



Gas Atomized Nickel Super Alloy Powder
for the Laser Cladding Process

Eutectic LC 41622



- Spherically shaped without satellites and without internal pores, providing consistent melt characteristics and porosity free coatings
- Outstanding corrosion resistance
- Low coefficient of friction
- Exceptional resistance to chloride-induced pitting
- Used exclusively with Laser systems

Eutectic LC 41622

Eutectic LC 41622 is a nickel base alloy designed for the laser cladding (LC) process, providing hard and dense coatings. The alloy provides resistance to general corrosion, pitting, crevice corrosion, intergranular attack, and stress corrosion cracking.

This nickel alloy also offers optimum resistance to environments where reducing and oxidizing conditions are encountered in process streams. This is beneficial in multi-purpose plants where such "upset" conditions occur frequently.

Eutectic LC 41622 should not be used in service temperatures above 1250°F (~670°C) due to the formation of detrimental phases which form above this temperature.

TECHNICAL DATA

Typical Values	
Typical Hardness:	20 HRC
Coating Density:	8.69 g/cm ³
Melting Point Range:	1357°C - 1399°C (2475°F - 2550°F)
Max. Service Temperature:	1250°F (675°C)
Max. Coefficient of Thermal Expansion	9.0 x 10 ⁻⁶ in/in-°F (15.9 x 10 ⁻⁶ m/m-°C)
Nominal Particle Size:	140 x 325 US Mesh (-106 / +45 µm)

Nominal Composition:

Ni, Cr, Mo, W, Fe

PROCEDURE FOR USE:

For some applications, a modest pre-heat may be required. The degree is dependent on the shape and dimensions of the part and the thickness of the deposit.

Coatings of Eutectic LC 41622 can be machined using carbide tool bits. Coatings can also be ground and polished.

Please contact your Eutectic Surface Coatings Specialist for more information.

TYPICAL APPLICATIONS

Eutectic LC 41622 can be used for many applications such as marine, power, chemical processing, pollution control, paper processing, and waste disposal industries.

Chemical process industry in equipment like flue gas scrubbers, chlorination systems, sulfur dioxide scrubbers, pulp and paper bleach plants, pickling systems, and nuclear fuel reprocessing.

- Pharmaceutical industries
- Incineration scrubber systems
- Chlorination systems
- Cellophane manufacturing



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