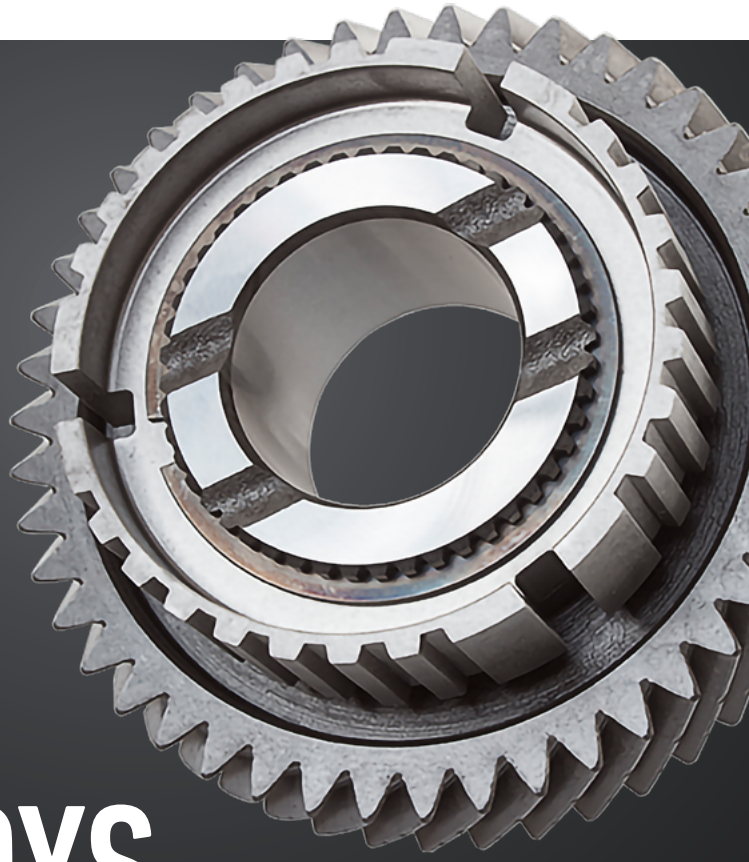
CARPENTER TECHNOLOGY



Kick into high gear

ADVANCED GEAR AND BEARING ALLOYS

Premium Melt
Improve chemistry and homogeneity

Hot Work
Reduce size, refine microstructure

Process
Precisely form and finish to spec

Test
Rigorously test for quality and certification

Customers and OEMs are pushing material capabilities to their limits. Carpenter Technology answers the call with world-class alloy solutions:

ULTRA-CLEAN RAW MATERIALS

plus premium melting and precision manufacturing

SUPERIOR MECHANICAL PROPERTIES

to enhance performance and reduce failures

200+ METALLURGISTS ON STAFF

to help you solve the most extreme design challenges

CARPENTER TECHNOLOGY

Alloys engineered for bearings and gears

Carburized alloys vs. base alloy 9310

ALLOYS	SERVICE TEMP	ENDURANCE	TOUGHNESS	OTHER
Pyrowear® 53	Better	Better	Better	—
CBS-50 NiL	Superior	Better	Equivalent	—
Ferrium® C64	Superior	Better	Equivalent	—
Pyrowear® 675	Better	Better	Superior	Corrosion Resistant
A-21 VV	Equivalent	Better	Equivalent	Stainless
Pyrowear® 61	Superior	Better	Superior	—

Gear and bearing alloy portfolio

ALLOYS	SPECIFICATIONS	PRODUCT FORMS	DESCRIPTION
9310	AMS 6265, AMS 6267	Bar, Billet, Forgings	Carburizing steel with high hardenability, good core strength, and superior fatigue resistance. Also available in a double vacuum melt version.
A-21®	AMS 5970-Pending (C170), AMS 5971-Pending (C190)	Bar, Billet, Plate, Rod, Ring, Sheet, Strip, Tube, Wire	Advanced martensitic stainless steel that can be used in the carburized, nitrided, and quenched and tempered conditions.
Ferrium® C64	AMS 6509	Bar-Flats, Bar-Rectangles, Bar-Rounds, Billet	Carburizing steel with high core strength and higher case hardness for improved wear resistance and greater power density.
GNB200	—	Bar	Nitridable premium melted alloy steel that offers high mechanical strength and very high toughness.
CBS-50 NiL	AMS 6278	Bar-Rounds, Billet, Wire, Wire-Shapes	Case hardenable grade of M-50 designed for service temperatures up to 600°F (316°C) with good fracture toughness.
Pyrowear® 53	AMS 6308	Bar-Rounds	Carburizable alloy with a combination of high-temperature performance, fatigue resistance, and excellent toughness, plus improved oil out performance.
Pyrowear® 675	AMS 5930	Bar-Rounds, Billet	Carburizable, corrosion-resistant alloy with a hard case and good ductile core toughness.

The future of aerospace starts with high-performance alloys

CarpenterTechnology.com/Aerospace

For additional information, please contact your nearest sales office:

info@cartech.com | 610 208 2000