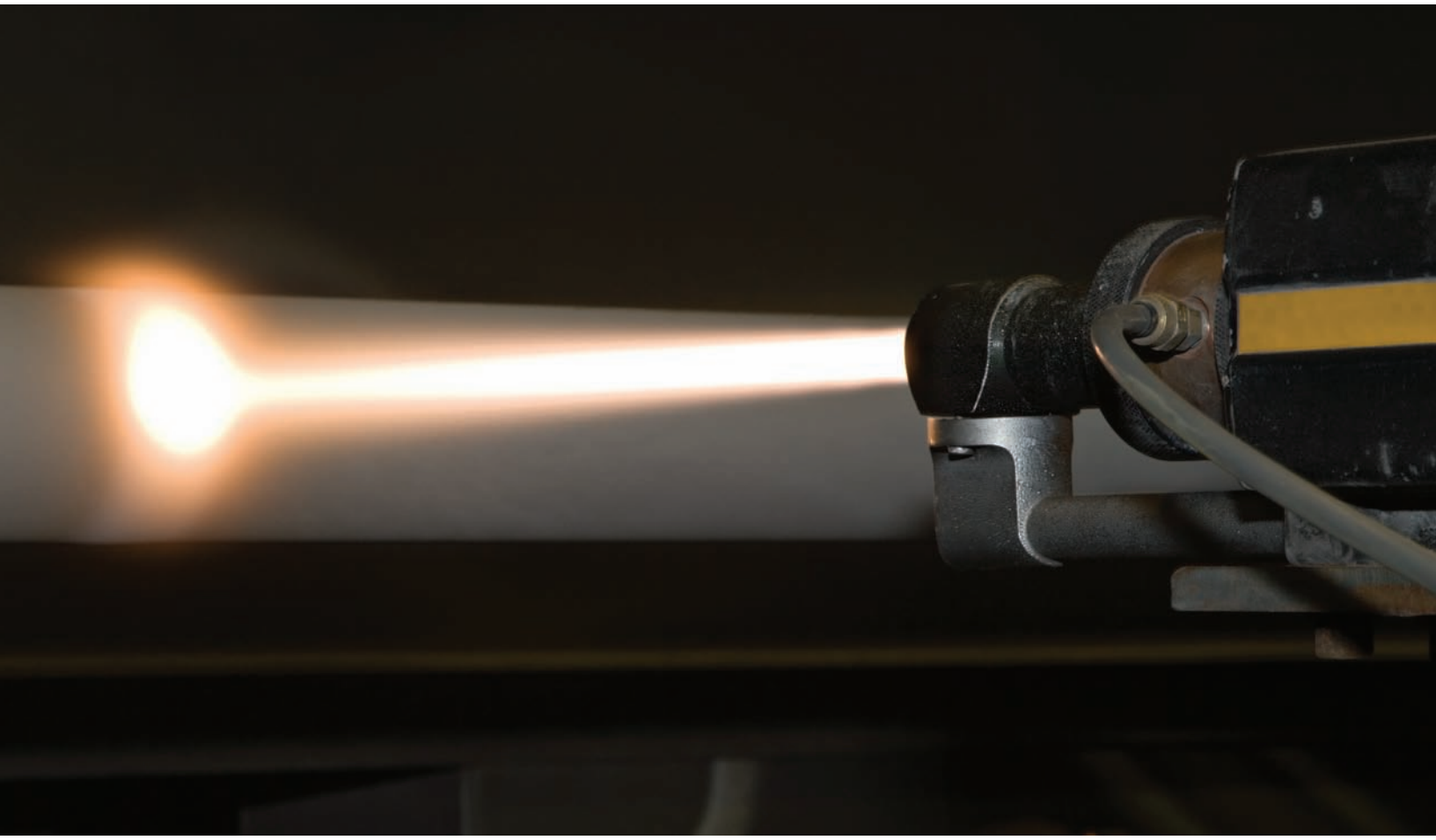
Cat® Advanced Surface Technology

For Hydraulic Cylinder Rod Reconditioning



Resurfacing Alternative to Chroming Extends Component Life and Reduces Downtime

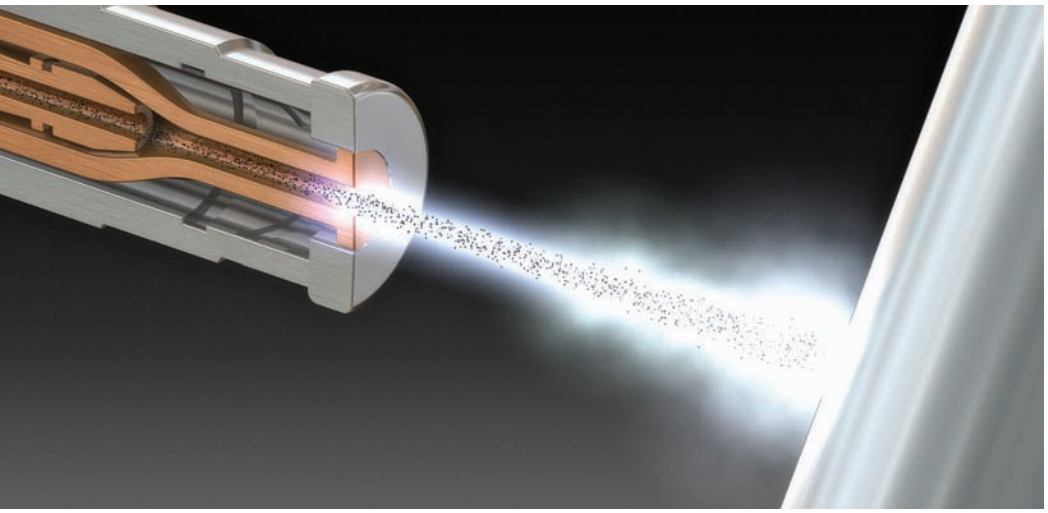
Caterpillar and several Cat® Dealers have developed a high-velocity thermal spray process for resurfacing hydraulic cylinder rods and other cylindrical components. Known as Cat Advanced Surface Technology (AST), this process offers several advantages over traditional chrome plating:

- Can last up to three times as long in the same application
- Offers better wear resistance
- Reduces time required to complete repairs
- Is more environmentally friendly

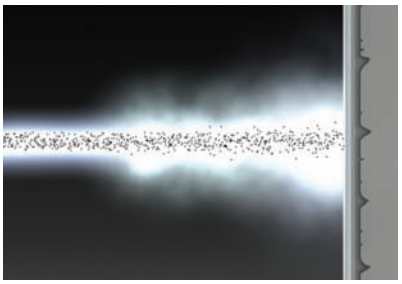


CATERPILLAR®

Cat® Advanced Surface Technology



How Cat® AST Works



Here's how the Cat® Advanced Surface Technology process works:

1. Salvaged components undergo straightening.
2. New and salvaged components undergo grit-blasting to prepare and clean the surface for the thermal spray.
3. Hot combustion gases near 5,000° F (2,760° C) are channeled and combined with a fine metal powder, and accelerated through a nozzle at more than three times the speed of sound. This forms a stronger mechanical bond than chrome plating.
4. The surface is ground to like-new specifications.
5. A final grinding operation gives the surface a super-fine polish.

To learn more about Cat AST applications and ways this technology can improve your productivity while reducing your costs, call or visit your Cat Dealer today.

Superior Wear Characteristics

Because the metal alloy coating created by Cat AST is harder than chrome plating, it provides greater resistance to scratching, and therefore helps prevent contaminants from entering the system. The Cat AST surface is also denser, allowing it to extend component life.

Extended Component Life

The benefits of Cat AST have been demonstrated both in the field and in the lab. Field tests indicate that Cat AST increases hydraulic cylinder rod life by up to three times. Likewise, lab tests using Cat seals show that rods resurfaced using Cat AST extend seal life by 50 percent, as compared with chrome-plated rods.

Faster Turnaround

Unlike chroming operations, the Cat AST process is performed in the Cat Dealer's shop—typically in a single shift. This reduces machine downtime and operating costs.

More Environmentally Friendly

Cat AST byproducts can be recycled or reused.

CAT® DEALERS DEFINE WORLD-CLASS PRODUCT SUPPORT.

We offer you the right parts and service solutions, when and where you need them.

The Cat® Dealer network of highly trained experts keeps your entire fleet up and running to maximize your equipment investment.



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