



CATARACT STEEL INDUSTRIES



## EXTENDED SURFACE HEAT EXCHANGERS

### CATARACT STEEL INDUSTRIES IS A WORLD LEADER IN MANUFACTURING COMPRESSOR INTERCOOLERS & AFTERCOOLERS

The “ES” (Extended Surface) heat exchanger is designed as a compressor intercooler with the ability to cool large volumes of air with:

- Minimum amount of cooling water
- Vibration free
- Can provide internal demister
- Low air side pressure drops



**CONTACT US TODAY FOR A FREE QUOTE ON YOUR COMPONENT OR COMPLETE PROJECT.**



## EXTENDED SURFACE HEAT EXCHANGERS

### EXTENDED SURFACE COOLER

- Built with 3/8" & 5/8" tubes with aluminum or copper fins
- Tubing can be copper alloys and stainless steel. The most frequently used tube materials are Admiralty brass, followed by 90/10 CuNi
- Flow capacities range between 3000 SCFM (13,500 Lbs./hr) to 190,000 SCFM (860,000 Lbs./hr)
- Typical operating pressures are between 25 Psig to 450 Psig but higher pressures are possible
- ES coolers are designed and fabricated to ASME and TEMA
- The ES cooler is a single pass on the shell side with an even number of tube side passes

### EXTENDED SURFACE COOLER APPLICATIONS

- Cooling of large volumes of gas
- They are usually found as intercoolers between the stages of centrifugal and axial compressors.
- While most ES coolers are used with air and nitrogen we have built these coolers to cool argon, carbon dioxide and other gases. (Can do any fluid that is compatible with our fins and tubes)
- Air Separation plants
- Large manufacturing facilities with large air compressors in operation
- Compressors

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