



Heat Treatment & Powder Metals

World-class gases and technology for heat treatments from cryogenics to carburizing and sintering to soldering

Heat treatments have evolved quite a bit since the days of frontier blacksmiths quenching horseshoes in barrels of water. Modern processes such as cryo-treating and carburizing require precisely controlled atmospheres, highly specialized equipment, and some of the most extreme temperatures in modern industry.

But that doesn't mean it can't be easy.

With Messer's best-in-class gases and leading-edge technology on your side, even the most demanding modern heat treatments are painless—and profitable—to implement.

Choose your process below, and learn how Messer can help you optimize your process—and leave the water barrels behind.



Annealing & Hardening

World-class gases and user-friendly furnace atmosphere control solutions to enable reliable product quality and optimized costs.

[Learn More](#)



Brazing & Soldering

Achieve consistent joining, high-quality brazing and soldering results with Messer gases and technology.

[Learn More](#)



Carburizing, Carbonitriding, Nitriding & Nitrocarburizing

Market-leading technology support and top-quality gases for thermochemical heat treatment and source of process industrial gases.

[Learn More](#)



Cryogenic Treatment

Not every heat treatment uses heat. Messer is your cryo-tech expert and North America's most reliable source of liquid nitrogen.

[Learn More](#)



High-Speed Gas Injection (HSGI)

Ditch fans, shorten process cycle and increase throughput, convection and efficiency with HSGI high-speed gas injection solutions.

[Learn More](#)



Hot Isostatic Pressing (HIP)

Be it for healing defects in castings or consolidation of ceramics and powdered metals or diffusion bonding, Messer can support your HIP process by providing a turn-key gas supply solution.

[Learn More](#)

Any questions? Contact us. We're ready to help! [Contact Us](#)

