



**PROUDLY MADE IN INDIA,
FOR THE WORLD**

A | P | A | X
PRODUCTS (INDIA)
AN ISO 9001:2015 CO.

*Precision Transmission Components of
Paramount Functionality
for
Tractors, Automobiles,
Heavy Earth Movers, Agricultural Implements
and
Other Machinery & Industrial Applications*

Gears



Straight Bevel Gears



Shafts



Spiral Bevel Gears



Gear Sleeves



Sprockets



Precision Machine Components



Rear Axle



Apax Products (INDIA)

Vision

"Highly customer oriented, humane and system run global organisation with a concern for society"

An ISO:9001:2008 certified Company established in Delhi excels in engineering, design, developing, manufacturing and marketing of Transmission Gears, Shafts, Straight Bevel Gears, Spiral Bevel Gears, Axle Shafts, Sprockets, Flanges, Couplings and variety of other machined parts for various applications like Tractors, Automobiles, Heavy Earth Movers, Agricultural Implements and other Industrial & Machinery purpose.

Mission

"We are a dedicated proactive, loyal and accountable group of people with a quest for excellence through latest technology, people empowerment and brand equity to produce world class products by adopting best business practices and ethics.

It has presence in OEMs, replacement markets as well as overseas destinations like Europe, South East Asia, Middle East, South America etc.

Our technical expertise and excellence enables us to support our customer requirements and deliver the product with impeccable quality.

Compliance with rigorous quality standards right from raw material procurement to manufacturing stages and prior to being sent in market, ensures that products reaching our customers are of high quality and reliability.



The plant is equipped with state of the art machinery and quality testing instruments. We have the capacity of:

CNC TURNING



VMC



- ♦ CNC Turning
- ♦ VMC
- ♦ HMC
- ♦ Broaching
- ♦ Straight Bevel Gear Generators
- ♦ Spiral Bevel Gear Generators
- ♦ Gear Hobbing
- ♦ Gear Shaping
- ♦ Long Shaft or Axle Horizontal Hobbing
- ♦ Gear Shaving
- ♦ Gear Tooth Grinding
- ♦ Gear Swaging
- ♦ Gear Tooth Rounding and Chamfering
- ♦ Gas Carburizing Heat Treatment
- ♦ Induction Hardening
- ♦ Hardness Tester
- ♦ Cylindrical Grinding
- ♦ Bore Grinding
- ♦ Deburring
- ♦ Lapping
- ♦ PCD Bench Centre
- ♦ Gear Rolling Tester
- ♦ Lead & Profile Tester
- ♦ Various Other Measuring Instruments & Gauges



Precision Machined Components

We manufacture FLANGES, COUPLINGS and a wide range of other Precision machined components as a result of our advanced engineering and innovative strategies. Such components made over CNCs, VMCs HMCs etc. find their usage across various Vehicles, Agricultural Sector & Industries. Our highly skilled and motivated workforce is committed to produce customised products for clients' requirement offering best solution at competitive prices.

We also have the capability to supply NORMALISED STEEL FORGINGS AND MACHINED BLANKS as per drawings or samples.

FORGINGS



MACHINED BLANKS



❖Gears ❖Shafts ❖Sprockets ❖Gear Sleeves



- ♦ They are made out of alloy steel procured from best of resources. The steel procured is then converted into forgings as per design of the component.
- ♦ Forge shops carry out test on raw materials to assure desired physical and chemical properties.
- ♦ Forgings are then subjected to turning process on CNC machines followed by Broaching to produce Blanks.
- ♦ Blanks' Teeth cutting both Spur and Helical is done on Hobbing and Gear Shaper under strict control for proper size, fitment & matching.
- ♦ Gear Swaging is done for Gear Sleeves and Gear Shifter Sleeves.
- ♦ Sprockets of required pitch are also made on these machines.
- ♦ Teeth Shaving and Grinding is done to improve finishing of tooth resulting in reduced friction and noise level thus improving life of component.
- ♦ Heat Treatment for required hardness and case depth is done through Case Hardening Gas Carburizing Procedure or Induction Hardening.

HOBGING



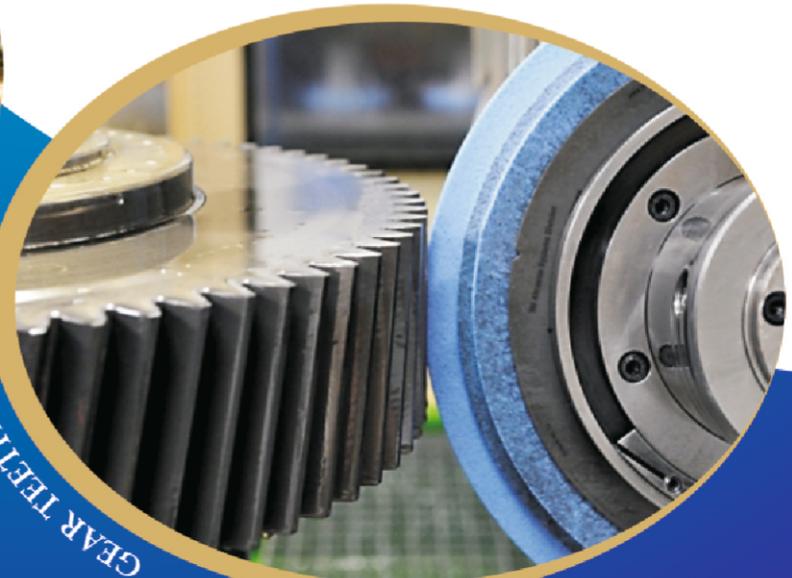
GEAR SHAPER



GEAR SHAVING



GEAR TEETH GRINDING



BORE GRINDING



CYLINDRICAL GRINDING



- ◆ *Bore & Cylindrical Grinders are also there to give perfect touch to components.*
- ◆ *Proper inspection at final stage and duly packaging is done to ensure right product reaches customer's hand in right condition.*
- ◆ *To check the precision of components the company is equipped with various gauges and instruments like*
- ◆ *Flange Micrometers to check MOT/DOP size and variation*
- ◆ *PCD Bench Centre to check PCD run out.*
- ◆ *Gear Rolling Tester to check TTE and TTCE.*
- ◆ *Lead and Profile Tester to check lead and profile error of Gears.*
- ◆ *Various other instruments to check required dimensions.*

GEAR ROLLING TESTER



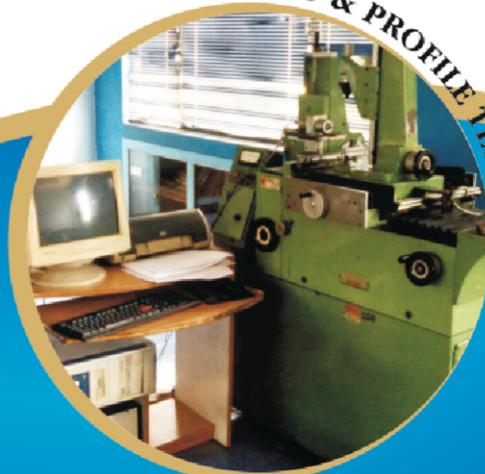
GAS CARBORISING FURNACE



PCD BENCH CENTRE



LEAD & PROFILE TESTER



Straight Bevel Gears



We offer various types of Spiral Bevel Sets for wide applications range from Tractors, Trucks, HCVs, LCVs to Agricultural and Industrial machines.

- ♦ *They are developed and manufactured on latest WMW-ZFTK Series and Gleason Bevel Gear Generators based on Coniflex Cycle ensuring that teeth be of required taper depth and thickness.*
- ♦ *Backlash, PCD Run out, Profile Matching and Rolling are properly checked to ensure smooth running of Bevel Gears and Bevel Kits/Spider Kits.*
- ♦ *We have developed Bevel Gears for wide range of Agricultural & Industrial machinery and Bevel Kits for Tractors, Trucks, Passenger Vehicles etc.*
- ♦ *We also take up customized jobs also for development and production of both Straight and Spiral Bevel Gears as per customers technical drawings or samples.*

DIFFERENTIAL BEVEL KIT / SPIDER KIT



**Straight Bevel Gear
Teeth Cutting on a Bevel Generator**



Spiral Bevel Gears

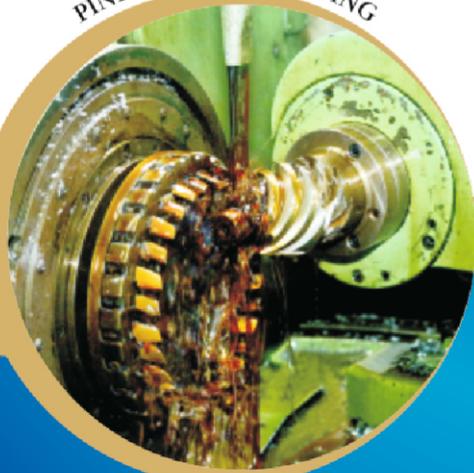
(Crown Wheel And Pinions)

We offer various types of Spiral Bevel Sets for wide applications range from Tractors, Trucks, HCVs, LCVs to Agricultural and Industrial machines.



- *They are made on Gleason Machines with latest testing facility.*
- *All soft Crown Wheels and Pinions undergo Gas Carburizing process to achieve required Case depth and then Quenched and Tempered to attain desired surface and core hardness.*
- *Company has a hi-tech CAD/CAM facilities handled by experienced persons.*
- *Reverse Engineering facilities are also available to ensure conformity with customers' requirement and parameters.*

PINION TEETH CUTTING



CROWN TEETH CUTTING



Rear Axles

Axles of requisite shape are forged on Up Setter hammer. Company has capacity to supply axles upto 250mm flange dia.

Forged pieces are then turned on CNC machines and are checked and bonded to eliminate run out. Teeth cutting is done on horizontal Hobbing Machines. Drill and Tapping at desired PCD is done on VMCs. Then they are Induction Hardened and Tempered to give proper hardness and case depth.



Front Spindles

Similarly Front Spindles are made on Hammer. Shaft is pressed at required angle and then induction hardened at desired place.



INDUCTION HARDENING MACHINE



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