

# HAYNES<sup>®</sup> HR-235<sup>®</sup> alloy

## Principal Features

HAYNES<sup>®</sup> HR-235<sup>®</sup> alloy is a nickel-chromium-molybdenum-copper material with outstanding resistance to metal dusting. It has no deliberate addition of iron, an element which is detrimental to the performance of alloys under metal dusting conditions. It is resistant to creep-rupture at temperatures under which metal dusting is normally encountered. Having a low silicon and aluminum content, HR-235<sup>®</sup> alloy is resistant to weld solidification and strain-age cracking. This is an improvement over other alloys intended for metal dusting resistance. It is also available as a filler wire with matching composition.

### **Applications:**

- Petrochemical plants
  - Syngas production
  - Synthesis of ammonia, methanol, LNG, H<sub>2</sub>
  - Microchannel High Temperature Reactors
  - High carbon containing gases
  - Direct reduction of iron ores
  - Carbon fiber production
  - Gas-to-liquids (GTL) plants
  - Steam-methane-reforming process
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