

HAYNES[®] X-750 alloy

Principal Features

HAYNES[®] X-750 (UNS N07750) alloy is an age-hardenable, nickel-base superalloy with a very good strength at temperatures up to about 1600°F (870°C). It is widely used as a wrought material for forged and fabricated parts in aerospace and industrial applications. Its strength is somewhat less than that for HAYNES[®] 718 alloy up to about 1400°F (760°C), and lower than that for HAYNES[®] R-41 alloy at higher temperatures. Alloy X-750 can be cold-formed in the annealed condition, and may also be hot-formed at temperatures of about 1900°F (1040°C) or above. Weldability is somewhat limited by susceptibility to strain age-cracking under conditions of heavy restraint. The alloy exhibits good resistance to oxidizing combustion gas environments at temperatures up to about 1600°F (870°C).