

VEDANT
TECHNO FORGE



**WHERE QUALITY
TAKES SHAPE**

www.vedanttechnoforge.com

About Us

Vedant Techno Forge (India) Pvt. Ltd. is a leading manufacturer of high-quality forged and precision-engineered components for industrial and mechanical applications. Driven by innovation, quality, and a commitment to excellence, we deliver solutions that meet global standards.

Guided by our vision “ ***Dream Big & Dare to Succeed*** , ” we focus on producing high-performance forgings that ensure strength, durability, and reliability in demanding applications.

From raw material selection to final delivery, our stringent quality control systems and advanced manufacturing processes guarantee consistent and superior products. As an **ISO 9001:2015 certified** company, we follow internationally recognized quality standards to ensure excellence at every stage.

With a skilled workforce and a customer-centric approach, we provide complete end-to-end solutions, building long-term partnerships and delivering real value to our clients.



**9001:2015
Certified**



**Advanced
Manufacturing**



**End-to-end
Solutions**

Vision & Mission

Vision

To become a leading and highly respected name in the forging industry, recognized for excellence in quality, performance, and service.

We aim to set industry benchmarks through innovation, reliability, and continuous improvement, while expanding into advanced and high-precision manufacturing sectors.

Our vision is to build a strong team of dedicated professionals committed to the highest standards, delivering outstanding results—from small components to large-scale industrial solutions.

Mission

To set new industry standards in quality, safety, and technical excellence through a systematic approach and continuous innovation. We are committed to delivering reliable, high-performance solutions while maintaining competitive pricing and ensuring complete customer satisfaction.

We focus on every project with precision and care, meeting exact customer specifications and consistently delivering superior results.

We also strive to build a dynamic work environment that fosters professional growth, enhances skills, and promotes teamwork and integrity.

Our Products

At Vedant Techno Forge, we deliver high-performance forged components built for strength, precision, and durability. Our products are engineered to meet the toughest industrial demands with Unmatched consistency and reliability.



Automotive Products

We specialize in manufacturing precision-forged automotive components, including brake flanges, yoke series, bell levers, and suspension brackets. Our products are designed to ensure superior performance, safety, and reliability in suspension and axle systems.



**BELL
LEVER**



**YOKE
SERIES**



**SUSPENSION
BRACKETS**



Gear & Transmission Products



We manufacture high-strength forged components for gear and transmission applications, engineered to withstand extreme loads, high torque, and demanding operating conditions. Our products ensure superior structural integrity, durability, and long service life.



**POWER
TRANSMISSION**



**VALVE
BODY**



SHAFT



GEARS



**PINION
GEAR**



Agricultural Products

We offer robust forged components designed for agricultural machinery, built to perform under heavy loads, impact, and continuous wear. Our product range includes plough shares, cultivator tines, disc blades, tractor components, and hydraulic fittings.

Compared to conventional cast parts, our forged components provide higher strength, better fatigue resistance, and longer operational life—ensuring reliable performance in the toughest farming conditions.



**PARTS &
GEARS**



Hydraulic Products

Hydraulic components play a critical role in delivering precise and controlled force required for metal forming operations. Our range includes high-performance hydraulic cylinders, fittings, and valves, engineered to ensure consistent pressure, operational reliability, and long service life in demanding forging applications.



**HYDRAULIC
PISTON**



ELBOW & T



Forged Flanges



Forged flanges are essential components used to connect pipes, valves, pumps, and other equipment in a piping system. They provide strong, leak-proof joints while allowing easy assembly and maintenance. Manufactured for strength and precision, our flanges ensure secure connections and enhanced structural integrity across various industrial applications.



**PIPE FLANGE
JOINT**



**SLIP-ON
FLANGE**



Oil Refineries & Mining Industry Products

We understand the demanding operating conditions of the oil refining and mining industries. We are committed to delivering high-quality forged components that meet our customers' exact specifications and performance requirements.



We supply a wide range of forgings, flanges, and fittings for both domestic and international markets, including:



Discs



Blocks



**Buttweld and
Forged Steel
Fittings**



**Custom
Flanges**



**Standard
(Commodity)
Flanges**

Forging Process

Flow Chart

► Cutting

- **Purpose:** Get raw material to forging size
- **Process:** Bar stock or billets are cut using band saw, circular saw (CNC Cutting)
- **Key points:** Weight control is critical. Oversized = material waste. Undersized = underfill defect. Cut length tolerance usually $\pm 1-2\text{mm}$
Common equipment: Automatic bandsaw with length stop

► Die Manufacturing

- **Purpose:** Make the tools that shape the part
- **Process:** 1. Die design in CAD based on part drawing + shrinkage allowance
2. CNC machining of die blocks - H13, D2 steel common
3. Heat treatment of dies to 48-52 HRC
4. Polishing, engraving part numbers, die matching
- **Key points:** Die life drives cost. Good die = 5,000-20,000 shots depending on part complexity

► Forging

- **Purpose:** Form metal to near-net shape using compressive force
- **Process:** 1. Billet heated to 1100-1250°C for steel in induction furnace
2. Hot billet placed in die cavity
3. Press or hammer applies force - 1000T to 2500T presses common
4. Flash trimmed after forging
- **Key points:** Temperature control prevents cracks. Flash line placement affects grain flow

► Heat Treatment

- **Purpose:** Achieve required mechanical properties
- **Process:** Common cycles are:
 1. Normalizing: 850–900°C air cool – refines grain
 2. Quenching & Tempering: 830–860°C oil/water quench, then 500–650°C temper – for hardness + toughness
 3. Annealing: For softness before machining
- **Key points:** Batch tracking and time-temp records are mandatory for automotive/agri parts

► Shot Blasting

- **Purpose:** Remove scale, rust, and surface contaminants
- **Process:** Steel shots fired at parts in tumble or hanger-type blasting machine
- **Key points:** Improves surface finish for inspection. Sa2.5 finish typical. Also stress-relieves surface

► Machining

- **Purpose:** Bring part to final dimensions and tolerances
- **Process:** CNC turning, VMC, drilling, tapping as per drawing
- **Key points:** Fixture design critical for repeatability. Tolerances like $\pm 0.05\text{mm}$ common on bores/holes. Surface finish Ra 1.6–3.2 typical

► Packaging

- **Purpose:** Prevent rust, damage in transit
 1. Rust preventive oil/VCI paper applied
 2. Packed in corrugated boxes, crates, or pallets
 3. Labeling with part no, heat code, qty

Forging Process

Flow Chart





VEDANT

TECHNO FORGE

Vedant Techno Forge

is a trusted manufacturer of premium steel forgings, specializing in high-performance industrial components. With advanced manufacturing techniques and precision engineering, we deliver the strength, durability, and reliability you can depend on.



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