

HALOJET™

AEROSPACE

The HaloJet rotary ID HVOF™ coating technology offers a groundbreaking solution that meets and exceeds REACH regulations by eliminating the need for hexavalent chrome production processes. This state-of-the-art technology delivers superior coating precision, applying a near net shape coating that maximises density and minimises porosity.

The high-velocity particle application eliminates the need for surface preparation, reducing production costs and increasing part efficiency. The unique rotary coupling enables 360-degree coverage at speeds up to 300 rpm, while the advanced Nano Gun technology allows for a working range as small as 63mm. This innovation removes the need to rotate substrates, enabling the efficient coating of asymmetrical parts, boosting productivity, and ensuring repeatable, accurate coatings.

In a world where safety and accuracy are paramount, HaloJet™ stands as a proven solution that ensures critical standards are consistently maintained. By eliminating the need for hazardous hexavalent chrome processes and delivering precision engineered coatings, HaloJet™ not only enhances operational safety but also guarantees accuracy in every application.

Its advanced technology and reliable performance make it the go-to choice for landing gear solutions that demand the highest levels of safety and precision.

APPLICATIONS

- ⊕ Landing gear struts & pistons
- ⊕ Oleo strut bodies
- ⊕ Shock jars



ADVANTAGES

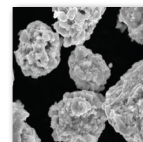
- ⊕ Compliance with existing coating specifications
- ⊕ Minimum ID of 63mm (2.5")
- ⊕ Removal of surface preparation
- ⊕ Coating of multiple asymmetric parts
- ⊕ Post-production finish <1,000th inch
- ⊕ Coating performance of <1% porosity & >950HV



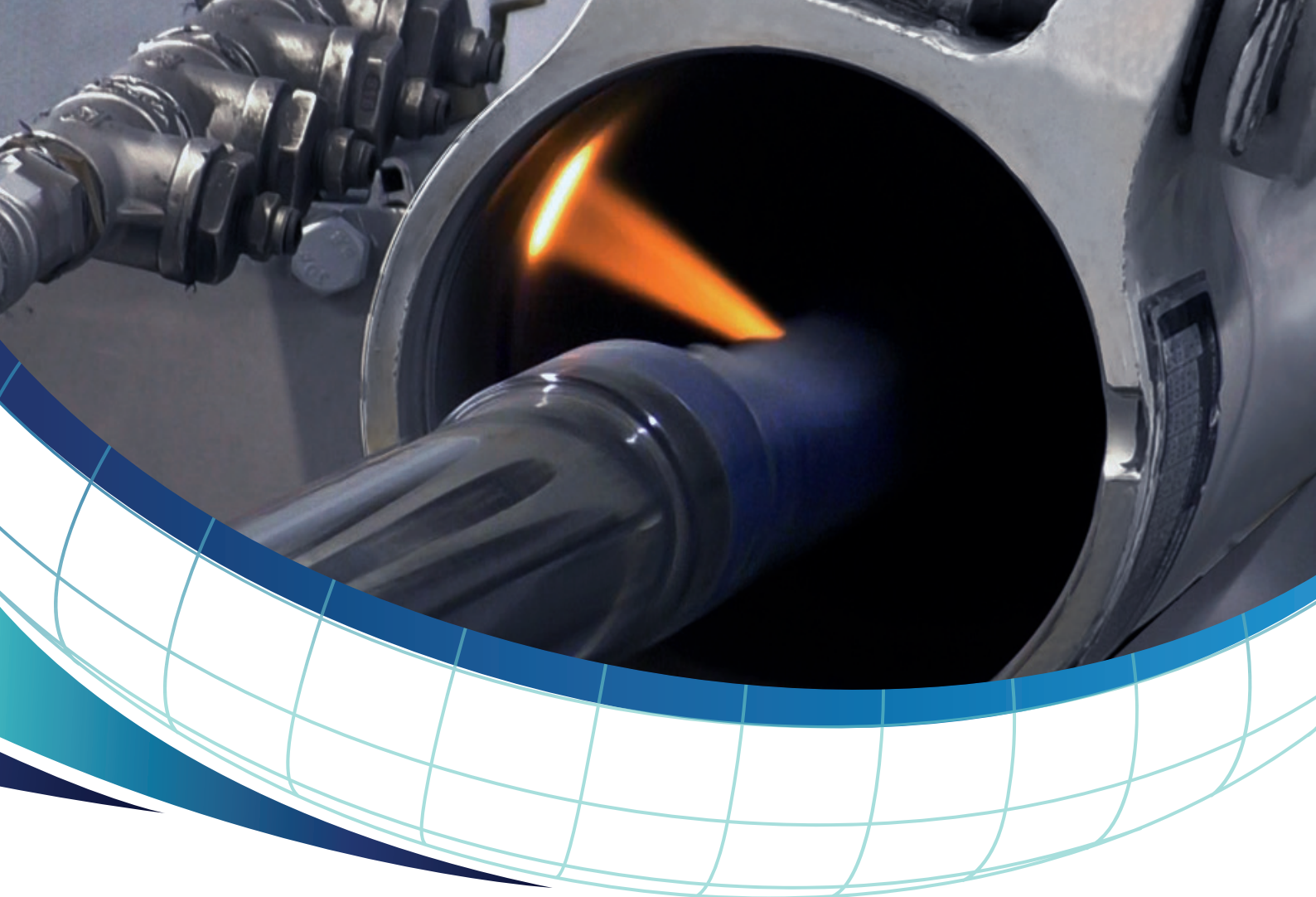
Cleaned HaloJet™ coated shock jar
after 263 hours in service



HaloJet™ WCCoCr
Coating in a 3" ID



CASALLOY
ST9760N Powder



FEATURES & BENEFITS

Novel fuel/gas/oxidizer & combustion chamber geometry

- ⊕ Maximum amount of thermal energy is released prior to powder injection thereby reducing heat transfer to substrate

Combustion power level of 25kW

- ⊕ Lower power levels required for approved aerospace coatings
- ⊕ Reduced combustion power levels reduces heat transfer to substrate allowing application to temperature sensitive alloys

RotaryJet™ gun head system

- ⊕ Internal extraction of dust and fume improves coating quality
- ⊕ Allows the coating of blind hole component parts
- ⊕ Able to coat eccentric bores on components that are symmetrical and asymmetrical
- ⊕ Coating thickness can be applied to a tight tolerance - 25µm (0.001")

Minimal pre-surface treatment

- ⊕ No requirement for grit blasting
- ⊕ Degreasing of substrate is only required

Minimal post-surface treatment

- ⊕ No grinding or lapping of sprayed coating required
- ⊕ Light honing to remove any surface peaks is all that is needed to create a 1.6µm Ra (63µ in Ra) surface finish



- ⊕ Modular Controller
- ⊕ Touch Screen HMI
- ⊕ RotaryJet™
- ⊕ Nano Gun
- ⊕ Ultra Fine Powder Feeder



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INTERNATIONAL

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