HEATING ELEMENTS FOR AIR PREHEATERS





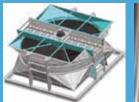


Air Systems is one of the leading sources for supply of Air Pre heater baskets. The replacement parts we offer for rotary pre heater ranges from the nuts and bolts that hold your APH equipment together to heating elements, seals, sector plates and other such components that are frequently needed for overhaul.

Air Preheaters (APH) are important equipments in modern Thermal Power Stations. By preheating the combustion air with the hot flue gases leaving out of the boiler, a considerable increase in efficiency is obtained. The type of air preheater totally dominating the Power Plant segment is the regenerative type, first and foremost because it is extremely efficient which results in reduced space requirements and a lower price.

Air Systems offers all the 3 types of heating element baskets for Lungstorm & Rothemule design of rotary Air Preheaters. Our cold end Baskets are manufactured from corten steel where as hot and intermediate baskets are produced from Carbon Steel. We require the general dimensions of the Heating Elements for us to supply the required spares for the Air Preheaters.

To ensure optimum performance & life under variety of working parameters, we source our steels from reputed Mills as per ASME specifications. Our precision & sturdy custom made special purpose machines are imported from reputed manufacturer in which we use to produce heating elements profiles of uniform depth and to close tolerances to ensure thermal and heat Transfer efficiency of Air Preheaters. From our present manufacturing facility, we can produce APH Baskets of almost all the sizes and segments in different container designs, with advance quality control checks.





Element Materials

Air Systems provide several high quality steel for use in airheater element. All steels used by us confirm to ASTM & IS specifications and we provide certificates issued by the mills to our customers with each order.

Steels with Enhanced Corrosion Resistance

The Cor-Ten is High Strength, Low Alloy (HSLA) steels with enhanced corrosion resistance which are used for manufacture of Cold End heating elements of Airheaters.

Although pre-heater represents approx. 2% of investment into a modern boiler, it is able to return upto 20% heat output into a process.





Manufacturing Facility

We have a sound infrastructural facility spread across a sprawling area of 90000 sq.ft and boasts of well equipped automatic manufacturing unit. Our manufacturing unit is installed with essential machinery and has installation capacity of 8000 tons of heating elements per annum. We are abreast with latest technological advancement which helps to design and develop airheater baskets for various industries as per client needs.

Air Systems has set up a well equipped facility near Chennai to manufacture

Recent changes to plants parameters have placed new emphasis on air heater element performance. The production of correct configuration, selection of raw material, maintaining of thickness and rigid manufacturing quality control processes are vital to the performance of the heating elements as well as of the Air preheater unit. This is in addition to providing the best material and manufacturing quality in the industry.

Years of Experience, together with the development of new era has made Air Systems one of the most advanced company in this field of manufacture of Air preheater basket elements; the use of up-todate technology guarantees the constant quality of our products & services.



The DU (Double Undulated) Series of hot and intermediate layer element has been the main stay of the airpreheater industry for many years. Air Systems manufacture the full range of DU elements including the standard DU 2.9-2.5. The common characteristic of DU element is the alternating stacking of "Undulated" element sheets with sheets that contain both undulations and notches. These elements are mainly used for hot and intermediate layer of baskets.

NF Series

The NF (Notched Flat) element has been mainly used for cold end element for many years. Although relatively low in thermal efficiency, its wide open configuration (axial oriented Notched sheet followed by a Flat sheet) makes NF element ideal for the cold end of coal fired units where condensation combines with ash resulting in plugging and corrosion. NF element is usually provided in the thicker gauge steel for increased life, and because of the corrosive environment in the cold end, Air System manufacture NF element using Corten steel.

The Air Preheater is a regenerative type Rotary heat exchanger in which flue gases and air passes thru a rotating cylinder filled with heat transfer surfaces (heatingelements). The flue gas heat the rotating elements, which in turn preheat the air before it is re-circulated to the boiler. In the air heater, there is a heat recovery process. As the the rotor revolves, the waste heat is absorbed from the flue gas streams and fresh air is heated by the accumulated heat.

