



Equipped for challenges.
Poised to deliver.

Experience

30+
Years

HYQUIP

in pursuit of excellence

THE COMPANY



HYQUIP is a professionally managed engineering company with diversified activities in the field of bulk material handling equipments, flow control products, dust & odour control systems, solar power and municipal solid waste processing technologies.

The current focus of the Company is to have strategic partnerships with reputed overseas companies to gear up to meet the demand of large projects and becoming a premier EPC corporation. In line with this objective, emphasis is laid on human resource development, use of information technology, combined with latest project management techniques. Hyquip has comprehensive quality management systems in place and has achieved ISO 9001 : 2008 certification in order to provide quality services to its clients.

With over three decades of experience in catering to various industrial sectors with engineering solutions, HYQUIP has developed many import substitutes, winning national and international awards.



Registered Office



Corporate Office



BULK HANDLING EQUIPMENT FOR CEMENT, STEEL.....



Today Hyquip is one of the largest manufacturer of **Screw Conveyors** in India. The screw conveyors are robustly built for total reliability and versatility to meet wide range of applications through special flighting with adaptations including special pitches, tapered, cutflight, ribbon and in various materials like Stainless Steel, Heat resistant steel and other alloy steels.

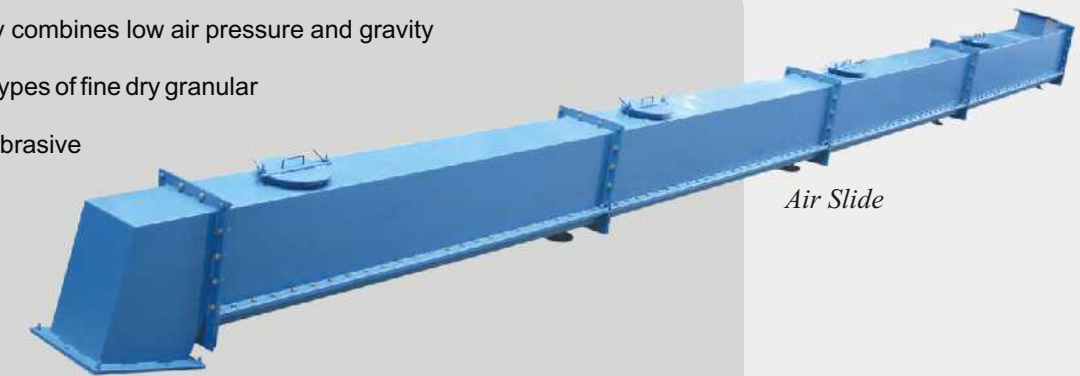
Hyquip manufactures medium to high capacity **Bucket Elevators** designed to handle capacities upto **450 M³/hr** and **heights upto 110 Mts.** Chain and Belt Type versions to meet most applications of the Industry. For the Chain Type Elevators, the sprockets and chain are sourced from Hitachi Metal Techno Ltd of Japan.

Hyquip **Drag Chain Conveyors** or En masse conveyors are designed for dependable and continuous duty conditions using a single or double strand. They are envisaged to handle highly abrasive materials at elevated temperatures with the use of special alloy forgings in the construction of drag chain conveyors.

Hyquip **Air Slides** efficiently combines low air pressure and gravity to fluidize and convey most types of fine dry granular materials regardless of abrasive nature or bulk density.



Bucket Elevator



Air Slide



Screw Conveyor



Shaftless Spiral Conveyor



Chain Conveyor



Multi Screw Feeder

FLOW CONTROL PRODUCTS FOR CEMENT, STEEL.....



Rotary airlock valves are very popular in the Industry and are used to minimise system air loss while transferring materials between vessels with differential pressures or as volumetric feeders for metering materials at specified flow rates. Available in Cast iron, Cast Steel, Stainless Steel, Aluminum, Heat resistant Steel and other materials of construction from **100 mm to 2000 mm** size to meet capacities upto **500M³/hr.**

Hyquip builds a heavier airlock to closer tolerances which means better sealing properties. Our airlocks are generally chosen for applications where air leakage and gas loss are of important considerations.

Double cone valves are robustly built consisting of double cone and cone seal rings which are actuated through a cam and lever arrangement. These valves function at a determined speed thus maintaining a uniform flow rate and at the same time the profile of the cone and cone seal rings are so designed to offer a perfect air seal.

Flap Valves are preferred for handling **highly abrasive** or lumpy materials which have tendency to stick. They can also be installed in tandem for **very high differential pressures**. They can be of cast / fabricated versions and can be gravity, pneumatic and electrically operated models.

Diverter Valves are designed for positive sealing and dependable switching of material flow in pressurised conveying lines. Available in manual or actuator controlled versions with case Iron or Stainless Steel construction. Special designs are available for three / four way diverting of materials.



Double Cone Valve



Pneumatic Dump Valve



Drop Through Rotary Airlock



Coal Mill Feeder



Motorized Diverter Valve



Self Cleaning Rotary Feeder

CONVEYORS FOR THE PAPER INDUSTRY



Hyquip with over two decades of experience in bulk material handling systems has evolved as a preferred supplier in the Paper industry.

Hyquip is geared up to meet the most challenging applications and under the most extreme conditions by collaborating with client right from understanding of application to deliver the right solution, thereafter design, manufacture and install in **compliance with best global practices**.

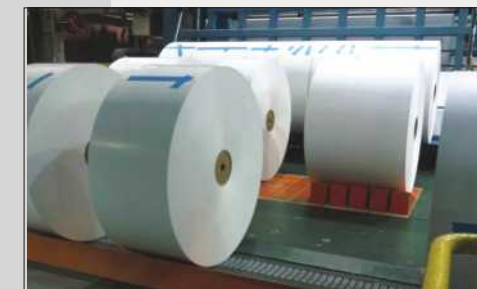
Almost all the major Paper plants in India employ either or all of the following:

- ❑ Shaftless spiral conveyors for Pulp feeding
- ❑ Slat chain conveyors for Paper bale handling
- ❑ Shaftless spiral conveyors for Wood chip handling
- ❑ High speed broke conveyors
- ❑ Chain / Shaftless spiral conveyors for Knots handling
- ❑ Screw feeders for Silo extraction.
- ❑ Reel handling systems

The products are manufactured under well established manufacturing process and quality assurance plans in most modern factories, at **competitive prices**.



Paper Pulp Feeding



Paper Reel Handling



Pulper Feeding Conveyor



Bales Feeding Conveyor



Conveying Paper Bales



Reel handling Transfer Station



Bale Transport System

CRUSHING & SCREENING SYSTEMS



HYQUIP with its vast experience in Crushing & Screening of aggregates has stood out in the cluster of competitors as the most reliable system supplier for the large infrastructure projects as well as **road construction industry**.

Apart from meeting the demands of the domestic market, Hyquip is focusing in growing markets of Africa and the Middle East.

In order to offer latest design concepts and technologies, Hyquip has entered into strategic partnerships with leading global players to create value to its customers.

Hyquip being a turnkey solution provider, also offers most efficient dust control systems with bag filters to ensure the facility meets the stringent environmental norms.

The complete instrumentation and electrical controls are designed and built by in-house team with an optional facility of real time **remote monitoring** through GT-16, a GPRS enabled system.

As the plant life is longer than the project schedules, modular / mobile concepts are adopted for **easy & faster relocation**.



Cone Crusher



Jaw Crusher



Impactor



Primary Stage



Secondary Stage



Tertiary Stage



Stock Piling

DUST CONTROL SYSTEMS

Hyquip's research and development group has developed reliable systems for Dust Extraction, Dust Suppression (dry fog, mist and sprinkler types), Pressure Ventilation for MCC rooms, Tunnel Ventilation and Plant cleaning systems.

The company's activity starts right from detail study of the layout to design, manufacture, supply, erection & commissioning. It also extends its services to annual maintenance contracts (AMC's) to ensure dust free environment in the plants.

Dust Extraction System employee's dust collectors for extraction of dust from generation source, where moisture addition is not advisable.

Instead of collecting dust and filtering through dust collectors another approach for dust control is spraying of water where moisture addition is not a concern.

The mist type **Dust Suppression Systems** are generally suggested at ground hoppers and unloading areas as a first choice due to its ease of maintenance and low operating costs.

Design, manufacture, installation and commissioning of pressure **Ventilation Systems** work in concert to provide you with the most efficient, cost-effective ambient Air quality control & maintenance.



Mist Type DSS



Sprinkling System DSS



Dry Fog Type DSS



Dust Extraction System



Tunnel Ventilation



Coal Dust Extraction



Pressure Ventilation

COAL HANDLING SYSTEMS

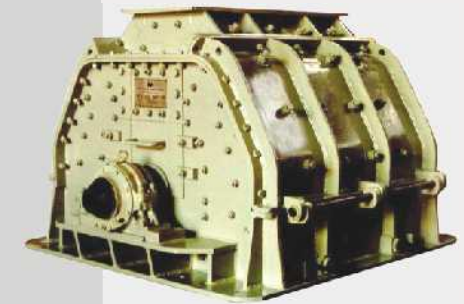


Hyquip engineered fuel handling systems, not only employs most efficient crushing and screening equipment but also ensures that the cost-per-ton of prepared fuel is economical even in the most complex power plant layouts.

Hyquip has developed the core equipment through constant in-house research for over a decade and selection of the right equipment for the duty conditions not only ensures the optimum performance of the individual equipment but also results in the overall efficiency of the power plant. The proposal engineers select the best suited crushing equipment to generate the desired size of the product with less amount of fines with regards to the type of furnace. This avoids fuel wastage and thereby savings in fuel cost.

The material of construction of wear-n-tear components are carefully selected as well as they are properly proportioned and balanced for maximum working hours resulting in **lower maintenance costs**.

More importantly, completion of the project within stipulated time schedule avoids cost overrun of the project.



Impactor



Vibro Screen



Coal Feeder



STACKING & RECLAIMING SYSTEMS



HYQUIPs expertise in understanding of optimum stockyard utilisation, storage and retrieval helps in selection of the right type and configuration of the Stacker and Reclaimer system for coal, iron ore, clinker, limestone, fertilizer... etc.

Most importantly the reliability and performance of the system is assured as our involvement not only stops with installation, but is also backed by a 24/7 post sales service.

Hyquip also offers cost effective storage sheds of various shapes and configurations from normal to extra wide spans.

They are covered by galvalume / corrugated aluminum sheets of various colors and designs to suit **plant aesthetics**.

Our in-house expertise of erection and commissioning of the systems is an added advantage to the customer as it provides a single source from concept to commissioning.

The current projects being upgraded to large capacities of global scale to ensure cost effective operations.



Bucket Wheel



Scraper Chain



Overhead Tripper



PRE-FABRICATED STRUCTURALS



As a logical extension to stock yard sheds Hyquip also offers **Pre Engineered Buildings** and **Space Frame Roofings**. The Pre-Engineered Steel Buildings will be fitted with different structural additions like trusses, mezzanine floors, fascias, canopies and crane systems as per user necessities. The standard design code followed by us is AISC, AWS-D1-1-96 & MBMA.

We specialize in Pre-Engineered Metal Building Systems Design, Engineering, Fabrication and Erection. The design and detailing work on Pre Engineered Building is carried out by our highly skilled engineering teams by utilizing fully optimized techniques and without compromising on quality.

Features:

- Longer service life and fine finishing
- Light in weight and portable
- Available in various sizes, shapes and specifications
- Water proof and rustproof
- Robust construction and excellent aesthetics
- Fabricated in accordance with the international quality standards
- Flexible and alluring design
- Corrosion resistant and abrasion resistant
- Easy installation and low maintenance
- Weather proof and environment friendly



CONVEYORS FOR MINING & MINERAL PROCESSING



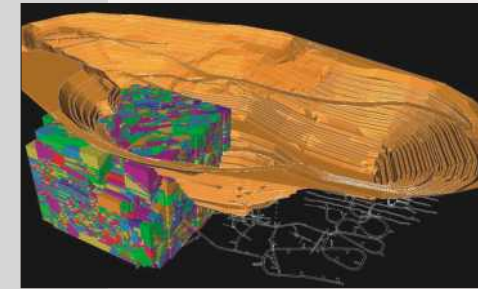
HYQUIP's basic philosophy of offering systems to meet specific applications, has evolved numerous solutions for the special demands and extreme operating conditions of the Mining and Mineral Processing industry, especially for **Underground Mines**.

Further as a result of working closely with Mining companies, Hyquip acquired an unique insight of all operational sequences in the mining and tunneling cycles and offers shiftable, semi-mobile, fully mobile conveyors facilitating relocation or expansion as the mine develops.

Through strategic associations Hyquip incorporates the latest **ore beneficiation** technologies and is ideally poised to take up the challenges of this industry.

The conveyor system is designed to operate from a centralized PLC system located on the surface consisting of non-redundant CPU, power supply and communication modules and non-redundant IO modules.

The specialization in project management and process plant design led to Hyquip launching its new Mineral Processing division, which extends consultancy services for the mine design and mining plans.



Mine Designing



Classifiers Installation



Screw Callssifier



Garland Type Belt Conveyor



Mine Site Conveyor



UG Control Station

CROSS COUNTRY CONVEYORS



Cross Country / Long Distance overland conveyors are the most economical means of transporting bulk materials over long distances and the costs are often lower than truck or rail transportation. Installing the conveyor beside the existing road facilitates easy approach for maintenance and avoids additional cost of building separate approach roads.

Conveyor systems are the logical connection between the phases of mining, processing and storage. Hyquips overland belt conveyor systems are custom made to meet the specific demands of the client like the type and volume of material to be conveyed and to meet the existing topography of the route, as well as the prevailing climatic conditions.

Hyquip's standardization of galleries (which provides **inter changeability**) and a unique mounting arrangement on the trestles facilitate faster assembly and erection at sites thereby reducing time and cost.

This approach also helps in optimal routing of the conveyors following the contours of the terrain.



Modern Transfer Station



Bolt Less End Portals



PNEUMATIC HANDLING AND STORAGE



Hyquip offers dilute phase pneumatic conveying systems ranging from single-point installation to cross-plant systems with multiple pick-up and discharge points and automated controls, satisfying an exceptionally wide range of bulk conveying applications. All are custom-engineered and fully integrated with other equipment and systems, for new or existing process.

Since conveyor lines can be routed vertically and in any horizontal direction, over short or long distances, through small holes in walls or ceilings, systems are easy to integrate into production environments in which process equipment and other obstacles often exist, while **consuming minimal floor space**.

Totally **enclosed and dust-free**, a Pneumatic conveying system prevents contamination of the product and plant environment, allowing safe transfer of contamination-sensitive materials including dusty and hazardous products.

Pneumatic conveying systems feature easy-to-maintain filter receivers with access doors and inspection ports, as well as rotary airlock valves with access doors for easy cleaning and inspection.

Self-contained Pneumatic conveying systems complete with feed hopper and/or pick-up wand, blower unit, filter receiver and control package, are available pre-engineered and configured on castor mounted frames for in-plant mobility.



BELT CONVEYORS & COMPONENTS



Hyquip supplies conveyor components of various types and capacities to meet several applications.

The Idlers are precision manufactured with CNC machines to ensure close tolerances with low starting and frictional resistance resulting in power savings.

The Idlers are built for a maintenance free operation with a guaranteed bearing life of over 40,000 working hours.

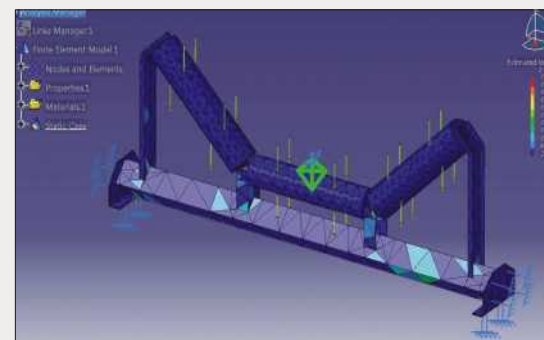
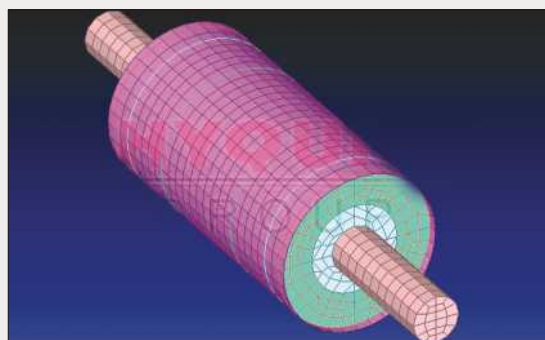
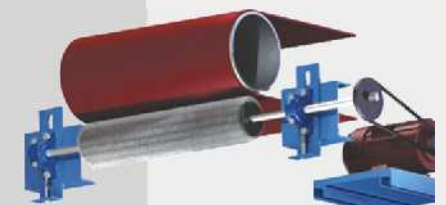
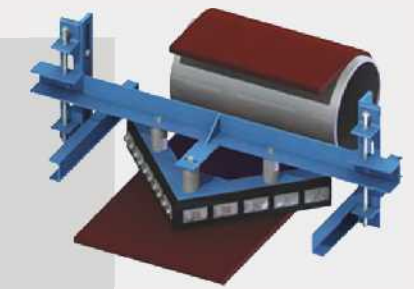
The conveyor pulleys are manufactured according to customers' specifications and drawings. The in-house design and calculations are based on FEM and all drawings are reproduced on CAD software.

Hyquip offers pulleys for medium and heavy duty applications of various types used in the belt conveyors like Drive, Driven, Snub, Bend and Takeup.

The specially designed Skirt sealing and Belt cleaners play a significant role in maintaining the Hyquip's USP of delivering clean and "dust free" Fuel (Coal) Handling Plants.

Hyquip offers, segmental blades made out of rubber / polymer / polyurethane depending upon the application with an option of having the lead edge cleaner tips made of Tungsten Carbide or Stainless Steel.

Customers, rely upon Hyquip to provide application specific product which are value priced, apart from meeting their ISO-14000 requirements.



MUNICIPAL WASTE PROCESSING MACHINERY



HYQUIP diversified into MSW processing technologies in the year 2002. Ever since through continuous refinement of its products, evolved into one of the most reliable system supplier in the domestic market for processing of municipal solid waste.

Hyquip has developed import substitutes like 'Shredder', 'Air Density Separator', 'Baling Machines' and 'Shaftless Screw Conveyors', to integrate into the system.

A battery of reputed scientists in the field of processing have been pooled to help offer turnkey solutions for conversion of solid waste into compost & refuse-derived-fuel and plastic recycling processes with integrated sanitary landfills. Hyquip has thus emerged a comprehensive solution provider for Municipal Solid Waste management.

Hyquip's technology provides an environmentally friendly approach to the increasing problems surrounding the Municipal solid waste generation, over which there is no control and offers a economically attractive solution - commercial power.

Hyquip's integrated sustainable MSW disposal concept not only offers recovery of Energy from Municipal Solid Waste but also re-use of solid remains from building and construction materials in the urban waste for manufacture of pavement tiles, kurbs etc.



Top Loader



SLUDGE HANDLING SYSTEMS



HYQUIP has emerged as the forerunner in MSW processing technologies with over a decade of rich experience having processed over 10 million tons of waste.

With this overwhelming success Hyquip ventured into sludge handling systems in waste water treatment plants in technical collaboration with a Canadian company.

Hyquip offers an optimal solution for municipal de-watered sludges and industrial sludges. Hyquip's design provides a non-clogging conveying surface for easy transport of "semi-liquid" and "sticky bulk solids", would also given greater flexibility in plant layout due to the various configurations available.

Shaftless spiral conveyors are capable of conveying de-watered sludge and other difficult to transport materials vertically up to 13 m (40 ft.) Per stage up to 3 stages into a corresponding horizontal conveyor or directly into storage silos. The throughput rate of the conveyors would be upto 50 m³/hr. The specially designed breaks in the liner provide resistance points which help to prevent slippery materials forming a rotating plug, thereby encouraging the material to move vertically with spiral face.

Hyquip also offers channel screens, grit classifiers, screening de-watered press, screw compactors in technical collaboration with a Canadian company.



DRYING AND COOLING OF BULK SOLIDS



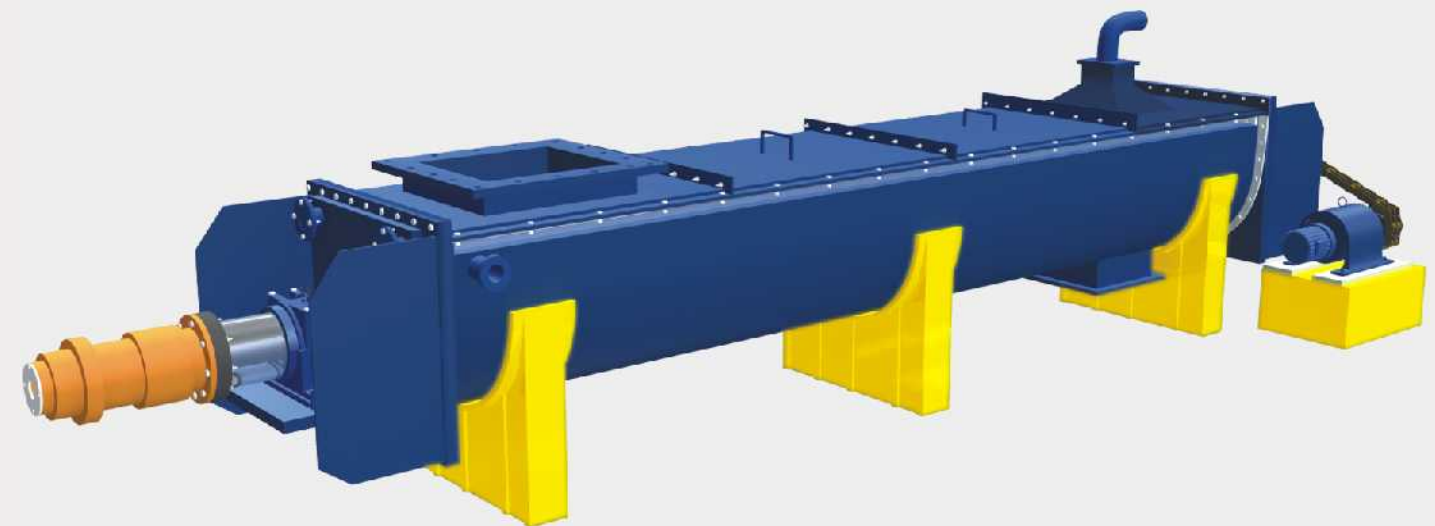
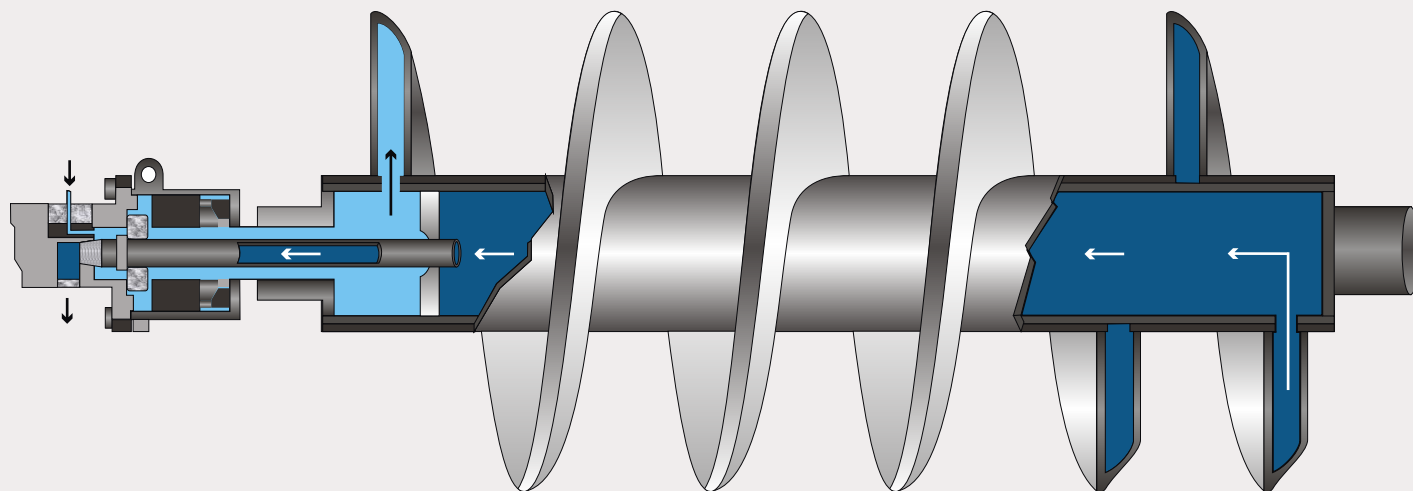
HYQUIP with over three decades of experience in Screw conveyor technology has developed Holo-Flite Screw Conveyor known as “**Holo-Screw Flite Cooler/Dryers**” for cooling of ash, pet coke and drying of refuse derived fuel and other varied materials.

These coolers/dryers, can be engineered with single, twin and quadruple holo flite screw shafts with diverse cooling heat-transfer medium and different materials of construction to meet requirement of specific applications of cooling, drying and heating.

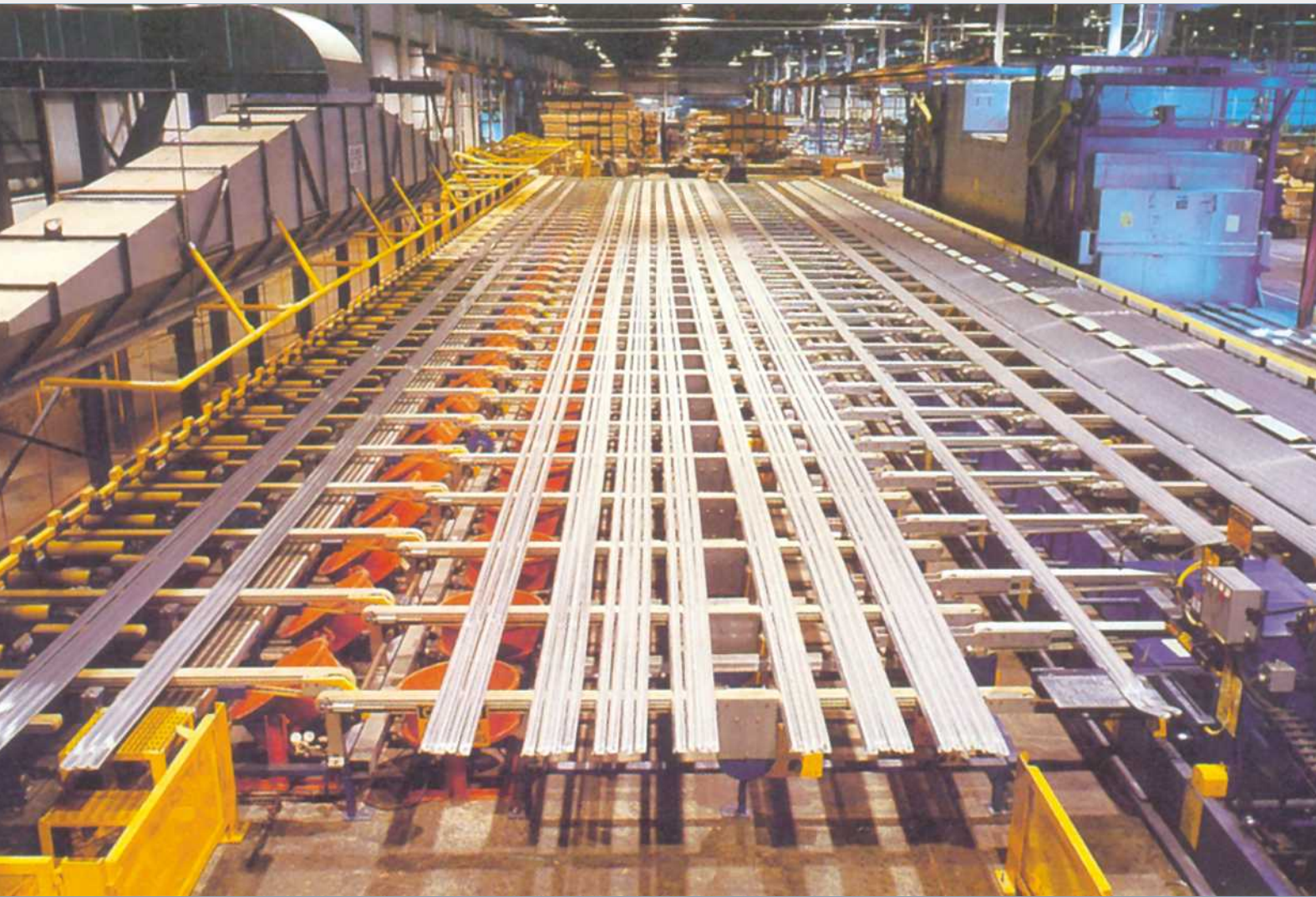
Over years of field experience, Hyquip has taken special care in design of these heat exchangers at the inlet to increase the life by three to four times. These equipments can be built upto 10 bar pressure.

To meet various application requirements, Hyquip Holo-Screw Flite coolers/dryers are engineered with single, double or multiple screw configurations and tubular, U or omega shaped jacketed troughs.

Though the coolers/dryers are primarily designed on the basis of empirical procedures, backed by thermodynamic calculations, Hyquip uses its own experience from existing installations and from other areas of process technology to continuously improve the performance of the equipment.



IN-PLANT & UNIT HANDLING SYSTEMS



Hyquip has evolved from a simple single conveyor into a system designer of totally integrated systems for handling of unit loads and machine-to-machine automation. These customised solutions have finally led to some of the standard product lines like Aluminium Extrusion handling systems, Elevators & Lowerators, Telescopic Truck-loaders and Palletizers, apart from simple conveyors like Slide-beds, Powered rollers, etc.

The In-plant handling systems are designed to work in harmony with other installed equipment with a sole objective of **increasing the productivity** and **reduce manpower dependence**.

Hyquip received the prestigious **PAC-Machine Award** for the high speed packaging line developed for Indo-Nippo batteries where the manpower was reduced from a 30 member team to only 3 supervisors.

Hyquip is well known in the market as a complete solution provider - offering customized and tailor made systems to the exacting needs of their applications.



BIOMASS & ALTERNATE FUEL HANDLING SYSTEMS



Hyquip with over two decades of experience in bulk material handling systems has evolved as a preferred supplier in the thermal power generation industry, based on Biomass, Bagasse, Coal, Lignite or Municipal Solid Waste fuels.

Our expertise is in offering most economical layouts, preparation, storage and retrieval systems of fuel. The core equipment for fuel preparation are designed and built by our team to meet the exacting needs of the boiler.

Further, to increase the viability of these power plants, Hyquip has developed technologies for producing RDF (Refuse Derived Fuel) from Municipal Solid Waste; which is economical and abundantly available compared to biomass fuels.



Wood Chips Shredder



Drum Chipper



Wood Chips Extractor



INTEGRATED SOLAR POWER PLANTS



The solar panel comprising of the PV modules is mounted on a **tracking** system that follows the Sun in its trajectory across the sky. This is considered the simplest and the most efficient way to maximize the output of a typical solar photovoltaic system. Thus, solar trackers are devices which improve the energy yield of the power plant by optimally positioning the solar panels towards the Sun.

Financial benefit of using solar tracking systems for increase in lifetime energy yield of solar power plants, considerably outweighs the increment of system cost.

Hyquip, adhering to the highest technological and engineering standards has indigenously developed, seasonal tilt, **single and dual-axis tracking** solar installation solutions for utility grade solar projects with technical assistance from **Sachs Engineering, Germany**.

It is also economical to install solar power systems for educational institutions, offices and commercial establishments who operate only in day time as it does not require any battery backup adding value to the business.

Hyquip's integrated approach also involves feasibility study to design, erect and maintain the systems by highly trained professionals / technicians giving you the peace of mind for years to come.

Specially designed self loading modular structures help in quicker installation of the system and avoid costly civil works.



A company built on values & ethics

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