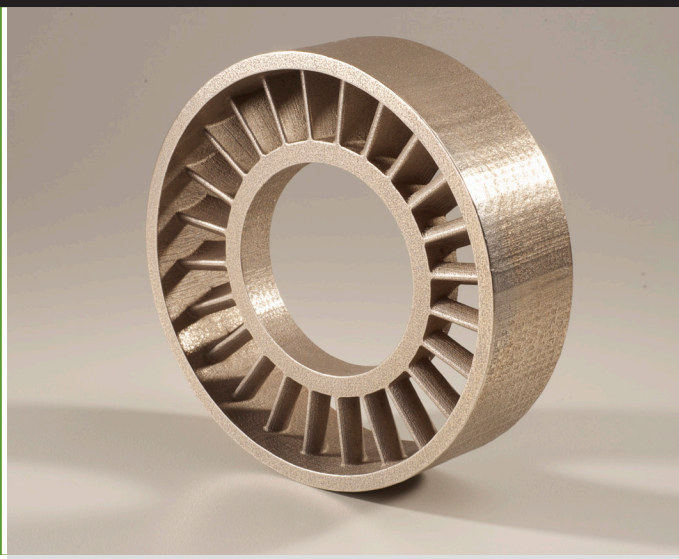
Ulterra

Extend Part Life & Reduce Costs with Additive Manufacturing

S4 abrasion resistance dramatically exceeds wear of conventional 4145 steel



Customer Challenge
Ulterra sought to extend the life of rotors and stators for down hole applications.

The Solution
ExOne's 3D metal printing technology was used to print the components in an S4 stainless/bronze matrix.

ExOne's Competitive Advantage
Additive manufacturing offers the ability to produce more wear-resistant parts at a lower cost than traditional methods.

About ExOne
ExOne offers digital part materialization using three-dimensional printing to create full-form parts directly from CAD data for a variety of applications. The technology is capable of a geometric complexity unachievable with conventional manufacturing methods.

Components produced by ExOne can reduce weight, integrate multi-piece assemblies, enhance product functionality and significantly reduce lead times for prototype and short-run production.

ExOne operates facilities across the Americas, Europe and Asia.

Specifications

Customer: Ulterra

Part Name: Stator

Batch Size: 10

Part Size: 3-5 inch

Traditional Method

Method: Conventional machining

Cost: $400-$500 each

ExOne® Metal Printing Method

Cost: $75-$150 each

Traditional Method:
Wear after 200-300 hrs

ExOne Method:
After 600 hrs no measurable wear