

50m³/h PSA nitrogen generator for metal product annealing treatment



At Suzhou XITE, we supplied a 50m³/h capacity PSA nitrogen generator to our customer. The generator has been operating efficiently for over a decade and continues to work at full capacity and purity.

We consider our work to be responsible for the complete user experience. And if it doesn't meet the standards, it's our fault, plain and simple.

This customer was facing a nitrogen shortage, and since the day he installed our XITE PSA nitrogen generator, he has been free from all the obstacles he previously faced in his production process.

Let's learn what nitrogen annealing is and what it is used for. All metal parts are made for some specific purpose. Some parts are made for commercial use and some are made for the end user. However, the manufacturer must maintain certain standards of ductility and hardness to ensure that it performs optimally for its intended use.

What does annealing mean? Annealing is a heat treatment process used to reduce the hardness and increase the ductility of a material. Annealing reduces the amount of crystal structure in a metal part to achieve the hardness and ductility required for end use.

What is the purpose of annealing? Annealing a metal product means that the material is less likely to fracture under stress.

Ductility means that the flexibility of the material is increased. It means the ability of a material to change its shape without fracturing. Annealing is particularly helpful in enhancing the ductility of metals because they have a lower chance of cracking during manufacturing/industrial processes and will be cold worked.

As annealing reduces the dislocations in the crystal structure, the material becomes a better electrical conductor.

Nitrogen Annealing Nitrogen annealing is the atmosphere in the annealing furnace during the cooling and heating process. While oxygen causes oxidation, nitrogen is the best choice for annealing because it creates an inert atmosphere.

Please contact our sales team for an answer to your question.

