

PRODUCTS

Some of the products which can be forged on Open Die Forging Press.



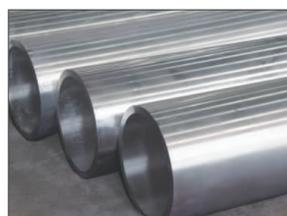
Forged Blinds & Tube Sheet



Forged Hemispherical Head



Forged Ball Valves



Forged Hollow Pipes



Forged Nozzle



Forged Shafts

FORGING CAPABILITIES

Forging Type	Dimensions	Size (mm)		Max. Weight (Kgs)
		Minimum	Maximum	
Shaft	OD	200	1600	25000
	Length	800	20000	
Stepped Shaft	OD	200	1600	25000
	Length	800	15000	
Disc / Tube Sheet	OD	500	3000	20000
	Thickness	100	1000	
Gear Blanks	OD	500	2500	20000
	ID	200	600	
	Thickness	100	1000	
Hollow Cylinders / Nozzles / Sleeves	OD	600	2500	20000
	ID	300	1700	
	Length	800	3500	
Blocks / Flats	Width	300	1800	25000
	Thickness	150	600	
	Length	1000	15000	

MATERIAL SERVED

CHW Forge has the experience and capability to provide forgings for the wide range of materials to meet the critical requirements of oil & gas, heavy engineering, fabrication and defence industry. CHW Forge is continuously working to upgrade its knowledge and processes. It is developing forgings of new grades of material keeping in mind the ever changing needs of its customers. We regularly manufacture the following alloys.

- Titanium Alloy
- Inconel
- Aluminium Alloy
- Stainless Steel
- Duplex Stainless Steel
- 15CDV6 Alloy Steel
- Maraging Steel
- Alloy Steel

RELATIONSHIP ACROSS INDUSTRIES

CHW Forge holds healthy relationships with an impressive list of clients across diverse industries

- Oil & Gas
- Nuclear Power
- Defense & Aerospace
- Power Generation
- Pressure Vessels & Heat Exchanger
- Cement & Mining
- Valve
- Heavy Industrial Equipment
- Bar Service Centers
- Bearing and Gear Blanks
- Wind Energy
- Shipping & Marine

CHW Forge Private Limited

(CIN: U27310UP1970PTC057609)

Registered Office UNIT 1

Near Hapur Road Flyover, Maliwara
Ghaziabad - 201001
Uttar Pradesh, India
Phone: +91 120 4388000
Fax: +91 120 4376970 - 71

UNIT 2

Achheja, P.O. Dujana, G.T. Road
Greater Noida (Phase II) - 203207
Uttar Pradesh, India
Phone: +91 120 4186600
Fax: +91 120 4186641

E-mail: chw@chwforge.com

www.chwforge.com



Open Die Forging



Forgings **and** Relationships
WHICH LAST LONGER

ABOUT CHW FORGE

Established in 1956, CHW Forge is one of India's leading manufacturer of Alloy steel, Stainless steel, Duplex stainless steel, Inconel, Maraging Steel, Aluminium alloy and Titanium alloy forgings.

Formerly known as Chaudhry Hammer Works, CHW Forge is preferred by companies across the globe for its quality and reliability of products and customer service. The company is trusted for forgings manufactured using the best raw material, advanced machinery and testing processes which are as per international standards. Over 6 Decades of its operation, the company has deployed a world class production infrastructure which includes state-of-the-art Ring Rolling facility.

Now CHW Forge has deployed another state-of-the-art Open Die Forging facility which includes:

- 3800 MT Automatic Hydraulic Open Die Forging Press (Wepuko Pahnke, Germany)
- 30 MT Rail Bound Forging Manipulator (Dango & Dienenthal, Germany)
- 14 MT Mobile Forging Manipulator (Dango & Dienenthal, Germany)
- 2 MT Mobile Manipulator (Dango & Dienenthal, Germany)
- 40 MT Car Bottom Gas Fired Reheating Furnace (Andritz Metals, Germany)
- 30 MT Chamber Gas Fired Reheating Furnace (Andritz Metals, Germany)
- 5 MT Car Bottom Electrically Heated Furnace (Andritz Technologies, India)
- 10 MT Chamber Electrically Heated Furnace (Wesman Engineering, India)

An Integrated Company wide ERP system maintains accurate control on materials, production and inspections while advanced communication systems ensure fast information exchange between the company and its customers.



Radial-Axial Ring Rolling Machine from SMS Meer GmbH, Germany

RECOGNITIONS & CERTIFICATIONS

- Rated as the best forge shop in open and open die forging by AIFI in 2006-2007
- CRISIL Rating: Long Term A (stable) and Short Term A1
- Our Testing Laboratory is accredited in accordance with the standard ISO/IEC 17025 by NABL
- Certified by world renowned certifying agencies for :
 - ISO 9001
 - ISO 14001
 - OHSAS 18001
 - ISO 27001
 - AS 9100
 - API 6A
 - AD 200-Merkblatt WO
 - PED 97/23/EC
 - Approved as well known Forge by IBR
 - Enlisted with Engineers India Limited

WORLD CLASS PRODUCTION INFRASTRUCTURE

3800 MT Automatic Hydraulic Open Die Forging Press

This open die forging press is a very stiff and rugged under the floor press, also known as pull down press having an extremely low center of gravity. The pull down concept also provides a clean forging area with excellent accessibility. The press has extraordinary dynamics and a speed of 21.5mm/s and has 110 strokes per minute. A rail bound Manipulator on one side and a mobile Manipulator on the other side of the press can be remotely controlled simultaneously by the press operator from the control desk.

This unique press can be used for various forging processes:

- High speed open die forging
- Forging of large rings and sleeves through saddling process
- Direct upsetting
- Sequential upsetting on a rotating table
- Straightening of shafts
- Punching and piercing of forged billets



3800 MT Automatic Hydraulic Open Die Forging Press from Wepuko Pahnke, Germany

Manipulators

To support the ODF press, we have the latest manipulators to facilitate the manufacture of forged products. These manipulators are supplied by Dango & Dienenthal, Germany. In the past manipulators were normally built with heavy structure to make them rigid. The high weight of the machine made the manipulator sluggish and slow. The new compact design ensures that the manipulator is strong and rigid and has fast movements without losing rigidity.

30 MT Rail Bound Forging Manipulator

Our open die forge shop is equipped with Rail bound forging manipulator of 30 MT carrying capacity and maximum tongs moment of 60 Ton-Mtr.



30 MT Rail Bound Forging Manipulator from Dango & Dienenthal, Germany

14 MT Mobile Forging Manipulator

The 14 MT Mobile forging manipulator has a maximum carrying capacity of 14 MT and maximum tongs moment of 24 Ton-Mtr.



14 Ton Tyre Bound Forging Manipulator from Dango & Dienenthal, Germany

2 MT Mobile Manipulator

In order to handle small forgings and move the hot stock in a very short span of time between the furnace and the press, this Diesel - hydraulic driven mobile forging manipulator comes very handy, especially for handling titanium, aluminum and exotic alloys. This is also from Dango & Dienenthal, Germany.

Salient Features

- High power travel & rotation drive
- Double hydraulic power system
- Backlash-free travel drive
- Low adapted suspension system
- Special tongs design with inverse cylinder
- Compact DDS design
- Automatic forge line centering

WORLD CLASS RE-HEATING FURNACES

CHW Forge continuously strive to install latest technology to reduce energy costs and carbon emissions. Our forge shop is equipped with modern gas fired and electric operated furnaces. The furnaces can be operated up to 1270 degree centigrade.

40 MT Car bottom gas fired reheating furnace with regenerative flat flame burners

This furnace is equipped in lightweight design for a flexible operation and with air-preheating for an economic operation. An essential advantage of this furnace, especially when using high-quality material, is that no overheating at the surfaces occurs and therefore an optimum homogenous heating can be guaranteed.



40 MT Car bottom gas fired reheating furnace from Andritz Metals, Germany

30 MT Chamber gas fired reheating furnace with regenerative flat flame burners

The furnace is fired by 4 regenerative burners which are arranged above the material on the roof of the furnace. Due to the number of burners and their arrangement, an optimum distribution of the burner performance over the entire furnace area is assured. Each burner is provided with a regenerator for pre-heating of the combustion air up to approx. 1100 degree centigrade. The burner is controlled in AM-REGTAKT mode which ensures the maximum heating before the burner starts.



30 MT Chamber gas fired reheating furnace from Andritz Metals, Germany

5 MT Car Bottom Electrically Heated Furnace

The furnace is provided with Silicon Carbide type heating elements located on all the 6 sides of the furnace including the floor and the door. This is a car bottom furnace which can be driven out with very high speed thereby saving the heat energy. This furnace is capable of meeting heat uniformity even at a temperature of 1250 degree centigrade. This furnace is suitable for heating of exotic materials, super alloys, titanium etc.



5 MT Car Bottom Electrically Heated Furnace from Andritz Technologies, India and 10 MT Chamber Electrically Heated Furnace from Wesman Engineering, India

10 MT Chamber Electrically Heated Furnace

This is an electrically heated fixed hearth type furnace. It is suitable for heating aluminium alloys. The temperature uniformity is maintained with the help of 2 centrifugal flow type re-circulation fan located at the roof of the furnace for efficient circulation of hot air inside the heating chamber.