



**Towse
Fonoon
Atieh**

Valves & Instrument



VALVES



شرکت توسعه فنون آتیه



شرکت توسعه فنون آتیه با پشتیبانی گروهی از معتبرترین شرکت های اروپایی و آسیایی که نمایندگی انحصاری آنها در اختیار این شرکت می باشد، با تکیه بر موجودی انبارهای خود و تهیه اقلام خاص و سفارشی از طریق دفاتر خود در خارج از کشور در زمینه تهیه، توزیع و خدمات پس از فروش تجهیزات مکانیک و ابزار دقیق جهت صنایع مختلف اعم از نفت، گاز، پتروشیمی، معدنی، غذایی، دارویی، تاسیسات، آب و فاضلاب فعالیت داشته و آمادگی لازم جهت هر گونه همکاری تجاری و خدماتی از جمله تامین قطعات صنعتی را دارا می باشد.

- شیرآلات صنعتی
- انواع ترانسمیترهای فشار، حرارت، سطح و فلومترهای مغناطیسی از برند های معتبر
- انواع گیج های فشار، حرارت و خلأ
- عملگرهای پنوماتیک و برقی و ولوهای کنترلی
- انواع پوزیشنرهای مبدل جریان به فشار





BALL VALVES



■ **FLOATING** MONOBLOC - WAFER / SPLIT BODY - 2 PIECES



■ **TRUNNION** 3 PIECES BODY / SIDE & TOP ENTRY

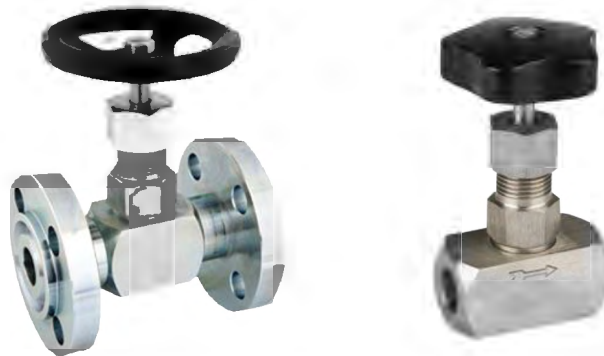
- **CONSTRUCTION:**
B 16.34 – API 6A - API 6D – BS 5351 – EN 17292
- **SIZE:**
FROM 1/2" TO 60" REDUCED AND FULL BORE
- **CLASS:**
ANSI 150 - 300 - 600 – 800 - 900 – 1500 – 2500 – 4500 PSI 3000 – 6000 - 10000
- **END CONNECTIONS:**
THREADED – BW – SW - PE
FLANGED ACCORDING TO ANSI - API – DIN - BS
- **SPECIAL FEATURES:**
NACE MR 01.75 – FIRE SAFE
METAL TO METAL SEAT – UNDERGROUND SERVICE
GEAR – ELECTRIC AND PNEUMATIC ACTUATOR EXTENDED BONNET
CRYOGENIC SERVICE – HEATING JACKET – PREVELDED NIPPLES
- **STANDARD MATERIALS:**
C.S. A105 / A216 WCB – L.T. C.S. A 350 LF2 – A352 LCB
S. S. A182 F304/L – A182 F316/L - A351 CF8M/CF3M
- **SPECIAL MATERIALS:**
HASTELLOY – INCONEL – INCOLOY – MONEL
TITANIUM – DUPLEX – SUPER DUPLEX – BRASS – BRONZE



FORGED VALVES



■ GATE / GLOBE / CHECK



■ NEEDLE

- **TYPE:** BOLTED AND WELDED BONNET / RENEWABLE AND INTEGRAL SEAT
- **CONSTRUCTION:**
B 16.34 –API 602 - BS 5352 – EN 15761
- **SIZE:**
FROM 1/4" TO 2" REDUCED AND FULL BORE
- **CLASS:**
ANSI 150 - 300 - 600 – 800 - 900 – 1500 – 2500 – 4500 PSI 3000 – 6000 - 10000
- **END CONNECTIONS:**
THREADED – BW – SW - PE
FLANGED ACCORDING TO ANSI - API – DIN - BS
- **SPECIAL FEATURES:**
NACE MR 01.75 – Y PATTERN – THROUGH CONDUIT
PRESSURE SEAL BONNET – BELLOWS SEAL – GEAR – ELECTRIC AND PNEUMATIC ACTUATOR
EXTENDED BODY - EXTENDED BONNET – ANGLE GLOBE VALVE - CRYOGENIC SERVICE
- **STANDARD MATERIALS:**
C.S. A105 – L.T. C.S. A 350 LF2
S. S. A182 F304/L – A182 F316/L
- **SPECIAL MATERIALS:**
C.S. A 182 F5 – F 9 – F 11 – F 22
S.S. A 182 F 321 – A 182 F 347
HASTELLOY – INCONEL – INCOLOY – MONEL – ALLOY 20 - TITANIUM – DUPLEX – SUPER DUPLEX



CAST VALVES



■ GATE / GLOBE / CHECK

- **TYPE:** BOLTED BONNET / RENEWABLE AND INTEGRAL SEAT
- **CONSTRUCTION:**
B 16.34 – API 600 – EN 10434 – BS 1873 – BS 1868 – API 6D
- **SIZE:**
GATE FROM 2" TO 48"
GLOBE FROM 2" TO 16"
CHECK FROM 2" TO 36"
- **CLASS:**
ANSI 150 - 300 - 600 – 900 – 1500 – 2500
- **END CONNECTIONS:**
BW AND FLANGED ACCORDING TO ANSI - API – DIN - BS
- **SPECIAL FEATURES:**
NACE MR 01.75
Y PATTERN – THROUGH CONDUIT
PRESSURE SEAL BONNET – BELLOW SEAL
GEAR – ELECTRIC AND PNEUMATIC ACTUATOR
CHAIN WHEEL OP. - EXTENDED BONNET
ANGLE GLOBE VALVE - CRYOGENIC SERVICE
- **STANDARD MATERIALS:**
C.S. A 216 WCB – A 352 LCB
S. S. A 351 CF8 – A 351 CF8M
- **SPECIAL MATERIALS:**
C.S. A 217 WC6 – WC9 – C 5 – C 12
S.S. A 351 CF8C
HASTELLOY – INCONEL – INCOLOY – MONEL – ALLOY 20 - TITANIUM – DUPLEX – SUPER DUPLEX



PLUG VALVES



■ LUBRICATED STANDARD AND PRESSURE BALANCED



■ NON LUBRICATED WITH SLEEVE 2/5 WAYS

- **CONSTRUCTION:**

B 16.34 – API 6A - API 6D – API 599 - BS 5353

- **SIZE:**

1/2" TO 24"

- **CLASS:**

ANSI 150 - 300 - 600 – 800 - 900 – 1500 – 2500 PSI 2000 - 3000 – 6000 - 10000

- **END CONNECTIONS:**

THREADED – BW – SW FLANGED ACCORDING TO API – ANSI – DIN -BS

- **SPECIAL FEATURES:**

NACE MR 01.75

SHORT, REGULAR AND VENTURI PATTERN - OPERATING EXTENSION - BEVEL GEAR

ELECTRIC AND PNEUMATIC ACTUATOR

HEATING JACKET - CRYOGENIC SERVICE - PFA/PTFE LINING

- **STANDARD MATERIALS:**

C.S. A105 - A216 WCB – A352 LCB

S. S. A182 F304 – A182 F316 – A351 CF8 – A351 CF8M

CAST AND DUCTILE IRON

- **SPECIAL MATERIALS:**

HASTELLOY – INCONEL – MONEL – TITANIUM – DUPLEX ALLOY 20 -NICKEL



BUTTERFLY VALVES



■ WAFER LUG FLANGED

- **CONSTRUCTION:**

ISO 5752 – EN 558 (DIN 3202 T3 K1)

API 609 - MSS SP-67 – BS 5155

- **SIZE:**

1-1/2" TO 96"

- **CLASS:**

PN 10 – PN 16 - ANSI 150 – 300 – 600

- **SPECIAL FEATURES:**

CONCENTRIC – DOUBLE ECCENTRIC – TRIPLE ECCENTRIC – NACE MR 01.75 - OPERATING EXTENSION – BEVEL GEAR – ELECTRIC AND PNEUMATIC ACTUATOR – PFA/PTFE LINING

- **STANDARD MATERIALS:**

CAST AND DUCTILE IRON

C. S. A105 - A216 WCB

S. S. 316 - A351 CF8M

ALUMINIUM BRONZE

- **SEATS:**

BUNA NBR – EPDM – VITON – SILICONE – NEOPRENE – PTFE – HYPALON – METAL TO METAL

- **SPECIAL MATERIALS:**

HASTELLOY – INCONEL – MONEL – TITANIUM – DUPLEX ALLOY 20 – NICKEL

NON RETURN VALVES



■ SINGLE PLATE CHECK VALVE / DISC CHECK VALVE



■ DUAL PLATE CHECK VALVE / WAFER LUG FLANGED

- **CONSTRUCTION:**
B 16.5 - API 594 - EN ISO 8062-3 - BS EN 10204
- **SIZE:**
2" TO 60"
- **CLASS:**
ANSI 150 – 300 – 600 – 900 -1500 – 2500
- **SPECIAL FEATURES:**
AVAILABLE ON REQUEST
- **STANDARD MATERIALS:**
CAST AND DUCTILE IRON
C. S. A105 - A216 WCB
L.T.C.S. A350 LF2 – A352 LCB
S. S. 316 - A351 CF8M
ALUMINIUM BRONZE
- **SEATS:**
METAL TO METAL / LINED
- **SPECIAL MATERIALS:**
HASTELLOY – INCONEL – MONEL – TITANIUM – DUPLEX ALLOY 20 – NICKEL

KNIFE GATE AND SLURRY VALVE



■ KNIFE GATE AND SLURRY VALVE

- **CONNECTION:**
LUG – SEMI LUG
- **SIZE:**
DN 50 - DN 800
- **RATING :**
PN 10 -PN16 - ANSI 150
- **SPECIAL FEATURES:**
NORMAL , SLURRY , GERA TYPE , PNEUMATIC ,ELECTRIC , HYDROLIC
- **STANDARD MATERIALS:**
GG25 - GGG40 - A216 WCB - SS 304 - SS316
- **DISC:**
SS 304 -SS316 - SS316 L
- **SPECIAL MATERIALS:**
HASTELLOY – INCONEL – MONEL – TITANIUM – DUPLEX ALLOY 20 – NICKEL

■ STRAINERS (Y TYPE)


- SIZE : DN15 - DN250 FLANGED DN 1/2"-DN 2" SCR.
- PRESSURE : PN16, PN25
- TEMPERATURE : -10 °C +350 °C
- MATERIALS : CAST & NODULAR CAST IRON
- APPLICATIONS: WATER, HOT WATER, SUPERHEATED WATER, COMPRESSED AIR
- FEATURES: DRAIN PLUG, ST. STEEL FILTER AND FRAME, LESS PRESSURE DROP, LARGER FILTERING AREA
- CERTIFICATES : TS 11494, PED97/23/EC

■ BELLOWS GLOBE VALVES


- SIZE : DN15-DN250 FLANGED
- PRESSURE RATING : PN16, PN25, PN40, ANSI 150-300
- TEMPERATURE : -20 °C +400 °C
- MATERIALS : CAST IRON, NODULAR CAST IRON, CARBON & STAINLESS STEEL
- APPLICATIONS : WATER, HOT & SUPERHEATED WATER, HEAT TRANSFER OIL, STEAM, DANGEROUS, INFLAMMABLE, LETHAL, EXPLOSIVE MEDIA
- FEATURES : FULLY IN COMPLIANCE WITH EXISTING INTERNATIONAL STANDARDS, ONE OR MORE WALLS OF BELLOWS DEPENDING ON SIZE AND PRESSURE RATING, RISING NON-ROTATING STEM
- CERTIFICATES : MSS SP117, CE, BS 5352

■ CHECK VALVES (LIFT, STOP-CHECK)


- SIZE : DN15 -DN250 FLANGED PRES-SURE RATING : PN16, PN25
- TEMPERATURE : -10 °C +350 °C MATE-
- RIALS : CAST & NODULAR CAST IRON
- APPLICATIONS : STEAM, WATER, HOT WATER, S.H. WATER, COMPRESSED AIR, ETC.
- FEATURES : SPRING LOADED LIFT TYPE DESIGN, SOFT SEATED DISC ON RE-QUEST.
- CERTIFICATES : PED97/231EC

■ THERMODYNAMIC STEAM TRAP


- CONNECTION: FEMALE THREAD GAS FEMALE THREAD NPT SOCKET WELDING ENDS SW FLANGE
- R: 1/2" TO 1"
- MATERIAL: STAINLESS STEEL.
- PMA. 63 BAR
- SEAL: METAL

■ FLOAT AND THERMOSTATIC STEAM TRAP


- CONNECTION: FEMALE THREAD GAS FEMALE THREAD NPT R: 1/2" TO 1"
- MATERIAL: CAST IRON. PMS-14 BAR
- SEAL: METAL
- CONNECTION: FLANGE X FLANGE
- DN: 15 TO 25, 40 AND 50
- MATERIAL: I I CAST STEEL. PMS-14 BAR
- SEAL: METAL

■ DIRECT ACTION PRESSURE REDICING VALVE


- CONNECTION: FEMALE THREAD GAS FEMALE THREAD NPT FLANGE
- R: 1/2" TO 1"
- MATERIAL: NODULAR IRON. PN-25 CAST IRON. PN-40 STAINLESS STEEL. PN-40
- SEAL: METAL

■ REFLECTION & TRANSPARENCY GLASSES


- REFLECTION: A 5 PRISMS 0 TO IX B 5 PRISMS 0 TO IX H 5 PRISMS 0 TO IX
- TRANSPARENCY: A V TO IX B V TO IX H V TO IX
- MATERIAL: BOROSILICATE KLINGERIT CARDBOARD TYPE (JOINT) GRAPHITE (JOINT)

■ SIGHT GLASSES


- CONNECTION: FLANGE
- DN: 20 AND 25
- MATERIAL: CAST STEEL. PN-16 CAST STEEL. PN-40 STAINLESS STEEL. PN-40
- SEAL: METAL
- BLOWOFF VALVE: MOD. 999 3/8" WITH SIMPLE JOINT PLUG

■ VACCUM BREAKER


- CONNECTION: MALE THREAD X FREE ADMISION
- MR1 X 6ØB: 3/8"x6ØB TO 1"x6ØB
- MATERIAL: BRASS. PN-16 STAINLESS STEEL. PN-16
- SEAL: SILICONES RUBBER FLUORELASTOMER (VITON)



SAFETY VALVES

- **CONNETION:** FLANGE X FLANGE
- **NPS1 X NPS2:** 1"X 2" TO 8"X10"
- **MATERIAL:** CARBON STEEL. 150 LBS AND 300 LBS
STAINLESS STEEL. 150 LBS AND 300 LBS
- **SEAL:** METAL



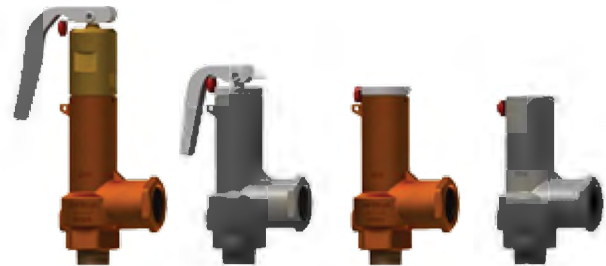
DEPENDING ON VERSION



THE VALVE WORKS AS AN AUTOMATIC PRESSURE RELEASING REGULATOR ACTIVATED BY THE STATIC PRESSURE EXISTING AT THE ENTRANCE TO THE VALVE AND IS CHARACTERIZED BY ITS ABILITY TO OPEN INSTANTLY AND TOTALLY. DESIGN IN ACCORDANCE WITH "ASME CODE SECTION VIII". MATERIALS ACCORDING ASME CODE SECTION II AND ASTM. CONNECTIONS ACCORDING ASME B1.20.1 STANDARD.

STEAM EQUIPMENT

- **CONNETION:** MALE THREAD NPT X FEMALE THREAD NPT
- **MNPT1 X FNPT2:** 3/8"X1/2" TO 1"X1"
- **MATERIAL:** BRONZE. PMS-522,14 PSI
STAINLESS STEEL. 300 LBS
- **SEAL:**
PTFE (TEFLON)
SILICONE'S RUBBER
FLUORELASTOMER (VITON)



DEPENDING ON VERSION

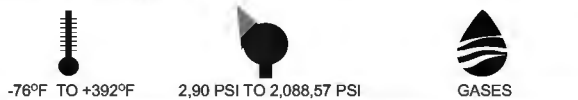


THE VALVE WORKS AS AN AUTOMATIC PRESSURE RELEASING REGULATOR ACTIVATED BY THE STATIC PRESSURE EXISTING AT THE ENTRANCE TO THE VALVE AND IS CHARACTERIZED BY ITS ABILITY TO OPEN INSTANTLY AND TOTALLY. DESIGN IN ACCORDANCE WITH "ASME CODE SECTION VIII". MATERIALS ACCORDING ASME CODE SECTION II AND ASTM. CONNECTIONS ACCORDING ASME B1.20.1 STANDARD.

- **CONNETION:** MALE THREAD NPT X FEMALE THREAD NPT
- **MNPT1 X FNPT2:** 3/8"X1/2" AND 1/2"X1/2"
- **MATERIAL:** STAINLESS STEEL. 900 LBS
- **SEAL:**
PTFE (TEFLON)
SILICONE'S RUBBER
FLUORELASTOMER (VITON)



DEPENDING ON VERSION



THE VALVE WORKS AS AN AUTOMATIC PRESSURE RELEASING REGULATOR ACTIVATED BY THE STATIC PRESSURE EXISTING AT THE ENTRANCE TO THE VALVE AND IS CHARACTERIZED BY ITS ABILITY TO OPEN INSTANTLY AND TOTALLY. DESIGN IN ACCORDANCE WITH "ASME CODE SECTION VIII". MATERIALS ACCORDING ASME CODE SECTION II AND ASTM. CONNECTIONS ACCORDING ASME B1.20.1 STANDARD.



FITTINGS



■ SMALL FITTINGS

• TYPE:

ELBOW – TEE – CROSS – COUPLING BUSHING - PLUG - CAP – NIPPLES – UNION
SOCKOLET – THREADOLET - WELDOLET

• CONSTRUCTION:

B 16.11 - B 31.1 – B 31.3 – BS 3799 - MSS SP-83 – MSS SP-95 - NACE MR 01.75

• RATING:

3000 – 6000 – 9000 – STD – XS – 160 - XXS

• MATERIALS:

A 105 – A 106 – LF2 – LF3 F 1 – F 5 – F 9 – F 11 – F 22

F 304 – F 316 – F 321 DUPLEX – SUPER DUPLEX – MONEL – INCONEL - INCOLOY



■ BIG FITTINGS

• TYPE:

ELBOW (S.R. AND L.R.) –180 DEG, 90 DEG, 45 DEG, 3D, 5D, 7D HOT AND COLD BENDING
TEE – REDUCER – CROSS – CAP

• CONSTRUCTION:

B 16.25 B 16.9 – B 31.1 – B 31.3 – B 31.4 – B 31.8 NACE MR-01-75 - MSS-SP43 - MSS-SP75

• RATING:

STD - XS – XXS SCHEDULE 10 TO 160 - SPECIAL THICKNESS ON REQUEST

• MATERIALS:

A 234 WPB – A 420 WPL3 – A 420 WPL6 MSS SP-75 WPHY 42-46-52-56-60-65-70-80 A 234

WP1-5-9-11-12-22-91-92 – A 403 WP304-316-317-321-347 DUPLEX - SUPERDUPLEX

FLANGES



■ FLANGES

- **TYPE:**

WN - THREADED - SW -BLIND SLIP ON- LAP JOINT-LONG WN STUB END - ORIFICE FLANGE
SPECTACLE FLANGE RING SPACER - SPADE ANCHOR FLANGE

- **CONSTRUCTION:**

ANSI - ASME - API - UNI MSS SP-44 - BS 3293

- **SIZE :** 1/2" TO 60"

- **RATING:**

ANSI 150 TO 2500 API 3000 TO 10000 UNI PN 6 TO PN 250 MSS SP-44150 TO 900 BS 3293 150 TO 600

- **MATERIALS:**

A 105- A 106 - LF2 - LF3 F 1-F6-F9-F 11 -F 22 F 52 -F 60 F 304 -F316 -F 321 DUPLEX - SUPER
DUPLEX MONEL - INCONEL - INCOLOY



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