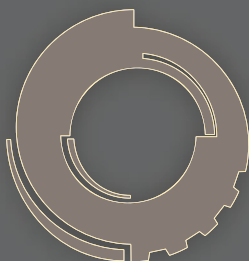


[SC-2]



EXTENDED-LIFE UNDERCARRIAGE



Taking the wear out of wear parts

SHURRY
COATING

JOHN DEERE CONSTRUCTION & FORESTRY COMPANY

TURN PROFITS,

We don't have to tell you the expense of keeping your undercarriage rolling. Not when some 50 percent of your maintenance expense ends up beneath your dozers. Until now, that is. John Deere announces a metallurgical breakthrough that will make dozer bushings last twice as long.



- > The SC-2 coating is fused to the bushings by heating them to 2,000 degrees and then cooled slowly.

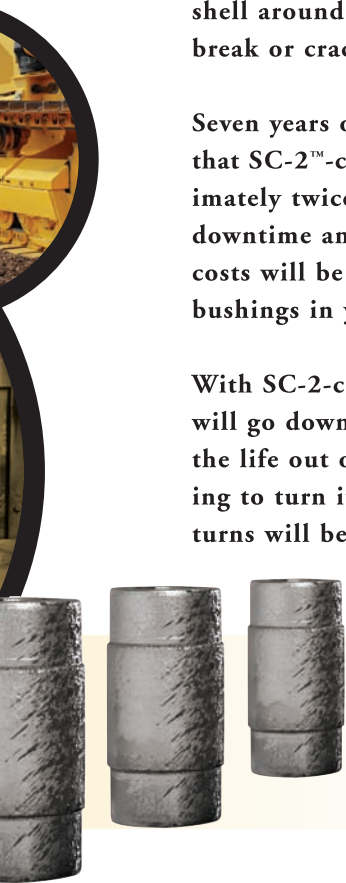
NOT BUSHINGS

A BREAKTHROUGH IN UPTIME

In 1997, John Deere metallurgist Dr. Gopal Revankar achieved a breakthrough in wear-parts protection. Through advances in heat treatment, alloy powders, atmospherics, and robotics, Dr. Revankar perfected the slurry-coat process. Finally, a new technique that creates a tough shell around a wear part that won't break or crack under duress.

Seven years of testing have proven that SC-2™-coated parts deliver approximately twice the wear. That's why downtime and owning and operating costs will be reduced with SC-2-coated bushings in your undercarriage.

With SC-2-coated bushings, downtime will go down because you'll get twice the life out of a bushing before needing to turn it. In some areas, bushing turns will be eliminated completely.

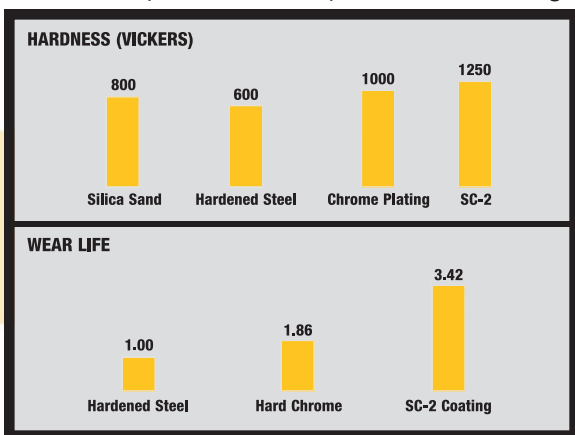


> After the bushings get a thorough cleaning, the SC-2 formula is sprayed on through the use of robotics.

SC-2™ TOUGHS IT OUT

Intensive laboratory tests prove conclusively that the SC-2 coating is 25-percent harder than chrome plating. First, SC-2-coated steel aced a sand-wheel test, holding up four times better than parts not protected by SC-2. Next, a SC-2-coated bushing shrugged off a brutal impact test, where researchers dropped a 220-pound (100 kg) weight on it 500 times from a height of 30 inches. Finally, a SC-2-coated bushing was fractured in a hydraulic press to see if the coating would stay fused to the steel. The coating passed with flying colors. And that's just the laboratory tests. SC-2 has also been tested where it really counts — in the field.

Hardness and Wear Comparisons with Silica Sand, Hardened Steel, and Chrome Plating

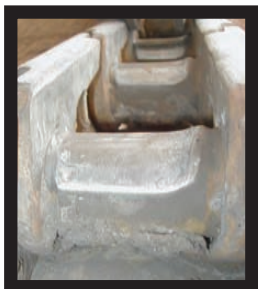


"In this new fusion process we use much higher temperatures than those commonly used, along with special atmospherics. It is a process that makes parts wear better than chrome plating."

DR. GOPAL REVANKAR

John Deere metallurgist and SC-2 inventor

Standard bushing



Bushing with SC-2



> After punishing tests in abrasive sand, zero wear.

Track-chain assemblies were field-tested in abrasive sand. These photos show the standard bushing wore 32 percent while the bushing with SC-2 coating had no visible wear.



HOW TO DOUBLE THE LIFE OF A BUSHING

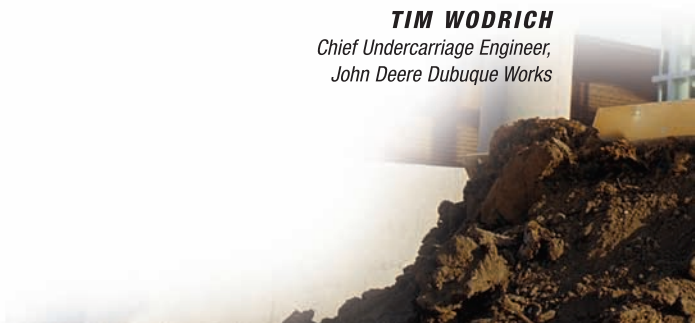
SC-2™ coatings are sprayed onto the bushing through the use of robotics. The coatings are then fused to the bushings by heating them in a hydrogen furnace.



"We've been testing SC-2-coated bushings in the field on Deere dozers run year-round in extremely abrasive soil conditions. Each dozer has one chain with normal production bushings. The other chain is equipped with SC-2-coated bushings. SC-2 bushings showed a 100-percent improvement in wear life over the production bushings."

TIM WODRICH

Chief Undercarriage Engineer,
John Deere Dubuque Works



ALL-MAKES SC-2 BUSHINGS ARE NOW AVAILABLE

A bushing with twice the wear life? Yes. Order SC-2-coated bushings for your Deere or other brand crawler. Ask your dealer for the hard facts on SC-2 extended life undercarriage parts and find out how you can lower your operating costs.

- > A heavy alloy-metal powder and several organic additives produce the water-based slurry. The slurry suspends the powder during the heat-treat process and produces a coating that's uniform in thickness and consistency.**

- > The SC-2 coating is approximately $\frac{1}{16}$ inches in diameter. The coating on this bushing did not crack or chip after a 220-pound weight was dropped on it 500 times from a height of 30 inches.**



FOR DEERE AND OTHER DOZERS, INSTALLATION IS EASY.

When it's time to replace bushings for your Deere or other brand dozer, opt for the bushing that gives you twice the life. SC-2-coated bushings are available right now for all John Deere J-Series Dozers, and "will fit" many other applications. No special tools are needed. See your dealer for complete details.



JOHN DEERE