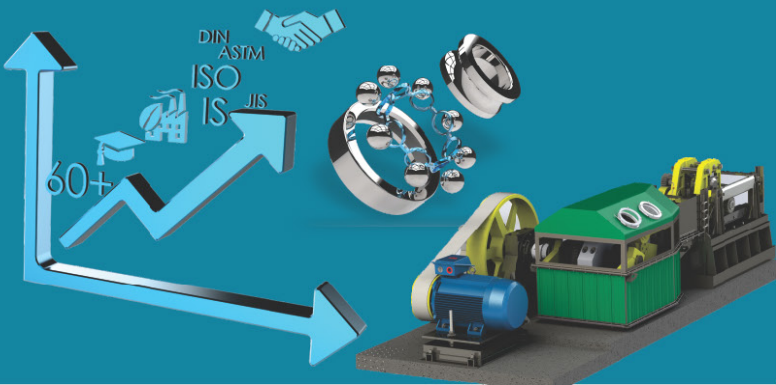




BS EN ISO 9001:2015 (UKAS)

Manufactures & Suppliers of Machinery & Parts
Engineering Designers & Developers
Technical Trainers
Greenfield Engineering Project Executors
Export & Import Products



COMPANY PROFILE

We at TKS are ready as a team to positively contribute in any responsibilities and challenges come on our way giving exceptional performance and excelling at any given opportunity. We thrive in working towards highest quality products through highly skilled team, state-of-the-art patented products and manufacturing processes.

We are a group of Professionals having wide experience in design and machine building, project engineering and execution, design of special purpose machines involving automation, consulting and execution for increase of efficiency by technology up-gradation in processes and equipment, including modification in existing engineering Plants, cutting down cost of production by doing techno-commercial evaluation, improvement in product quality etc. We also undertake indigenous replacement of imported machinery by re-designing and engineering for achieving better performance.

We are analytical, insightful, and highly-disciplined problem solvers with a demonstrated ability to identify & secure project resources, we provide the quality leadership that invokes committed professional participation on all levels. Maintaining meticulous attention to detail, inspiring team accomplishment and delivering quality on-time project execution are areas in which we excel. We have acquire many key qualities during our journey through completing projects. We are Business focused motivators, Creative and proactive problem solvers. We analyze revenue areas and industry trends, identifying risks, developing mitigation strategies, reviewing financials and providing structures for multi millions project deals.

COMPANY'S MISSION :

"To become benchmark by exceeding customer expectations in quality, cost and delivery through continuous improvements in Technology & Knowledge providing turnkey solutions through custom designs, manufacturing, installations & support of plant related systems producing highest quality product possible through our highly skilled team and state-of-the-art patented products and manufacturing processes."

VISION STATEMENT

"To become benchmark in bringing Technology & Knowledge into the Manufacturing world"



Mr. RUPESH PANDYA
(Managing Director)

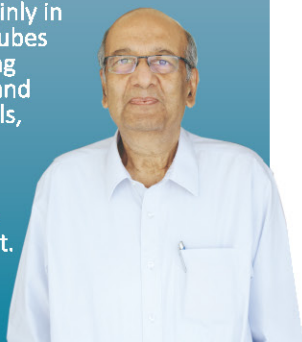


Mr. Rupesh Pandya holds P.G. in Business Management from UK with more than 8 years of experience in managing Business, With a developed reputation for successfully and profitably managing numerous concurrent projects through all project phases from conception through completion within targeted cost, schedule and compliance parameters, Specializing in reviving businesses and taking them progressively towards profitable business has been one of main strengths. Sustaining a high safety performance reputation, maintaining quality standards and minimizing corporate costs and liability have been a consistent result of his professional commitments & performance that directly impacts the bottom line. A solid organizational leader and decision-maker that can make an immediate contribution to operations and business development.

MEET THE TEAM

P.G. in Mech Eng. From I.I.T., BHU specializing in Machine Design and having approx. 46 years of total experience (including TISCO, Rourkela Steel Plant, GST, Choksi Tubes, Viraj Tubinox Plant in Romania etc.) Which includes design and development of several special purpose machines, development and execution of 4 Greenfield projects mainly in field of manufacturing S.S. seamless tubes and pipes, up-grading and modernizing technology in existing plants, Design and development of High speed Pilger Mills, B.A. furnace, Instrumentation Tubing plant etc. with application of special technology first time in country. Evaluation of product mix to optimize profit margin as per market requirement.

Mr. AMITABH MISRA
(Technical Director)



Mr. PRASHANT PANDYA (Development Manager)

P.G. in Mech Eng. From Indus university specializing in Machine Design and having approx. 6 years plus which includes Design and Development of several special purpose Machines, Project execution in machine field as a freelancer, Techno – commercial data evaluation and optimization in the field of manufacturing tubes and related machinery. Involved in Design and Development of High speed Pilger Mills, material handling systems, Bright Annealing furnace and new technology implementation for manufacturing special products like instrumentation tubing.

Mr. PANTH PATEL (Sr. Design Engineer)

P.G. in Mech Eng. From Indus university specializing in Machine Design and Developments and having approx. 3 years of total experience which includes Design and Development of several Special Purpose Machines, New Concept development for Heavy Machinery, Auxiliary machines using the latest technology available, Technological upgradation for existing machines. Turnkey Project execution for various industries, Technical data evaluation and parameter optimization for cost effective solution and economic viability.

Mr. SIDDHARTH PATEL (Sr. Project Engineer)

P.G. in Mech Eng. From Indus University specializing in Machine Design having approx. 3 years of total experience including Project handling, making of factory layout, preparation of G.A. drawings, detailed material requirement of project and handling manufacturing of machines. Determining the detailed requirement of utilities, material flow and other functions of industrial engineering required for the execution of complete project. Preparation & monitoring of bar charts for project execution several Special Purpose Machines.



◀ RESEARCH & DEVELOPMENT ▶

Research & Development

- ▶ Experienced team force for growth through a landscape of new innovative & supportive **TechKnowlogieS** and ideas delivering progress & sustainable solutions.
- ▶ Unparalleled creativity with knowledge and experience to generate dynamics for unique challenges.
- ▶ Creating New Fields & Developments in current businesses
- ▶ Unsurpassed innovations contributing to society
- ▶ Adding values to your Investments
- ▶ Unique methods of solving challenges
- ▶ Giving experiences of globally proven good practices & information about Modern technology.

Greenfield Projects Executed :

Manifestation of turn-key project into a globally competitive working plant with efficient process flow as per ready market product mix.

- ❖ Plant for Hot Extruded and hot finished SS pipes and mother hollows **1500 T/annum** at Rajpur, Ahmedabad for Choksi Tubes.
- ❖ Manufacturing plant for SS Seamless Cold rolled and Bright Annealed HX tubes at Moti Bhoyan, Ahmedabad for Choksi Tubes.
- ❖ Setting up of a plant for CNC machining centre (included Retro fitting of Conventional and CNC machines) for Patel Alloys, Ahmedabad.
- ❖ Integrated Seamless SS Tube Manufacturing by Piercing and cold pilgering at Chandan Steels, Umernagar.

◀ PROJECTS ▶

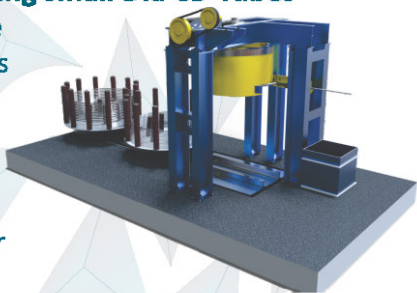
Projects Handled at Glance :

- ▶ Design, engineering & manufacturing of high speed Pilger mill.
- ▶ Project Report for setting up **2000 T/month** cap. Manufacturing plant for Seamless S.S. tubes & pipes.
- ▶ Design & Development of online tube degreasing system on Pilger mill.
- ▶ Concept development for Tube Bright Annealing Furnace.
- ▶ Project Report for setting up **50 T/month** cap. Manufacturing plant for Seamless S.S. Instrumentation tubing.
- ▶ Design & Development of Draw-Block & B.A. furnace for manufacturing coil to coil instrumentation tubing.
- ▶ Imparting Knowledge for copper tube manufacturing plant to increase the efficiency and reducing cost of production on 3000 Ton Hot Extrusion Press.
- ▶ Technical Solutions for S.S. Seamless tube plant to increase plant efficiency.
- ▶ Giving Technical Training to personnel of a S.S. seamless tube plant.

PRODUCTS AT A GLANCE

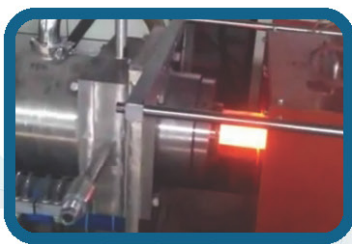
Draw block for Producing small Dia CD Tubes

Rotary Vertical drum type equipment for continuous drawing and sinking process of high quality small diameter coiled tubes using variable speed A.C. motor with a gearbox.



B.A. furnace for SS

Coil to coil or straight to straight annealing of the pilgered or drawn tubes in a protective atmosphere resulting in world class quality bright finish tubes.



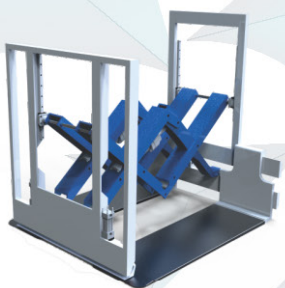
Special Effective Degreasing System for Tubes

Fully automatized system has been developed for ID & OD thoroughly cleaning/degreasing of pilgered or drawn tubes with the help of degreasing agent followed by hot water rinsing through high pressure jet nozzles preventing deterioration of tubes.



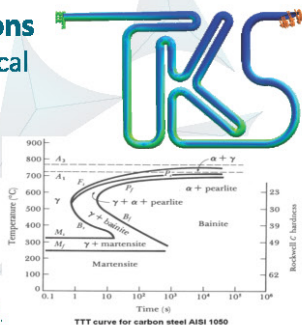
Material Handling

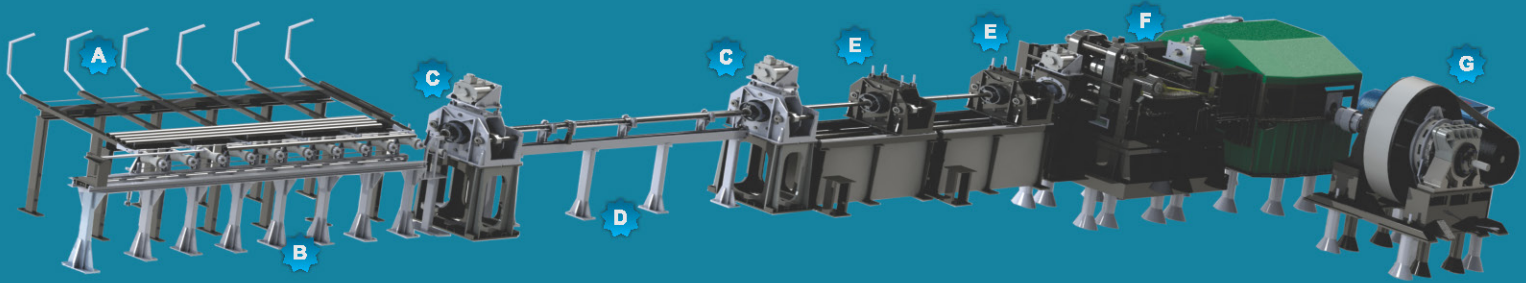
Equipments and automatic systems for ergonomically effective transportation and handling of light to heavy goods resulting in time saving for maximum usage of space in organizing of goods.



Total Technological Solutions

We provide complete technological solutions involving detailed engineering analysis, solutions and also process parameter control. We offer Efficiency Improvement, Modification, Upgradation of existing machinery as and when required.





(A) Charging Skid, (B) Feeding Table 1, (C) Mandrel Thrust Block, (D) Feeding Table 2, (E) Clamping Carriage, (F) Main Pilgering Area, (G) Gear Box

Double mass balanced Pilger Mill Lines~ Standard DMB Mill sizes : 25, 40*, 50, 63, 76. OD : 9 to 76 mm WT : 0.7 to 10 mm

DMB Cold Pilger Mills

Advanced Engineered Mills equipped with latest technology for production of high quality tubes with low production cost.

General

Cold Pilger mills are used for cold rolling of tubes (seamless and welded). The rolling is done for reduction of higher cross section of mother tubes or hollows into lower cross section of finally produced tubes. The cross section reduction is effected by rolling of the tube between a pair of top and bottom rolls having grooves for reducing the section while the rolls move in housing by reciprocating motion of the housing and mandrel inside the tube having a matching profile with the rolls. Hence while the OD is reduced between the rolls or dies and the ID over the mandrel.

Our mills ensure the following.

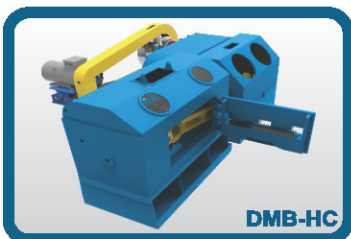
- Tube dimensional tolerance as per ASTM or equivalent international standard
- Minimum ovality
- Improved surface finish (≤ 0.3 microns Ra)
- Homogenous metallurgical properties
- Consistent dimensional wall thickness throughout the tube length and cross section.

Our DMB Mill's Advantages :

- Our mills are designed for continuous running and fully automated operation.
- Our cold pilger mills are engineered for cost effective production because of higher speed and elongation which results in cost effective solution and lower production cost per unit length of tube produced.

Technologically Optimized Design :

- ❖ Full ring die with curved groove profile on die and mandrel to suit the smooth flow of pilgered material during cold forming.
- ❖ Higher cross section reduction and higher speed due to advanced balancing of inertia and torque forced generated by reciprocating saddle.
- ❖ Smooth operation because of effective balancing against both horizontal & vertical components of shaking forces generated by reciprocating motion of the saddle.
- ❖ Cassette type device for easier and quick roll change to optimize the downtime.
- ❖ Double feed – once each during forward and backward motion of the reciprocating saddle.



Automation & Safety :

- ❖ Fully Automatic continuous PLC controlled closed loop operation with minimal manual intervention resulting higher productivity.
- ❖ Employing latest electronics by utilizing high reflex servo motors for unique feed and turn device. The feeding carriage runs on anti-friction guides.
- ❖ Electronics enabling elimination of mechanical elements e.g. feed & turn gearbox, cams, springs etc., thus minimizing maintenance and increases machine availability.
- ❖ For safer and continuous operation, critical sensors have been incorporated
- ❖ Tube to tube joint sensor
- ❖ Mandrel breakage device
- ❖ Tube front end split sensor and etc.

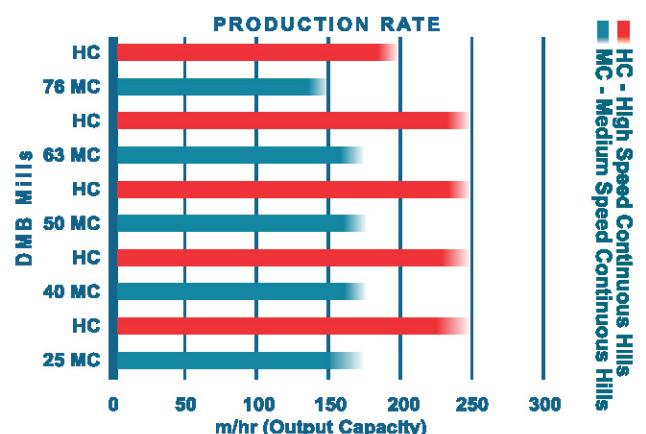


Economic Advantage :

- ❖ High productivity because of higher working speed and elongation.
- ❖ Our mills are highly reliable resulting in higher availability.
- ❖ Our mills produce higher quality tubes because of higher cross sectional reduction which produce better metallurgical properties, better dimensional tolerance and good surface finish because of which they can be sold in the price range of Niche tubes market. E.g. directly to O.E.Ms
- ❖ The mills gives the best commercial option and return on investment since production capacity on one mill replaces the combined capacity on a no. of mills of the cheaper variety.
- ❖ Lesser manpower, lesser built up shed area, lesser foundations etc. minimizing fixed cost (low CAPEX) and operating cost (because of lesser consumables, overheads etc.) thus resulting in lower cost of production per ton (low OPEX) increasing profit margins.

Materials of Tubes Rolled :

Stainless Steel & alloy steels, Copper & its alloys, Aluminum & its alloys, Nickel-based alloys, Titanium alloys etc.



AEROSPACE



MECHANICAL



CHEMICAL & PETROCHEMICAL



AUTOMOBILE



NUCLEAR POWER



DEFENCE



STEEL INDUSTRIES



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