Empowering core sector industry with technology, innovation and engineering excellence







Pimpri, Pune





Hyderabad Works

Pune Works



A brief insight

Established in 1947, thyssenkrupp Industries India Pvt. Ltd is a part of the Industrial Solutions Business Area of thyssenkrupp AG, Germany.

Today, thyssenkrupp is one of the world's largest industrial conglomerate with three main lines of business activity: Steel, Capital Goods and Services, in all of which it occupies leadership positions.

The group is internationally acknowledged for excellence, borne out of intensive research, careful market analysis and close collaboration with customers. thyssenkrupp actively pursues a strategy of globalization.

Over the last 75 years, tkll has grown to become one of the most trusted names in the fields of Sugar Plant & Machinery, Open Cast Mining & Bulk Material Handing Systems, Cement Plant & Machinery and Steam & Power Generation Plants.

Today, leveraging strong foundations and access to cutting edge world class technology, tkll's plant making capabilities are helping industries become competitive the world over. tkll's strategic vision, as a leading contractor executing turnkey projects, is derived from its core strengths of integrated engineering expertise and automation in manufacturing at its Pimpri (Pune) and Hyderabad works, backed by an excellent team of project executives.

The company firmly believes in delivering total customer satisfaction that spans everything from concept to commissioning to after sales service.

tkll's celebrated project management capabilities are a result of its long tradition of anticipating and fulfilling specific customer requirements. Highly qualified teams of engineers and technicians, supported by a robust and ultra modern IT infrastructure, ensures quality standards that thyssenkrupp is known for worldwide. Its emergence as a true market leader speaks volumes about the world class technology inherent in the company's products. The company's nationwide network of branch offices, coupled with the support of thyssenkrupp's global establishments, enables it to meet customer needs on time, every time.

Hyderabad Office



A global footprint

thyssenkrupp Industries India has established its presence as a provider of total turnkey solutions in markets around the globe.

Asia

- Bahrain
- Bangladesh
- Indonesia
- Iran
- Malaysia
- Mongolia
- Nepal
- Oman
- Philippines
- Sri Lanka
- Thailand
- Tibet
- UAE
- Vietnam

Africa

- Algeria
- Burundi
- Ethiopia
- Eygpt
- Guinea
- Kenya
- Mauritius
- Mozambique
- Malawi
- Nigeria
- Rwanda
- Senegal
- South Africa
- Sudan
- Uganda Zambia

Americas

Canada

- Chile
- El Salvador
- Ecuador
- Peru

Oceania

- Australia
- Fiji

- **Europe**
 - Austria
 - Czech Republic • Germany
 - Greece
 - Poland
 - Russia
 - Spain
- Ukraine



Quality Assurance

Quality Assurance at tkll starts with the planning and designing of the product, and ends with trouble-free plant performance in the hands of satisfied customers.

On the strength of its complete product range, thyssenkrupp seeks to achieve and maintain leadership positions across world markets.

The Group pursues a strategy of globalization, focused on bringing it closer to its customers and reducing costs, while fulfilling their precise needs.

tkll continues this tradition with the same zeal and commitment. Its stringent quality control measures have earned it the ISO 9001 Quality Management System certification and the ASME certificates of authorization for 'S', 'U', and 'PP' stamps.



Turnkey Capabilities

The company provides total turnkey services, encompassing preparation of feasibility study, assistance to customers in firming of project proposal and providing engineering expertise to finalise scope and specification. The company has all the in-house capabilities and the capacity for executing all specialised types of engineering such as process, mechanical, civil, electrical, structural and instrumentation.

Full fledged, in-house manufacturing facilities enable the company to ensure strict compliance to project requirements and effectively control quality and workmanship, while ensuring timely deliveries. Well honed project management expertise seamlessly integrates the engineering, procurement and manufacturing chain, to provide clients with a single point control that ensures the project remains on track.



The company provides full range of site services, including storage and handling of equipment, construction and commissioning of plants, including providing services for complete power plants on EPC basis. The wide range of construction equipment further ensures that site activities are completed on schedule.

These integrated turnkey services, continuously improved and refined over the last 75 years, not only significantly reduce project related risks, but also ensure timely completion and peak performance ratings. Also, the economic edge from such reliable and proven turnkey services go a long way in generating extra financial gains for our customers.

As a value added service, tkll also offers specialised training for the customer's personnel, so that they can upgrade their skills to a level that ensures the smooth running of a new plant.





Sugar Plants and Equipment

tkll has revolutionised the sugar industry over the last 75 years. The company has always led from the front through innovation and advanced technology that is focused on safety reliability and productivity.

High efficiency products from tkll like Milling Plants, Boilers, Batch and Continuous Centrifugal Machines, Continuous Pans, Falling Film Evaporators and other process house equipment, enable sugar factories to optimize plant capacity and efficiency and quality of sugar.

tkll undertakes sugar plant projects, right from design, manufacture, supply and erection to commissioning of the plant with capacities ranging from 800 to 18,000 TCD and higher. Testimony to tkll's quality, reliability and timely deliveries come from the ready and repeated acceptance of the company's batch and continuous centrifugal machines in European and other Global market.

Known as a reputed supplier of sugar and co-generation plants, the company also offers refineries based on the latest technology. Another area of unmatched expertise in up gradation, modernization and expansion of existing sugar plants.











Mining and Material Handling Equipment

tkll is a technologically driven engineering powerhouse, with exceptional contributions in the areas of Open Cast Mining and Bulk Material Handling Systems and Equipment.

Backed by rich pools of expertise from global pioneers like Bucka Wolf, Krupp, PHB, PWH, O&K, Demag Lauchhammer, Weserhutte and Robins, tkll has proven itself as the most reliable and versatil solution provider in this field, for everything from concept to commissioning. tkll provides end-to-end solutions for core sector such as mining, power, ports, steel and minerals.

Some of the large turnkey projects executed are:

- 2800 TPH Lignite Handling Plant and Open Cast Mining Machinery for Neyveli Lignite Corporation Ltd.
- 6 Mtpa Open Pit Coal Mine for CIL's Piparwar Mine, through White Industries, Australia.
- 2,600 TPH Coal Handling Plants, for NTPC's 3 x 660 MW and 2 x 500 MW Sipat I & II Power Projects.
- 2,000 TPH Coal Handling System for the 3 x 700 MW Tanjung Bin Power Plant, Malaysia, that included Continuous Ship Unloaders.



2011 - Order from Tata Steel Ltd. for India's First Rotary Twin Wagon Tippler (complying to G33 Rev 01) for their Kalinganagar Plant.

2012 - Repeat order for Coal Handling System for 1 x 1000 MW Stage IV Tanjung Bin Power, Malaysia. First independent export order.

2013 - Coke Handling System for Integrated Refinery Expansion Project for Bharat Petroleum Corp. Ltd., Kochi Refinery having the largest circular dome of 120 mtrs (by any TK Group company) and Pipe Conveyor of approx1.8 Kms.

2013 - An independent export order for Urea Handling and Urea Ship Loading Facility at Sabah Ammonia Urea (Samur), Malaysia.

2014 - Bagged Largest Order (for tkll) for Fuel and Limestone Handling System for Coal based Captive Power Plants of Reliance Industries Ltd. at Dahej and Hazira.

2015 - Adani Dhanra & Dahej orders.

- 2016 Mahagenco Pipe Conveyor 6.5 km at Chandrapur.
- 2017 Doosan Power System orders.

tkll's range of equipment includes:

- Bucket Wheel Excavator
- Crawler Mounted Tripper
- Spreader
- Transport Crawler
- Mobile, Semi-Mobile and Stationery Crushing Plants • Crushers
- Stacker
- Reclaimer
- Stacker cum Reclaimer
- · Pre-blending equipment for coal & other minerals

- Wagon Tippler · Ship / Barge Loader
- Ship / Barge Unloader
- Paddle Feeder
- Apron Feeder
- Screens
- Specialised Conveying Systems Pipe Conveyor System Shiftable Conveyor System **Downhill Regenerative** Conveyor
- Pulleys for Gearless Drive



Cement Plants and Equipment

thyssenkrupp Industries India (tkll) together with thyssenkrupp Industrial Solutions AG, Germany (tklS), one of the world's leading cement and mining technology companies, has been manufacturing, supplying, installing and commissioning modern, state-of-art and most efficient integrated cement plants of capacities ranging between 650 to 10000 tpd, as well as split location grinding units in India and overseas for more than 35 years.

tkll also provides comprehensive service activities for complete cement production line, individual products, plant upgrades & conversions, and undertakes O & M activities.

tkll plants are in operation across the length and breadth of India, running at more than their rated capacities, and are distinct on account of their sustained efficiency and output levels.

Excellent technological competence is the key to tkll success, and the ability for developing first-class and innovative solutions for every application is valued and trusted by customers all over the world. tklS has one of the most modern research and development facilities, where new technologies are first simulated / tested and validated on pilot scale to perfection before introduction in the market.

The trend in the global cement industry is moving towards the awarding of turnkey orders - from individual grinding plants to entire production lines, and tkll has already established itself as one of the most trusted turnkey suppliers.



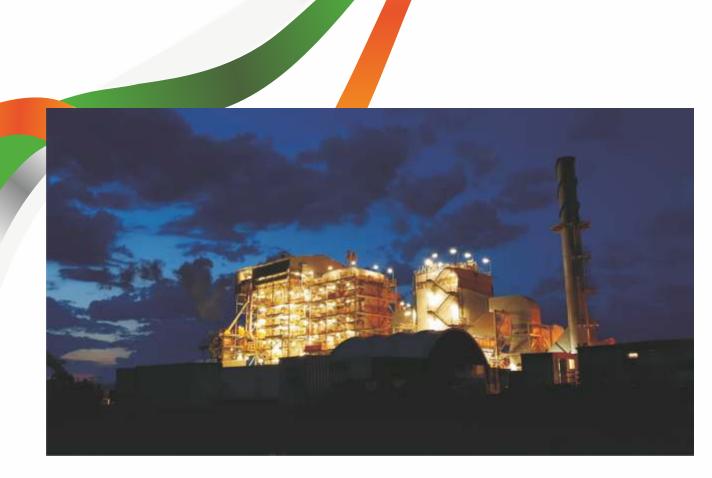
Through the application of ultra-modern production processes, our plants protect resources and the environment and guarantee plant owners maximum productivity and economy of operation.

The range of equipment on offer includes:

- Crushing:
 - Hammer crushers
 - Impactors
 - Jaw crushers
 - Toggle crushers
 - Roll crushers
 - Mobile & semi-mobile crushers
- Pre-blending Systems:
 - Longitudinal blending beds
 - Circular blending beds
 - Corrective and additive stores

- Grinding:
 - POLYCOM® high pressure grinding roll
 - QUADROPOL® vertical roller mill
 - Ball mill
 - SEPOL® high efficiency separator
- Blending / Storing:
 - Tangential blending silo
 - Multi-compartment silo
 - Cone-compartment silo
- Clinker Production:
 - DOPOL® 90 cyclone preheater
 - PREPOL® calcining system
 - POLRO® 2-support kiln
 - 3 support kiln
 - POLGUIDE® kiln drive system
 - POLFLAME® clinkering zone burner
 - POLYTRACK® clinker cooler
 - REPOL® reciprocating grate cooler for clinker

- Factory Automation:
 - Master process control system POLCID®
 - AQCnet software package for POLAB® laboratory automation
 - Laboratory automation system
 - POLAB® ACT, AMT and APM
 - Sampling systems
 - Information management systems
- Lime Calcining:
 PFR Lime Kiln system



Boiler and Power Plant

tkll has long established itself in the field of design, manufacture, supply installation and commissioning of a wide range of steam and power generation plants for a host of industrial applications.

Leveraging its leadership position in Circulating Fluidized Combustion Bed Boilers, the company has expanded its range of offerings to provide complete power plants on EPC basis.

A comprehensive range of steam generating plants including solid fuel fired boilers (coal, lignite, pet coke, bagasse, biomass and others), waste heat recovery boilers and oil/gas fired boilers form the backbone of these power plants.

These steam generating plants are available on stand-alone basis and are the industry benchmark for their multi-fuel capability, high efficiency, reliability and environment friendliness.



Today, boilers and power plants from thyssenkrupp are at work in a range of different industries, meeting their needs for process steam, co-generation as well as captive power generation.

The scorching pace of success, in bagging so many orders from leading names in business and industry, provides testimony to the manifold benefits built into the steam and power generation plants supplied by the company. tkll has fully equipped manufacturing facilities, certified for "S , "U" and "PP"by ASME. This is backed by a strong team of qualified and skilled professionals from mechanical, electrical, civil, instrumentation, erection and field services.

It is a combination of all these strength that makes the company ideally positioned to satisfy the increasingly demanding requirements of industrial users.

In-house Capabilities:

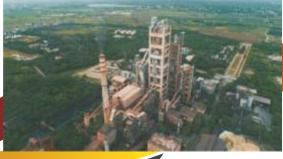
- System Engineering
 Design- Thermal, Mechanical, Electrical, Civil,
- Structural and Automation
- Project Management
- Procurement
- Construction & CommissioningOperation and Maintenance
- (O&M)

Engineering, Procurement, Construction (EPC) solution for

- Independent Power Plants (IPPs)
- Cogeneration
- Boiler & Steam Turbine Generator (BTG)
- Balance of Plants (BCP)









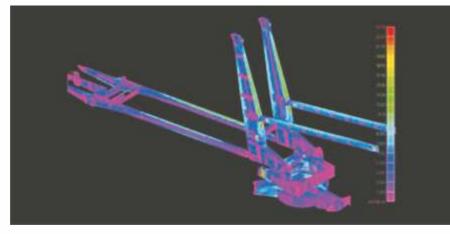
Engineering Expertise

tkll engineering and design expertise stem from 75 years, of experience in providing highly sophisticated and comprehensive technical services in all the major branches of engineering viz. Process, Mechanical, Electrical, Instrumentation, Civil and Structural.

The company focuses on providing design and engineering solutions after careful analysis of all key parameters like environmental conditions, working duty requirements, safety, ease of operations, maintenance and of course, productivity.

Close contacts with customers have resulted in continuous product improvement and new technology developments.



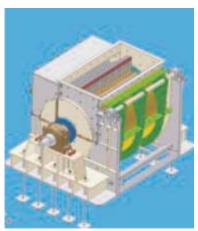




tkll's integrated turnkey set-up results in close cooperation and co-ordination between the Engineering, Design, Manufacturing, Materials and Quality Assurance divisions.

This reduces cycle time and leads to integrated holistic solutions that benefit customers greatly. Extensive use of Information Technology, in all aspects of design and engineering, results in fully optimized engineering solutions.

Continuous training in the latest versions of world renowned software, and regular upgrades of hardware platforms, enable the company's design and engineering divisions to retain their technological edge.





Project Management

Project management is focussed on total customer satisfaction, and backed by highly trained and experienced experts working with fully computerized support.

All activities, from conception to commissioning, are regularly and critically monitored to ensure strict compliance with the agreed schedules of Quality Assurance Programmes.

For seven decades now, the company has honed its skills to a high degree of competence.

At tkll project engineers are the focal point through whom all critical activities are integrated in a way that customers are assured of a single point source for all solutions.



Asset Management

tkll has an experienced team of procurement/ sourcing personnel. This, combined with ready access to thyssenkrupp counterparts around the world, gives tkll a clear edge when it comes to sourcing the best in raw material, components and bought-outs in India, or anywhere else around the globe.

Periodic vendor-rating is undertaken to ensure consistent quality of input materials. tkll quality control personnel are deputed to vendors' sites, to ensure adherence to even the most exacting customer requirements.



Manufacturing Strengths

Industrial plants and equipment supplied by tkll can perform to their fully rated capacities on a continuous basis. This is because their parts and components are manufactured at its Pimpri (Pune) and Hyderabad plants, in the best processing conditions and under high quality workmanship.

The company ensures the finest levels of workmanship and manufacturing to international standards through a strict adherence to critical manufacturing steps. All these steps are based on meticulous process planning, which determine the best processes for producing the components. This is achieved only by specifying operation sequences and special tooling, and giving careful consideration to the parameters of quality, cost and delivery schedule.



Tool Engineering

Experienced tooling engineers are continuously engaged in ensuring economically viable production of components,by constantly focussing on all aspects of tooling, including design and manufacture.

Production planning, scheduling and controlling ensure that optimum resources are made available at appropriate times and fully utilized, so that manufacturing delays are avoided.

A culture of continuous learning through shared experiences, shop floor meetings with operators, close coordination with the engineering and materials departments and constant interaction with end-users ensure that complex tailor-made jobs are completed, while adhering to quality and time schedule commitments across all functions.

Range of Machinery

- Horizontal Boring & Milling Machine
- Gear Hobbing Machine
- CNC Flame Cutting Machine
- Vertical Hydraulic Press
- Vertical Turning Lathe
- Facing Lathe CNC Vertical Turning Lathe



General Purpose Machines

- CNC Plano Miller
- CNC Horizontal Machining Centre
- CNC Turn Mill Centre
- CNC Milling Machine
- CNC Keyseating Machine
- Heavy Plate Rolling Machine
- Membrane Wall Welding Machine
- Panel Bending Machine
- Flat Calibration Machine
- Circle Welding Machine
- Orbital Welding Machine
- Submerged Arc Welding Machine
- Heavy Duty Rotators for Automatic Welding
- Automatic Stub Welding Machine for Header
- Manufacture









tkll's manufacturing shops have the optimum mix of basic forming facilities, secondary operations facilities, welding and assembly facilities and the protective coating inspection & testing facilities capable of handling a single component weighing up to 150 metric tonnes.











Construction, Commissioning and After Sales Service

tkll's capabilities in setting up highly sophisticated plants of large capacities are based on comprehensive in-house resources and expertise. Construction Services Division erects and commissions the plants including complete civil works and also provides services designed to prevent breakdown of machinery. Plant erection at site is carried out through planning of erection sequences, adhering to agreed quality and safety requirements with the establishment of necessary infrastructure.

Experienced construction site engineers and erection crews, backed by proper erection equipment, are important factors that ensure high class site services to customers. Similar site services are also arranged from suppliers of proprietary equipment.

The sophisticated nature of major and critical equipment requires sound knowledge, dedicated approach, skilled manpower and clear instruction for sustained and satisfactory performance of plant and equipment.

The company's full trained and experience construction service specialists provide complete range of after sales services. These include repair services to attend to any breakdown, scheduled services covering a program of preventive maintenance, training services to clients' operators and spare parts management services that assist the customer in scientific inventory planning as well as regular and scheduled replacement of parts.



This synergy of total-in-house turnkey capabilities has also translated into a much sought after rejuvenation service of old plants (including those supplied by competitors) which results in immense financial benefits to customers.











Workforce The driving power

thyssenkrupp Industries India has won the confidence of its customers by putting its people at the centre of all its efforts. The sum of their creativity, knowledge and experience translates into modern, efficient industrial plants and equipments – all of which gives high returns to the company's customers. tkll has constantly nurtured this talent through continuous learning and sharing of experiences across group organizations.

From the very beginning, the company has created an organizational culture aimed at imparting not only technical knowledge but also key interpersonal skills like initiative, responsibility, flexibility and team work.



thyssenkrupp Industries India Pvt. Ltd.

Pune

Pimpri, Pune - 411 018, Maharashtra, India P: +91 20 2742 5461-64 F: +91 20 2742 5350 Email: contactus.tkii@thyssenkrupp.com

Hyderabad

Survey Nos: 212-215, IDA, Phase - II, Cherlapally, Hyderabad - 500 051. Telangana, India P: +91 40 2726 3647 / 3540 / 2762 / 3015 F: +91 40 2726 3162 Email: tkii.hydbad@thyssenkrupp.com

Registered Office

Mumbai

154 C, Mittal Tower, 15th Floor, 210, Nariman Point Mumbai - 400 021, India P: +91 22 2202 0064 / 6837 F: +91 22 2204 4025 Email: tkii.mumbai@thyssenkrupp.com

Branches

Chennai

Temple Tower, 5th Floor, Nandanam 672, Anna Salai, Chennai - 600 035, India P: +91 44 2431 4235 / 2433 9482 F: +91 44 2434 8198 Email: tkii.chennai@thyssenkrupp.com

Kolkata

thyssenkrupp Industries India Pvt. Ltd. Ecospace Business Park, Block-3A, 7th Floor Rajarhat-Newtown Kolkata - 700 160, India P: +91 33 6605 5200 / 01 F: +91 33 6605 5218 Email: tkii.kolkata@thyssenkrupp.com

New Delhi

407 A, Hemkunt Tower, 98, Nehru Place New Delhi - 110 019, India P: +91 11 2644 9971 /72 /73 F: +91 11 26468968 Email: tkii.delhi@thyssenkrupp.com

Gujarat

thyssenkrupp Industries India Pvt. Ltd. Keval Corporate Park, Block No. 02 Third Floor, Opp GEB Substation, Channi Road, Channi, Vadodar<u>a 391740</u>

Corporate Identity No. : U74999MH1947PTC005508 E-mail: contactus.tkii@thyssenkrupp.com Internet: www.thyssenkrupp-industries-india.com

July: 2023

engineering. tomorrow. together.