



Gas Atomized, Iron Base Alloy Powder
for the Laser Cladding Process

LaserClad®

41659



- Maximum wear resistance for abrasion combined with moderate impact
- Excellent welding characteristics
- Excellent for ground engaging equipment
- Consistent powder distribution through equipment

LaserClad® 41659

LC 41659 is a high performance atomized iron based alloy powder optimized to produce hard, durable, abrasion, and impact resistant coatings using the Laser Cladding Process. The alloy is resistant to abrasion up to 1100 °F (593°C).

TECHNICAL DATA

Weld metal (untreated)	Typical values* at 20°C
Hardness single pass:	56 HRC
Hardness double pass:	59 HRC

*The hardness values achievable depend on the welding parameters, pre-heat temperatures, etc. selected. It is not therefore possible to give any guarantee for achieving the hardness values.

Nominal Composition: Fe, Cr, C, Si, Mn

Grain size: 50-150 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

Suitable for surfacing carbon steels, alloy and non-alloy steels and austenitic manganese steels.

- Wearplates
- Mixer vanes
- Transport screws
- Drilling tools
- Dragline and excavator buckets

