

THREAD GRINDING



CJWINTER'S THREAD GRINDING CAPABILITIES

Full CNC 7 Axis Capability

.250 in. to 8.00 in. ODF

00 in. to 13.00 in. Length

All Materials (except carbide)

With/Without Heat Treat

Can Hold +/- .000050 in. Tolerance

Intricate Forms

Small Radii

Threads on Heat Treated Shafts

Ballscrew Threads

Leadscrew Threads

Jackscrew Threads

Metering Screw Threads

Worm Gear Teeth

Your Blanks Or Ours

STATE-OF-THE-ART THREAD GRINDING EQUIPMENT

To better meet our clients' diverse needs, we've added cutting-edge, seven-axis computer numerical controlled (CNC) grinders to our manufacturing floor.

With a wide array of features and capabilities, our seven-axis state of the art CNC thread grinders can process any material, in a wide range of dimensions — from 0.25 inches to 8 inches in outer diameter (OD) and from 1 inch to 13 inches in length. Most importantly, these thread grinders can hold incredibly tight tolerances — as close as ± 0.00005 inches — and can generate intricate forms, including helical and annular forms, with small radii. This equipment allows us to handle medium- to high-production volumes with speedy turnarounds.

BASIC BALL AND LEAD SCREW

There are two standard types of ball and lead screws commonly available today.

Machined, or rolled, ball and lead screws are generally heat treated after machining, reducing their accuracy; the process of rolling and the thermal movement caused during heat treatment make it difficult to keep — and repeat — perfect tolerances.



Ground ball and lead screws, meanwhile, involve heat treating of the raw material prior to grinding. Ground ball and lead screws are generally more accurate and allow for both reduced vibration and reduced motion noise, but they are also more expensive to manufacture.

SPECIALTY BALL AND LEAD SCREWS

Increasingly popular, hybrid ball and lead screws involve both the [rolling](#) and grinding processes: Materials are partially rolled and then heat treated before being finished via grinding. Hybrid ball and lead screws are generally more cost effective and more accurate than other types.

When sourcing ball and lead screws for specialized applications — such as syringe pumps, blood analysis equipment, and other medical equipment — screws that have been pre-rolled and finished with grinding should be considered first. Such screws are cleaner, extremely precise, and can be used with nuts made from lubricant-free materials such as acetal or nylon.

WHY CHOOSE CJWINTER?

With our new thread grinding service, CJWinter is now able to provide top-quality ground ball screws and lead screws, offering products that are cleaner, more accurate, and more precise than ever before.

To learn more about our thread grinding capabilities, or to discuss an upcoming project, [contact us](#) today.