CARPENTER TITANIUM by Dynamet®

CarpenterTechnology.com

SMALL DIAMETER. BIG IMPACT.

Carpenter Titanium by Dynamet manufactures a wide range of small-diameter alloys used in surgical, diagnostic, orthopedic, cardiovascular, dental, and medical applications around the world.

Small-diameter titanium, stainless steel, and cobalt alloys

- Exceptional wear and corrosion resistance
- Ultra-high tensile strength
- Superior ductility and toughness

Next-level performance, application after application

- Industry-best dimensional accuracy
- Manufacturing with fewer steps and scrap
- Better patient and end-use outcomes

Added value every step of the way

- Quality-assured, in-stock materials
- Metallurgy and manufacturing expertise
- Shorter lead times, on-time delivery

Premium small-diameter alloys. Proven performance.

Delivering ultra-tight tolerances

Our proprietary process combines leading technology with state-of-the-art processing, resulting in a new industry standard for machining alloys. Small-diameter form factors offer tight dimensional tolerances and exceptional diameter uniformity, making them ideal for lights-out manufacturing. With stringent roundness, straightness, and finish requirements, our in-stock materials lead the way with unprecedented consistency from end-to-end, bar-to-bar, and lot-to-lot.

Size ranges:

- Titanium: 0.059–0.649 in. rd
- Stainless and cobalt alloys: 0.059–0.375 in. rd

TOLERANCE EXTRAS

	O.D. TOLERANCE TOTAL SPREAD (IN)	EUROPEAN STANDARDS
ULTRABAR	Size-dependent	h5
Precision bar	0.0003	h6
Custom tolerance bar	0.0004	h7
Standard tolerance (CGB)	0.0010	h8 / h9

Total tolerance can be allocated on either side of nominal diameter size. Exact diameter tolerance requirements can be customized on a case-by-case basis.

Improving productivity and profit

Our small-diameter alloys are highly consistent and dimensionally accurate, minimizing the number of manufacturing steps needed, production interruptions, machine downtime, and scrap. They move efficiently through machinery and work well in sliding Swiss-type screw machines, allowing for higher speeds and feed rates for lights-out manufacturing operations.

Expanded capabilities

- Process innovations
- Inventory management
- Chamfering
- Line-marking (ink jet or laser)
- Custom packaging

Advancing medical outcomes

Materials that enable the smallest incision site are essential to patient outcomes. Whether reducing strut thickness and stent size to improve clinical performance or ensuring adequate strength for fine intravenous blades, our small diameter alloys deliver industry-leading performance — resulting in less invasive procedures with faster patient recoveries.

A small-diameter alloy for every application
CarpenterTechnology.com