

ball valves manufacturing catalog



| 1. | WHO WE ARE | 2 |
|------|---|----|
| 2. | KIOS TECHFLOW LLP | 3 |
| 3. | BALL MANUFACTURING | 4 |
| 3.1. | FLOATING BALL VALVES | 6 |
| 3.2 | TRUNNION MOUNTED BALL VALVES – small sizes | 11 |
| 3.2. | TRUNNION MOUNTED BALL VALVES - medium sizes | 17 |
| 4. | Workshop and Equipment | 22 |
| 5. | CERTIFICATIONS | 25 |
| 6. | _CONTACTS | 26 |







1. WHO WE ARE

Expertise is a privately-owned company founded in Genova, Italy, in 1984, thanks to the vision of the President Mr. Ezio Bracco, majority shareholder, parent company of the Expertise Group.

Covering at first the demand of the Italian market for Engineering and Project Management services, during 40 years of history the Group has branched out to different services in the home country and abroad.

With a workforce of over 2000 employees, the Group sees today its presence in Italy, Kazakhstan, Republic of the Congo, United Arab Emirates, Kuwait, Libya and Mozambique.

Expertise is the Parent Company of the following Companies, part of the Group:

- ✓ Expertise Srl (Italy, 1984)
- ✓ Telford International LTD (United Arab Emirates, 1994)
- ✓ KIOS LLP (Kazakhstan, 1999)
- ✓ Expertise Branch, Atyrau (Kazakhstan, 2008)
- ✓ Proteco SARLU (Republic of Congo, 2009)
- ✓ Expertise LLP (Kazakhstan, 2011)
- ✓ Expertise Libya for Oil Operations JSC (Libya, 2011)
- ✓ Expertise Mozambique Limitada (Mozambique, 2013)
- ✓ Expertise Branch Kuwait (Kuwait, 2017)
- ✓ KIOS TechFlow LLP (Kazakhstan, 2017)
- ✓ KIOS Maintenance Solutions LLP (Kazakhstan, 2021)
- ✓ Expertise Kuwait Oil Well Drilling WLL (Kuwait, 2021)

The services rendered across the various countries include Engineering and Project Management, Technical Assistance Services, HSE and Operations & Maintenance Services to the Oil & Gas, Refining, Petrochemical, Chemical, Power and Desalination Industries, as well as Integrated Field Services to the Upstream Industry.

The Expertise Group prides itself in carrying out all works at the highest achievable standards and it places notable emphasis on project management through strict QA/QC procedures, applied to all projects to constantly monitor both quality and progress.

Through its business activities the Expertise Group has been involved in major onshore and offshore developments and at drilling/production installations, working with many of the major Operators and Contractors worldwide.

Expertise' established record of success has been achieved by providing quality and innovative services with unrivalled commitment and flexibility. Throughout the years, the group has continuously increased its technical know-how and organisational capabilities in order to broaden the range of services provided.

Our clients have always recognized that our strength lays in our name, in a word Expertise. We do make a difference with our expertise.







2. KIOS TECHFLOW LLP

In 2017 a Joint Venture was created in Aksai, Kazakhstan with the aim to support the local need for Critical Maintenance of Valves which, in 2020 was fully acquired by Expertise Group renaming it KIOS Techflow LLP bringing under its umbrella a full capability for valve maintenance in country.

KIOS Techflow is corrently located in Aksai where a state of the art workshop is present in order to increase the demand for quick delivery valves and high turnaround maintenance and repair works required on installed valves.



KIOS Techflow made a name for itself tackling the criticality of a damaged valves, either on site or in our workshop, to engineer and produce components in order to restore the valve in a quick and satisfactory manner.

The aim of this service is granting to the client the minimum downtime due to the valve not operational condition.

Among the various services, KIOS Techflow LLP

can provide, Reverse Engineering on partner OEM, Upgrading & Modification, Critical/Complex Overhauling & Re-certification, Advanced Balls Grinding/Lapping Machining & Sealing Areas Semi-Automatic Welding Overlay, Valves/Actuators (Assembly) Torques Measuring & Monitoring and Actuators Static Torque Peak Measuring & Endurance Dynamic Test.

During the recent years we have supported also the various requirements for new valves cooperating with some of the top notch Italian Valve maker as Orion S.p.A. and Actuator makers as DVG Srl.

Nevertheless, as the local market is demanding higher localization of the product, Expertise Group decided to move towards a major milestone, obtaining the Certification for API6D as manufacturer of valves. Such certification was obtained in



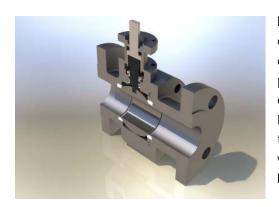
2023 and KIOS Techflow LLP can proudly provide now valves made in Kazakhstan.

KIOS Techflow is also accredited with ISO 9001, 18001 and 45001.





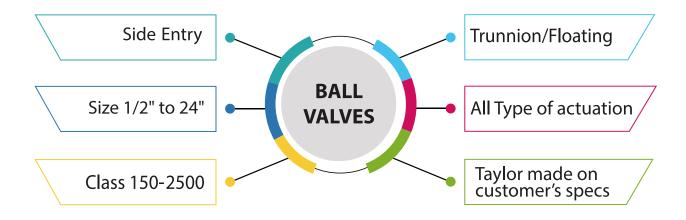
3. BALL MANUFACTURING



In its seven years of operation, KIOS TECHFLOW LLP has developed comprehensive internal engineering resources capable of managing the entire valve manufacturing process. This capability is crucial for greenfield projects and even more so for replacement valves in brownfield sites. KIOS TECHFLOW LLP can meet all valve supply demands throughout the lifecycle of an Oil & Gas field. Furthermore, we produce and test all our products locally, ensuring high local content and providing a CT-KZ certificate.

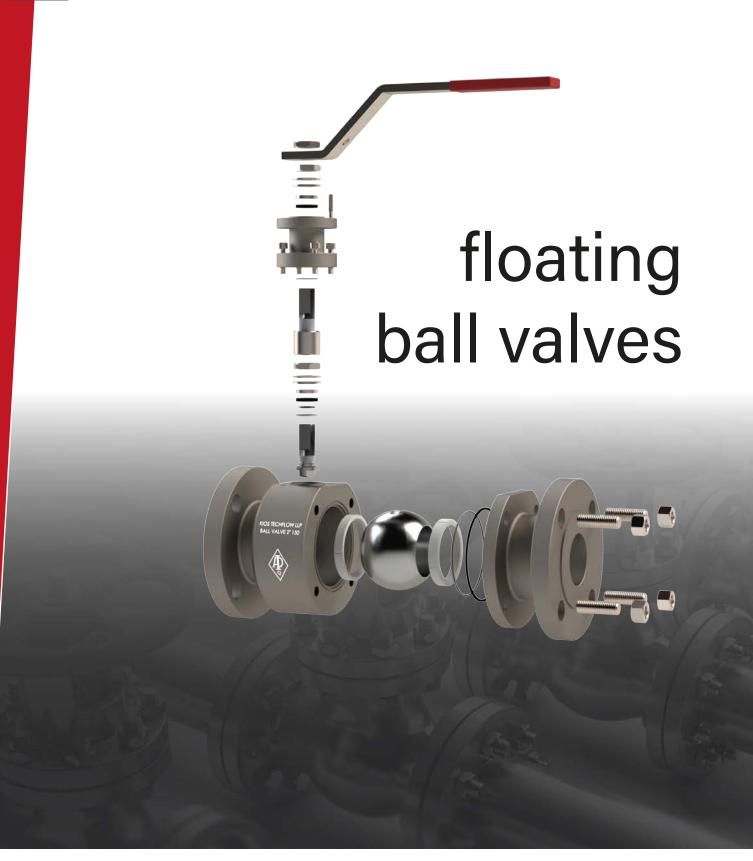
Our design features are tailored specifically for the Oil & Gas industry, incorporating robustness, ease of maintenance, and optimal performance under extreme conditions. This includes soft seat and metal-to-metal sealing, self-relieving and double piston configurations, double block and bleed systems, and various stem and seat seal arrangements. Our ball valves cater to all applications, including special and critical ones. KIOS TECHFLOW LLP offers a tailored material selection, providing valves in Carbon Steel, Stainless Steel, Duplex/Super Duplex, Nickel alloys, and ensuring compliance with NACE MR0175 standards.

Our commitment to quality and compliance guarantees that we meet the stringent demands of the Oil & Gas sector, delivering solutions that ensure operational efficiency and longevity in every valve. Our range includes floating or trunnion-mounted ball valves, constructed to ASME B16.34-API 6D standards, with side-entry and top-entry designs. These valves feature single or double-effect seats, double block & bleed configurations, flanged RF/RTJ or weld ends, ANSI B16.10, or special face-to-face dimensions. They are available in full/reduced bore, with a seat leakage rate to ISO 5208 Rate A, anti-static devices, blowout-proof stems, vent and drain options, and API 607-API 6FA fireproof design. Additionally, the valves can be supplied with manual operation or actuation.





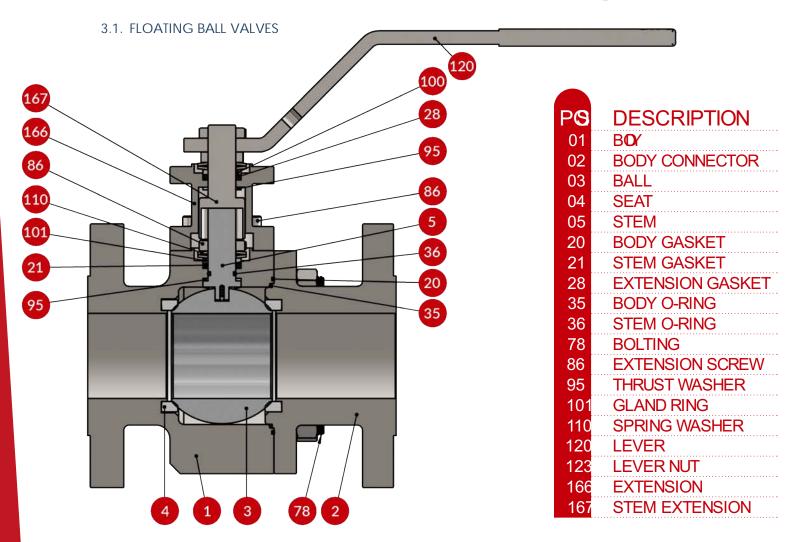










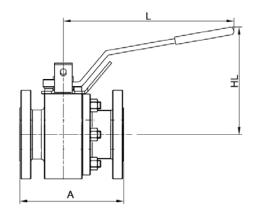












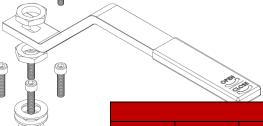
| | AVAILABILITY | | | | | | | | | |
|-----------|--------------|-----|-----|-----|------|------|--|--|--|--|
| SIZE | 150 | 300 | 600 | 900 | 1500 | 2500 | | | | |
| 1/2" | | | | | | | | | | |
| 3/4" | | | | | | | | | | |
| 1" | | | | | | | | | | |
| 1 1/2" | | | | | | | | | | |
| 2"X1 1/2" | | | | | | | | | | |
| 2" | | | | | | 1 | | | | |
| 3"x2" | | | | | | | | | | |
| 3″ | | | | | | | | | | |
| 4" x3" | | | | | | | | | | |
| 4" | | | | | | | | | | |
| 6"x4" | | | | | | | | | | |
| 6" | | | | | | | | | | |
| 8"x6" | | | | | | | | | | |
| 8″ | | | · | | | | | | | |

| ASME CLASS 150 | | | | | | | | | |
|----------------|------|-------|------|------|------|--------|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | | |
| 1/2" | 108 | 121 | 140 | 116 | 166 | 3.5 | | | |
| 3/4"x1/2" | 117 | 130 | 152 | 116 | 166 | 4 | | | |
| 3/4" | 117 | 130 | 152 | 120 | 166 | 4,5 | | | |
| 1"x3/4" | 127 | 140 | 165 | 120 | 166 | 5 | | | |
| 1" | 127 | 140 | 165 | 125 | 180 | 6 | | | |
| 1 1/2"x1" | 165 | 178 | 190 | 125 | 180 | 7,5 | | | |
| 1 1/2" | 165 | 178 | 190 | 155 | 250 | 10 | | | |
| 2"x1 1/2" | 178 | 191 | 216 | 155 | 250 | 12 | | | |
| 2" | 178 | 191 | 216 | 185 | 290 | 16 | | | |
| 3"x2" | 203 | 216 | 283 | 185 | 290 | 22 | | | |
| 3" | 203 | 216 | 283 | 217 | 400 | 30 | | | |
| 4"x3" | 229 | 241 | 305 | 217 | 400 | 42 | | | |
| 4" | 229 | 241 | 305 | GEAR | GEAR | 58 | | | |
| 6"x4" | 267 | 279 | 403 | GEAR | GEAR | 70 | | | |
| 6" | 394 | 406 | 457 | GEAR | GEAR | 115 | | | |
| 8"x6" | 292 | 305 | 419 | GEAR | GEAR | 155 | | | |
| 8" | 457 | 470 | 521 | GEAR | GEAR | 170 | | | |
| 10"x8" | 330 | 343 | 457 | GEAR | GEAR | 230 | | | |









| ASME CLASS 300 | | | | | | | | | |
|----------------|------|-------|------|------|------|--------|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | | |
| 1/2" | 140 | 151 | 140 | 116 | 166 | 4 | | | |
| 3/4"x1/2" | 152 | 165 | 152 | 116 | 166 | 5 | | | |
| 3/4" | 152 | 165 | 152 | 120 | 166 | 6 | | | |
| 1"x3/4" | 165 | 178 | 165 | 120 | 166 | 7 | | | |
| 1" | 165 | 178 | 165 | 125 | 180 | 8 | | | |
| 1 1/2"x1" | 190 | 203 | 190 | 125 | 180 | 10 | | | |
| 1 1/2" | 190 | 203 | 190 | 155 | 250 | 13 | | | |
| 2"x1 1/2" | 216 | 232 | 216 | 155 | 250 | 14 | | | |
| 2" | 216 | 232 | 216 | 185 | 290 | 18 | | | |
| 3"x2" | 283 | 298 | 283 | 185 | 290 | 28 | | | |
| 3" | 283 | 298 | 283 | 217 | 450 | 43 | | | |
| 4"x3" | 305 | 321 | 305 | 217 | 450 | 55 | | | |
| 4" | 305 | 321 | 305 | GEAR | GEAR | 80 | | | |
| 6"x4" | 403 | 419 | 457 | GEAR | GEAR | 115 | | | |
| 6" | 403 | 419 | 457 | GEAR | GEAR | 150 | | | |
| 8"x6" | 419 | 435 | 419 | GEAR | GEAR | 180 | | | |

| ASME CLASS 600 | | | | | | | | | | |
|----------------|------|-------|------|------|------|--------|--|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | | | |
| 1/2" | 165 | 165 | 165 | 116 | 166 | 5 | | | | |
| 3/4"x1/2" | 190 | 190 | 190 | 116 | 166 | 6 | | | | |
| 3/4" | 190 | 190 | 190 | 120 | 166 | 7 | | | | |
| 1"x3/4" | 216 | 216 | 216 | 120 | 166 | 8 | | | | |
| 1" | 216 | 216 | 216 | 125 | 180 | 9 | | | | |
| 1 1/2"x1" | 241 | 241 | 241 | 125 | 180 | 14 | | | | |
| 1 1/2" | 241 | 241 | 241 | 155 | 250 | 16 | | | | |
| 2"x1 1/2" | 292 | 295 | 292 | 155 | 250 | 18 | | | | |
| 2" | 292 | 295 | 292 | 185 | 290 | 23 | | | | |
| 3"x2" | 356 | 359 | 356 | 185 | 290 | 37 | | | | |
| 3" | 356 | 359 | 356 | GEAR | GEAR | 65 | | | | |
| 4"x3" | 432 | 435 | 432 | GEAR | GEAR | 85 | | | | |









| ASME CLASS 1500 | | | | | | | | | |
|-----------------|------|-------|------|------|------|--------|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | | |
| 1/2" | 216 | 216 | 216 | 116 | 166 | 8 | | | |
| 3/4"x1/2" | 229 | 229 | 229 | 116 | 166 | 10 | | | |
| 3/4" | 229 | 229 | 229 | 139 | 250 | 11 | | | |
| 1"x3/4" | 254 | 254 | 254 | 139 | 250 | 14 | | | |
| 1" | 254 | 254 | 254 | 159 | 290 | 17 | | | |
| 1 1/2"x1" | 305 | 305 | 305 | 159 | 290 | 22 | | | |
| 1 1/2" | 305 | 305 | 305 | GEAR | GEAR | 40 | | | |
| 2"x1 1/2" | 368 | 371 | 368 | GEAR | GEAR | 51 | | | |

| ASME CLASS 2500 | | | | | | | | | |
|-----------------|------|-------|------|------|------|--------|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | | |
| 1/2" | 264 | 264 | 264 | 125 | 250 | 12 | | | |
| 3/4"x1/2" | 273 | 273 | 273 | 125 | 250 | 14 | | | |
| 3/4" | 273 | 273 | 273 | 135 | 250 | 16 | | | |
| 1"x3/4" | 308 | 308 | 308 | 135 | 250 | 19 | | | |
| 1" | 308 | 308 | 308 | 185 | 400 | 24 | | | |
| 1 1/2"x1" | 384 | 387 | 384 | 185 | 400 | 32 | | | |
| 1 1/2" | 384 | 387 | 384 | GEAR | GEAR | 55 | | | |
| 2"x1 1/2" | 451 | 454 | 451 | GEAR | GEAR | 75 | | | |





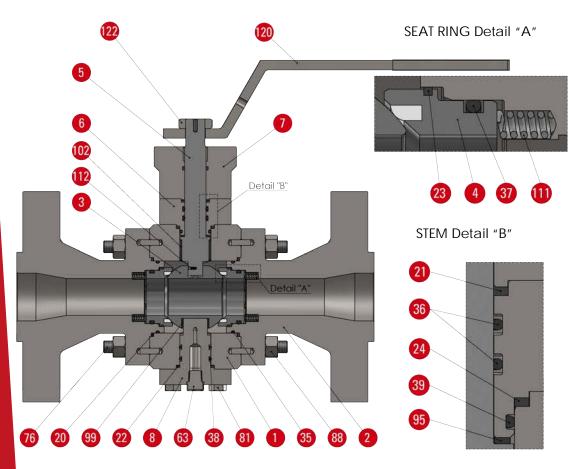






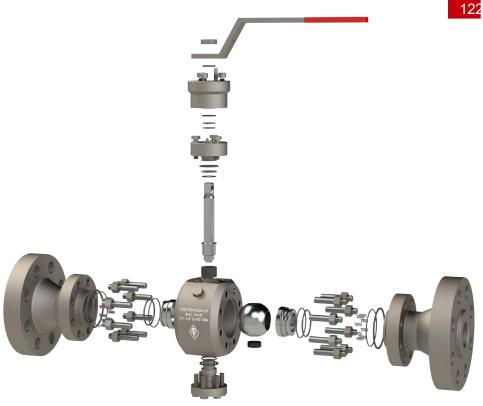


3.2 TRUNNION MOUNTED BALL VALVES - SIDE-ENTRY - small sizes



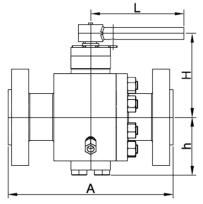
| PB | DESCRIPTION |
|-----|--------------------|
| 01 | B O ⁄ |
| 02 | closure |
| 03 | BALL |
| 04 | SEAT with insert |
| 05 | STEM |
| 06 | gland |
| 07 | adapter plate |
| 80 | trunnion |
| 20 | body gasket |
| 21 | stem gasket |
| 22 | trunnion gasket |
| 23 | seat f.s. gasket |
| 24 | gland plate gasket |
| 35 | body o-ring |
| 36 | stem o-ring |
| 37 | seat o-ring |
| 38 | trunnion o-ring |
| 39 | gland o-ring |
| 63 | drain plug |
| 76 | body stud bolt |
| 81 | trunnion cap-screw |
| 88 | body nut |
| 95 | thrust washer |
| 99 | trunnion bearing |
| 102 | stem bearing |
| 111 | seat spring |
| 112 | |
| 120 | lever |

lever nut









| | | Α\ | /AILABILI [*] | TY | | |
|-----------|-----|-----|------------------------|-----|------|------|
| SIZE | 150 | 300 | 600 | 900 | 1500 | 2500 |
| 1/2" | | | | | | |
| 3/4"x1/2" | | | | | | |
| 3/4" | | | | | | |
| 1"x3/4" | | | | | | |
| 1" | | | | | | |
| 1.1/2"x1" | | | | | | |
| 1.1/2" | | | | | | |
| 2x1. 1/2" | | | | | | |
| 2" | | | | | | |
| 3" x2" | | | | | | |
| 3″ | | | | | | |
| 4"x3" | | | | | | |
| 4" | | | | | | |
| 6"x4" | | | | | | |

| ASME CLASS 150 | | | | | | | | | |
|----------------|------|-------|------|-------|------|--------|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | | |
| 1/2" | 108 | 121 | 140 | 55 | 73 | 10 | | | |
| 3/4"x1/2" | 117 | 130 | 152 | 55 | 73 | 11 | | | |
| 3/4" | 117 | 130 | 152 | 57 | 75 | 12 | | | |
| 1"x3/4" | 127 | 140 | 165 | 57 | 75 | 13 | | | |
| 1" | 127 | 140 | 165 | 79 | 80 | 18 | | | |
| 1 1/2"x1" | 165 | 178 | 190 | 79 | 80 | 20 | | | |
| 1 1/2" | 165 | 178 | 190 | 115,5 | 95,5 | 20 | | | |
| 2"x1 1/2" | 178 | 191 | 216 | 115,5 | 95,5 | 22 | | | |
| 2" | 178 | 191 | 216 | 121 | 101 | 23 | | | |
| 3"x2" | 203 | 216 | 283 | 121 | 101 | 28 | | | |
| 3" | 203 | 216 | 283 | 142 | 123 | 40 | | | |
| 4"x3" | 229 | 241 | 305 | 142 | 123 | 48 | | | |
| 4" | 229 | 241 | 305 | 177 | 153 | 65 | | | |
| 6"x4" | 394 | 406 | 457 | 177 | 153 | 95 | | | |







| | ASME CLASS 300 | | | | | | | | | |
|-----------|----------------|-------|------|-------|------|--------|--|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | | | |
| 1/2" | 140 | 151 | 140 | 55 | 73 | 12 | | | | |
| 3/4"x1/2" | 152 | 165 | 152 | 55 | 73 | 13 | | | | |
| 3/4" | 152 | 165 | 152 | 57 | 75 | 14 | | | | |
| 1"x3/4" | 165 | 178 | 165 | 57 | 75 | 15 | | | | |
| 1" | 165 | 178 | 165 | 79 | 80 | 22 | | | | |
| 1 1/2"x1" | 190 | 203 | 190 | 79 | 80 | 24 | | | | |
| 1 1/2" | 190 | 203 | 190 | 115,5 | 95,5 | 24 | | | | |
| 2"x1 1/2" | 216 | 232 | 216 | 115,5 | 95,5 | 25 | | | | |
| 2" | 216 | 232 | 216 | 121 | 101 | 25 | | | | |
| 3"x2" | 283 | 298 | 283 | 121 | 101 | 42 | | | | |
| 3" | 283 | 298 | 283 | 142 | 123 | 46 | | | | |
| 4"x3" | 305 | 321 | 305 | 142 | 123 | 62 | | | | |
| 4" | 305 | 321 | 305 | 177 | 153 | 93 | | | | |
| 6"x4" | 403 | 419 | 457 | 177 | 153 | 115 | | | | |

| ASME CLASS 600 | | | | | | | | | |
|----------------|------|-------|------|-------|-------|--------|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | | |
| 1/2" | 165 | 165 | 165 | 55 | 73 | 12 | | | |
| 3/4"x1/2" | 190 | 190 | 190 | 55 | 73 | 14 | | | |
| 3/4" | 190 | 190 | 190 | 57 | 75 | 17 | | | |
| 1"x3/4" | 216 | 216 | 216 | 57 | 75 | 18 | | | |
| 1" | 216 | 216 | 216 | 79 | 80 | 26 | | | |
| 1 1/2"x1" | 241 | 241 | 241 | 79 | 80 | 28 | | | |
| 1 1/2" | 241 | 241 | 241 | 115,5 | 95,5 | 31 | | | |
| 2"x1 1/2" | 292 | 295 | 292 | 115,5 | 95,5 | 33 | | | |
| 2" | 292 | 295 | 292 | 121 | 101 | 38 | | | |
| 3"x2" | 356 | 359 | 356 | 121 | 101 | 44 | | | |
| 3" | 356 | 359 | 356 | 142 | 123 | 63 | | | |
| 4"x3" | 432 | 435 | 432 | 142 | 123 | 85 | | | |
| 4" | 432 | 435 | 432 | 182,5 | 195,5 | 115 | | | |
| 6"x4" | 559 | 562 | 559 | 182,5 | 195,5 | 169 | | | |





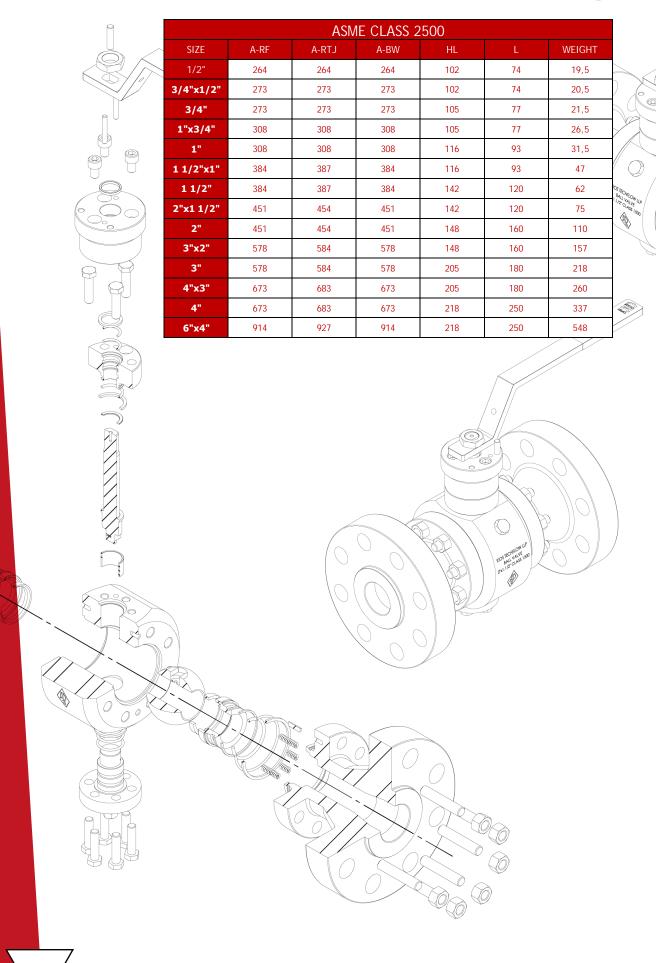
| | | ASI | ME CLASS | 900 | | |
|-----------|------|-------|----------|-------|-------|--------|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT |
| 1/2" | 216 | 216 | 216 | 103 | 75 | 13 |
| 3/4"x1/2" | 229 | 229 | 229 | 103 | 75 | 15 |
| 3/4" | 229 | 229 | 229 | 103 | 75 | 16 |
| 1"x3/4" | 254 | 254 | 254 | 103 | 75 | 20 |
| 1" | 254 | 254 | 254 | 114 | 81 | 24 |
| 1 1/2"x1" | 305 | 305 | 305 | 114 | 81 | 26 |
| 1 1/2" | 305 | 305 | 305 | 150 | 114,5 | 43,5 |
| 2"x1 1/2" | 368 | 371 | 368 | 150 | 114,5 | 56 |
| 2" | 368 | 371 | 368 | 165,5 | 130 | 73,5 |
| 3"x2" | 381 | 384 | 381 | 165,5 | 130 | 79 |
| 3" | 381 | 384 | 381 | 180 | 153 | 84 |
| 4"x3" | 457 | 460 | 457 | 180 | 153 | 110 |
| 4" | 457 | 460 | 457 | 191 | 210 | 162 |
| 6"x4" | 610 | 613 | 610 | 191 | 210 | 238 |

| ASME CLASS 1500 | | | | | | | | |
|-----------------|------|-------|------|-------|-------|--------|--|--|
| SIZE | A-RF | A-RTJ | A-BW | HL | L | WEIGHT | | |
| 1/2" | 216 | 216 | 216 | 103 | 75 | 13 | | |
| 3/4"x1/2" | 229 | 229 | 229 | 103 | 75 | 15 | | |
| 3/4" | 229 | 229 | 229 | 103 | 75 | 16 | | |
| 1"x3/4" | 254 | 254 | 254 | 103 | 75 | 20 | | |
| 1" | 254 | 254 | 254 | 114 | 81 | 24 | | |
| 1 1/2"x1" | 305 | 305 | 305 | 114 | 81 | 26 | | |
| 1 1/2" | 305 | 305 | 305 | 150 | 114,5 | 43,5 | | |
| 2"x1 1/2" | 368 | 371 | 368 | 150 | 114,5 | 56 | | |
| 2" | 368 | 371 | 368 | 165,5 | 130 | 73,5 | | |
| 3"x2" | 470 | 473 | 470 | 165,5 | 155 | 79 | | |
| 3" | 470 | 473 | 470 | 180 | 155 | 110 | | |
| 4"x3" | 546 | 549 | 546 | 180 | 189 | 139 | | |
| 4" | 546 | 549 | 546 | 205 | 189 | 210 | | |
| 6"x4" | 705 | 711 | 705 | 205 | 250 | 270 | | |









ADE IN





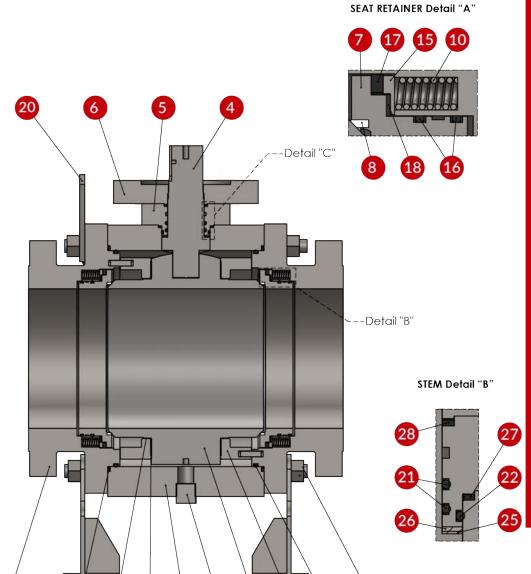








3.2. TRUNNION MOUNTED BALL VALVES – TOP-ENTRY



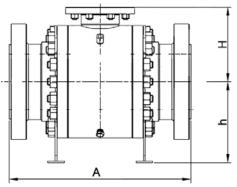
3

| PO | DESCRIPTION |
|----|------------------|
| 01 | B O Y |
| 02 | BONNET |
| 03 | BALL |
| 04 | STEM |
| 05 | GLAND |
| 06 | ADAPTER PLATE |
| 07 | SEAT RETAINER |
| 08 | SEAT INSERT |
| 09 | SUPPORTING PLATE |
| 10 | SPRING |
| 11 | O-RING |
| 12 | gasket |
| 13 | NUT |
| 14 | STUD |
| 15 | SEAT FOLLOWER |
| 16 | O-RING |
| 17 | GASKET |
| 18 | SPACER RING |
| 19 | LEGS |
| 20 | LIFTING |
| 21 | O-RING |
| 22 | O-RING |
| 23 | BEARING |
| 24 | THRUST WASHER |
| 25 | THRUST WASHER |
| 26 | METAL WASHER |
| 27 | GASKET |
| 28 | GASKET |
| 29 | SOLID NPT PLUG |









| | | - | | | | | | | | |
|-----------|--------------|-----|-----|-----|------|------|--|--|--|--|
| | AVAILABILITY | | | | | | | | | |
| SIZE | 150 | 300 | 600 | 900 | 1500 | 2500 | | | | |
| 6" | | | | | | | | | | |
| 8x6" | | | | | | | | | | |
| 8″ | | | | | | | | | | |
| 10"x8" | | | | | | | | | | |
| 10″ | | | | | | | | | | |
| 12"x10" | | | | | | | | | | |
| 12" | | | | | | | | | | |
| 14"x10" | | | | | | | | | | |
| 14" | | | | | | | | | | |
| 16" x 12" | | | | | | | | | | |
| 16" | | | | | | | | | | |
| 18"x14" | | | | | | | | | | |
| 18" | | | | | | | | | | |
| 20"x16" | | | | | | | | | | |
| 20" | | | | | | | | | | |
| 24"x20" | | | | | | | | | | |
| 24" | | | | | | | | | | |

| | 4 | | | | / 15 | | | | |
|----------------|------|-------|------|-------|------|--------|--|--|--|
| ASME CLASS 150 | | | | | | | | | |
| SIZE | A-RF | A-RTJ | A-BW | Н | h | WEIGHT | | | |
| 6" | 394 | 406 | 457 | 220 | 258 | 149 | | | |
| 8x6" | 457 | 470 | 521 | 220 | 258 | 158 | | | |
| 8" | 457 | 470 | 521 | 264,5 | 268 | 251,5 | | | |
| 10"x8" | 533 | 546 | 559 | 264,5 | 268 | 290 | | | |
| 10" | 533 | 546 | 559 | 308 | 309 | 425 | | | |
| 12"x10" | 610 | 622 | 635 | 308 | 309 | 485 | | | |
| 12" | 610 | 622 | 635 | 342 | 288 | 590 | | | |
| 14"x10" | 686 | 699 | 762 | 308 | 309 | 530 | | | |
| 14" | 686 | 699 | 762 | 364,5 | 323 | 768 | | | |
| 16"x 12" | 762 | 775 | 838 | 342 | 288 | 750 | | | |
| 16" | 762 | 775 | 838 | 405,5 | 389 | 1114,5 | | | |
| 18"x14" | 864 | 876 | 914 | 364,5 | 323 | 950 | | | |
| 18" | 864 | 876 | 914 | 448 | 421 | 1483,5 | | | |
| 20"x16" | 914 | 927 | 991 | 405,5 | 389 | 1295 | | | |
| 20" | 914 | 927 | 991 | 494,5 | 460 | 1999 | | | |
| 24"x20" | 1067 | 1080 | 1143 | 494,5 | 460 | 2300 | | | |
| 24" | 1067 | 1080 | 1143 | 572 | 554 | 3364 | | | |
| | | | | | | | | | |



OS TECHFLOW LLP





| ASME CLASS 300 | | | | | | | | | |
|----------------|------|-------|------|-------|-------|--------|--|--|--|
| SIZE | A-RF | A-RTJ | A-BW | Н | h | WEIGHT | | | |
| 6" | 403 | 419 | 457 | 220 | 258 | 172 | | | |
| 8x6" | 502 | 518 | 521 | 220 | 258 | 196 | | | |
| 8" | 502 | 518 | 521 | 264,5 | 268 | 286 | | | |
| 10"x8" | 568 | 584 | 559 | 264,5 | 268 | 342,5 | | | |
| 10" | 568 | 584 | 559 | 308 | 309 | 467 | | | |
| 12"x10" | 648 | 664 | 635 | 308 | 309 | 547 | | | |
| 12" | 648 | 664 | 635 | 353 | 335 | 738,5 | | | |
| 14"x10" | 762 | 778 | 762 | 308 | 309 | 660 | | | |
| 14" | 762 | 778 | 762 | 375,5 | 386,5 | 983 | | | |
| 16"x 12" | 838 | 854 | 838 | 353 | 335 | 910 | | | |
| 16" | 838 | 854 | 838 | 422 | 446 | 1434 | | | |
| 18"x14" | 914 | 930 | 914 | 375,5 | 386,5 | 1210 | | | |
| 18" | 914 | 930 | 914 | 469 | 470 | 1886,5 | | | |
| 20"x16" | 991 | 1010 | 991 | 422 | 446 | 1660 | | | |
| 20" | 991 | 1010 | 991 | 513 | 483 | 2413,5 | | | |
| 24"x20" | 1143 | 1165 | 1143 | 513 | 483 | 2940 | | | |
| 24" | 1143 | 1165 | 1143 | 611 | 599 | 4177 | | | |

| ASME CLASS 600 | | | | | | | | |
|----------------|------|-------|------|-------|-------|--------|--|--|
| SIZE | A-RF | A-RTJ | A-BW | Н | h | WEIGHT | | |
| 6" | 559 | 562 | 559 | 220 | 258 | 261 | | |
| 8x6" | 660 | 664 | 660 | 220 | 258 | 280 | | |
| 8" | 660 | 664 | 660 | 270,5 | 293,5 | 415 | | |
| 10"x8" | 787 | 791 | 787 | 270,5 | 293,5 | 534 | | |
| 10" | 787 | 791 | 787 | 316 | 312 | 708 | | |
| 12"x10" | 838 | 841 | 838 | 316 | 312 | 772 | | |
| 12" | 838 | 841 | 838 | 367 | 364 | 1017,5 | | |
| 14"x10" | 889 | 892 | 889 | 316 | 312 | 845 | | |
| 14" | 889 | 892 | 889 | 394 | 403 | 1281 | | |
| 16"x 12" | 991 | 994 | 991 | 367 | 364 | 1245 | | |
| 16" | 991 | 994 | 991 | 440 | 448 | 1898,5 | | |
| 18"x14" | 1092 | 1095 | 1092 | 394 | 403 | 1590 | | |
| 18" | 1092 | 1095 | 1092 | 493,5 | 478,5 | 2622 | | |
| 20"x16" | 1194 | 1200 | 1194 | 440 | 448 | 2260 | | |
| 20" | 1194 | 1200 | 1194 | 530,5 | 499,5 | 3202 | | |
| 24"x20" | 1295 | 1305 | 1295 | 493,5 | 478,5 | 2974 | | |
| 24" | 1397 | 1407 | 1397 | 634 | 599 | 5672 | | |
| | | | | | | | | |



KIOS TECHFLOW LLP





| ASME CLASS 900 | | | | | | | | |
|----------------|------|-------|------|-------|-------|--------|--|--|
| SIZE | A-RF | A-RTJ | A-BW | Н | h | WEIGHT | | |
| 6" | 610 | 613 | 610 | 230 | 268 | 340 | | |
| 8x6" | 737 | 740 | 737 | 230 | 268 | 436 | | |
| 8″ | 737 | 740 | 737 | 300 | 307 | 630 | | |
| 10"x8" | 838 | 841 | 838 | 300 | 307 | 755 | | |
| 10" | 838 | 841 | 838 | 342,5 | 350 | 1000 | | |
| 12"x10" | 965 | 968 | 965 | 342,5 | 350 | 1140 | | |
| 12" | 965 | 968 | 965 | 384,5 | 392 | 1440 | | |
| 14"x10" | 1029 | 1038 | 1029 | 342,5 | 350 | 1320 | | |
| 14" | 1029 | 1038 | 1029 | 395 | 425,5 | 1695 | | |
| 16"x 12" | 1130 | 1140 | 1130 | 384,5 | 392 | 1570 | | |
| 16" | 1130 | 1140 | 1130 | 507 | 475 | 2150 | | |
| 18"x14" | 1219 | 1232 | 1219 | 395 | 425,5 | 1930 | | |
| 18" | 1219 | 1232 | 1219 | 550 | 517 | 3450 | | |
| 20"x16" | 1321 | 1334 | 1321 | 507 | 475 | 2630 | | |
| 20" | 1321 | 1334 | 1321 | 594 | 565 | 4250 | | |

| THE | | (/ Y) | | | | | | | |
|-----------------|------|--------|--------|-------|-----|--------|--|--|--|
| ASME CLASS 1500 | | | | | | | | | |
| SIZE | A-RF | A-RTJ | A-BW | Н | h | WEIGHT | | | |
| 6" | 705 | 711 | 705 | 261 | 250 | 495 | | | |
| 8x6" | 832 | 841 | 832 | 261 | 290 | 586 | | | |
| 8" | 832 | 841 | 832 | 317 | 321 | 889 | | | |
| 10"x8" | 991 | 1000 | 991 | 317 | 321 | 1396 | | | |
| 10" | 991 | 1000 | 991 | 440,5 | 420 | 1902 | | | |
| 12"x10" | 1130 | 1146 | 1130 | 440,5 | 420 | 2050 | | | |
| 12" | 1130 | 1146 | 1130 | 451,5 | 440 | 2390 | | | |
| 14"x10" | 1257 | 1276 | 1257 | 440,5 | 420 | 2200 | | | |
| 14" | 1257 | 1276 | 1257 | 490 | 530 | 3000 | | | |
| 16"x 12" | 1384 | 1407 | 1384 | 451,5 | 440 | 2910 | | | |
| 16" | 1384 | 1407 | 1384 | 555,5 | 530 | 3816 | | | |
| 18"x14" | 1537 | 1559 | Nota 2 | 490 | 530 | 3410 | | | |
| 18" | 1537 | 1559 | Nota 2 | 575 | 570 | 6150 | | | |

| / | | | | ~ | // /= | | | |
|-----------------|------|-------|------|-----|-------|--------|--|--|
| ASME CLASS 2500 | | | | | | | | |
| SIZE | A-RF | A-RTJ | A-BW | Н | h | WEIGHT | | |
| 6" | 914 | 927 | 914 | 335 | 347 | 1330 | | |
| 8x6" | 1022 | 1038 | 1022 | 335 | 347 | 1500 | | |
| 8″ | 1022 | 1038 | 1022 | 442 | 395 | 1969 | | |
| 10"x8" | 1270 | 1292 | 1270 | 442 | 395 | 2260 | | |
| 10" | 1270 | 1292 | 1270 | 494 | 461 | 2550 | | |
| 12"x10" | 1422 | 1445 | 1422 | 494 | 461 | 3211 | | |
| 12" | 1422 | 1445 | 1422 | 522 | 488 | 3872 | | |









workshop & equipments









4. WORKSHOP AND EQUIPMENT

KIOS TECHFLOW LLP has a workshop of 2,150 sqm fully equipped for maintenance and production of valves.

The main equipment present in our workshop are:

- ✓ Hydraulic test benches
- ✓ Gas test bench
- ✓ Actuator test bench
- ✓ LTT and FET capabilities
- ✓ Column drill machine
- ✓ CNC Vertical Lathe machine
- ✓ CNC Ball Grinder machine
- ✓ Mill machine
- ✓ Horizonthal lathe machine
- ✓ Slotting machine
- ✓ Press machine (up to 100 tons)
- ✓ Lapping unit
- ✓ Automatic Welding equipment
- ✓ Washing and Cleaning area
- ✓ Overhead crane (5 tons)
- ✓ Quality Control Tools (Caliper, gauges, etc)
- ✓ PMI laser tool
- ✓ Forklift (up to 3 tons)















Inconel Overlay Welding Station



Vertical Late - CNC





Ball Grinding - CNC

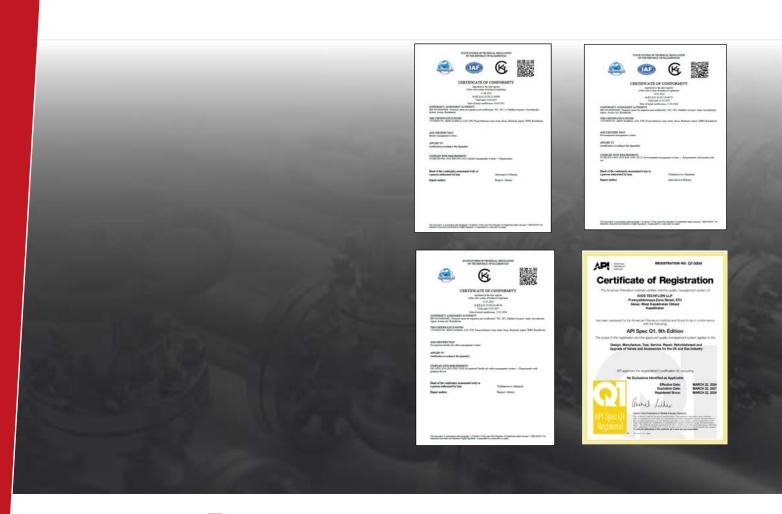


Actuators Test Bench





certifications









5. CERTIFICATIONS



ISO 9001

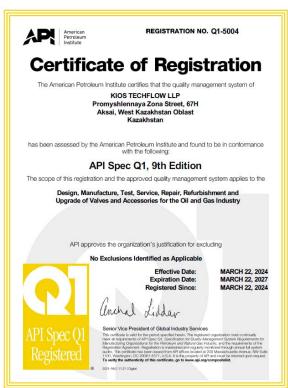


ISO 45001



ISO 14001

API SPEC Q1







ADE IN

AKHST





EXPERTISE SRL - HEAD OFFICE

Via Pontaccio 8 20121, Milano (MI) Italy

Phone: +39 019 215841 promote@expertise.it

EXPERTISE SRL - MAIN OFFICE

Via Aurelia 278/1 17047, Vado Ligure (SV) Italy Phone: +39 019 215841

Phone: +39 019 215841 promote@expertise.it

EXPERTISE LLP

12A Abay street, 2nd floor 060002, Atyrau Kazakhstan Phone: +7 7122 763231 promote@expertisellp.kz

KIOS LLP

67H, Promyshlennaya zona street 090300, Aksai, Burlinsky region Kazakhstan Phone: +7 71133 92 700 promote@kios.kz

KIOS TECHFLOW LLP

67H, Promyshlennaya zona street 090300, Aksai, Burlinsky region Kazakhstan Phone: +7 71133 92 700

tenderteam@kiostechflow.kz

KIOS MAINTENANCE SOLUTIONS

71 Building, Youzhnaya Industrial Zone, 060000, Atyrau Kazakhstan Phone: +7 7122 763231

info@kios.kz