

# **PT. MANDIRI WAHANATAMA**

Mechanical & Instrumentation Supply

## **COMPANY PROFILE**



**FERTILIZER★**

**PETROCHEMICAL★**

**POWER INDUSTRY★**

**OIL & GAS INDUSTRY★**

### **OFFICE:**

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Kebomas, Kabupaten Gresik, Surabaya - 61121

Phone : +62 31 3992 1839

Email : [sales@mandiriwahanatama.com](mailto:sales@mandiriwahanatama.com)

## ABOUT US

Since year 2010, we delivered the goods quality products and competitive price to clients. With the product knowledge and direct supporting from principals and our engineering team we will ensure you will get your products need according your requirement and specification.

We could provide you with the product range as follow:

Gate, Globe, Check, Ball & Butterfly Valves

Subsea, Cryogenic, High Pressure, Custom Made Valve

Pipe, Fitting, Flanges

Hot Induction Bending

Strainers

Raw Materials, like bars, plate, sheet, etc.

Flexible hoses & Expansion Joint

Pressure Safety & Reducing Valves

Rupture Disc

Actuators, Electric, Pneumatic & Hydraulic

Instrumentation

Tank Protection & Tank Gauging

Bolt & Nuts

Welding Habitat System

with material as follow:

Carbon Steel

Alloy Steel for High Temperature

Low Temperature Steel

Stainless Steel

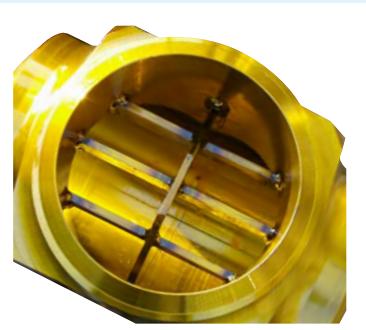
Plastic (PVC, PP & PVDF)

Exotic Metals like Duplex, Incolloy, Inconnel, Hastelloy, Titanium, Zirconium

# T.F.TECH

Manufacturer of Forged Fittings & Piping Products

We are committed to world class products and customer satisfaction for forged steel fittings and piping products.



**Passion Connected  
for Customer Satisfaction**



T.F.TECH.Co.,Ltd.

# ESLON VALVE

## ■ Manual Operation Valve

- DIAPHRAGM VALVE
- BALL VALVE
- BUTTERFLY VALVE
- GATE VALVE

## ■ Other

- GLOBE VALVE
- STRAINER
- CHECK VALVE SWING TYPE
- CHECK VALVE BALL TYPE
- CHECK VALVE LIFT TYPE
- RELIEF VALVE
- PRESSURE REGULATION VALVE



## ■ Automatic Operation Valve

- PNEUMATIC VALVES  
(DIAPHRAGM, BALL & BUTTERFLY VALVES)
- ELECTRIC VALVES  
(DIAPHRAGM, BALL, 3 WAY & BUTTERFLY VALVES)

## ■ Pipe, Fittings & Accessories

- U-PVC, H-T PVC, PP & PVDF PIPES
- U-PVC, H-T PVC, PP & PVDF FITTINGS
- FRP REINFORCE U-PVC PIPE & FITTINGS
- CLEAN PIPES
- DUCT PIPES
- PVC - LINING PIPES & FITTINGS
- GASKET / PACKING
- SOLVENT CEMENT
- WELDING ROD





KEY-VALVE

www.key-valves.com

# KEY VALVES CO., LTD

## UNLOCKING YOUR POTENTIAL

Quality First Service Foremost  
**API & BS CAST & FORGED  
STEEL VALVES**

### Floating Ball Valve Series



### Trunnion Ball Valve Series



### Gate Valve Series



### Globe Valve Series



### Check Valve Series



### Forged Steel Valve Series



### Special Valve



### Strainer



WORLD CLASS OF **BALL VALVES**

FOCUSED ON BEING THE MOST RELIABLE, FLEXIBLE AND  
QUALITY-MINDED BALL VALVE MANUFACTURER IN THE WORLD

Our ball valves are implemented around the world for multiple uses, including  
**OILFIELD, INDUSTRIAL AND CHEMICAL APPLICATIONS**



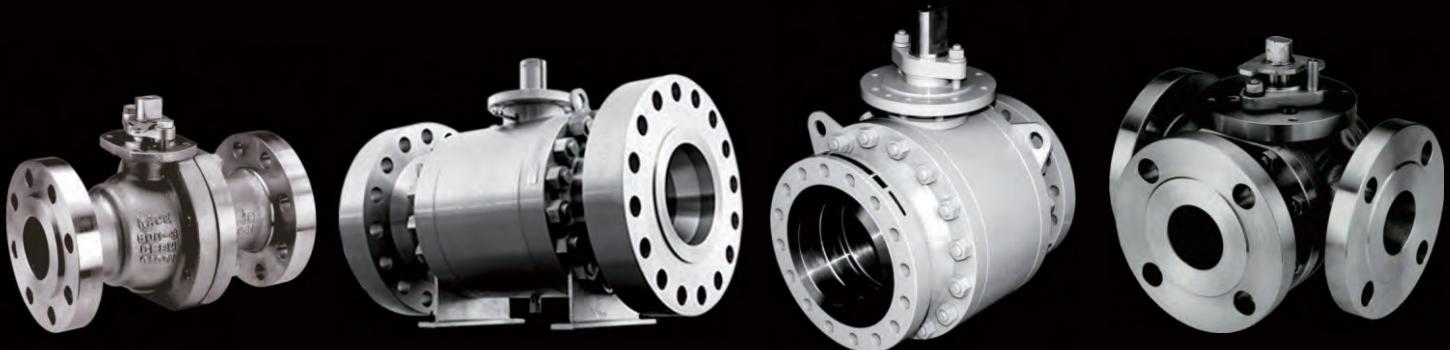
FROM THE SMALLEST APPLICATION  
TO ENTIRE INSTALLATIONS,  
**KACE** BALL VALVES CAN HANDLE ANY JOB!

#### **PRODUCT TYPE**

**Cryogenic - Floating - Catalyst Injection & Metering, Three-Way Flanged -  
Three-Way Threaded - Speciality/ Custom Ball Valves - High Purity -  
High Pressure Threaded - Metal Seated - Trunnion Mounted - Twin - 3-Piece**

#### **CERTIFICATION**

**API 6D, API 607, API Spec 6F, ISO 9001:2008, ISO 9001:2015, SIL Type**





## New Standard in Process Valves

Custom Made With 30 years of experience designing and producing special valves development to use our knowledge and exibility to build together

### Piston Valves

- Dual Seal Arrangement
- Metal Seated
- Seat-less Design
- Heating Jacket



### Disc Bottom Valves

- Open into the Tank or the Valves



### Multi-Ways Valves

- Hot Polymer Valving Helps Improving Piping Layout



### Sampling Valves

- Flushing, venting, draining or cleaning nozzles with or without valves will match all process requirement .
- Volume sampling is the safest to avoid opening of process to atmosphere



### Ball Valves

- Only sophisticated and heavy-duty metal seated and trunnion mounted ball valves



### Gate Valves

- Fabricated design provides design exibility and allows small quantities we can supply very dicult or out of standart application.



### Globe Valves

- Fabricated design provides supply every dicult or out of standart application



### Wash Down Equipment

- Mixing units
- Multiple Series Hot and Cold Water



- Hoses
- Nozzles



### Cabinets & Hose reels

### Hose Racks



- Spray and Clean with 30 years of experience developing products
- ROTATIVE Spray Rinse Valve
- NON-ROTATIVE Spray Rinse Valve



Since more than 30 years, Diflon Technology srl. produces piping, fittings, columns and tanks according to DIN and ANSI standards, lined in PTFE and PFA. Performs technical flexible hoses, antacids gaskets in Diflex, PTFE-lined expansion joints and also coatings in PFA on behalf of third parties. All products are built using the most modern manufacturing techniques and testing, and comply with the more stringent certifications.

Diflon, PTFE lining since 1969

## PRODUCTS



### DIFLINE

PTFE lined pipes and fittings in carbon steel or stainless steel, from DN 15 to DN 500.



### DIFLEX

DIFLEX universal gaskets, suitable for all employments: -160°C +260°C, 50 bar, pH 0-14



### BELLOWS

PTFE expansion joints with stainless steel house or reinforcement rings, suitable also for vacuum. Besides we manufacture metallic and rubber expansion joints



### TANKSLINE

PTFE lined columns and tanks in carbon steel: lining up to 5mm. PED certificates. Diameters up to nominal diameter 2000.



### FLEXILINE

PTFE lined, metallic and not, flexible hoses: smooth, convoluted, corrugated and antistatic. We also produce thin-wall, metallic and rubber flexible hoses as well.



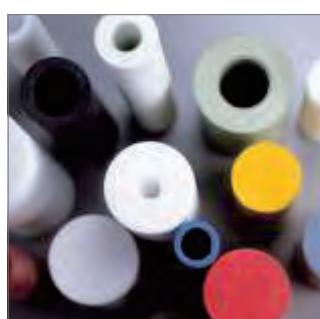
### PFA

Design and production of PFA-lined metallic bodies on behalf of third parties; we also specialize in the production of PFA moldings.



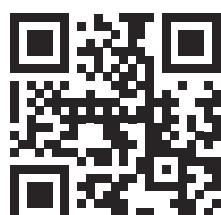
### VALVES

FEP-PFA-PTFE lined valves in ductile iron: ball, butterfly, plug, diaphragm ad also actuated, Y filters and sight glasses.



### PTFE

Virgin and filled PTFE and specials for high prestations Diflon D, available in stock.





## **Our Products:**

### **Ball Valves:**

- Floating Ball Valves
- Trunnion Mounted Ball Valves: Side Entry & Top Entry
- Double Block & Bleed
- Fully Welded

### **Gate Valves**

### **Globe Valves**

### **Check Valves**

### **Plug Valves**

### **Butterfly Valves**

### **Choke Valves**

### **Cryogenic Valves**

## **Our Standard:**

API 6D, API 594, API 599, API 600, API 602, API 603, API 609, API 6A, ASME B16.34, BS AND ISO

## **Manufacturing Range:**

Size from 1/2 inch to 36 inch

### **Materials:**

- Cast and Forged Carbon Steel: WCB, WCC, LCB, LCC, A105, LF2, LF3.
- Forged Stainless & Duplex Steel: F304, F316(L), F6, 17-4 PH, AISI 4140, F321, F347, F44, F51, F53, F55.
- Special Alloys: Inconel 625, Hastelloy, Monel 6Mo, Incolloy 825, Alloy 20, Sanycro 28, Titanium.

## **Special Test:**

- HIC & SSC for Sour Service
- Low temperature test for cryogenic service
- Gas test
- Fire safe test as per API 6A
- Fugitive emission test
- Visual and dimension examination
- Hydraulic test
- Dry film thickness
- UT of body welding end
- UT of circular body welds
- Radiographic examination (RT)
- Liquid Penetrant (LP) on machine-finished welding ends
- Inspection of coated and painted surfaces
- Magnetic Particle (MP)
- Any other NDE on request

**EUROGUARCO SpA**  
**Italy**



# MOTHERWELL

## TANK PROTECTION

TANK PROTECTION EQUIPMENT FOR BULK LIQUID STORAGE FACILITIES

### Tank Breather Valve or Conservation Valve



- ✓ Pressure & Vacuum Relief Valve
- ✓ Pilot - Operated Relief Valve
- ✓ Spring Loaded Breather Valve

### Emergency Manways

- ✓ Pressure Relief Manways
- ✓ Pressure & Vacuum Emergency Manways
- ✓ Access Manways / Gauge Hatch



### Flame Arresters



- ✓ Deflagration / Detonation Flame Arrester
- ✓ End of Line Flame Arrester
- ✓ Vent Combination Flame Arrester

### Tank Blanketing Valve

- ✓ Protection to Storage Tank against Contamination and Rupture or Damage to the Vessel



### Level Gauges



- ✓ Tank Liquid Level Indicator
- ✓ Float Operated Level Gauge
- ✓ High Pressure Float Level

# BARTON FIRTOP

# World Leading Filtration®

ENGINEERING  
COMPANY  
LTD.



Fabricated Basket Strainer  
with Optional Davit



Screwed Y-Type  
Strainer



Flanged Y-Type  
Strainer



Bi Simplex Strainer



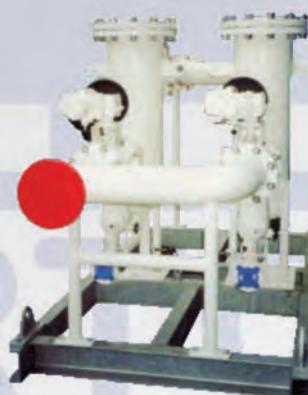
Quick Release Basket  
(Mono-in-line Strainer)



Duplex "Firplex"  
Ball Strainer



Self Cleaning  
Filter



Duplex Skid  
Filter Package



Quick Release Basket  
(Mono-in-line Strainer)



Fabricated Flange  
"Bath Tub Strainer"

Material available in CS/Low Temp CS, SS, Duplex / Super Duplex SS,  
6 Mo , Inconel 625 & 825. Hastelloy & Titanium



PROCESS PROTECTION  
EQUIPMENT



# ZOOK®

## ONE source for ALL your Rupture Disk needs...

- Reverse Acting Disk
- Graphite Disk
- Forward Acting Disk
- Transportation Disks
- Ultra Low Pressure Rupture Disk
- Explosion Vent / Panel
- Sanitary Disk
- Burst Sensor / Indicator
- Extruder Rupture Disk
- Rupture Disk Holder
- Accessories





# Nacional

## SAFETY VALVES



Model 64LC



Model 64GF



Model 64GC



Model 64LF

### Safety valve Model 64

Safety valve 90° angular type of rapid opening (pop action), full nozzle, and spring loaded, adjusting ring, conventional or balanced.

Sizes :  
from 1" x 2" up to 12" x 16"

Flanges rating:  
Inlet 150 ÷ 2500#  
Outlet 150 ÷ 300#

Also supplied with DIN flanges.

### Safety valve Model 3-51

Safety valve 90° angular type of rapid opening (pop action), full nozzle, and spring loaded, adjusting ring, conventional or balanced.

Sizes :  
from 1/2" x 3/4" up to 1" x 1"

Flanges rating:  
Inlet 150 ÷ 1500#  
Outlet 150 ÷ 300#, ASME 16,5  
Supplied with DIN flanges under request



Model 3-5111 Flange



Model 3-5111 Threaded

### Safety valve Model 3-50

Safety valve 90° angular type of rapid opening (pop action), full nozzle, spring loaded, adjusting ring.

Sizes :  
from 1/2" x 3/4" up to 1" x 1"

Thread connections:  
NPTF-ANSI B1.20.3; BSP-BS 21



Model 3-50



Model 3-5500

### Safety valve Model 3-55

Safety valve 90° angular type of rapid opening, semi nozzle, spring loaded.

Sizes :  
DN20x32 up to DN150xDN250

Flanges rating:  
Inlet PN-16 ÷ 40  
Outlet PN-16

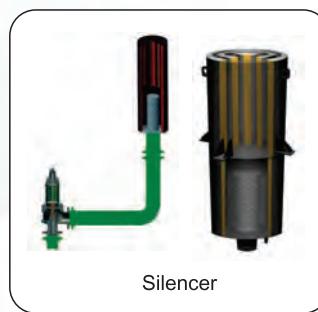
Also supplied with ANSI B-16,5 flanges

### Valve Silencer

Silencers are used to reduce noise in safety valves (PSV), Relief Valves (PRV), starter valves, blow valves, blow downs, ejectors, and discharge tanks.

Sizes :  
Inlet size NPS 2 – 40

End Connection :  
ASME B-16,5 flanges  
ASME B-16,25 butt-welded



Silencer





*- Your right choice for perfect filtration -*

## PRODUCT RANGE

### Simplex Strainer

Material:

Carbon Steel & Stainless Steel

Standard: ANSI, JIS & DIN

Pressure Rating: 10 Bar

Size: 2 inch - 48 inch



### Duplex Strainer

Material:

Carbon Steel & Stainless Steel

Standard: ANSI, JIS & DIN

Pressure Rating: 10 Bar

Size: 1 inch - 4 inch



### Y- Strainer

Material:

Carbon Steel & Stainless Steel

Standard: ANSI, JIS & DIN

Pressure Rating: 10, 16, 25 Bar

Size: 2 inch - 30 inch



### Temporary Cone Strainer

Material:

Stainless Steel

Standard: ANSI, JIS & DIN





# HITELFI

High Tech Level Flow Instrument

## LEVEL GAUGE :

- ▶ Tubular Type
- ▶ Reflex Type
- ▶ Tubular Type
- ▶ Transparent Type
- ▶ Magnetic Float Type
- ▶ Zig - Zag Type
- ▶ Non - Frost Type
- ▶ Jacket Type
- ▶ Transparent & Two Color Type
- ▶ Two Color Multiport Type
- ▶ Transparent & Two Color Zig - Zag Type
- ▶ Illuminator Type
- ▶ Level Transmeter
- ▶ Level Switch



## SIGHT GLASS :

- ▶ See Through Type
- ▶ Flapper Type
- ▶ Ball Type
- ▶ Lantern Type
- ▶ High Pressure Type
- ▶ Wiper Type

## FLOW METER :

- ▶ Orifice Flange Ass'y
- ▶ Orifice Ring Ass'y
- ▶ Integral Orifice Meter Run Ass'y
- ▶ Orifice Plate
- ▶ Model for Venturi Tube Guide
- ▶ Venturi Tube
- ▶ Model for Flow Nozzle Guide
- ▶ Flow Nozzle
- ▶ Hitelfi Average Pitot Tube
- ▶ Con-Venturi
- ▶ Wedge Flow Meter
- ▶ Orifice Flow Indicator
- ▶ Differential Pressure & Variable - Area Flow Meter
- ▶ Metal Tube Rotameter
- ▶ Level Transmitter & Switch
- ▶ Seal Pitot





## WELDING HABITAT SYSTEM (WHS)

WHS is used to manage and control risk associated with any performing Hot-Work operation in potentially hazardous areas.

The main objective of the WHS is to isolate ignition sources that are generated from Hot-Work operations taking place inside the Habitat Enclosure from any potentially flammable gases that may exist outside the habitat - in order to protect personnel and assets both inside and outside the enclosure.

### Design and Features:

- Standard interchangeable 1 meter x 1 meter panel
  - Heavy duty silicone coated Fiberglass fabrics
  - Window that are incorporated into some of the standard panels
- Air supply and exhaust blowers to initiate pressurizing & to maintain positive pressure inside Habitat Enclosure

### Our Clients

Petronas Carigali, Shell, Talisman Energy, ExxonMobil, Petra Energy, Petrofac, Total, BP etc.



**E.H. WACHS®**

A Division of **ITW**

**Superior Equipment. Complete Support.™**



# PIPE CUTTING & BEVELING MACHINES

*The most important consideration in pipeline maintenance is safety... every E.H. Wachs machine utilizes a cold cutting process designed to eliminate the hazard associated with thermal cutting.*

## PRODUCT RANGE:

- DynaPrep Split Frame: SDSF or Small Diameter Split Frames, MDSF or Medium Diameter Split Frames; LDSF or Large Diameter Split Frame
- SpeedPrep Pipe Bevelers
- Handheld Valve Operators: P-2 Valve Operator & RS-2 Valve Operator

## *Alco Instrumental valves Ready to GO!!!*



- Ball Valve
- Needle Valve
- Manifolds & Gauge Valve
- Check Valve & Plug Valve

## *Alco Double Block and Bleed (DBB) & Piping interface solutions*

- Flanged & Screwed DBB
- Compact Modular DBB & Monoflange DBB
- Compact Modular SBB & Monoflange SBB
- Flange Injection or Sampling DBB
- Twin Block II / III DBB



## *ALCO Twin Block*

Bore Size range 2" up to 12"

# WINTERS INSTRUMENT

MANUFACTURER OF INDUSTRIAL INSTRUMENTATION



*We're There.*

## PRODUCTS RANGE :

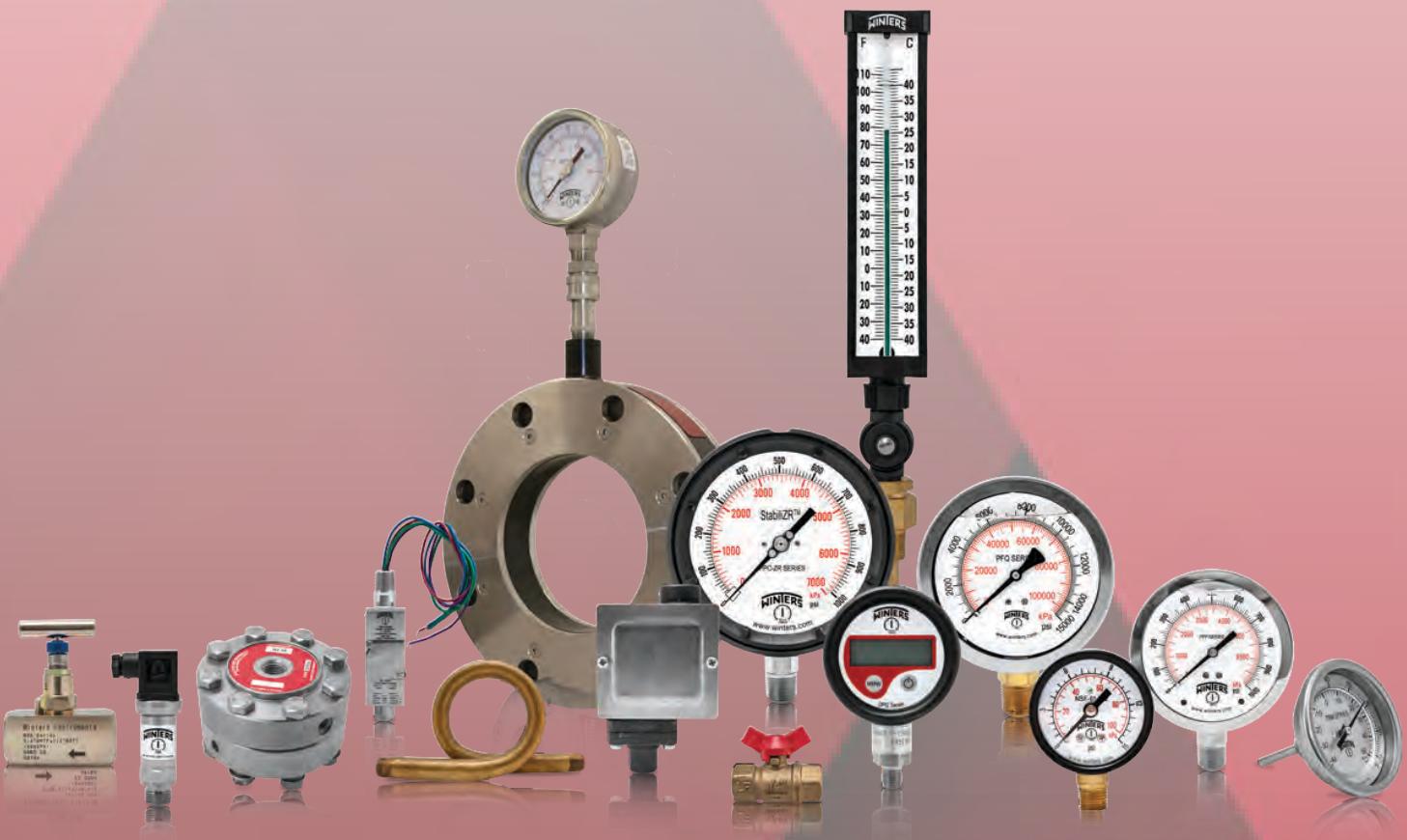
process gauges - Stabilizr® gauges - industrial gauges - economy gauges - lead free gauges - differential gauges - compressed gas gauges - sanitary gauges - special application gauges - test kits - pressure transmitters - pressure switches - diaphragm seals - valves - thermometers - RTDS and thermocouples - thermowells

## SERVICES :

calibration - dial changing - fluid filling / drying - gauge audit program (G.A.P) - oxygen cleaning - seal assembly - repairs

## APPLICATION :

ammonia - boiler & hydronic heating system - chiller - compressed gases - compressor - drinking water - filters - hazardous locations - hydraulic power unit - low pressure liquids or gases - lubrication system - paint sprayer - positioners and regulators - pressure washer - pulsation - pump - refrigeration system - etc.



# VALVE MATERIAL SPECIFICATIONS

| KEY PHYSICAL PROPERTIES          | CAST         |         | FORGED     |        |
|----------------------------------|--------------|---------|------------|--------|
|                                  | ASTM         | SUFFIX  | ASTM       | SUFFIX |
| <b>CARBON STEEL</b>              |              |         |            |        |
| 0.25 C Max                       | A216         | WCA     | A105       | A105   |
|                                  |              | WCB     | A106       | A106   |
|                                  |              | WCC     |            |        |
| <b>LOW TEMPERATURE STEEL</b>     |              |         |            |        |
| 0.25 C Max                       | A352-LCA     | LCA     |            |        |
|                                  | A352-LCB     | LCB     | A350LF2    | LF2    |
|                                  | A352-LCC     | LCC     |            |        |
| 0.5 Mo                           | A352-LC1     | LC1     |            |        |
| 2 Ni                             | A352-LC2     | LC2     |            |        |
| 3 Ni                             | A352-LC2-1   | LC2-1   |            |        |
| 3.5 Ni                           | A352-LC3     | LC3     | A350LF3    | LF3    |
| 4.5 Ni                           | A352-LC4     | LC4     |            |        |
| 9 Ni                             | A352-LC9     | LC9     |            |        |
| <b>ALLOY STEEL</b>               |              |         |            |        |
| 0.5 Mo                           | A217-WC1     | WC1     | A182-F1    | F1     |
| 0.5 Cr - 0.5 Mo                  | A217-WC4     | WC4     | A182-F2    | F2     |
| 0.6 Cr - Ni-0.2 Mo               | A487-4C      | 4C      |            |        |
| 0.75 Cr - 0.75 Ni - 1 Mo         | A182-WC5     | WC5     |            |        |
| 1 Cr - 0.5 Mo                    | A182-F12     | F12     |            |        |
| 1.25 Cr - 0.5 Mo                 | A217-WC6     | WC6     | A182-F11   | F11    |
| 1.25 Cr - 0.5 Mo                 | A217-WC11    | WC11    |            |        |
| 2.25 Cr - 1 Mo                   | A217-WC9     | WC9     | A182-F22   | F22    |
| 3 Cr - 1 Mo                      | A182-F21     | F21     |            |        |
| 5 Cr - 0.5 Mo                    | A217-C5      | C5      | A182-F5    | F5     |
| 9 Cr - 1 Mo                      | A217-C12     | C12     | A182-F9    | F9     |
| 9 Cr - 1 Mo-0.2 V                | A217-C12A    | C12A    |            |        |
| <b>STAINLESS STEEL</b>           |              |         |            |        |
| 13 Cr                            | A217-CA15    | CA15    | A182-F6A   | F6A    |
| 13 Cr - 4 Ni                     |              |         | A182-F6NM  | F6NM   |
| 17 Cr                            |              |         | A182-F430  | F430   |
| 18 Cr - 8 Ni                     |              |         | A182-F304H | F304H  |
| 18 Cr - 8 Ni with Molybdenum     |              |         | A182-F316H | F316H  |
| 18 Cr - 8 Ni with Titanium       |              |         | A182-F321  | F321   |
| 18 Cr - 8 Ni with Titanium       |              |         | A182-F321H | F321H  |
| 18 Cr - 8 Ni with Columbium      |              |         | A182-F347H | F347H  |
| 19 Cr - 9 Ni                     | A351-CF8     | CF8     | A182-F304  | F304   |
| 19 Cr - 10 Ni Low Carbon         | A351-CF3     | CF3     | A182-F304L | F304L  |
| 19 Cr - 10 Ni - 2 Mo             | A351-CF8M    | CF8M    | A182-F316  | F316   |
| 19 Cr - 10 Ni - 2 Mo Low Carbon  | A351-CF3M    | CF3M    | A182-F316L | F316L  |
| 19 Cr - 9 Ni - Cb                | A351-CF8C    | CF8C    | A182-F347  | F347   |
| 13 Cr - 4 Ni - 0.7 Mo            | A351-CA6NM   | CA6NM   |            |        |
| 16 Cr - 4 Ni                     |              |         | A564-630   | 630    |
| 22 Cr - 13 Ni - 5 Mo             |              |         | A182-FXM19 | FXM19  |
| <b>DUPLEX STEEL</b>              |              |         |            |        |
| 19-22 Cr 27.5-30.5 Ni 2-3 Mo     | A351-CN7M    | CN7M    | B473       |        |
| 25.5-26.5 Cr 4.7-6 Ni 1.7-2.2 Mo | A351-CD4MCu  | CD4M Cu | A182-F50   | F50    |
| 18-21 Cr 9-13 Ni 3-4 Mo          | A351-CG8M    | CG8M    |            |        |
| 19.5-20.5 Cr 17.5-19.5 Ni 6-7 Mo | A351-CK3MCuN | CK3MCuN | A182-F44   | F44    |
| 24.5-26.5 Cr 4.7 Ni 1.7-2.2 Mo   | A890-1A      | 1A      | A182-F50   | F50    |
| 21-23.5 Cr 4.5-6.5 Ni 2.5-3.5 Mo | A890-4A      | 4A      | A182-F51   | F51    |
| 24-26 Cr 6-8 Ni 4-5 Mo           | A890-5A      | 5A      | A182-F53   | F53    |
| 24-26 Cr 6.5-8.5 Ni 3-4 Mo       | A890-6A      | 6A      |            |        |
| 24-26 Cr 19-22 Ni                |              |         | A182-F310  | F310   |