



Gas Atomized, High Vanadium
Steel Alloy Powder for the
Laser Cladding Process

LaserClad®

41607



- Good overall wear resistance for abrasion and impact
- Good abrasion resistance due to finely dispersed carbides and carbo-borides
- Good behavior under combined wear and corrosion at elevated temperatures
- Excellent edge holding ability, application up to 600°C
- Very good weldability

LaserClad® 41607

LC 41607 has been specially developed to meet the metallurgical and physical standards of the laser cladding process.

Tool steel base with martensitic structure, embedded with vanadium carbide particles, gives this alloy a very high resistance to abrasion and corrosion at elevated temperatures.

The spherical shape and the grain-size distribution of the particles ensures a regular flow of powder through the equipment.

TECHNICAL DATA

Typical Values	
Typical hardness as welded:	57 to 63 HRC
Apparent density:	~ 3.6 g/cm ³

*Hardness depends on welding parameters and may vary

Nominal Composition: Fe, V, Cr, Ni, B, Si

Grain size: -150 +50 µm

PROCEDURE FOR USE:

Remove damaged and fatigued areas by disc grinding.

Preheat according to base metal type.

Set welding parameters according to base metal thickness and type.
Minimum dilution is desired.

Maintain preheat and interpass temperature during welding.
The degree is dependent on the shape and dimensions of the part and the thickness of the deposit.

Allow work piece to cool slowly.

Please contact your Eutectic Surface Coatings Specialist for more information.

TYPICAL APPLICATIONS

- Hot and cold sieves
- Extrusion screws
- Shear bars,
- Cutting blades for agriculture and food industry

