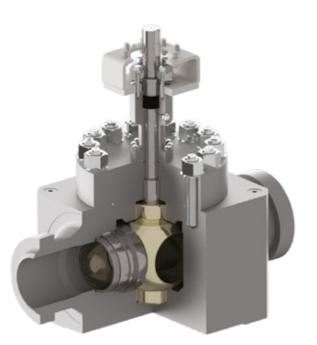
# 04 Design Features

### 4.3 - Double Eccentric

- Single seat
- Body cavity free
- Friction free seating
- Flow passes after ball rotates away from the seat
- Seat integrity
- Low torque
- Piggable version, O-Rex
- Side & top entry design
- Minimised seat loads long lasting tightness
- Durable operation when operating with solids and catalysts without failure







O-Rex Control Valve

# 04 Design Features

### 4.3 - Double Eccentric

#### Double eccentricity

With double eccentricity the C-Rex/O-Rex designs are able to provide a very low torque to operate the valve and provide a bubble-tight seal even at very low differential pressures

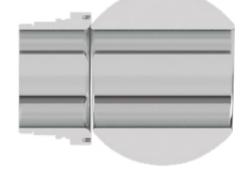
#### Single seats

With the single seated design the C-Rex/O-Rex avoids problems associated with over-pressure that affect the body cavity in standard ball design with easier maintenance and lower risk to the operator. No testing port is required and thus eliminates a potential leaking point.

#### Mechanical sealing

The sealing is achieved through the double eccentricity of the ball. The ball converges with and compresses the seat (locked in the body) at the very few last degrees of rotation, thus no springs are needed. The seat is available in various material combinations and can be replaced in-line.





Very low torque and bubble-tight seal



Available in a variety of materials

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# 04 Design Features

### 4.4 - Trim Technology

The enhanced axial ball control valves offer a large variety of changeable cartridge trims, from a low-cost segment type to special trim solutions. A solution for the application can be customised when there is a risk of cavitation, noise and excessive vibration. This is in addition to the already exceptional features of the Flo-Rex control valve for when partial, total, double resistors, diffusers or special silencer are needed.

All trim designs are carefully selected and specially designed for you by our sales and engineering team using computational fluid dynamics (CFD) analysis to ensure the correct size and capacity.

#### We can customise:

- Number of low noise plates
- Number and dimensions of holes per plates
- Style of passages (straight through or labyrinth path)
- Main trim type (standard, special, segment, etc).

The selection of the control valves is a precision process with the following elements taken into consideration:

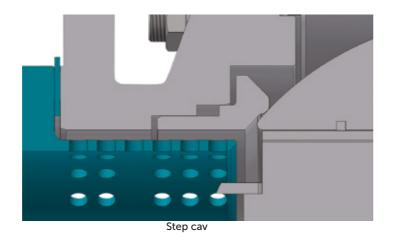
- Mechanical suitability of the physical flow conditions and characteristics: fluid type (liquid, gaseous, bi-phase, etc.), pressure, temperature, plant rules and specifications and local
- · Physical valve sizing to ensure capability for all loading cases, safety level, noise generation, cavitation control and vibration
- Valve control behaviour suitable for meeting control loop requirements.



Flo-Rex



T-Rex (in ball partial resistor)

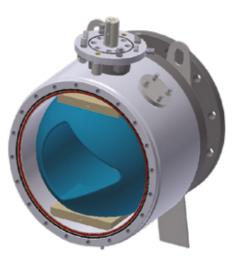


## 04 Design Features

## 4.5 - Body Technology

Our valves come in various body-shapes. We will help you to select the best option depending upon your need.





V-shape





Fully welded

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## 05 Actuation & Control

### Flow Control Advanced Solutions

IMI Critical Engineering offers a complete and integrated control valve unit for any application posing a specific challenge.

#### Control valves

Our customers specify the proven IMI Truflo Italy high performance trunnion mounted axial ball control valves where integrity, safety and performance are critical.



#### Instrumentation components

IMI Critical Engineering's sister division manufacture a wide range of accessories to ensure a superior performance and to satisfy the most demanding requirements in modulating and heavy-duty service. Find out more at www.imi-precision.com.



Actuators on display at IMI STI's manufacturing facility in Bergamo, Italy



#### **Positioners**

There are a wide range of IMI STI positioners, including pneumatic, electro-pneumatic and smart models (a high and low flow rate)

FasTrak® is a high capacity, high precision digital pneumatic valve controller that replaces a conventional positioner. It has an excellent dynamic performance and high flow (CV = 2), which means an amplifier does not need to be used in most applications.

FasTrak Compact® is a high precision digital-pneumatic valve controller. It has a very good dynamic performance and thanks to its air capacity (CV = 0,3) can be used in the most common applications.



IMI STI focuses on the design, development and production of complete actuation systems for the operation of industrial valves in the most demanding applications and processes.

IMI STI offers a complete range of pneumatic, hydraulic and electro-hydraulic actuators suitable for modulating applications.

The patented Zero Backlash mechanism technology has been developed so that a modulating application has fine control of the valve. The zero backlash mechanism solves the native and the wearing related gap between the sliding block and the scotch yoke slot, and maintains friction values at comparable levels to state-of-the-art technology.



IMI STI FasTrak Compact® Positioner



IMI STI FasTrak® Positioner



IMI STI RTQ Scotch Yoke Pneumatic Actuator



IMI STI Zero Backlash

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# 06 Flow Capacity

### 6.1 - Axial Flo

Axial-flo Cv table - Full bore 150 to 600 rating

- Control valve flow coefficient: Bi-Directional flow
- Single or double seats
- Metal seats / soft seat
- Side entry / top entry / fully welded



SIZE				RELATIVE '	VALVE OPENI	NG							
INCH	DN	Min Con. *	10%	20%	30%	40%	50%	60%	70%		80%	90%	100%
1	25	0,48	0,48	1,24	2,44	4,05	6,21	9,02	14,67		25,41	46,07	100
1,5	40	0,79	0,79	2,04	4,03	6,68	10,25	14,88	24,2		41,9	148,50	165
2	50	1,5	2,33	6,00	11,85	19,64	30,13	43,73	71		123	223	485
3	80	3,2	5,85	15,10	29,80	49,40	76	110	179		310	562	1.220
4	100	3	10,2	26,4	52,2	86,5	133	193	313		543	984	2.135
6	150	6	24,6	63,5	125	208	319	463	753		1.304	2.363	5.130
8	200	9,5	45	116	228	379	581	843	1.372		2.376	4.307	9.350
10	250	12	73	189	373	619	950	1.378	2.243		3.884	10.480	15.285
12	300	15	109	282	556	921	1.413	2.051	3.338		5.781	10.480	22.750
14	350	20	136	352	694	1.151	1.766	2.563	4.171		7.224	13.096	28.430
16	400	32	181	468	923	1.530	2.348	3.407	5.544		9.601	17.406	37.785
18	480	41	231	596	1.175	1.948	2.990	4.339	7.060		12.227	22.167	48.120
20	500	55	286	738	1.457	2.415	3.705	5.377	8.750		15.153	27.471	59.635
24	600	66	414	1.069	2.110	3.498	5.368	7.790	12.67	7	21.954	39.801	86.400
28	700	77	572	1.475	2.912	4.827	7.406	10.748	17.489	9	30.289	54.910	119.200
30	750	83	654	1.687	3.329	5.519	8.468	12.289	19.99	8	34.634	62.787	136.300
32	800	93	725	1.872	3.695	6.126	9.399	13.640	22.19	6	38.440	69.688	151.280
36	900	112	926	2.390	4.717	7.819	11.998	17.411	28.33	2	49.066	88.953	193.100
40	1000	225	1.141	2.946	5.813	9.637	14.787	21.459	34.92	0	60.475	109.636	238.000
44	1100	245	1.427	3.682	7.267	12.046	18.484	26.824	43.65	0	75.594	137.045	297.500
48	1200	258	1.785	4.608	9.094	14.892	23.131	33.568	54.62	4	94.601	171.502	372.300
52	1300	276	2.217	92.480	11.295	18.723	28.729	41.692	67.88	4	369.920	213.007	462.400
56	1400	285	2.782	7.180	14.170	23.489	36.042	52.304	85.11	3	147.402	267.226	580.100
60	1500	312	71.550	8.856	17.447	28.972	44.455	64.512	104.9	79	181.807	329.599	715.500
Cv/d2		0,73	1,60	3,00	5,30	8,30	12,62		20,22	33,	34	56	156
FI		0,91	0,91	0,90	0,89	0,86	0,80		0,74	0,6	7	0,57	0,28
Xt		0,82	0,82	0,80	0,75	0,67	0,57		0,42	0,3	0	0,20	0,07
Z		0,52	0,51	0,47	0,42	0,36	0,29		0,22	0,1	6	0,09	0,06

- \* Minimum controllable flow coefficient
- Special trim: please refer to factory
- For rating 900-1500-2500 please refer to factory

# 06 Flow Capacity

### 6.2 - Flo-Rex

Flo-rex Cv table - Full bore 150 to 600 rating

- Control valve flow coefficient: Bi-Directional flow
- Single or double seats
- Metal seats / soft seat
- Side entry / top entry / fully welded



Size						Relative va	alve opening					
iNCH	DN	Min Con. *	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1	25	0,10	0,10	0,22	0,41	0,72	1,13	1,73	2,87	4,91	8,97	20
1,5	40	0,23	0,23	0,50	0,95	1,67	2,61	3,98	6,6	11,3	20,70	45
2	50	0,40	0,40	0,87	1,64	2,89	4,53	6,90	11	20	36	78
3	80	1	1,20	2,63	4,94	8,70	14	21	35	59	108	235
4	100	1,2	2,3	5,0	9,3	16,4	26	39	65	111	203	442
6	150	2,1	6,3	13,8	26	46	72	109	182	311	568	1.235
8	200	3	11	24	45	79	123	188	312	536	978	2.125
10	250	5	19	41	77	135	212	323	537	921	1.681	3.655
12	300	6	27	58	109	192	302	460	764	1.310	2.392	5.200
14	350	8,5	30	65	123	216	339	516	858	1.470	2.684	5.835
16	400	10	41	91	171	301	473	720	1.196	2.050	3.742	8.135
18	480	12	59	129	243	428	672	1.023	1.699	2.913	5.318	11.560
20	500	13	71	155	291	512	805	1.226	2.036	3.490	6.371	13.850
24	600	15	115	252	473	834	1.309	1.994	3.312	5.678	10.364	22.530
28	700	19	137	301	564	993	1.560	2.376	3.947	6.766	12.351	26.850
30	750	31	176	387	725	1.278	2.007	3.057	5.077	8.704	15.888	34.540
32	800	33	207	454	852	1.501	2.357	3.590	5.962	10.221	18.658	40.560
36	900	56	269	590	1.106	1.948	3.059	4.660	7.740	13.268	24.219	52.650
40	1000	49	338	742	1.391	2.451	3.849	5.863	9.739	16.695	30.475	66.250
44	1100	65	462	1.014	1.902	3.351	5.262	8.015	13.312	22.821	41.658	90.560
48	1200	92	773	1.697	3.182	5.606	8.802	13.408	22.271	38.178	69.690	151.500

Cv/d2	0,60	1,40	2,30	3,48	5,05	7,18	10,32	15,90	28	43
FI	0,95	0,95	0,93	0,93	0,93	0,91	0,90	0,88	0,86	0,75
Xt	0,82	0,82	0,83	0,83	0,80	0,78	0,59	0,45	0,28	0,18
Z	0,56	0,55	0,54	0,52	0,50	0,47	0,43	0,36	0,30	0,22

- \* Minimum controllable flow coefficient
- Special trim: please refer to factory
- For rating 900-1500-2500 please refer to factory

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# 06 Flow Capacity

6.3 - O-Rex

O-Rex Cv table - Full bore 150 to 600 rating

- Control valve flow coefficient: Bi-Directional flow
- Single or double seats
- Metal seats / soft seat
- Side entry / top entry / fully welded



SIZE				RELATIVE	VALVE OPE	NING						
INCH	DN	Min Con. *	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1	25	0,43	0,43	1,11	2,20	3,64	5,59	8,11	13	23	41	90
1,5	40	1,20	1,20	3,09	6,11	10,12	16	23	37	64	225	250
2	50	1,20	1,99	5,14	10,14	17	26	37	61	105	191	415
3	80	4,5	7,00	18,07	35,66	59	91	132	214	371	673	1.460
4	100	5,5	10	26	51	85	130	189	307	532	965	2.095
6	150	8,5	24	62	123	203	312	453	737	1.277	2.315	5.025
8	200	10,5	44	113	224	371	569	825	1.343	2.325	4.215	9.150
10	250	13,8	72	187	368	611	937	1360	2.213	3.833	6.949	15.085
12	300	21	107	275	543	901	1.382	2.006	3.265	5.654	10.250	22.250
14	350	23	135	349	688	1.141	1.751	2.541	4.135	7.160	12.981	28.180
16	400	29,5	180	465	917	1.520	2.332	3.384	5.506	9.536	17.288	37.530
18	480	42,3	230	593	1.170	1.939	2.975	4.318	7.026	12.169	22.061	47.890
20	500	58	284	734	1.449	2.402	3.686	5.349	8.704	15.073	27.326	59.320
24	600	63	413	1.067	2.106	3.490	5.356	7.772	12.647	21.903	39.709	86.200
Cv/d2		0,70	1,40	3,00	5,00	8,20	12,50	19,1	.0	32	53	148
FI		0,95	0,95	0,93	0,93	0,93	0,91	0,9	0	0,88	0,86	0,75
Xt		0,82	0,82	0,83	0,83	0,80	0,78	0,5	9	0,45	0,28	0,18
Z		0,56	0,55	0,54	0,52	0,50	0,47	0,4	3	0,36	0,30	0,22

- \* Minimum controllable flow coefficient
- Special trim: please refer to factory
- For rating 900-1500-2500 please refer to factory

# 06 Flow Capacity

6.4 - C-Rex

C-rex Cv table - Full bore 150 to 600 rating

- Control valve flow coefficient: Bi-Directional flow
- Single or double seats
- Metal seats / soft seat
- Side entry / top entry / fully welded



Size						Relative \	/alve Opening	I				
Inch	DN	Min Con. *	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1	25	0,49	0,49	1,22	2,54	5,21	8,70	12,99	17,72	22,32	24,90	26
1,5	40	1,12	1,12	2,81	5,87	12	20	30	41	52	57	60
2	50	1,2	1,95	4,87	10,17	21	35	52	71	89	100	104
3	80	3,2	5,84	15	31	63	104	156	213	268	299	312
4	100	5,8	11,03	28	58	118	197	294	402	506	564	589
6	150	9,5	31	77	161	330	551	822	1.122	1.414	1.577	1.647
8	200	12,5	58	146	306	627	1.046	1.561	2.130	2.683	2.993	3.125
10	250	15	91	228	477	977	1.631	2.434	3.321	4.184	4.667	4.873
12	300	22,5	130	325	678	1.390	2.320	3.463	4.725	5.952	6.640	6.933
14	350	25	146	364	761	1.560	2.603	3.886	5.303	6.679	7.451	7.780
16	400	29	152	381	795	1.631	2.722	4.063	5.545	6.984	7.791	8.135
18	480	43,5	288	722	1.507	3.090	5.158	7.698	10.505	13.233	14.761	15.413
20	500	65	259	649	1.354	2.777	4.635	6.917	9.440	11.891	13.264	13.850
24	600	72	562	1.407	2.937	6.023	10.053	15.003	20.474	25.790	28.769	30.040
Cv/d2		0,60	1,40	2,30	3,48	5,05	7,18	10,	32	15,90	28	43
FI		0,95	0,95	0,93	0,93	0,90	0,90	0,8	8	0,80	0,72	0,50
Xt		0,82	0,82	0,83	0,83	0,80	0,78	0,5	9	0,45	0,28	0,18
Z		0,56	0,55	0,54	0,52	0,50	0,47	0,4	3	0,36	0,30	0,22

 $<sup>\</sup>ensuremath{^{\star}}$  Minimum controllable flow coefficient

<sup>-</sup> Special trim: please refer to factory

<sup>-</sup> For rating 900-1500-2500 please refer to factory

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## 07 Materials

### 7.1 - Metallic Materials

IMI Truflo Italy's valves are available in a wide range of metallic materials for both pressure containing components (the body and closure body cover) and pressure controlling components (the ball, seat, stem and trim).

Carbon steel (CS) ASTM A105N; ASTM A694 F60/F65; ASTM A216 WCB/WCC;

Low temp. CS (CTCS) ASTM A350 LF2; ASTM A694 F60/F65; ASTM A352 LCB/LCC

ASTM A350 LF3; AISI 4130 (60K and 75K); ASTM A352 LC3 Low alloy steel (LAS)

Martensitic

stainless steel ASTM A182 F6a; ASTM A182 F6NM; AISI 410; A216 CA15

Austenitic stainless steel ASTM A182 F316/316L; ASTM A182 F304/304L; ASTM A182 F321; ASTM A182

F347; ASTM A351 CF3/CF3M/CF8/CF8M etc

6Mo SS ASTM A182 F44: ASTM A351 CK3MCuN

ASTM A182 F51; A890 Gr. 4a; A995 Gr. 4A Duplex stainless steel

Super duplex stainless steel ASTM A182F53/F55; A890 Gr. 5A/6A; A995 Gr. 5A/6A

Ni alloys UNS N08825; UNS N06625; UNS N07718; UNS N09925

Cu alloys Monel 400; Monel K500

Ti alloys Gr. 2; Gr. 5

Co alloys Hastelloy C276

ASTM B150 C62300 Alu bronze

CS and LTCS are also available partially or fully cladded.

Partial cladding includes dynamic seal areas or static and dynamic seal areas. Full cladding includes all wetted areas. The cladding material can be AISI 316L SS, 22/05 Duplex SS, 25/07 Superduplex SS and Inconel 625.





Welding overlay

#### Forging

## 07 Materials

### 7.2 - Non Metallic Materials

#### Seat to ball sealing materials

Grafitar

Metal to metal (Chrome carbide coating)

Metal to metal (Tungsten carbide coating)

Vespel

ETFE (e.g Tefzel®)

PCTFE (e.g. KEL-F®; Voltalef®)

PEEK

Devlon V

Nylon 6.12

Nylon 6.6 Grafite/MoS2 filled

Reinforced PTFE

Viton AED 98 Sh. A

Viton GLT 98 Sh. A

Viton B 98 Sh. A

HNBR 98 Sh. A

#### Static & dynamic sealing materials

Graphite/Grafoil

PEEK + Elgiloy/Inconel 718

PCTFE + Elgiloy/Inconel 718

PTFE + Elgiloy/Inconel 718

Kalrez

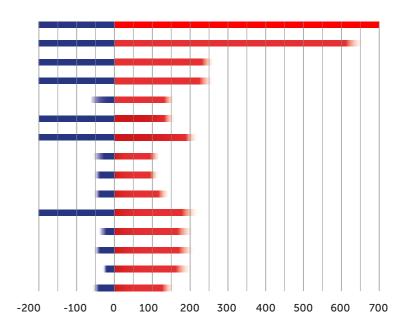
Chemraz

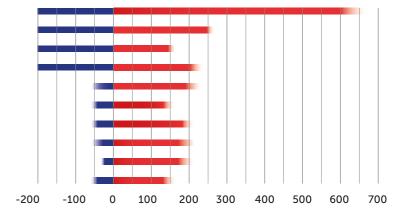
Viton AED 90 Sh. A

Viton GLT 90 Sh. A

Viton B 90 Sh. A

HNBR 90 Sh. A - AED





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## 08 Tests

### 8.1 - Special tests

## MI Truflo Italy performs the following tests in-house

- High pressure hydrostatic tests up to 1550 barg (155 MPa, 22500 psi)
- High pressure nitrogen test up to 1000 barg (100 MPa; 15000 nsi)
- Low temperature / cryogenic test down to -196°C (-321 °F)
- High temperature test up to 800 °C (1470 °F)
- Fugitive emission ISO 15848
- Fire safe (ISO 10497/API607) / API 6FA

## Many other tests are available on request, including:

- Bending test
- Sub-sea test
- Flow test
- Cycling test
- Vacuum test

## 09 Global Service

The IMI Critical Engineering Isolation team of specialists can perform worldwide servicing on every IMI Truflo Italy product, and particularly for programmed maintenance activities.

Programmed maintenance has proven to be of a crucial importance to ensure efficient, trouble-free and safe operation on all kinds of plant.

IMI Truflo Italy has installations across the world. For a full list of installations, please contact our sales team using the details listed on the back page of this brochure.





Testing rigs

## Process Automation

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