

# **GENERAL SERVICE BALL VALVE RANGE**







# **GENERAL SERVICE**VALVE RANGE



POYAM VALVES is one of the world's leading manufacturers of high specification soft seated ball valves (TOP ENTRY , SPLIT BODY and END ENTRY DESIGN), recognized as a leader in quality and innovation. Founded in 1964, our company has developed advanced engineering capabilities and innovation-driven focus to continuously expand our offer of high quality- high technology valves. Today we produce engineered products up to 56" and up to 2500# in a variety of standard and rare materials such as Titanium, Hastelloy, Incoloy, Inconel, Super Duplex, ....We can also produce the entire range of weld overlays on any kind of base materials for abrasive and corrosive aplications.

POYAM Ball valves are installed throughout the world, handling diverse applications.

Power Generation	Elevated Temperatures	Oil & Gas Production/Drilling	Marine
PTA	Geothermal Processes	Petrochemical	Mining
Abrasive & Corrosive Serv.	Hydrofluoric Acid Processing	Pipeline (Natural Gas)	Chemicals
Refinery	Offshore-Platform	Pipeline (Oil/Liquid)	Pharmaceuticals

With our own quality-renowned foundry at AMPO and long experience in this range of valves, Poyam Valves is able to design and manufacture high technology valves with the best performance and low maintenance cost.

Through our Field Engineering Service (FES) team we provide timely response to customers' needs worldwide and give technical support in commissioning & start-up stage, maintenance shut-down supervision, troubleshooting and repair service, equipment selection, maintenance and operation training....













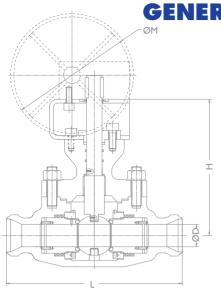




# **GENERAL SERVICE BALL VALVES** TOP ENTRY, SPLIT BODY & END ENTRY DESIGN



# GENERAL SERVICE BALL VALVES TOP ENTRY



Standards: API, BS, MSS, ANSI, ASME, ASTM Classes: 150 lbs up to 2500 Lbs

Sizes: 1/2" up to 48"

Temperature: Up to 315°C

Construction: - Bolted bonnet.

- Floating and trunnion-mounted ball.

- Full and reduced bore.

- Flanged, butt weld ends, and both.

- Manual and motor-operated.

- Fire safe.

- Soft seats.



#### **CLASS 150 DIMENSIONS IN MILLIMETERS**

ND.	1/2"	3/4"	1″	11/2"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"	30"	36"
L (BW)	139,7	152,4	165,1	190,5	215,9	282,6	393,7	457,2	623,9	754	876,3	965	1130	1220	1321	1499	1671	1796	2242
L (RF)	108	127	160	215,9	215,9	282,6	393,7	457,2	623,9	754	876,3	965	1130	-	-	-	-	-	-
D	15	19	25	38	50	76	102	150	203	254	305	337	388	438	489	591	686	737	876
Н	103	118	147	169	190	279	340	365	395	480	510	570	611	668	714	911	989	1060	1121
M	130	200	250	350	700	457	457	610	762	914	762	762	762	762	762	914	914	914	914
Weight (Kg) (BW)	4	5	10	15	24	47	84	164	289	514	888	1261	1552	1921	2370	2725	3301	4095	5290
Weight (Kg) (RF)	5	6	12	17	28	52	90	172	301	520	910	1305	1601	1985	2441	2807	3396	4110	5470



#### **CLASS 300** DIMENSIONS IN MILLIMETERS

ND.	1/2"	3/4"	1″	11/2"	2"	3"	4"	6"	8"	10"	12"
L (BW)	139,7	152,4	177,8	228,6	282,6	355,8	403,2	560,4	653,9	762	914,4
L (RF)	139,7	152,4	177,8	228,6	282,6	355,8	403,2	560,4	653,9	762	914,4
D	15	19	25	38	50	76	102	150	203	254	305
Н	103	118	147	169	177	201	240	331	431	519	591
M	130	200	250	350	457	457	457	762	762	762	914
Weight (Kg) (BW)	5	6	12	17	34	53	97	225	412	665	1172
Weight (Kg) (RF)	6	7	14	21	39	62	105	241	431	680	1205



## **CLASS 600** DIMENSIONS IN MILLIMETERS

ND.	1/2"	3/4"	1″	11/2"	2"	3"	4"	6"	8"	10"	12"
L (BW)	165,1	190,5	215,9	241,3	320	418,8	504	632	784	916	1112
L (RF)	165,1	190,5	215,9	241,3	355,6	431,8	558,8	604	784	916	1112
D	15	19	25	38	50	76	102	152	204	254	305
Н	103	118	147	169	190	239	257	360	471	547	571
M	130	200	250	350	457	457	610	762	610	914	762
Weight (Kg) (BW)	10	13	20	31	40	84	150	311	531	895	1601
Weight (Kg) (RF)	12	16	24	36	48	96	161	345	610	1005	1810

#### **CLASS 900** DIMENSIONS IN MILLIMETERS

ND.	1/2"	3/4"	1″	11/2"	2"	3"	4"	6"	8"	10"	12"	16"
L (BW)	215,9	228,6	254	304,8	368,3	424,2	510,4	642,8	849,8	990	1168,4	1130,3
L (RF)	215,9	228,6	254	304,8	-	-		-	-	-	-	
D	13	17	22	35	50	76	102	152	204	254	305	375
Н	108	123	152	174	207	245	271	370	489	560	582	610
M	200	250	350	500	457	610	762	914	914	762	914	914
Weight (Kg) (BW)	14	24	28	34	40	105	206	380	625	1107	2015	3302
Weight (Kg) (RF)	18	28	35	46	64	125	231	417	715	1217	2125	3407

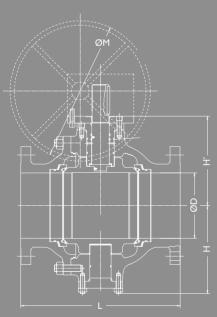
## **CLASS 800** DIMENSIONS IN MILLIMETERS

ND.	1/2"	3/4"	1"	11/2"
L (BW)	139,7	152,4	165,1	190,5
L (RF)	108	127	160	215,9
D	15	19	25	38
Н	103	118	147	169
M	130	200	250	350
Weight (Kg) (BW)	4	5	10	15
Weight (Kg) (RF)	5	6	12	17

# **CLASS 1500** DIMENSIONS IN MILLIMETERS

ND.	1/2″	3/4"	1″	11/2"	2″
L (BW)	215,9	228,6	254	304,8	368,3
L (RF)	215,9	228,6	254	304,8	-
D	13	17	22	35	50
Н	108	123	152	174	
M	200	250	350	500	457
Weight (Kg) (BW)	14	24	28	34	40
Weight (Kg) (RF)	18	28	35	46	64





# GENERAL SERVICE BALL VALVES SPLIT BODY

Standards: API, BS, MSS, ANSI, ASME, ASTM

Classes: 150 lbs up to 2500 Lbs 1/2" up to 48" Sizes: Up to 315°C Temperature:

Construction: - Bolted bonnet.

Floating and trunnion-mounted ball.Full and reduced bore.

- Flanged ends.
- Manual and motor-operated.

- Fire safe.

- Soft seats.

# **CLASS 150** DIMENSIONS IN MILLIMETERS

ND.	1/2"	3/4"	1″	11/2"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	26"	28"	30"
L (RF)	108	117	127	165,1	177,8	203,2	228,6	393,7	457,2	533,4	609,6	685,8	762	863,6	914,4	1066,8	1143	1244,6	1295,4
D	13	19	25	38	50	76	102	152	200	254	305	337	388	438	489	591	635	689	737
Н	70	90	97	125	120	184	203	223	296	350	419	443	477	502	601	715			
M	120	200	230	300	300	600	750	457	457	457	610	762	762	762	914	914	914	914	762
Weight (Kg) (RF)	2	4,5	6	8	20	27	30	133	150	312	540	787	920	1133	1771	2380	2691	2914	3250

# **CLASS 300** DIMENSIONS IN MILLIMETERS

ND.	1/2"	3/4"	1″	11/2"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	32"
L (RF)	139,7	152,4	165,1	190,5	215,9	282,6	308,8	403,2	501,7	568,3	647,6	762	838,2	914,4	990,6	1143	1524
D	11	20	25	38	50	76	102	152	200	254	305	335	388	438	489	591	781
Н	68	92	96	128	135	166	238	223	269	371	415	446	477	524	571	715	925
M	135	200	230	450	600	750	457	457	457	610	762	762	762	762	914	914	914
Weight (Kg) (RF)	4	7	14	16	23	50	69	187	280	447	607	845	1125	1391	1997	2510	2801



# CLASS 600 DIMENSIONS IN MILLIMETERS

ND.	1/2"	3/4"	1"	11/2"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"
L (RF)	165,1	190,5	215,9	241,3	292,1	355,6	431,8	558,8	660,4	787,4	838,2	889	990,6	1092,2	1193,8	1397
D	11	20	25	38	51	76	102	152	204	254	305	337	388	438	489	591
Н	68	105	110	115	167	199	238	298	401	363	449	493	485	511	562	607
M	135	250	250	400	600	400	457	457	610	762	610	610	762	762	914	914
Weight (Kg) (RF)	8	10	20	26	31	61	76	240	340	732	940	1205	1371	1592	1922	2508

# **CLASS 900** DIMENSIONS IN MILLIMETERS

ND.	1/2″	3/4"	1″	11/2"	2"	3"	4"	6"	8″	10"	12"	14"	16"	18"
L (RF)	215,9	228,6	266,7	304,8	368,3	381	549,3	609,6	736,6	838,2	965,2	1028,7	1130,3	1219,2
D	11	20	25	38	51	76	102	152	204	254	305	324	375	425
Н	104	106	123	130	187	194	239	301	376	409	422	487	521	551
M	250	400	500	750	457	457	610	610	610	610	762	762	914	762
Weight (Kg) (RF)	13	14	29	60	71	119	194	358	748	898	1355	1844	2350	2894

# **CLASS 1500** DIMENSIONS IN MILLIMETERS

ND.	1/2"	3/4"	1"	1 <sup>1/2</sup> "	2"	3"	4"	6"	8"	10"
L (RF)	215,9	228,6	266,7	304,8	368,3	469,9	546,1	704,8	831,8	990,6
D	11	20	25	38	51	76	102	146	194	241
Н	104	106	123	130	187	228	290	347	370	500
M	250	400	500	750	457	610	610	762	762	914
Weight (Kg) (RF)	13	14	29	60	71	182	290	580	980	1968

# **CLASS 2500** DIMENSIONS IN MILIMETERS

ND.	2"	3"	4"	6"	10"
L (RF)	450,9	575,85	673,1	914,4	1270
D	45	64	89	133	225
н	197	284	333	353	515
M	457	610	762	762	914
Weight (Kg) (RF)	116	277	420	912	3025

# GENERAL SERVICE BALL VALVES END ENTRY

# Standards: Classes: Sizes: Temperature:

API, BS, MSS, ANSI, ASME, ASTM 150 lbs up to 2500 Lbs 1/2" up to 48" Up to 315°C

Construction:

- Bolted bonnet.
- Floating and trunnion-mounted ball.
- Full and reduced bore.
- Flanged ends.Manual and motor-operated.
- Fire safe.
- Soft seats.



#### **CLASS 150 DIMENSIONS IN MILLIMETERS**

ND.	1/2"	3/4"	1"	11/2"	2"	3"	4"	6"	8"	10"	12"
L (RF)	108	117,3	127	165,1	177,8	203,2	228,6	266,7	292,1	330,2	355,6
A	15	20	25	40	52	76	102	154	203	254	305
D	11	14	18	31	38	58	76	111	144	187	220
Н	73	67	105	101	123	140	173	243	290	367	422
M	125	130	130	250	300	450	600	457	457	457	610
Weight (Kg) (RF)	2	2,5	4	8	9	18	42	70	105	158	220



ND.	1/2″	3/4"	1″	11/2"	2″	3″	4"	6"
L (RF)	139,7	152,4	165,1	190,5	215,9	282,6	304,8	403,2
A	15	20	25	40	52	76	102	154
D	11	14	18	31	38	58	76	111
Н	73	67	105	101	123	140	173	243
M	125	130	130	250	300	450	600	457
Weight (Kg) (RF)	3	6	8	15	27	42	61	121



ND.	1/2"	3/4"	1"	11/2"	2″	3"
L (RF)	165,1	190,5	215,9	241,3	292,1	355,6
A	15	20	25	40	52	76
D	11	14	18	31	38	58
Н	66	71	90	97	117	105
M	130	250	250	400	450	457
Weight (Kg) (RF)	5	9	14	21	36	59







**"OUR FOUNDRY WORKS TOGETHER** WITH OUR R+D+I TEAM TO CREATE **NEW DEVELOPMENTS AND** DESIGNS, A KEY FACTOR IN **ENABLING POYAM TO CONTROL** THE WHOLE PROCESS, FROM START TO FINISH."

# **OUR FOUNDRY, AMPO**

Our own foundry AMPO is fully in line with POYAM manufacturing processes, providing us with the best quality castings and service.

Cast materials are produced under strict quality controls at the AMPO foundry. Ongoing control is the key to our quality and success, starting with castings from one of the world's leading valve foundries, AMPO, through to a finished and tested product to any specification, all within our own facilities.



















"THROUGH CONTINOUS TRAINING OF PERSONNEL AND CLOSE COLLABORATION WITH LEADING TECHNOLOGICAL CENTRES OUR PRODUCTION PROCESSES ARE AT THE FOREFRONT OF TECHNOLOGICAL RESEARCH DEVELOPMENTS"

# **CAST MATERIALS**

CARBON STEEL FOR GENERAL USE WCB, WCC, 1.0619...

CARBON STEEL FOR LOW TEMPERATURE LCB, LCC...

ALLOY STEEL WC1, WC6, WC9, C5, C12...

ALLOY STEEL FOR LOW TEMPERATURE LC1, LC2, LC3,...

MARTENSITIC STEEL AND FERRITIC MARTENSITE FOR GENERAL SERVICE AND LOW TEMPERATURE

CA15. CA6NM. 1.4008...

AUSTENITIC STAINLESS STEEL FOR GENERAL USE, LOW TEMPERATURE

CF8, CF8M, CF8C, CF3,CF3C, CF3M, 1,4308, 1,4408, 1,4552...

SUPERAUSTENITIC ALLOYS CN7M, CK3MCuN, 254 SMO, 654 SMO..

**DUPLEX ALLOYS** \$31803, \$32760, A890Gr4A, A890Gr5A, A890Gr6A, CD4MCu...

NICKEL BASE ALLOYS INCOLOY 825, MONEL 400, INCONEL 625, CW-6MC, CW-12MW...



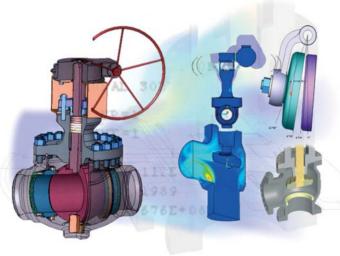


# RESEARCH, DEVELOPMENT AND INNOVATION (R+D+I)

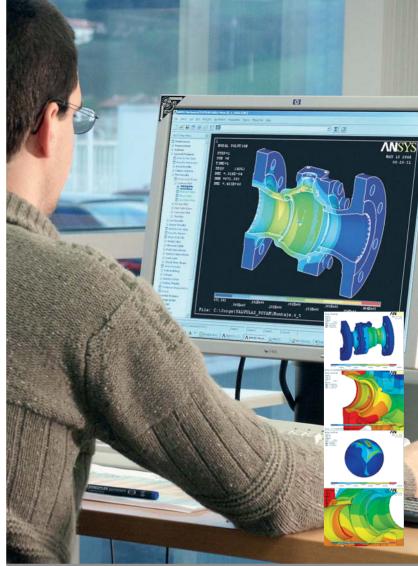
Our extensive expertise in valve design, together with integrated CAD/CAM (Solid Works) systems fully exploit the opportunities for innovative and competitive engineering solutions whilst ensuring compliance with all relevant standards.

POYAM VALVES is committed to developing and marketing new products based on customer needs.

POYAM VALVES has been particularly outstanding in developing new designs of larger valves for high pressure and temperature service, Cryogenic valves, Corrosion resistant valves, Aluminium refining valves and specially-engineered products for specific services, i.e. specialising in high specification project work.



- Our aim is engineering efficiency, our engineers are ready to help customers meet the most demanding design challenges and applications.
- Latest CAD/CAM -3D design system.
- Seismic Calculations, Flow Simulations, Mechanical Analyses and Thermal Simulations by FEA (Finite Element Analysis), for optimizing our valve design performance.
- New materials and technology research.
- We work together with the most important European R+D+I Centers and  $\label{eq:continuous} \text{Engineering Colleges}.$



"POYAM VALVES R+D+I TEAM

HAVE THE SKILL, EXPERIENCE

AND MOST MODERN COMPUTER TOOLS

AND EQUIPMENT

TO ASSIST OUR CUSTOMERS

TO WHATEVER EXTENT IS NEEDED".

# **DESIGN FEATURES**

#### **SEATING**

- The resilient seat is retained within the seat ring, maintaining long term reliability.
- At low operating pressure the springs load the seat ring.
- At higher line pressure the upstream seat is pressure energised against the ball.

#### **SEALANT INJECTION**

In case of damage of face seat an emergency seal can be provided using a sealant injection facility.

## **STEM SEALING**

"O" rings provide a perfect sealing in normal operating conditions. As an additional gland security a sealant injection system is provided.

## **CAVITY RELIEF**

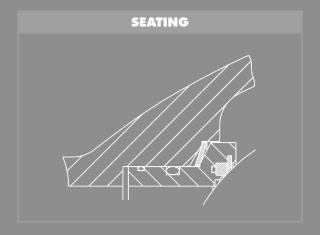
If pressure increases in body cavity due to fluid expansion, automatic relief of excess pressure to the downstream side is provided.

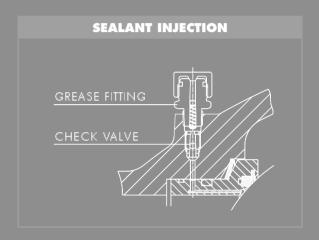
## **BLOCK AND BLEED**

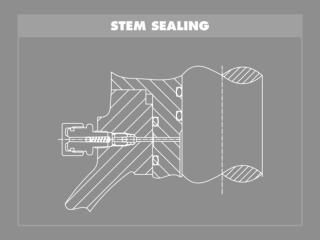
Seating design is ideal for double block and bleed service.

### DESIGN

POYAM ball valves conform with requierements of API 6D, BS5351 and are fire safe certified to BS6755 and API 607. Pressure - temperature ratings and flanges conform to ANSI B16.5.













# "INTERNAL WELD OVERLAY OPTIONS FOR ABRASIVE AND/OR CORROSION APPLICATIONS ARE AVAILABLE."

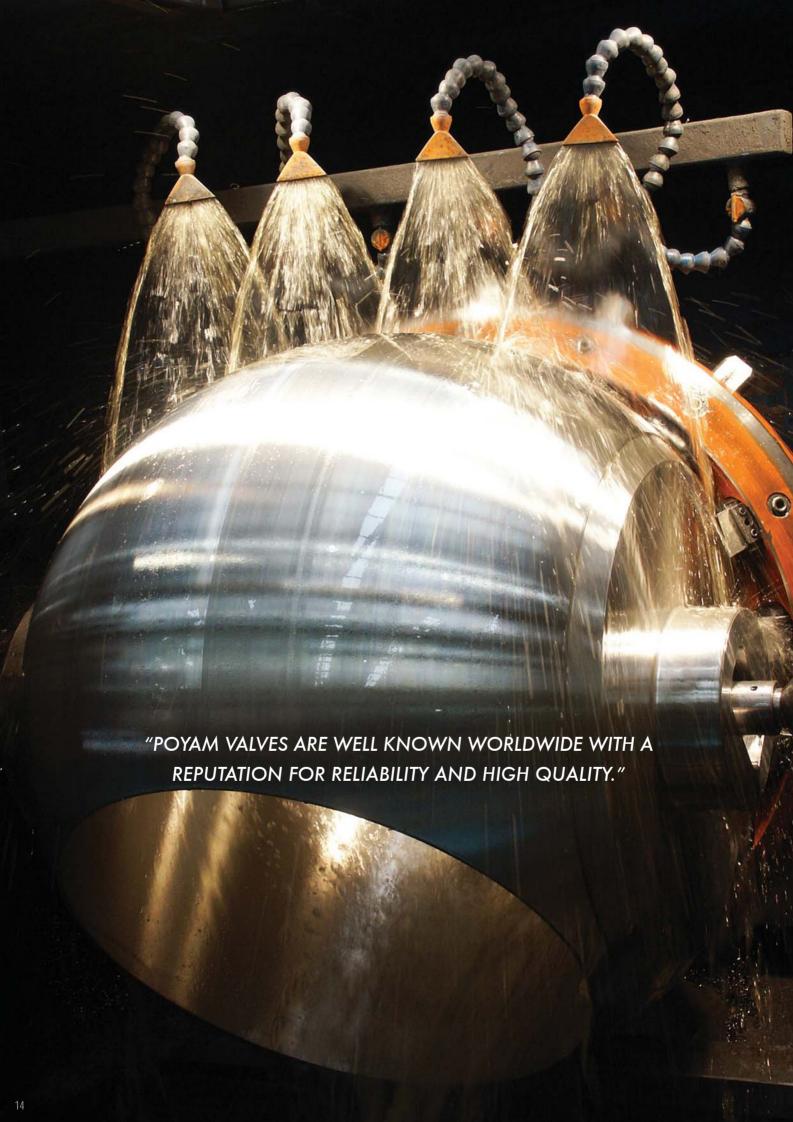
# INTERNAL WELD OVERLAY TECHNOLOGIES

Poyam Valves solid commitment to high performance and top quality products provide the best welding technology and solutions for any kind of welding needs:

- 1- Our advanced technologies and high productivity allows Poyam Valves to produce the entire range of weld overlays on any kind of base materials in the shortest turn around times using rare materials.
- 2- High quality deposits of Stellite 6 and other hardfacing alloys are assured by the use of the following state of the art technology: controlled preheating, automatic Plasma Arc hardfacing equipment and a controlled cooling process.







# **BEST VALVE QUALITY**

The operativity and processes are implemented and governed by our quality assurance system, certified to ISO 9001 & API Spec Q1 & 6D, and subjected to continuous review and audit by internal quality audits, third-party inspection agencies, and main engineering companies worldwide, demonstrating POYAM compliance with customer requirements and international standards.

Internal Quality Control Personnel are highly-qualified to carry out Non-Destructive Examinations, such as X-ray, Dye Penetrant, Magnetic Particles and PAMI (positive alloy material identification).

POYAM VALVES has efficient means to meet targets defined in the Strategic Plan. Our company and its product meet all legislative requirements, as well as international codes and standards. Every step from purchase order receipt through procurement, NDE, machining, assembling, testing, painting and packaging is in accordance with regulations stipulated in OA Manuals.

"OUR GOAL IS TO PLEASE THE CUSTOMER BY OFFERING PRODUCTS AND SERVICES
THAT NOT ONLY MEET CUSTOMER REQUIREMENTS BUT ALSO EXCEED THEIR
EXPECTATIONS THROUGH HIGHLY-TRAINED, EXPERIENCED PERSONNEL AND
CONTINUOUS IMPROVEMENT OF OUR INTERNAL PROCESSES".









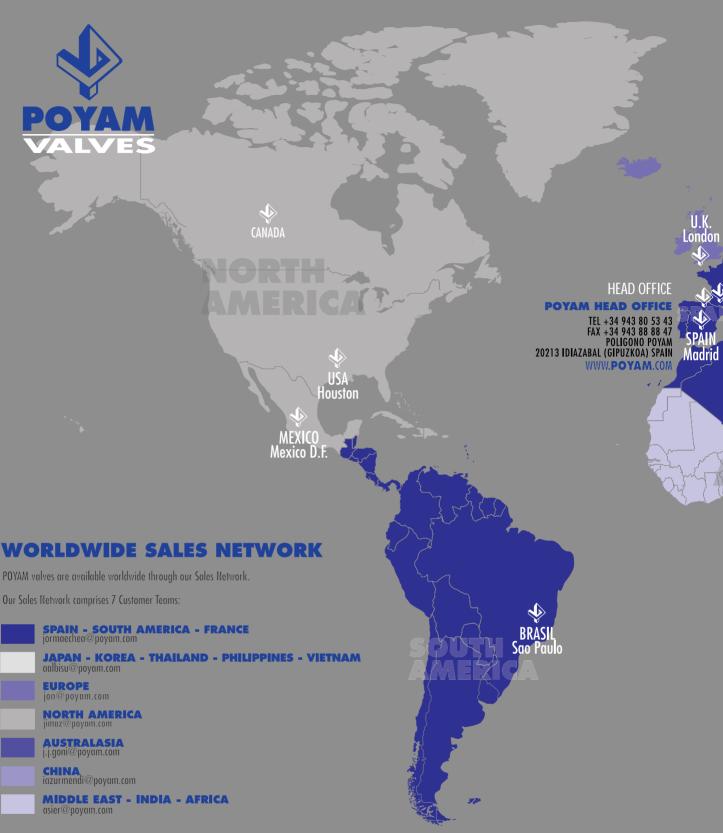








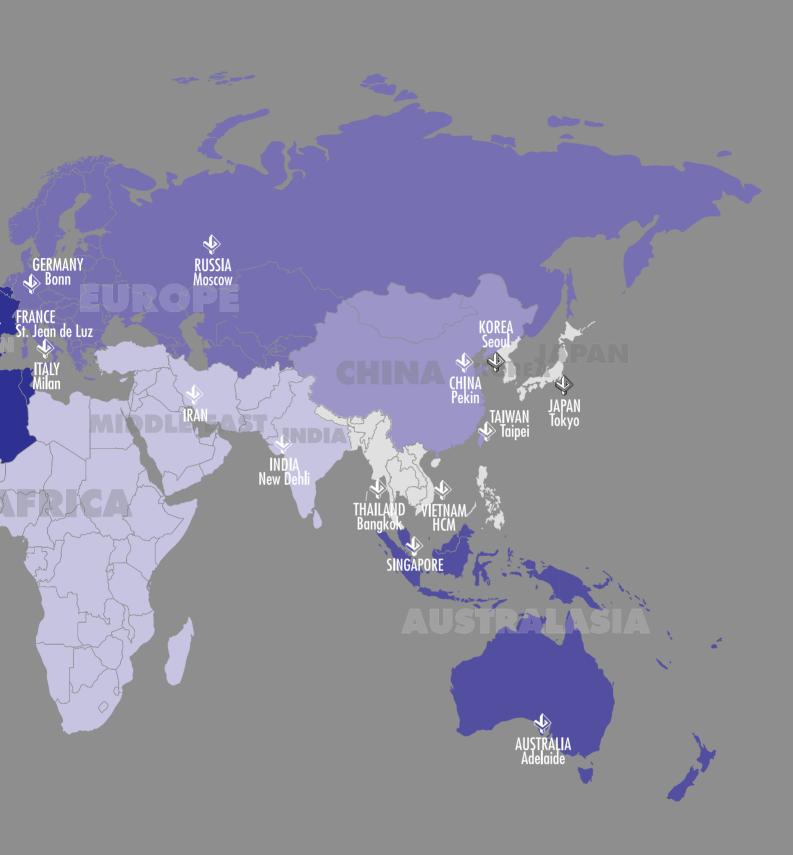






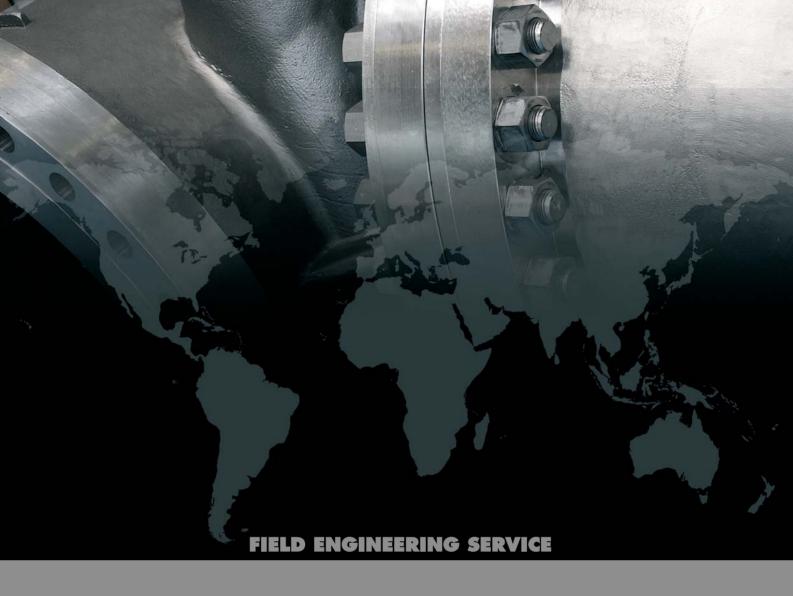


POYAM VALVES is located in Idiazabal, a town in the north of Spain, in an area with a deeply-rooted industrial tradition called THE BASQUE COUNTRY. Idiazabal is just 1 hour's drive away from BILBAO (International Airport) and at the following distances from other important places:





WWW.POYAM.COM





"THROUGH OUR FIELD ENGINNERING SERVICE (FES) TEAM
WE PROVIDE TIMELY RESPONSE TO CUSTOMER NEEDS
WORLDWIDE: TECHNOLOGICAL SUPPORT IN
COMMISSIONING & START UP STAGE, TROUBLESHOOTING
AND REPAIR SERVICE, EQUIPMENT SELECTION, MAINTENANCE
AND OPERATION TRAINING..."





# **ATTENTION AND SERVICE**

POYAM VALVES is the most efficient partnership at each stage of your project, we have more than 35 years' experience worldwide supplying high-tech, quality products and best service.

"IN TUNE WITH CUSTOMERS,
BECAUSE CUSTOMER SATISFACTION
IS POYAM SATISFACTION".



