



INDUSTRIAL ENGINEERING PROGRESS FACTORY

Overview

Machined Parts: -

Shafts, Gears, Rollers, Impeller, Lining Disc, Connector nozzle, Roller, Rotor vanes, idler roller, shaft for gear box, chroming of shaft, wheel rim, nut, nozzle, pinion, gear reducer, wheel loader, hub & flange, idler roller, rubber bumper stem, piston rod, bolt, pulley, motor bearing housing, mixture shaft, spacer, roller, Trailer Base Plate on cast steel, reconditioning of gear box, roller body, coupling, mixing shaft, Drum machining, Roller wheel cover, bush pin, screw shaft, flange with brass nut, Hex Coupling, SS sensor and support guide, timing roller, blower shaft, Impeller balancing, Teflon guide, adaptor pin, Teflon bolt.

Fabricated Parts:

Compressed Air Piping, Table platform, stainless steel stand, SS duct elbow, ss safety door, roll-up banner stand, safety barrier, SS box, Aluminium water proof ceiling board, SS conveyor support, acid pouring pipe system, step ladder, SS skid, safety door, Battery charging table, SS container, barcode scanner table, SS table trolley, acrylic notice boards, Polyurethane boards, SS work table, Air lifting inspection window, SS cabinet, camera stand with table, electrical safety box, chiller cooler reconditioning, clamps, handrails, scrap drum, dual safety door, Electric Panel board, safety stand, SS cabinets, Skip trolleys, sliding table, cabinets, ladders, observation desks/platforms and balconies.

Material:

AISI 4140
AISI 4340,
AISI 1045,
Stainless Steel 304, 316, 316L etc.
Tool steel 2312,
Tool steel 2379,
Tool steel 2080
P20 mould tool steel,
Aluminium, Aluminium 7085,
Copper,
Brass,
Bronze,
Nickel Al bronze,
polycarbonate sheet/Lexan sheet
Cast Iron GG25, GG40



PIPING:

We undertake hygienic piping projects for Food, Pharmaceutical, Dairy and FMCG industries.

We use ORBITAL WELDING MACHINE to execute welding procedure so that we get the best quality results.
Special application

ASME Process Piping Codes [ASME B31.3]

It is the code that governs the design, fabrication, component standards, installation, inspection and testing of process piping is the ASME B31. 3 Process Piping Code. This code is also an ANSI standard and is a subset of the ASME Code for Pressure Piping, B31.

Bioprocessing equipment encompasses bioreactor vessels and all related equipment necessary for maintaining a streamlined reaction, ideally within a sterile environment. Bioprocessing is designed to produce therapeutic substances by continuous or batch processing.

Bioprocessing equipment (BPE) fittings are a special type of fitting used for high-purity end markets, such as biotech, pharmaceutical, cosmetic , personal care, and semiconductor that require strict cleanliness and production practices.

Additional Services:

We serve our customers with supply of

- Special application parts,
- Seals,
- Bearings,
- special steels and materials
- High temperature seals,
- Timing optibelts,
- Safety products
- Tools sets from renowned producers.
- caster blickle break wheel,

Operations:

Lathe operations, Flange machining, Horizontal Boring, Milling Operations, Gear cutting, Gear shaping, Gear Hobbing, Gear Slotting, Gear Beveling, Heat Treatments, Surface grinding, EDMs, spark-sinker & wire erosions, Cutting, Pressing, Shearing, Bending, Welding, Gas Cutting, Waterjet & laser cutting, Arc welding, TIG welding, MIG welding, gas welding, brazing,

Industries:

Oil & Gas
Cement Industry
Road Construction
Pulp & Paper
Agricultural Technology
Compressors & Fans
Food & Beverage
Automotive
Logistics & Distribution



Textiles
Garden & Lawn
Sealing & Damping Technology
Leisure & Sport

EDMs & WIRE CUTTING Machines:

Most crucial and internally inaccessible proofing is done using these machineries. EDM (Electrical discharge machining) drills is also known as electric spark punching machine, small hole drilling and fast hole drilling and start hole drilling . Its working principle is to use the continuous up and down vertical movement of fine metal copper tube (called electrode wire) as the electrode to carry out pulse spark discharge to remove metal from the workpiece. High temperature corrosion metal is produced by discharge between electrode and metal to achieve the purpose of perforation. It is used to process the pores of super hard steel, hard alloy, copper, aluminum and any conductive substance. EDM drills can process at least 0.015mm small holes, and also can process small holes with taper.

Wire EDM machine uses a metallic wire (electrode) to cut a programmed contour in a workpiece. Extrusion dies and blanking punches are very often machined by wire cutting. In the machining area, each discharge creates a crater in the workpiece (material removal) and an impact on the tool (wear of the tool/electrode).

Wire EDM machining (Electrical Discharge Machining) is an electro thermal production process where a thin single strand metal wire, along with de-ionized water (used to conduct electricity) allows the wire to cut through metal by the use of heat from electrical sparks, while preventing rust.

WATERJET MACHINES

An intensifier pump creates pressure by using hydraulic oil to move a piston forcing the water through a tiny hole. The water then travels along the high-pressure tubing to the nozzle of the waterjet. In the nozzle, the water is focused into a thin beam by a jewel orifice.

A waterjet is a tool used in machine shops to cut metal parts with a (very) high-pressure stream of water. ... The key to cutting metal with water is to keep the spray coherent. Waterjets are able to cut because the spray is channeled through a very narrow jeweled nozzle at a very high pressure to keep the spray coherent

PLASMA CUTTERS

Plasma cutting (plasma arc cutting) is a melting process in which a jet of ionized gas at temperatures above 20,000°C is used to melt and expel material from the cut. During the process, an electric arc is struck between an electrode (cathode) and the workpiece (anode).

Plasma arc cutting, also referred to as plasma fusion cutting or plasma cutting, is a fabrication process which employs superheated, ionized gas funneled through a plasma torch to heat, melt and, ultimately, cut electrically conductive material into custom shapes and designs.

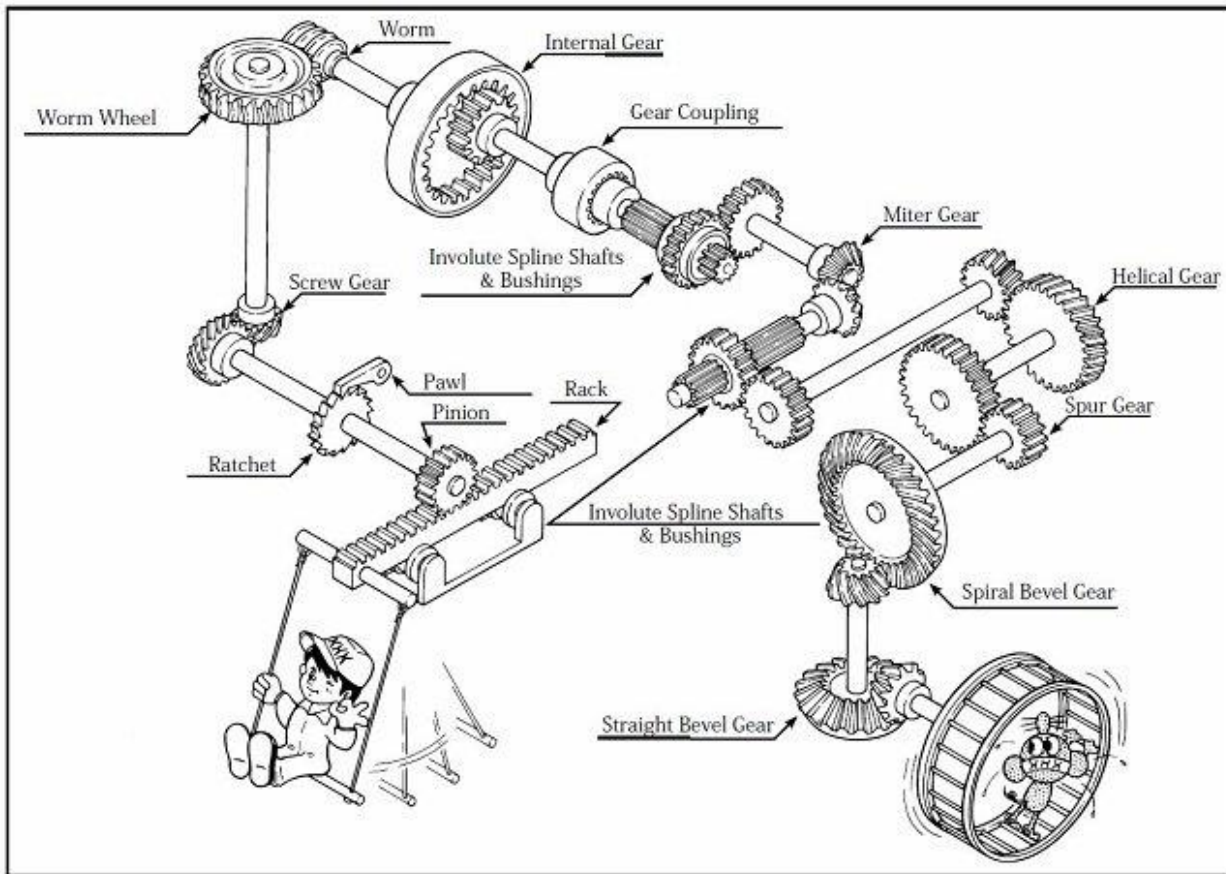
Economical - Plasma cutting is a cost-effective application - it is less expensive than laser or water-jet cutting. Keeps Materials Cool - Despite operating at high temperatures, plasma cutting robotic systems can keep the surface of materials cool. This prevents warping and damage to paint and other coatings.



Gears:

There are three major categories of gears in accordance with the orientation of their axes Configuration:

type I	Parallel Axes	Spur Gear, helical Gear, Gear rack, Internal rack
type II	Intersecting Axes	Miter gear, Straight Bevel Gear, Spiral bevel gear
type III	non-parallel/ non-intersecting Axes	Screw gear, worm shaft, worm gear, worm wheel
type IV	others	Involute spline shaft and bushing, gear coupling, pawl & ratchet



Oilfield Products & Services

Our oilfield supports vary from fabrication of equipments and supply of products and services as stipulated by oil producers according to international standards and BS EN 12079 -1 2006 Part 1 - specifications. This European/British code specifies standards for the design, manufacturing and marking of offshore containers and associated Lifting sets.

Oilfield Skids, platforms

- Oil Field skids
- King Cobra Shaker Skid (Single, Dual & Triple)
- Mud Conditioners
- Centrifuge Skids
- Telescopic Centrifuge Skids
- Vortex Skids
- Burner skids
- Flare stuck skids
- De-sander skids
- Compressor skids
- mud storage box

Offshore baskets

- Man Carry Baskets
- Long Baskets
- Tool Boxes
- Cylinder Racks (Oxygen, Acetylene) Cabins
- Tool Cabins
- Office containers
- Workshop containers
- Cylinder cascade containers
- Working Tables
- Vacuum Stations (Tilting)

Racks

- Special Tool Racks
- Pipe Racks
- A shaped Frames
- Cross Over Racks

Special Tools as per requirement

- Dismantling and Assembling Trolleys
- Special Trolleys
- Pulling Tools
- Special Pullers
- Special Measuring Tools
- Diesel pilots
- Flare stuck pipes
- Vacuum Stations (Tilting)



Repairing of spiders

- Hydraulic and Air Operated Elevators
- Hydraulic Cylinders
- Tanks,
- Skids

General:

- water tanks
- diesel tanks
- air manifolds
- air-cooled enclosure
- oil cooled enclosure
- all sort of rigmats

