Direct Laser Fabrication

Process Overview
Direct laser fabrication is an additive manufacturing technique for building components layer-by-layer by direct deposition of powders in a melt pool. Powders are injected into a focused laser beam to create a melt pool; the powder is rapidly melted and solidified as the laser scans over each layer building 3D components.

Key Features
- Near net-shape components can be easily fabricated
- Compositionally graded materials can be fabricated
- Wear resistance and corrosion properties of components can be improved by cladding
- Damaged components can be easily repaired (e.g. airfoils, blades, etc.)