# Forged & Machined parts

### MANUFACTURING CAPABILITIES

### (i) Close Die Forge

Round Jobs: 0.5Kgs to 52Kgs each piece

**Items**: Flanges, Gears, couplings etc.

Profile Jobs: 0.5Kgs to 28Kgs each piece

**Items**: Valve Body/Bonnet, Elbows, Tees, Hooks,

Connection Rod, Hubs, Yokes etc.

### (ii) Open Forge

: Upto 1000Kgs each piece

Items : Flanges-Slip on, Weld Neck, Blind, Rings,

Tube Sheet, Girth Flange etc.

Material : Stainless Steel, Alloy Steel & Carbon Steel

of different grades



#### **MANUFACTURING FACILITIES**

- 1. Close Die Forging hammers
- 2. Open Forging hammers
- 3. "Natural Gas Fired" forging furnaces equipped with DIGITAL TEMPERATURE INDICATOR.
- 4. "Natural Gas Fired" heat treatment furnaces equipped with Temperature Indicator, Controller and recorder.
- 5. Well equipped Die Making shop & Tool Room.
- 6. Fully equipped Machine Shop for flanges.
- 7. Fast track raw material cutting facility on Band Saws.
- 8. Other facilities like Shot Blasting, Grinding etc.

# **PRODUCT RANGE:**









# A) Pipe fittings

# 1. Flanges: ( Size: ¼" NB to 36" NB & 6mm to 900mm NB)

Standard type Flanges:	Standard Ratings	Standard Facings	Standard Dimensions	Standard Grades
Weld-neck	150LB	Raised Face	ANSI B16.5	ASTM A105/ SA266 /
Slip-on	300LB	Flat Face	API 605	ST37.2 / C22.8 / C22
Lap-Joint	600LB	Ring-type Joint	ANSI B6.47	A350 LF2
Screwed	900LB	Male/Female	BS4504	A182 F304 / F304L / F316 / F316L
Socket Weld	1500LB	Tongue/Groove	DIN	DIN 1.4306 / 4307 /4404 /
Blind	2500LB		JIS	4541 / 4571

Non-Standard type	Non-Standard Ratings	Alloy Material	High Yield Material (Offshore)		Stainless Steels
Long weld-neck	As per	A182-F5	A694-F50	A182-F304H,	A182-F317L
Orifice	customer Design.	A182-F9	A694-F52	A182-F310,	A182-F347
Tube Sheets		A182-F11		A182-F316H,	A182-F6NM
Spacer	A350LF3	A182-F22 and		A182-F321,	and equivalent
Spectacle	BS & DIN	equivalent		A182-F321H,	BS & DIN Specns.
Girth Flanges					

# 2. Seamless Forged Stub Ends to MSS (Long & Short)

Туре	Size Range	Material Specification
A & B	½" to 24"	A 182 F 304L, F 316L, F 321, F 347

# 3. Forged Valve Body / Bonnet (Un-machined only)

Size	Pressure Rating (lbs)	Material Specification
½" to 2"	400, 800, 1500 Class }	A 182 F 304 / 304L / 316 /316L
½" to 1½"	2500 Class }	A 182 F 11, F22

# 4. Forged Elbows / Tees to B16.11 (Un-machined only)

½" to 4"	2000, 3000 & 6000 Class	A 182 F 304 / 304L / 316 / 316L
½" to 2"	9000 Class	A 182 F11, F5, F22, A 105

# B) Forgings for Automotives

To this sector we supply material in forged, heat treated and shot blasted condition only in the weight range of 0.5kgs to 28kgs each.

**Items:** Gears, Gear Shaft, Pinions, crown wheel Propeller Shaft, Yokes, Hubs, Con rod, Steering Knuckle armsfor different type of Heavy and light Four Wheelers.

#### C) Forgings for Material Lifting & Handling

Eye & Shank Hooks ½ Tonnes, Shakles, Gears, Couplings, Crane Wheels etc.

#### D) Forgings for Marine, Shipping & Earth Movers

Anchers, Twist lock etc. for Sea Containers Rollers Rim & Chain Link etc.

#### E) Forgings as per customer's drawing & specifications

Rings, Blanks, Crane Wheels, Couplings or any open or close die forging as per drawing.

#### Raw Material Specification for (B, C, D, E)

EN 3A, EN 8, EN 9, EN 16, EN 18, EN 19, EN 24, En 36C, EN 353, 16Mn Cr5, 20Mn Cr5, SAE 8620, AISI 1010, 1015, 1020, 1025, 1030, 1035, 1040, 1045, 1145, 4140, 4130, 4145 etc.

Any other special alloy Steel material as per customer's specification

FOR MODIFICATION PURPOSES DESIGN/SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

**CISO** 9001:2008 Company

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