



Alro Steel

Metals • Industrial Supplies • Plastics

Thermal Processing

Stress Relieving diminishes the residual stress in steel caused by working the material (i.e. flame cutting, forming, rolling, casting, machining, welding, bending, straightening). This is accomplished by reheating the steel then cooling it at a slower rate.

Benefits:

- Stress Relieving can be performed before grinding on parts that require light machining
- Often used on weldments

Normalizing is accomplished by heating the metal above the transformation temperature, then cooling it in still or slightly agitated air.

Benefits:

- Refines/reduces the grain size of steels that have been subjected to high temperatures
- Prepares steel for heavy machining
- When machined, provides a better surface finish

Annealing is accomplished by heating the metal just below the transformation temperature, then cooling in a controlled cycle which limits the cooling rate and brings the temperature down slowly.

Benefits:

- Softens metal
- Changes mechanical/electrical properties
- Aids in dimensional stability
- Greatly improves forming and bending



Our furnace is 96" wide x 144" long x 54" high with a weight capacity of 30,000 lbs.



Alro's Thermal Processing services gets you this much closer to your finished product.



Order flame cut to customer specifications, annealed and ready to ship to specified location.

Equipment	Temperature	Tolerance	Min Hole Size	Max Plate Capacity	Material
Annealing	Max Temperature 1400°	N/A	N/A	96" x 144"	Carbon/Alloys Only
Normalizing	Max Temperature 1650°	N/A	N/A	96" x 144"	Carbon/Alloys Only
Stress Relieving	Max Temperature 1300°	N/A	N/A	96" x 144"	Carbon/Alloys Only

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888-888-ALRO

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