VISION

Our vision is to be a globally reputed engineering metal products company. We endeavor to have a strong and enduring relationship with our customers based on quality and service.

MISSION

Our mission is to leverage our modern infrastructure, technical expertise and decades of experience to provide high quality and cost effective metal products to our customers. We are committed to ensure rewarding experience to our customers. We work closely with shareholders, suppliers, customers and employees to ensure attractive economic returns for every shareholder.
Pennar Group, founded in 1988, has over 2000 employees with an annual turnover of more than Rs1200 crores. It has three main entities, namely, Pennar Industries Limited, PEBS Pennar and Pennar Enviro Limited. Pennar Industries Limited is the parent company of the Pennar Group. PEBS Pennar and Pennar Enviro Limited are its subsidiaries.
Pennar Industries Limited (PIL) is one of the leading engineering organizations in India renowned for providing innovative engineering solutions. An epitome of quality, precision and perfection, Pennar is a professionally managed company of over 2000 employees. We are driven by an unrelenting desire to excel with experience and expertise spanning over three decades. Pennar is a multi-location, multi-product company manufacturing cold rolled steel strips, precision tubes, cold rolled formed sections, ESP electrodes, profiles, railway wagon and coach components, solar structures, storage solutions, pressed steel components and road safety systems.

PIL, established in the year 1988, has grown since then by leaps and bounds widening its spectrum of engineering products. Pennar covers a whole range of products catering to various segments such as Infrastructure, Automobiles, Energy, General Engineering and others. The company has stratified its business into Strategic Business Units, namely: Steel Products, Industrial Components, Systems and Projects, Tubes.

PIL has a pan-India presence with five manufacturing facilities situated across the country. These facilities include laser cutting, plasma cutting, transfer presses and CNC machines that enable it to make products of very high quality. All the plants are ISO 9000 certified. Pennar Industries endeavours to achieve ‘total customer satisfaction through total quality management’ and is committed to produce and provide steel-based products and associated services of the highest quality to customers all over the world. Pennar Industries stands for quality, precision and commitment to deliver the best; the thirst for top class engineering products ends here.

Driven by our guiding philosophy of maximizing customer satisfaction with products and services par excellence, today, we have successfully established our identity as a Powerhouse of Engineering Excellence.
30 YEARS OF EXPERIENCE
1,000 PRECISELY ENGINEERED PRODUCTS
500 CUSTOMERS
2,500 TOOLS AND DIES
2,000 EMPLOYEES AND THE COUNT IS ON!
Pennar Engineered Building Systems Ltd. (PEBS Pennar) has emerged as one of the leading companies involved in the design, fabrication, supply & erection of: Pre-engineered steel buildings, Solar Structures, Cold Formed Buildings, Industrial Racking Systems, Hi-rise Buildings & Structural Steel.

PEBS Pennar has inherited a streak of excellence from its parent company – Pennar Group, an ISO 9001:2000 Company. Covering a wide spectrum of application areas, PEBS Pennar has brought innovation, design distinction, international expertise and above all, global quality to every customer who aspires for technological and structural superiority.
Pennar Enviro Limited (PEL), incorporated in 1992, has a manufacturing facility at Mallapur, Hyderabad. Since its incorporation, PEL has been a pioneer in the field of additives, supplying specific premium high technology additives based on fuel characteristic requirements and specific performance enhancements.

PEL has brought to India a wide range of fuel additives for treatment of different petroleum fuels in order to enhance the specific performance requirements of each fuel like Furnace Oil (FO), CBFS, Light Diesel Oil (LDO), Superior Kerosene Oil (SKO) and Low Sulphur Heavy Stock (LSHS).

Pennar Enviro Limited is the authorized manufacturer and marketer of Elf Fuel Oil Additives. The company has obtained technical know-how from Total of France for the manufacture of fuel additives. A strategic alliance has been established with Cummins India Ltd. for marketing.

For water treatment, Pennar Enviro Limited has an extensive range of high performance Specialty Water Treatment Chemicals under the brand name of “PENNTREAT” for treatment of Boiler Water, Cooling Water, Raw and Effluent Water and Reverse Osmosis.

Pennar Enviro deals with Water and Environment Infrastructure business to provide turnkey solutions viz., Water Treatment Plants (WTPs), Sewage Treatment Plants (STPs), Effluent Treatment Plants (ETPs), Effluent Recycling Plants (ERPs), Zero Liquid Discharge Plants (ZLDPs) etc. using various advanced and environmental friendly technologies in Industrial and Municipal Segments besides Sea/Brackish Water Desalination. Plans are on to enter into MSW and HWM Processing and Treatment Solutions using advanced and environmentally friendly technologies.
Roofing sheets are manufactured by forming the sheet from imported world class forming mills, dedicated exclusively for roofing sheets. We manufacture and supply Trapezoidal profiled metal Roofing sheets which are made available as: Bare Galvalume, Colour coated Galvalume, Colour coated Galvanised. With strong commitment to deliveries, Pennar’s Roofing Sheet is known for several benefits such as: • Consistent quality • Customised profiles which are offered in exact cut to length • Availability in attractive colour and designs.

Business application-Pennar supplies total roofing/cladding system to a wide range of industries like power plants, cement plants, industrial sheds, godowns, institutions, etc

Products involved are: corner flashings, profiled ridges, bargeboard gutters, down spouts, etc
A Composite Floor Deck is a steel deck with a ribbed profile, which binds with a concrete slab and together forms a part of the floor structure. This interlocking between the concrete and the floor deck is brought about through a system of embossment and ribs which are built into the deck, creating a reinforced concrete slab that serves the dual purpose of permanent form and positive reinforcement.

Composite decking is one of the most effective method of constructing floors in steel building and very useful in highrise RCC/Steel Buildings.

**BENEFITS OF PENNAR METAL DECKING**

- Light weight and doesn’t require any support, which considerably reduces the use of concrete & slab thickness.
- Acts as composite member and as permanent shuttering.
- No major reinforcement required.
- Deck can be used as working platform during construction.
- Speedy construction enables faster completion of a project.
- Metal deck can also be used as roofing and cladding sheet.
- Decking reduces the construction time, hence the total cost.
- Easy-to-erect standard profiles as well as customized decks as per specific customer requirements.

**APPLICATIONS**

Pennar specializes in the manufacture and supply of metal decking, which can be effectively used in power projects, industrial buildings, multi-storied buildings, supermarkets/malls, SEZs, silos, storage sites, mezzanines, bridges, walkways and platforms.
All over the world, engineers are now taking keen interest in using Cold Formed Steel as the basic material of construction to complete projects on fast track basis. Considering the higher strength to weight ratio of CRF Sections, Pennar Purlins / SECTIONS have become very popular in the construction of any steel building, whether it is simple storage shed or a complex Turbo Generator building in a power plant. Pennar Purlins are well accepted by architects and structural consultants all over India and abroad. Pennar supplies a wide variety of sections like C-Channels, Lip Channels, Sigma Sections, Z-Purlins, Multi-beams, Angles and various other contours, usually in thickness range of upto 6mm. Sections can be supplied in various grades of steel depending on the customer requirement.
The inter-locked cold-formed steel sheet piles can be divided into two main types. These are produced as per EN10249 standard & IS 2314.

**U-TYPE**
The U-type sheet pile is the best choice for support usage. It has equal cross section, which is convenient for piling and reuse. It combines great profile depth and has excellent statical properties.

**Z-TYPE**
The Z-type sheet piles can be used to bear the heavy weight of independent pile wall. It has higher modulus of section. Interlocks provided at the outer fibre thus give optimised section profile.
Metal Crash Barrier is a cold formed steel product used as a road safety system to prevent vehicles from colliding with obstacles such as boulders, walls and buildings. It also prevent vehicles from entering into large storm drains, steep slopes or deep water. Pennar Industries is the first company to introduce the Metal Crash Barriers concept in India. We have supplied more than 3000 kms of Metal Crash Barriers to various leading infrastructure companies in India.

FEATURES

• Our tested and proven barriers ensure minimum damage to the vehicle and its occupants.
• During collision the W beam absorbs maximum energy by flattening out and laterally restrains the vehicle from veering over.
• Prevents the vehicle from skidding back onto the carriageway by controlled exit angles by gradual deceleration and effective redirection of the vehicle back onto the road.
• Provides a good visual guide to the drivers especially in the night.
• Enables quick repairs in case of accidents.
• All components are hot dip galvanized for longer life.

APPLICATIONS

• As restraining barriers on embankments of Expressways & Highways.
• As containment barriers on medians and grade separators of four/six lane roads.
• As protection barriers/containment barriers for hilly terrains and ghat roads.
• As race car crash guards on car racing tracks.
• For interior traffic safety at airports, plants handling hazardous chemicals, mines, collieries, etc.
• As fencing barriers for country border lines, expanse lands, water bodies, bridge piers, signposts, rocky areas etc.

TYPES OF BARRIERS

Metal crash barriers conforming to all major specifications like:

• Ministry of Road Transport & Highways, India (MORTH)
• American (AASHTO M 180)
• Euronorm (EN 1317 – 1&2)
Pennar has been supplying various types of collecting & discharge electrodes of all ESP designs (both European & American) to all ESP manufacturers in India for the last 15 years. Pennar is having its own inhouse facilities and full fledged manufacturing facilities including fabrication. In-house manufacturing resources and testing facilities enable to supply quality product in large quantities. Pennar manufactures a wide range of ‘Collecting Electrodes’ and ‘Discharge Electrodes’ for Electrostatic Precipitators (ESPs), which are used for controlling pollution in cement, mineral industries and in power plants.

**DISCHARGE ELECTRODES**

They are insulated electrically from the rest of the chamber and charged with high direct current. The electrical charge ionizes the suspended particles, causing them to move toward the collecting electrodes. Opposite high voltages (plus and minus) are charged on two plate grids. The positive grid charges the particles and the negative grid attracts (collects) them.

The electrodes are manufactured by cold roll forming and then subjected to various post forming operations. The customers include Alstom, Thermax, ACC and L&T. Pennar is also a global source of ESP components to FL Smidth (Denmark) and Hamon Research-Cottrel (Belgium).

**COLLECTING ELECTRODES**

Particles caught in the flow of gas move through a collector chamber or passageway containing sets of electrodes in the form of parallel plates, bundles of tubes, or simply the collector’s inner walls. The plates, tubes or inner walls serve as grounded electrodes that act as particle collectors. The collecting electrodes are vibrated to loosen the particles, which fall into hoppers for collection and disposal.

*Note: Image for representational purpose only*
Cold Rolled Steel Strips (CRSS) are steel products produced from hot rolled strips that have been pickled. The strip is reduced to approximately final thickness by cold-rolling directly, or with the inclusion of an annealing operation at some intermediate thickness to facilitate further cold reduction or to obtain mechanical properties desired in the finished product. The coil is then slit to the desired width through the process of roll slitting. The final product typically consists of cold rolled steel that has been cut into strips of specific widths and coiled or oscillate coiled for delivery. The CRSS division with facilities at Patancheru & Isnapur, Hyderabad has a combined annual production capacity of 120,000 MT.
Automobile products are the pressed steel products manufactured to address requirement of the Automobile sector. Pennar is a one-stop-shop for all products to most of the OEMs. We cater with our vast product portfolio to fulfill demands of the Automobile sector.

Pennar profiles are being used by almost all the major Automobile companies (LCV/MCV/HCV) in India. We cater Automobile companies with products as: tubes for bus body builders, floor panels/side panels, bumpers for LCVs, MCVs, sheet metal components, fabricated items along with floor products.
WAGON

Pennar’s custom designed cold roll formed profiles find application in the manufacture of railway wagons because of the superior strength to weight ratio, which are alternative / substitute for conventional Hot Rolled sections of non-uniform in thickness. Pennar developed and supplied Stainless Steel Single Piece Centre Sill Hat Section in 10mm Thick / 10 Meters Length, which is vital for New Generation Stainless Steel Wagon’s Under frame (BOXNHL - MBS). Pennar manufactures various Stainless Steel CRF Profiles for different Wagon applications like BOXNLW, BOXNHL (MBS), BCNHL, BRN 22.90, BOXNR etc. Pennar supplies Stainless Steel CRF Sections up to 12mm Thickness for various Wagon applications, usually in longer Lengths (10 Meters and above). Pennar supplies Fabricated stainless steel Wagon sub-assemblies like Side Wall / End Wall / Flap Door assemblies for Stainless Steel BOXNR Wagon for Indian Railway wagon rehabilitation project. Pennar is an approved source for supply of CRF sections and fabricated parts for wagon applications by RDSO, Lucknow.

COACH

Pennar supplies stainless steel Trough Floor and Sole Bar, usually in longer lengths (9 Meters and above) for Rail Coach under Frame. Pennar’s range includes heavy fabricated items like: Front Part, End Part, Bogie Bolster, Head Stock, Lower Spring Beam and Trough Assemblies. Pennar also manufactures Cant Rail Assemblies, Side Wall Assemblies and Stainless Steel Body Pillar (in single piece construction) for conventional coaches (Side / Roof Assemblies). Stainless Steel Fabrication of Side Wall / End Wall / Roof Assemblies for LHB Coaches have also been developed and supplies are made as per customer’s requirement.

Pennar manufactures the following products for all types of coaches i.e., conventional / EMU / MRVC / LHB and Metro coaches:

**Under Frame assembly**
- Longitudinal Beam
- Stainless Steel Trough Floor Sheets
- Bogie Bolster Body Frame
- Head Stock
- Modular Frame
- Lower Spring Beam

**Side Wall assembly**
- Body Pillar
- Door Corner Sheet
- Light Rails / Waist Rails
- Roof
  - Cant Rail Assembly
  - U-Stiffener
  - Trough for Roof-Mounted A/c

**LHB COACHES (Stainless Steel)**
- Side Wall Assembly
- Roof Assembly
- End Wall Construction
- Metro Coaches
  - Cant Rail
  - Sill Side
  - Roof Panel
  - Keystone

**Shell assembly**
- Partition Frame
- Furnishing
- Hand Rails
- End Construction
Pennar is making a foray into the storage solutions market to meet the needs of a growing market and to extend its product portfolio with following products. • Selective pallet racking • Heavy duty shelving • Drive In and VNA racks • Mezzanine storage systems • Cantilever storage systems • Pallets: Tubular pallets, Plastic pallets, Corrugated pallets, Cage pallets/Wire mesh pallets and Stackable pallets • Accessories: Machine tool cabinet, Tool storage lockers, Tool transfer trolley and Worktables

Selective pallet racking
Pennar selective pallet racking system allows individual accessibility to all pallets with simple stock rotation. Selective pallet racking provides high volume of storage for pallets. Wide range of products can be stored in selective pallet racking.

APPLICATIONS
• Raw material storage • Finished goods storage
• Distribution centres • Retail stores

Mezzanine Storage systems
Pennar mezzanine floor for storage is a structural floor offered in single & multi-tier formats. This provides scope to increase available storage space within the existing plant. Single or multi-tier mezzanine floors can be used to extend the area in an existing warehouse. Mezzanine floors are the most price and time efficient solution to enlarge floor space. Pennar offers multiple flooring options to best accommodate the service conditions viz., steel panels, gratings, chequered plate & wooden floor.

ADVANTAGES
• Uniquely engineered steel components rapidly bolted to form secure storage unitized structure.
• Components of the mezzanine system are powder coated for anti-corrosion features and long life.

APPLICATIONS
• Manufacturing units • Warehouses • Offices

Cantilever storage systems
Pennar cantilever storage systems are storage units with load carrying arms and extended length apparent from a single column. Vacancy of vertical support on one end of cantilever arms allows steady storage of long material. Cantilever storage systems are primary storage solutions for long & irregular shape rods, tubular arms and materials of varying lengths.

Heavy duty shelving systems
Pennar Heavy duty shelving system can be used to store non-palletized goods. Pennar offers multiple decking options to best accommodate the storage viz., steel panels, gratings, chequered plate & wooden floor. Heavy duty shelving systems are set up for ultimate strength, stability, and safety with quality material.

APPLICATIONS
• Warehouses • Automotive • Factories • Retail

Drive In Racking
Pennar Drive In racking systems eliminate aisles and utilize up to 70% more warehouse space. Drive in rack is an ideal storage solution for inventory that has a longer shelf life.

Drive In racking systems can store multiple pallets two or deeper, allowing storage of the largest possible quantity of product in your existing space.

Very Narrow Aisle (VNA) Racking
Pennar Very Narrow Aisle (VNA) racking is similar to selective racking which decreases the passage between the racks for high storage capacity. Pennar VNA racking is the ideal choice for the use of storage space that has a narrow aisle access and is operated with “very narrow aisle” material handling equipment.

Pallets
Pennar pallets are manufactured to support heavy loads and can reduce risk of product damage in storage solutions. Pennar provides pallets that are uniquely designed in different dimensions. Company offers two-way and four-way pallets for multi use.
Being the largest cold roll formed steel section manufacturers in India, Pennar Industries has supplied mounting structures and structural components to various solar plants, totaling more than 400 MW till the end of Financial Year 2013. Pennar Industries is also equipped with a strong team of design engineers who have helped optimize the weight of mounting structure by approximately 30% thereby helping greatly in reducing the overall cost of the structures and in turn the cost of the Solar Power Project.

The range of solar sections manufactured by Pennar Industries is quite large with a vast spectrum of sectional dimensions and thickness. The solar structure and structural component manufacturing capacity of Pennar currently stands at 5000 MT per month which translates to approximately 70-80 MW worth of solar structures. One of the most tactical advantages of Pennar for the solar segments is the strategic locations of the manufacturing plants. The Tarapur plant is close to the present epicenter of solar projects (Gujarat and Rajasthan) and our plants in Chennai and Hyderabad (Patancheru and Isnapur) can cater to the markets in Tamil Nadu, Odisha, Karnataka and other neighboring states.
A tubular section or hollow cylinder, usually but not necessarily of circular cross-section, used mainly to convey substances which can flow — liquids and gases (fluids), slurries, powders, masses of small solids is known as Tube. It can also be used for structural applications. Various industrial segments are catered with four broad categories of products. The tubes SBU manufactures products of different shapes and dimensions. The standard products include: • Electric Resistance Welded (ERW) tubes/pipes • Cold Drawn Welded (CDW) tubes • Air Pre-heater (APH) tubes • Indian Boiler Regulations (IBR) tubes.

CDW TUBE MAKING
Tubes requiring high precision dimensional tolerances, higher strength, controlled mechanical properties and special smooth inner surface finishes are produced by Cold Drawing process, popularly known as Cold Drawn Welded (CDW Tubes).

ERW tubes are annealed and prepared for pointed ends through cold swaging/push pointing operations. End prepared tubes are drawn through a high precision close machined die which controls the outer diameter over a plug (placed inside the tube, coaxial with outer die) which controls the inner diameter of the tube. The tubes are further processed by the downstream facilities for a variety of applications.

Uniform sectional thickness, close dimensional tolerances, superior inner surface finish and consistently higher mechanical properties make CDW tubes suitable for a wide variety of applications.

ERW TUBE MAKING
Electric Resistance Welded (ERW) tubes are made by forming the steel strip into a tubular round section by progressive movement through a set of specially designed rolls. The butted ends of the strip are welded by high frequency induction welding process without any filler material. The hot weldflash formed due to welding is removed internally (fin-cut) and externally by the deburring units. Turks head and sizing rolls provided at the end of the tube mill ensure straightening and sizing of the tubes into required sections like rectangular, square, elliptical and oval. The tubes are cut into required length and undergo annealing, pressure testing, eddy current testing, straightening or cutting depending upon the applications.

APPLICATIONS
Automobile
• Front fork Top/Bottom • Steering column • Two wheeler main frame • Bottom chassis • Fuel tank spacer • Swing arm • Propeller shaft • Seat frame • Tie rod • Rocker arm shaft • Catalytic converter • Fuel injection • Side impact beams • Four wheeler dash board frame • Shock absorber • Silent blocks • Control arms • Gear shift lever

Boilers and Heaters
• Chemical/Sugar Industry • Super heater • Paper/Process Industry • Air pre heater • Heat exchanger

General Engineering
• Bearings and spindles • Trolley handles • Hydraulic and pneumatic line • Electrical conduit • Oxygen lancing pipes • Cycle pumps • Industrial chain roller • Gas stove lighters • Electrostatic precipitators • Textile frames and Bobbins • Main beam for pedestal fans
INDUSTRIAL COMPONENTS

White Goods & Auto Components

Pennar Industries is the largest player in the organised sector for Industrial Components in India. The Industrial Components are value added steel products manufactured as per the application and requirement of customer. These components find application in Automobile, White Goods and General Engineering sector. Plants located in Patancheru, Chennai & Hosur are the facilities equipped with state-of-the-art Press Shops to manufacture these components. The ISO-9001:2000 certified manufacturing facilities have capacity ranging from 20MT to 600MT. Our Chennai plant is accredited with TS16949.

AUTOMOBILES
- Pennar has years of experience in manufacturing wide range of critical automotive components (for e.g. Braking and Suspension, Auto Electricals, Chassis & Body etc.)
- High volume production to meet the bulk demand
- Dedicated product development cell
- Excellent in-house supporting infrastructure for tool design, development and manufacturing
- Fly wheel rotors has been a critical part supplied in high volumes for Auto electrical segment
- Well versed in JIT concepts

WHITE GOODS & INDUSTRIAL APPLICATIONS
- Pennar has a wide expertise in handling critical, innovative and customized components for White goods applications
- Market leader of Compressor shells to leading manufacturers in India
- Just In Time supply to enhance efficiency & productivity
- Two manufacturing locations and one service centre
- Ability to work closely with customers and develop products to meet end application
- Ability to move up the Value chain to produce components, sub-assemblies and finished products
ABOUT HYDRAULICS BUSINESS

The young and dynamic engineering team at Pennar has a cumulative experience of over 15 years in the hydraulic cylinder industry across product design and manufacturing.

Our strengths lie in our ability to conceptualize and design complex cylinders across user segments.

WHAT WE OFFER:

- Welded and tie-rod cylinders and components with bore sizes from 38 mm to 300 mm, with strokes up to 6000 mm
- We can incorporate valves, springs, and a wide range of mounting options along with custom coating and packing options into our designs
- A wide product range with applications across industries such as agriculture, construction, mining, marine, ship building and bulk cargo handling, off highway and earth movers

STANDARD WELDED CYLINDERS

- High quality welded cylinders designed for heavier loads
- Bore size ranging from 1.5” to 8” (38 mm - 203 mm)
- Stroke rate of 4” to 96” (100 mm - 2440 mm)

STANDARD TIE-ROD CYLINDERS

- Bore size of 2” to 5” (50 mm - 127 mm)
- Stroke rate of 4”to 60” (100 mm - 1524 mm)

with 3000 psi of rated working pressure

DUMP HOIST CYLINDERS

- Design and manufacture of single acting dump hoist cylinders for pushing a load of 35 tonnes or more
- Maximum bore diameter of 9.8” (250 mm) and rod diameter of 3.9” (100 mm)

WE ALSO MANUFACTURE:

- Integrated Valve Cylinders • Telescopic Cylinders • Piggy Back Cylinders
Way Forward

**6 GOALS FOR PENNAR**

1. To be in top 3 companies in India by market share in all our businesses.
2. To create one of the best places to work in India.
3. To create a greener and safer work environment.
4. To become the most profitable company in the industry based on ROCE.
5. To be one of the best benchmarks for delivery and quality.
6. To be top 6 groups by 2018.

**THE GATE TO $1 BILLION**

- **GLOBAL**: Achieve 10% revenue outside India
- **ACQUIRE**: Acquire to add 1000 Cr revenue
- **TRIPLE**: Triple the revenue from existing businesses
- **TEN**: Save 10% in cost of operations
- **EXCEL**: Pennar performance, productivity, quality & safety system
Pan-India Network

- Chennai
- Delhi
- Hyderabad
- Kolkata
- Mumbai
- Bengaluru
- Baroda
- Ahmedabad
- Coimbatore
- Indore
- Aurangabad
- Faridabad
- Vizag
Our Customers