

THERMAL SPRAY METHODS FOR
METALLIC AND CERAMIC MATERIALS**Technical Data Sheet**
Nickel-based Alloy

HS 52

Chemical Composition

Element	Nominal Analysis
Chromium	13.00 %
Silicon	3.30 %
Nickel	Balance

Coating Hardness: **49 – 54 HRC****Description:**

- A nickel-base alloy suitable for plasma spraying, offering excellent resistance to high-temperature corrosion induced by chlorides. Thanks to various hard-phase formers within the alloy, the material also provides high abrasion resistance, with a typical operating temperature of up to approx. 600 °C.
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- If required, thermally sprayed layers made from this alloy can be subjected to a special heat treatment, creating a gas-tight and diffusion-based (i.e., metallurgical) bond with the base pipe material. Häuser GmbH possesses the expertise to perform this heat treatment without altering the microstructure of the base material.

Suggested Applications:

- Coatings on evaporator and superheater tubes in power plants and waste incineration plants where components are exposed to a combination of corrosion and abrasion.

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