

Product Catalogue



I.M.G. INTERNATIONAL SRI

IMG - Product Catalogue

Layout and Production	:	IMG INTERNATIONAL SRL
Edition	:	Year 2017
Catalogue No.	:	IMG-V0-2017

This Catalogue has been complied with highest level of Care to the Accuracy of the Catalogue Content, however IMG cannot held responsibility for any possible Error, omissions and inaccurate/incomplete information as a result of further developments/changes and no rights may be derived from its content. Data given in this catalogue may be changed without notice.

Copyright: No part of this book may be reproduced in any form , by print , Photoprint , microfilm or any other means without written permission from the appropriate authority in IMG International SRL.

I.M.G. INTERNATIONAL SRL

INDEX

1.	Company Introduction	Page: 2
2.	Certification	Page: 4
3.	Scope of Work :	
	 Flanges and Special Forging profiles Cold and Hot Induction bends Monolithic Insulating Joints Pipe Spools Valves Control Valves Gate Valves Globe Valves 	Page : 5 Page : 6 Page : 9 page : 11 Page : 12 Page : 14 Page : 15
	 Check Valves Ball Valves Butterfly Valves Forged Steel Valves 	Page : 16 Page : 18 Page : 19 Page : 20
	 Strainers and Filters Tank & Pipeline protection Solutions Flame Arrester – Blanketing Valve – Emergency Vent 	Page : 21 page : 22
	 Tanks Agitators (Mechanical/Static) Piping Material : Steel Pipes BW Fittings Forged Fittings Accessories (Bolts, Gaskets, Hoses,) 	Page : 24 Page : 27 Page : 28 Page : 29 Page : 30
4.	Other Useful Material : Pipe Schedules / Weight/Thickness Gasket Ring Numbering 	Page : 31 Page : 32

INTRODUCTION

I.M.G. International SRL is 100% Privately Owned Company, and Sole Representative of High Reputed Companies in Europe and World Wide, Based in Turin the Industrial Heart of Europe.

I.M.G. Focus on the Oil & Gas, Petrochemical, Power Generation, HVAC & Infrastructure Fields, and with our strong relation with several manufacturers and stockiest worldwide, we can satisfy our customer requirement with complete solutions of products according to their technical, commercial and delivery requirement.

I.M.G. has always been investing on technology and experience to ensure a high quality product

We adopt high accuracy measurement and methods to overcome the tolerance according to the Applicable standards and regulations in the specific sector.

IMG Team expertise exceed 40 years in Bending Field Division and 50 year in forging material and through our experience and connection we can supply complete package including pipes, Valves, fittings, gaskets and stud bolts, etc.

Strength of I.M.G. International SRL :

- I.M.G. International SRL holds "**ISO 9001:2008**" issued by RINA for <u>design</u> of insulating joints, pipes, fittings, flanges, valves and accessories in carbon steel, stainless steel and steel alloys for the oilfield and petrochemical sectors
- High Quality Products Individually Tested.
- Experienced Personnel Handling Different Market Segments.
- Special Sales Representative Office Based in UAE to perform sales and Technical development for IMG in the UAE and North Africa
- Turnkey Supplier / Project Packages
- High Reputed Associate Plants and Agencies
- One Stop Shop for all type of products , on Forward and Ex-Stock Delivery
- Continuous technology and experience investment to ensure a high quality product
- Solution Provider and Product Range Optimized to the customer Needs
- ISO & OHSAS Certified Principles
- After Sales Service (24 Hours)
- Financial Strength and Stability



Scope of Production and Supply:

I.M.G. International SRL is considered as one stop shop and solution provider for large scope of products as:

- Flanges and Forged Special profiles
- Cold and Hot Induction bends
- Insulating Joints
- Pipe Spools
- Tank Agitators and Mixers (Static / Mechanical Belt and Gear Dirven)
- Tanks and Pipeline protection Solutions (Flame Arrester/Blanketing Valve/Emergency Vent)
- Control Valves
- Manual and Automated Valves
- Strainers
- Piping Material

Where you can Find I.M.G. Products:

Our products are highly demanded in the following areas

- Oil & Gas
- Petro-Chemical
- Marine.
- Steel and Infra Structure
- Marine.
- Energy and Power Generation
- Plumbing and HVAC
- Water and Sewage

CERTIFICATION

CISQ is a member of

www.iqnet-certification.com at, the association of the world's first class in bodies, is the largest provider of manager System Certification in the world. composed of more than 30 bodies and cour ver 150 subsidiaries all over the globe.

e

Per informazioni sulla validità del certificato, visitare il sito www.rina.org

For information concerning ralidity of the certificate, you can visit the site www.rina.org

Riferirsi al Manuale della Qualità per i dettagli delle esclusioni ai requisiti della norma

Reference is to be made to the Quality Manual for details regarding the exemptions from the requirements of the standard

EA:29 FA:17

www.cisa.com

CISQ è la Federazione Italiana di Organismi di Certificazione dei sistemi di gestione aziendale CISQ is the Italian Federation of management system Certification Bodies



29456/13/S

CERTIFICATE No.

CERTIFICATO N.

Prima emissione

Emissione corrente Current Issue

ACCREDIA 🎵

002 B PRS Nº 066 003 F LAB Nº 083 008 M ISP Nº 083

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC Signatory of EA, IAF and ILAC Mutua Recognition Agreements

Data scadenza

Expiry Date

05.08.2013

04.08.2016

15 09 2018

First Issue

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI IT IS HEREBY CERTIFIED THAT THE QUALITY MANAGEMENT SYSTEM OF

I.M.G. INTERNATIONAL S.R.L.

VIA MASERO, 57 10010 SCARMAGNO (TO) ITALIA

NELLE SEGUENTI UNITÀ OPERATIVE / IN THE FOLLOWING OPERATIONAL UNITS

VIA MASERO, 57 10010 SCARMAGNO (TO) ITALIA

È CONFORME ALLA NORMA / IS IN COMPLIANCE WITH THE STANDARD

ISO 9001:2008

PER I SEGUENTI CAMPI DI ATTIVITÀ / FOR THE FOLLOWING FIELD(S) OF ACTIVITIES

PROGETTAZIONE E COMMERCIALIZZAZIONE DI GIUNTI ISOLANTI, TUBI, RACCORDI, FLANGE, VALVOLE ED ACCESSORI IN ACCIAIO AL CARBONIO, INOX E LEGHE VARIE PER I SETTORI PETROLIFERO E PETROLCHIMICO

DESIGN AND TRADE OF INSULATING JOINTS, PIPES, FITTINGS, FLANGES, VALVES AND ACCESSORIES IN CARBON STEEL, STAINLESS STEEL AND STEEL ALLOYS FOR THE OILFIELD AND PETROCHEMICAL SECTORS

La validità del presente certificato è subordinata a sorveglianza periodica annuale / semestrale ed al riesame completo del sistema di gestione con periodicità triennale The validity of this certificate is dependent on an annual / six monthly audit and on a complete review, every three years, of the management system L'uso e la validità del presente certificato sono soggetti al rispetto del documento IRNA. Regolamento per la Certificazione di Sistemi di Gestione per la Qualità The use and validity of this certificate e subject to compliance with the RINA document : Rules for the certification of Quality Management Systems

Silvio Bilucaglia Manager, Torino Certification

Shlunpu

RINA Services S.p.A. Via Corsica 12 - 16128 Genova Italy

16128 Genova Italy

I.M.G. INTERNATIONAL SRL

FLANGES & SPECIAL FORGING PRODUCTS

I.M.G. can produce any kind of standard and nonstandard flanges (Weld Neck , Blind , Orifice Flange , Spade & Spacers) through our certified Forging Plants , This is in addition to Special Forging profiles such as Long Weld Neck Flanges, spectacle blind, nozzles, Anchor flanges, Swivel flanges, Drip rings , Studded Cross , and other Forgings according to client's drawing.





Material of Construction:

Carbon Steel / ST.ST / Alloy Steel / Nickel & Alloy Copper Nickel

Standards: ASME / API / NORSK

Pressure Rating: CL150 up to Cl 2500 (ASME) & 3K up to 10K PSI (API)

Size: Full Range

Thickness: SCH 10 to SCH 160 (As applicable in the Standards)

Optional: Surface Cladding (Internal & External)



COLD & HOT INDUCTION BENDING

I.M.G. International SRL, supply complete Steel profile requirement and Currently Our Facility is Ranked as one of the Top facilities in the bending and Calendering industry for Pipes, Special Steel profiles and metal Sheets as during 2013 despite of the global financial challenges, It was decided to invest in buying the **largest bending machine in the world**. Built according to the specific customer needs and market requirement

Accordingly We have achieved high capability of Performing Any Type of Bending requirement through our World Largest bending machine (as HEM 1000 and PIPE 40 ", solid and special profiles made with thicknesses more than 50 mm), and possibility to handle any type of loads through our fully equipped factory (6 Ton Forklift, 20 Ton Mobile Crane, 6.3 TON Overhead Crane, 15 Ton Overhead Crane)

TYPE	(mm)		TYPE	(mm)	
	360X100	POS 1	-	250	POS 10
	600X100	POS 2		250	POS 11
	250	POS 3		250	POS 12
	250	POS 4		<mark>400</mark>	POS 13
0	406X30	POS 5		400	POS 14
				INP 600	POS 15
	400X200X8	POS 6		HEA 600 HEB 600	POS 16
	450X25	POS 7		400	POS 17
	250X25	POS 8		INP 1000	POS 18
	200X25	POS 9		HEA1000 HEB 1000	POS 19

Scope of Supply:

_

- **Pipes, Circular & Square sections** Bending and Calendering used for metal structures, tubes for gas pipelines, bridges, tunnels, noise barriers, etc.



- **Beams** Calendering and bending , used in metal structures such as: bridges, tunnels, noise barriers, factory buildings and building works



Sheets Calendering and bending in cylindrical forms used for the majority of tank construction works.



I.M.G. INTERNATIONAL SRL

- **Rings** Calendering and bending from standard and non-standard profiles in iron, stainless steel and alloys used for: hatches, reinforcements for tanks, pipe joints, etc.





Our Loading and Packing Capabilities:







PIPELINE MONOLITHIC INSULATING JOINT

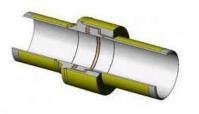
I.M.G. International SRL is ISO Certified Designer for Insulating Joints, with an exclusive management and manufacturing system.

In this way We can design and produce insulating joints completely from forged body, welding, painting, assembly and testing of the finished item.

Pipeline insulating joints are used in both onshore and offshore projects with key benefit in saving in the overall cost of corrosion implemented systems, as it controls the flow of electrical currents through the piping network.

The Effective management of cathodic protection programs results from the use of these highly reliable substitutes for flanged insulating systems.

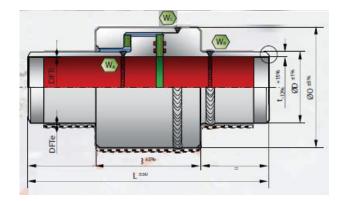
Other benefits include protection against earthling currents at domestic and industrial premises, and to ensure that cathodic protection or stray currents do not cause increased corrosion.





THE PIPELINE INSULATING JOINT

- Eliminates short circuits
- Eliminates field assembly
- Eliminates maintenance
- is less expensive
- is coated both internally and externally
- is 100% electrically tested
- is completely weld inspected
- is manufactured in accordance with ISO 9001:2000 specifications



Range and Characteristic :

		STAN	CUSTOMER SPECIFICATION						
	Class 150)	Class 300				Class 600		DESIGN
DN	Wtk	Length	DN	Wtk	Length	DN	Wtk	Length	
2	3.9	350	2	3.9	350	2	3.9	350	Size
3	4.8	350	3	5.5	350	3	5.5	350	 Materials
4	4.8	350	4	6.0	400	4	6.0	400	 Wall Thickness
6	5.6	400	6	7.1	500	6	7.1	500	Fluid
8	6.4	400	8	8.2	500	8	8.2	500	 Type of installation
10	6.4	400	10	9.3	600	10	9.3	600	 Design Pressure
12	6.4	450	12	10.3	600	12	10.3	600	 Design Temperature
14	7.9	450	14	12.7	600	14	12.7	600	 Corrosion Allowance
16	9.5	500	16	12.7	700	16	12.7	700	Dielectric Resistance
18	9.5	500	18	12.7	700	18	12.7	700	 Electric Insulation
20	9.5	600	20	12.7	800	20	12.7	800	 Design Loads
24	12.7	600	24	14.3	800	24	14.3	800	 Design Life
30	12.7	800	30	15.9	1000	30	15.9	1000	 Testing
36	14.3	900	36	19.1	1100	36	19.1	1100	 Coating
48	15.9	1000	48	20.6	1200	48	20.6	1200	

INSTALLATION	ABOVEGROUND / UNDERGROUND
HYDROSTATIC TEST	1.5 Times the Design Pressure
DIELECTRIC TEST	1.5 to 5 KV @ 1 minute AC 50÷60 Hz (Special 20 KV @ 1 minute AC 50÷60 Hz)
ELECTRIC INSULATION TEST	> 100 MΩ @ 1000 Volt DC (Special > 100 GΩ @ 5000 Volt DC)
NDE TEST	WA-WB-WC: MT & UT, Bevel Ends MT According to ASME V
WELDS	WA-WB-WC: According To ASME IX
CERTIFICATION	EN 10204 - 3.1 (EN 10204 - 3.2 if request)
APPLICATION	Suitable for flow media such as natural gas, crude oil, kerosene, gasoline, propane, butane, coal gas, ethylene, nitrogen and drinking water - Media such as sour gas and oxygen require special material and design. Standard versions up to maximum + 80°C constant temperature - Special versions for district heating pipelines up to +150°C.

INSULATING JOINTS shall be boltless and completely factory assembled in accordance with the appropriate requirements of ASME, ASTM, API, DIN and BS codes.

Insulation material is a thermosetting fiber-Glass epoxy material. NEMA G10/11.

Sealing system shall be by two Standard "O" ring seals. Interior and exterior coating by epoxy with a thickness of 150 microns. , Dielectric Resistance @ 5 KV, Isolation Resistance > 50 MOhm, Design According to ANSI/ASME B31.3/4/8, Dimens. ASME VIII Div.I



PIPE SPOOLS

Definition:

Pipe spools are fabricated from a number of raw pipes and fittings (e.g. elbows, flanges, tees, etc.) in fabrication shops.

Raw pipes are cut to the required sizes and moved with pipe fittings to a fitting table, where some of the components are fitted together (i.e. temporarily connected), The resulting sub-assembly continues with welding operations (i.e. permanent connected) before it comes back to the fitting table and gets fitted with other spool components.

Pipe Spool advantages

Cost and Time Saving in Prefabrication, Inspection & Testing:

- Using Prefabricated Spools will avoid the situation of Technician and Welder Shortage at site , and lack of space in the Work Yard
- Prefabricated Spools will entail no or little investments in fabrication & testing equipment by users. Radiography, PMI, MPI, Ultrasonic tests, Hydro tests etc. can be performed better & effectively in controlled environments.
- Better control on welding parameters in controlled environments resulting in lesser probability of rework at site.
- Lesser dependency on power availability, avoiding unnecessary time delays.
- Improved safety in better manufacturing conditions than on site.

I.M.G. Strength and Advantage:

- I.M.G. Supplies prefabricated pipe spools assembled from pipes, flanges and fittings in accordance to the customer Requirement , this requirement is cross checked and verified by our specialized team to ensure the suitability and matching with design conditions
- Unfinished components are kept ready which can be used immediately in fabricating the spools; in addition to that we maintain Strong Business relation with Stockiest and Mills worldwide, in order to meet the Customer Technical / commercial / delivery requirement.



CONTROL VALVES

Control valve is used to control fluid flow by varying the size of the flow passage according to the control signal. This enables the direct control of flow rate and the consequential control of process quantities such as pressure, temperature, and liquid level.

An automatic control valve consists of three main parts in which each part exist in several types and designs:

- Valve actuator which moves the valve's modulating element, such as ball or butterfly.
- Valve positioner, who ensures the valve, has reached the desired degree of opening. This overcomes the problems of friction and wear.
- Valve body in which the modulating element, a plug, globe, ball or butterfly, is contained. , and can be summarized as per the following main groups
 - Sliding Stem Control Valve (Angle Seat Piston Type / Globe Valve)
 - Rotary Control Valve (Butterfly / Ball Valves)
 - Pinch Valve
 - Diaphragm Valves

I.M.G. with our principles in Europe, builds on a proud tradition of designing and manufacturing quality Control Valves for the Power, Desalination, Oil and Gas industries. From both design and engineering perspectives.





Scope of Work:

- A- General Service Control valves(Cl150-Cl600)Size : ¾" up to 6"B- Severe Service Control valves(Cl150-CL2500)Size: 1" up to 24"C- On/Off Service Control valves(Cl150-CL2500)Size : 1" up to 24"
- D- DesuperHeaters
- I.M.G. INTERNATIONAL SRL



Main Material:

- Body / Bonnet : Carbon Steel (A105) / Low Temperature Carbon Steel (A350 LF2) / Low Alloy Steel (WC6, WC9, F11, F22) / Stainless Steel / Inconel 625
- Trim Material : 17-4 PH / SS316 / SS316 + STL / S410 / S410 + STL / SS420 / SS304 / SS304+STL/A182 F51 / A182 F53 / AL BR / Inconel 625 / Monel

Certification:

Our principle and Facilities are certified to ISO 9001:2008 / ATEX / PED

Testing Facility:

Our unique testing facility allows us to test our entire range of sizes and pressure classes on-site. We therefore ensure the Quality Control of our products in-house assuring our Customers of the best Performance and Quality control.



VALVES

CAST STEEL GATE VALVES



Class Rating	NPS (inch)	End Connection	Bonnet Type	Sealing Type	Design Standard	Material
150 lbs.	1.5" to 60"		BB			
300 lbs.	1.5" to 48"		BB		API 600 /	ASTM A 216 GR. WCB/
600 lbs.	2"to 36"	RF / FF	BB	Metal to Metal	API 6D / ASME B 16.34,	ASTM A 352 Gr.LCB/ ASTM A 351 CF8/CF8M / ASTM A 890 DUPLEX ,
900 lbs.	2" to 30"	/RTJ / BW	BB/PSB			
1500 lbs.	2" to 24"	-	BB/PSB			ASTM B 148 C95800
2500 lbs.	2" to 16"		BB/PSB			

<u>Remark</u>:

Based on the Applicable Standard the valve can be Through Conduit, Cryogenic Valves, NACE Service, Fire Safe, Hydrogen Service Valves & Bellow Sealed Available



CAST STEEL GLOBE VALVES



Class Rating	NPS (inch)	End Connection	Bonnet Type	Sealing Type	Design Standard	Material
150 lbs.	1.5" to 30"		BB			
300 lbs.	1.5" to16"		BB			ASTM A 216 GR. WCB/
600 lbs.	2" to 16"	RF / FF /	BB	Metal to	BS 1873 /	ASTM A 352 Gr.LCB/
900 lbs.	2" to 12"	RTJ / BW	-	Metal	ASME B 16.34	ASTM A 351 CF8/CF8M / ASTM A 890 DUPLEX
1500 lbs.	2" to 10"	BB/PSB	BB/PSB		10.01	, ASTM B 148 C95800
2500 lbs.	2" to 8"		BB/PSB			

<u>Remark</u>:

Based on the Applicable Standard the valve can be According to NACE Service, Hydrogen Service, Fire Safe, Under Ground, Bellow Sealed & Y-Type Globe Valves



CHECK VALVES:

A- CAST STEEL SWING CHECK VALVES :



Class Rating	NPS (inch)	End Connection	Bonnet Type	Sealing Type	Design Standard	Material
150 lbs.	1.5"~30"		BB			ASTM A 216 GR. WCB/
300 lbs.	1.5"~24"		BB			ASTM A 352 Gr.LCB/
600 lbs.	2''~24''	RF / FF /	BB	Metal to	BS 1868 / ASME B16.34	ASTM A 351 CF8/CF8M / ASTM A
900 lbs.	2''~24''	RTJ / BŴ	BB/PSB	Metal		
1500 lbs.	2''~16''		BB/PSB			890 DUPLEX , ASTM B
2500 lbs.	2''~8''		BB/PSB			148 C95800

<u>Remark</u>:

Based on the Applicable Standard the valve can be According to NACE Service, Hydrogen Service Valves Available.

B- WAFER CAST STEEL CHECK VALVES :



Class Rating	NPS (inch)	End Connection	Bonnet Type	Sealing Type	Design Standard	Material
150 lbs.	1.5''~48''					
300 lbs.	1.5"~40"					ASTM A395 / ASTM A
600 lbs.	2''~36''	WAFER /	NI / A	Metal to		216 GR. WCB/ ASTM A
900 lbs.	2''~32''	LUG	N/A	Metal	API 594	351 CF8/CF8M /
1500 lbs.	2''~24''					ASTM A 890 DUPLEX
2500 lbs.	2''~10''					



CAST STEEL BALL VALVES :



	FLOATING BALL VALVES										
Class Rating	NPS (inch)	End Connection	Bonnet Type	Sealing Type	Design Standard	Material					
150 lbs.	3/8"~10"					ASTM A 216 GR. WCB/					
300 lbs.	1/2''~8''				API 6D /	ASTM A 352 Gr.LCB/					
600 lbs.	1/2''~4''	RF / FF /				ASTM A 351 CF8/CF8M / ASTM A					
900 lbs.	1/2''~3''	RTJ / BW	BB	Metal / Soft	ASME B16.34	890 DUPLEX / ASTM A 148 C95800 / ASTM A105/ ASTM A182. Gr F304/316					

	TRUNION MOUNTED BALL VALVES										
Class Rating	NPS (inch)	End Connection	Bonnet Type	Sealing Type	Design Standard	Material					
150 lbs.	2''~60''					ASTM A 216 GR. WCB/					
300 lbs.	2''~56''	-				ASTM A 352 Gr.LCB/					
600 lbs.	2''~56''	RF / FF /		Metal /	API 6D /	ASTM A 351 CF8/CF8M					
900 lbs.	2''~52''	RTJ / BW	KK/W/K	Soft	ASME B16.34	/ ASTM A 890 DUPLEX /ASTM B 148 C95800/					
1500 lbs.	2''~32''				D10.34	ASTM B 148 C958007 ASTM A105/ ASTM					
2500 lbs.	2''~20''					A182. Gr F304/316					

Remark:

According to the Standard and Client requirement the valve can be Side Entry, Split Body, 1Pc , 2Pc, 3Pc, 2way & 3Way Cryogenic, Fire safe, NACE Service valves.



BUTTERFLY VALVES:



Class Rating	NPS (inch)	End Connection	Bonnet Type	Sealing Type	Design Standard	Material	
150 lbs.	2"~120"					ASTM A 216 GR. WCB/	
300 lbs.	2''~40''	RF / BW / WAFER /				API 609 /	ASTM A 352 Gr.LCB/
600 lbs.	2''~24''		N/A	Metal /	, ,	ASTM A 351 CF8/CF8M / ASTM A 890 DUPLEX	
900/1500 lbs.	2"~12"	LUG	N/A	Soft	ASME B16.34	/ ASTM A 890 DOFLEX / ASTM B 148 C95800/ ASTM A 126/ ASTM A 395.	

Remark:

According to the Standard and Client requirement the valve Concentric, Double Eccentric & Triple Eccentric & Fire Safe Valves



FORGED STEEL VALVES (GATE / GLOBE / CHECK):



Class Rating	NPS (INCH)	End Connection	Bonnet Type	Sealing Type	Design Standard	Material
800lbs~1500lbs	3/8"~2"	SW / NPT	BB		BS 5352 /	ASTM A105/
1500lbs~2500lbs	3/8''~2''	SW / NPT	PSB / WB	Metal to	API 602 /	ASTM A182. Gr
800lbs~1500lbs	3/8"~2"	RF / FF / RTJ / BW	BB	Metal	ASME	F304/316/ ASTM A350
1500lbs~2500lbs	3/8''~2''	RF / FF / RTJ / BW	PSB / WB		B16.34	LF2.

I.M.G. INTERNATIONAL SRL

STRAINERS

It is essential in Manufacturing to keep the process as clean as possible. Filters and strainers are used to remove foreign particles that can build up during the processing of a liquid or gas within a production facility. Over time it is normal for foreign matter and tiny metal particles from the wear of pipework, valves and pumps and other production equipment to enter the production system. Therefore, the introduction of Strainers is essential to safeguard against contamination of the process.

I.M.G. can supply the following types of Strainers:

- Basket Strainer
- Duplex Strainer
- Y & T Type Strainers (Cast / Fabricated)
- Temporary Strainers
- Conical Strainers



Class Rating	NPS (inch)	End Connection	Bonnet Type	Design Standard	Material		
150 lbs.	2''~36''						
300 lbs.	2''~30''	RF/FF/RTJ	BB	ASME B16.34	ASTM A 216 GR. WCB/		
600 lbs.	2''~16''				ASTM A 351 CF8/CF8M /		
900 lbs.	2''~14''				ASTM B 148 C95800/		
1500 lbs.	2''~14''				ASTM A 126		
2500 lbs.	2''~4''						

*Above Table is for Y Strainer, Fabricated T Strainer, and Other Sizes on request

* BW / Threaded End Strainers are available up to Size 2"

TANK & PIPELINE PROTECTION SOLUTIONS

We supply Tanks and Pipeline Protection equipment in order to prevent explosions risks and flame propagation, and protect your processes and plants using our best-in-class product range.

Flame Arresters:

Flame Arresters are fitted to the opening of an enclosure or to the connecting pipework of a system of enclosures and whose intended function is to allow flow but prevent transmission of a flame. Whenever a flammable gas or vapour is mixed with air/oxygen, there is the potential for an explosion in case of an accidental ignition. It is commonly used in fuel storage tank vents, fuel gas pipeline, burner inlet line, exhaust systems, vapour recovery systems, process pipelines, etc.

Types of flame arresters:

- 1- End-of-line Deflagration Arresters
- 2- In-line Deflagration Arresters
- 3- In-Line Detonation Arresters

Emergency Relief Vents & Access Manways

Non-sparking, emergency relief vents permit access to low pressure storage tanks whilst providing emergency venting capacity in the event of fire. These vents are used extensively on bulk storage tanks, including floating roof tanks.

Sizes range from 10" (250mm) to 24" (600mm). Typical applications include: bulk storage tanks, low pressure gas pipeline systems, digesters, and gas holders.



Free Vents For Storage Tanks

Free vents are designed for use on any atmospheric tank to prevent the build-up of internal pressure by allowing atmospheres and vapors to flow freely in tanks or vent riser pipes.

Pressure & Vacuum Relief Valves

Direct acting pressure/vacuum relief valves (also known as breather valves, conservation vents, or safety vents) are low pressure devices specifically designed to protect tanks, process systems and equipment from excessive pressure and vacuum.

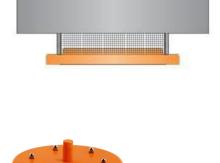
As well as providing the primary layer of protection for tanks and process systems, pressure/vacuum valves also minimize emission losses of gases or vapors, thus protecting the environment and providing significant financial savings.

The range includes pressure only, vacuum only and combined pressure/vacuum valves, all available with flanged outlets or vented to atmosphere.

Tank Blanketing Valves

Tank blanketing valves offer complete protection to the storage tank product against contamination and to the storage tank itself against rupture or damage. This type of valve is mainly used in the chemical, bulk storage, and pharmaceutical industries to reduce emissions and lower the cost of product loss.

In addition to preventing outside air and moisture from entering the storage vessel, a blanket gas pressure reduces the evaporation of the stored product to a negligible amount.







TANK AGITATORS

Tank mixers (Agitators) are machines used in industries which have Process in the Oil & Gas, Petrochemicals, food, pharmaceutical and cosmetic industries, in a view of:

- mixing liquids together
- Enhance the reactions of chemical substances
- keeping homogeneous liquid bulk during storage
- increase heat transfer (heating or cooling)

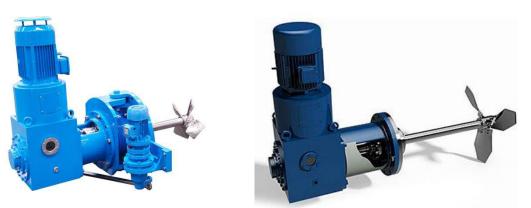
I.M.G. and its representative Supplies Agitators from (LOTUS MIXERS – USA)

LOTUS MIXERS – USA is a leader in mixing technology. By utilizing the latest in design technology, extensive laboratory testing and field experience, therefore LOTUS is recognized as Premium Manufacturer who can provide:

- <u>Solution provider with Plenty of styles & Customized Mixers</u> which match the Customer requirement , in top entry, side entry, bottom entry, portables and custom designed agitators.
- <u>Parts Inventory</u>: LOTUS MIXERS has one of the largest inventories of spare parts in the industry. This allows us to minimize our customers down time. , All Standard parts, Gearboxes are available ready for shipment in Stock.
- <u>Services:</u> LOTUS MIXERS is dedicated to providing fast service worldwide though the specialized service department who has an extensive experience and process knowledge to help the Customer solving the root cause of most problems.
- o <u>Continuous Development & Innovation to the latest Impeller technologies.</u>

Types and Models

Side Entry Mixers



Available Models:

- CFJ : Gear driven fixed mount side entry mixers
- CKJ : Gear driven swivel angle side entry mixers
- CPT/TD : Belt driven fixed mounted side entry mixers
- CKT : belt driven swivel angle side entry mixers

TOP Entry Mixers

We Offer top Entry Mixers for a wide Variety of applications from simple blending to complex chemical reactions.

Available Models:

- X8/X8A Series Heavy Duty Top Entry Mixers Top Entry Heavy Duty Rig
- X9 Series Industrial Grade Top Entry Mixers with Extreme Versatility
- X10 Series Top Entry Mixers with exceptional flexibility

Special Application Mixers

LOTUS MIXERS designs and manufactures a wide range of special application mixers as Belt Drive Top Entry Mixers, Bottom Entry Agitators, Extruders, Rake Agitators, Attrition Scrubbing, Solvent Extraction Mixer Settlers, High Pressure Oxidative Leach Agitators, Corn Mill Agitators, High pressure crystallizers





Portable Mixers



X series portables are heavy duty industrial mixers. They are designed and built to compete with only the top of the line portable agitators offered by competition. They are not 'econoline' mixers like others supply.

Available Models:

X Series is available from 1/2HP to 5HP. The design is a compact parallel gear drive mixer that is supplied with either a C-clamp and fixed flange mount.

- X1 Series offers extreme versatility. They are available from 1/4H to 10HP with a
- X2 Series portables our heavy duty industrial mixers.

Static Mixers:

LOTUS MIXERS standard line of static mixers is recognized as being one of the leaders in the industry. Our research and development has resulted in a unique element shape which is simple to manufacture and provides lower cost mixing than competitive shapes.

We offer a complete range of static mixers from 3/16" to 36" diameter.



Parts & Services:

Complete installation and aftermarket service are offered with our Agitators, Our team supports our agitators and competitor's equipment worldwide.

Services Offered:

- Installation (everything from advisory service to rigging)
- Removal and replacement
- Mechanical seal and gearbox maintenance
- Root Cause Analysis investigations
- Annual overhauls during planned shutdowns



STEEL PIPES

SEAMLESS STEEL PIPES (Up to 28")

- Seamless Steel Pipes to API 5L Gr B (PSL1 & PSL2) / ASTM A106 Gr B / ASTM A 53 Gr B, ASTM A333 Gr 1/Gr 6 etc., Available in single / double random lengths, Plain end square cut up to 1 1/2 "& beveled ends as per ANSI/ASME B 16.25 for 2" & above.
- Seamless pipes as per DIN standards, mainly DIN 1629, DIN 17175, DIN 2391, DIN 1630, DIN 17179, DIN 7173, DIN 17456/DIN 17458, DIN 2448 etc.

WELDED STEEL PIPES (ERW/HFIW up to 60")

- Welded Carbon Steel pipes to API 5L Gr B/ASTM A53 Gr B, Available in single/double random lengths, Plain end square cut up to 1 1/2 "& beveled ends as per ANSI/ASME B 16.25 for 2" & above.
- ERW pipes as per DIN standards, mainly DIN 1626, DIN 1628, DIN 17178, DIN 17179, DIN 17455, DIN 17457, DIN 17177, DIN 2458 etc.

SEAMLESS (up to 24") / WELDED STAINLESS PIPES

• Seamless Stainless steel pipes to ASTM A312. (Tp 304/L, Tp 316/L/T, Tp 321/H etc.), Duplex Grades UNS S31803, Super Duplex Grade UNS S 32750/S, 32760, Super Austenitic Grade Tp 904L, Available in single random lengths.





BUTT-WELD FITTINGS

- Butt-Welding Fitting are Manufactured in Accordance with ANSI Standards B16.9 and B16.28 for Dimensions , Shops and Dimension Tolerance
- Butt-Welding fittings are machined in accordance with ANSI B16.25 Standards for welding and preparation
- Manufacturing methods , Quality and so on are based upon ASTM A234 and MSS-SP-25 Specifications .

Type of Material:

- Elbows BW :
 - 90 DEG Elbow LR/SR
 - 45 DEG Elbow
- CAPS BW
- 180 Deg Return Bend Long / Short Radius
- Tee BW
 - o Equal Tee
 - Reduced Tee
- Concentric / Eccentric Reducer



NPS (inch)	Material	Thickness	Comments
2" to 60"	Carbon Steel Stainless Steel Alloy Steel Nickel & Alloy Copper Nickel	SCH 10 to SCH 160 (As per the relevant Standards)	For Welded fittings 100% Radiography is provided on welded Areas

FORGED FITTINGS

Applicable Standard: ANSI B16.11

Material of Construction

CARBON STEEL: ASTM A105N, A350 LF2, LF3 (HOT DIP GALVANIZED OR ELECTROPLATED)
ALLOY STEEL: ASTM A182 F1, F2, F11, F12, F22, F9
STAINLESS STEEL: ASTM A 182 304/L, 316/L/Ti, 321/H, 347/H, 310
DUPLEX: ASTM A182 F51
SUPER DUPLEX: ASTM A182 F53/F55
Ni & ALLOYS: MONEL 400, INCONEL 600/625, INCOLLOY 800 / 825, HASTELLOY, B2/C22/C276, ALLOY-20

Pressure Rating: 3000/6000 LBS

Type of Products:

- Coupling
- Half Coupling
- Reducing Coupling
- Hexagonal Nipples
- Reducing Bushing (M/M, M/F)
- Hex/Square/Round Head Plugs
- CAPS
- Elbows (45 / 90 DEG)
- Tee (EQ/Red)
- Union
- Swage Nipple
- O-LET (Weldolet / Nippolet / Therdolet / Sweepolet / Flagolet)



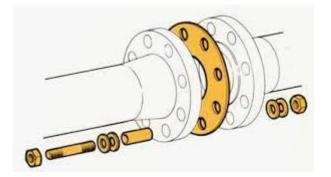


ACCESSORIES

- Spiral Wound Gasket
- Ring Gasket
- Insulating Kits
- Stud bolts
- Hoses & Couplings
- Expansion Joints













WEIGHT & DIMENSION of STEEL PIPES (ANSI B36.10)

NB	OD (mm)	10	20	30	STD	40	60	XS	80	100	120	140	160	XXS
1/8"	10.30	W.THK MM Wgt: Kg/M			1.73 0.37	1.73 0.37		2.41 0.47	2.41 0.47					
1/4"	13.70				2.24 0.63	2.24 0.63		3.02 0.80	3.02 0.80					
3/8"	17.10				2.31 0.84	2.31 0.84		3.20 1.10	3.20 1.10					
1/2"	21.30				2.77 1.27	2.77 1.27		3.73 1.62	3.73 1.62				4.78 1.95	7.47 2.55
3/4"	26.70				2.87 1.69	2.87 1.69		3.91 2.20	3.91 2.20				5.56 2.90	7.82. 3.64
1"	33.40				3.38 2.50	3.38 2.50		4.55 3.24	4.55 3.24				6.35 4.24	9.09 5.45
1.1/4"	42.20				3.56 3.39	3.56 3.39		4.85 4.47	4.85 4.47				6.35 5.61	9.70 7.77
1.1/2"	48.30				3.68 4.05	3.68 4.05		5.08 5.41	5.08 5.41				7.14 7.25	10.15 9.56
2"	60.30				3.91 5.44	3.91 5.44		5.54 7.48	5.54 7.48				8.74 11.11	11.07 13.44
2.1/2"	73.00				5.16 8.63	5.16 8.63		7.01 11.41	7.01 11.41				9.53 14.92	14.02 20.39
3"	88.90				5.49 11.29	5.49 11.29		7.62 15.27	7.62 15.27				11.13 21.35	15.24 27.68
3.1/2"	101.60				5.74 13.57	5.74 13.57		8.08 18.63	8.08 18.63				-	
4"	114.30				6.02 16.07	6.02 16.07		8.56 22.32	8.56 22.32		11.13 28.32		13.49 33.54	17.12 41.03
5"	141.30				6.55 21.77	6.55 21.77		9.53 30.97	9.53 30.97		12.70 40.28		15.88 49.11	19.05 57.43
6"	168.30				7.11 28.26	7.11 28.26		10.97 42.57	10.97 42.56		14.27 54.20		18.26 67.56	21.95 79.22
8"	219.10		6.35 33.31	7.04 36.31	8.18 42.55	8.18 42.55	10.31 53.08	12.70 64.64	12.70 64.64	15.09 75.92	18.26 90.44	20.62 100.92	23.01 111.27	22.23 107.92
10"	273.10		6.35 41.77	7.80 51.03	9.27 60.31	9.27 60.31	12.70 81.55	12.70 81.55	15.09 96.01	18.26 114.75	21.44 133.06	25.40 155.15	28.58 172.33	25.4 155.16
12"	323.90		6.35 49.73	8.38 65.20	9.53 73.88	10.31 79.73	14.27 108.96	12.70 97.46	17.48 132.08	21.44 159.91	25.40 186.97	28.58 208.14	33.32 238.76	25.4 186.97
14"	355.60	6.35 54.69	7.92 57.90	9.53 81.33	9.53 91.33	11.13 94.55	15.09 126.71	12.70 107.39	19.05 158.10	23.83 194.96	27.79 224.65	31.75 253.56	35.71 281.70	
16"	406.40	6.35 62.64	7.92 77.90	9.53 93.27	9.53 93.27	12.70 123.30	16.66 160.12	12.70 123.30	21.44 203.53	26.19 245.56	30.96 286.64	36.53 333.19	40.49 365.35	
18"	457.00	6.35 70.57	7.92 87.71	11.13 122.38	9.53 105.16	14.27 155.80	19.05 205.74	12.70 139.15	23.88 254.55	29.36 309.62	34.93 363.56	39.67 408.26	45.24 459.37	
20"	508.00	6.35 78.55	9.53 117.15	12.70 155.12	9.53 117.15	15.09 183.42	20.62 247.83	12.70 155.12	26.19 311.17	32.54 381.53	38.10 441.49	44.45 508.11	50.01 564.81	
22"	559.00	6.35 86.54	9.53 129.13	12.70 171.09	9.53 129.13	-	22.23 294.25	12.70 171.09	28.58 373.83	34.93 451.42	41.28 527.02	47.63 600.63	53.98 672.26	
24"	610.00	6.35 94.53	9.53 141.12	14.27 209.64	9.53 141.12	17.48 255.41	24.61 355.26	12.70 187.06	30.96 442.08	38.89 547.71	46.02 640.03	52.37 720.15	59.54 808.22	
26"	660.00	7.92 127.36	12.70 202.72	-	9.53 152.87	-		12.70 202.72						
28"	711.00	7.92 137.36	12.70 218.69	15.88 271.21	9.53 164.85	-		12.70 218.69						
30"	762.00	7.92 147.28	12.70 234.67	15.88 292.18	9.53 176.84	-		12.70 234.67						
32"	813.00	7.92 157.24	12.70 250.64	15.88 312.15	9.53 188.82	17.48 342.91		12.70 250.64						
34"	864.00	7.92 167.20	12.70 266.61	15.88 332.12	9.53 200.31	17.48 364.90		12.70 266.61						
36"	914.00	7.92 176.96	12.70 282.27	15.88 351.70	9.53 212.56	19.05 420.42		12.70 282.27						
38"	965.00				9.53 224.54			12.70 298.24						
40"	1016.00				9.53 236.53			12.70 314.22						
42"	1067.00				9.53 248.52			12.70 330.19						
44"	1118.00				9.53 260.50			12.70 346.16						
46"	1168.00				9.53 272.25			12.70 351.82						
48"	1219.00				9.53 284.24			12.70 377.79						

Ring Gasket (Oval / Octagonal) Number Definition

Size Designation for Oval and Octagonal Ring Joint Gaskets										
Pipe	Pressure Class									
Size	150	300	600	900	1500	2500				
1/2"		R11	R11	R12	R12	R13				
3/4"		R13	R13	R14	R14	R16				
1"	R15	R16	R16	R16	R16	R18				
1-1/4"	R17	R18	R18	R18	R18	R21				
1-1/2"	R19	R20	R20	R20	R20	R23				
2"	R22	R23	R23	R24	R24	R26				
2-1/2"	R25	R26	R26	R27	R27	R28				
3"	R29	R31	R31	R31	R35	R32				
3-1/2"	R33	R34	R34	R34						
4"	R36	R37	R37	R37	R39	R38				
5"	R40	R41	R41	R41	R44	R42				
6"	R43	R45	R45	R45	R46	R47				
8"	R48	R49	R49	R49	R50	R51				
10"	R52	R53	R53	R53	R54	R55				
12"	R56	R57	R57	R57	R58	R60				
14"	R59	R61	R61	R62	R63					
16"	R64	R65	R65	R66	R67					
18"	R68	R69	R69	R70	R71					
20"	R72	R73	R73	R74	R75					
24"	R76	R77	R77	R78	R79					

I.M.G. INTERNATIONAL SRL

YOUR STRATEGIC PROJECT PARTNER



HEAD OFFICE



I.M.G. INTERNATIONAL SRL

Via Masero, 57 10010 – Scarmagno (TO) – ITALY Email: info@imginternational.it Website: www.imginternational.it Tel: +39 0125 639289

I.M.G. INTERNATIONAL SRL