

## THERMAL SPRAY METHODS FOR METALLIC AND CERAMIC MATERIALS

### Technical Data Sheet Nickel-based Alloy

# HS 1.1

### Chemical Composition

Element	Nominal Analysis
Chromium	10.00 %
Molybdenum	7.50 %
Silicon	2.00 %
Nickel	Balance

Coating Hardness: **35 – 43 HRC**

### Description:

- A nickel-base alloy suitable for plasma spraying, offering excellent protection against (chloride-) induced corrosion processes encountered, for example, in boiler systems.
- Due to the presence of various hard-phase formers, it also provides good resistance to erosion and abrasion.
- The ductility of this alloy allows it to accommodate the thermal expansion of boiler construction materials up to approximately 600 °C surface temperature without developing stress-induced cracks.

### Suggested Applications:

- Evaporator heating surfaces in waste-to-energy plants.
- Highly corrosion-stressed components in boiler installations.

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