Looking for A Reliable Die Set Supplier?

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The innovator of our industry®

- Danly Style Guiding
- Short Deliveries
- Quality Work Guaranteed
- SinterLube® Self-Lubricating Bushings

There is a Difference--We're Ready

SinterLube® “No Maintenance” Bushings for Dies and Molds

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Contact READY today at 800-543-4355 for details!
The economics of today's manufacturing have evolved to a point where companies have to look at alternative means to achieve cost efficiency, closer tolerances and longer die life.

Manufacturers face many situations in keeping their die sets in top performance condition. Forget to lube the bushing, die set is an oily mess, graphite contaminating high tolerance parts, guiding wear—these are just a few problems production stampers face using current technology.

After years of research and manufacturing process development Ready Technology proudly announces its latest and most dramatic contribution to our industry — SinterLube® Die Sets featuring SinterLube® Alloy Bushings. These revolutionary products require no lubrication during production, yet they maintain their initial geometry and undergo negligible wear even after millions of press cycles.

The Secret to Ready's SinterLube® Die Sets

Our key breakthrough in developing the product was to discover a material having good sliding lubricity and hardness, which we added to the bronze powder of our sintered bushing. Incorporating the SinterLube® Alloy Bushing into our die set manufacturing, we are able to deliver a superior performing combination significantly reducing production maintenance.

The SinterLube® Alloy Bushing properly combines the dispersed particles of the alloy that remain disconnected to the bronze microstructure when sintered, providing lubricity and hardness without harming the mechanical properties of the bronze.

SinterLube® doesn't merely claim to be self-lubricating, it truly is self-lubricating, and it doesn't abrade or close in on the guide pin like ordinary graphite plug bushings. This results in a wear-resistant microstructure that outperforms conventional die sets using industry standard guiding.

The Ready Die Set Difference

SinterLube® Die Sets use a guiding system for which there are no lubrication holes or oil groves, reflecting the fact that SinterLube® Bushings are designed to operate with only a single initial application of lubricant. The color code identifies the size of the inside SinterLube® diameter. By matching this color to the appropriately color coded pin, a close, standard or loose running fit can be selected to achieve long die life and high tolerance. The sintered alloy interior of the SinterLube® Bushing is 11 to 12 times thicker than that of a plated bronze bushing so there is no risk of wearing through to the steel substrate. Even under the most severe wear conditions, the SinterLube® Bushing maintains its lubricated bearing surface.

Die sets using graphite plug bushings operate at higher temperatures requiring larger running clearances. The minimum running clearance needed for a SinterLube® Die Set is two to three times less, so close tolerance-stamping work can be performed with lubrication-free bushings. According to industry results, die sets using bronze plated bushings operate well as long as they are well lubricated every shift. As a result of lubrication, die sets using graphite plug bushings become a sticky mess, making it hard to disengage the top die shoe from the lower die shoe.

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SinterLube® Bushings are designed to operate without additional lubrication. However, if lubrication is applied, they will continue to perform normally.

SinterLube® Die Sets can perform well when running speeds as high as 800 to 1200 strokes per minute. Running at these speeds was formerly reserved exclusively for ball bearing guided die sets. Since SinterLube® Die Sets are more rigid than ball bearing guiding, part accuracy is improved. SinterLube® guiding cost less than ball bearing guiding and takes up less space, therefore die building costs are lower.

SinterLube® Die Sets have various applications outside the typical production-stamping environment. One example is a customer stamping material that is heated between 1922 degrees Fahrenheit to 2012 degrees Fahrenheit with a general material thickness between 0.315 inches to 0.472 inches up to 1.181 inches. The guide pins mounted to the lower plate run at a recorded 662 degrees Fahrenheit. The SinterLube® Die Set cycles at 10 to 15 strokes per minute running on a two-shift basis. This example as well as many others attest to the resilience of SinterLube® Alloy Bushings in tough stamping environments.

SinterLube® Alloy Bushing Die Sets can replace ball bearing die sets in low, medium and high speed stamping applications. SinterLube® has run at 1500 strokes per minute with a stroke of 0.60 inches. Continuous running of SinterLube® is documented at 800 strokes per minute with a stroke of 0.78 inches. Stamping manufacturers have used SinterLube® in place of ball bearing with results of six times improvement before regind was required. Ball bearing customers have reported two to seven times longer production runs after switching to SinterLube®. Customers replacing graphite plug bushings have reported two to six and a half times improvement.

Making the Ready SinterLube® Change

Ready Technology stocks standard SinterLube® Die components for quick, efficient delivery. All die sets are available in both two post as well as four post configurations. Ready also offers SinterLube® Die Sets in aluminum, which are one-third the weight of steel, faster and easier setup. Less wear and tear on the press (clutch, brake, ram . . . ). Aluminum SinterLube® Die Sets also offer a rust-free environment, which is impervious to typical (water soluble) die lubes.

A high volume, close-tolerance stamping plant located in Sterling Heights, MI manufacturing transmission components states, “Standard bushing life in the industry is three months, SinterLube® bushing life in our dies so far is 14 months with 640 thousand hits and still running! While SinterLube® bushings cost may be slightly higher than our brand we were using we’ve gotten at least four times the life, our conclusion: SinterLube® proved to be the superior bushing.”

Rick Streeker of R.K.S. Tool and Die (Fairfield, OH) states, “SinterLube® Die Sets have improved my customers up time with little to no maintenance, they are the best die sets we have ever used.”

Rob Cairo of AFC Tool Co., Inc. (Dayton, OH) explains, “Incorporating SinterLube® has made our customers as well as our in house operations very satisfied, we only want to use Ready Technology SinterLube®.”

SinterLube® Die Set guiding is established by using Ready Technology’s SinterLube® Alloy Bushings. These bushings are available in inch, metric, NAAMS, DIN, and AFNOR standards.

Our large inventory of short, standard and extra long shoulder bushings complement our extensive plate stock to achieve a timely delivery.

Visit Ready Technology, Inc. at their web site, www.READYTECHNOLOGY, to view a complete product listing and NOW FEATURING detailed training videos of SinterLube®, DesignTite® gas springs and ReadyBenders®.
NEW!

SinterLube® - “No Maintenance” Bushings for Dies and Molds

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