

# Carpenter Alloys for the Nuclear Industry



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We understand the pressure you and nuclear power plants are under. High temperatures, corrosive conditions, radioactive environments and operating stresses require specialty alloys that meet the critical performance standards of the power generation industry.

Carpenter manufactures a full line of superalloys, high-strength steels, stainless steels and powder products used in various nuclear applications. These high quality, heat- and corrosion-resistant materials can improve durability and extend component operating life. We combine an industry-leading product offering with knowledgeable materials support and responsive, on-time delivery.

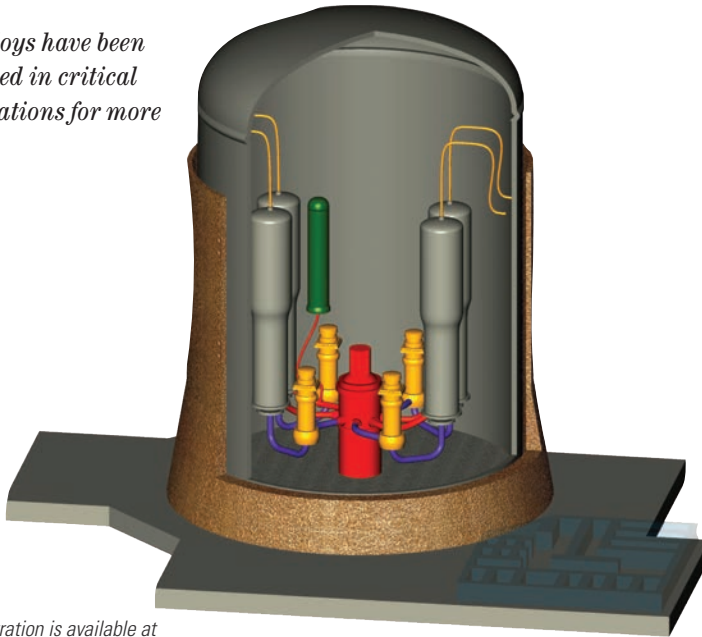
Whether the application is a fuel assembly, control rod or steam generator, you can count on Carpenter to deliver high-quality materials that last. As technology continues to change, we'll provide the innovative next-generation alloys that enable our customers to increase the useful life of their equipment and reach higher performance levels.

## CERTIFICATIONS/STANDARDS

- PRI Registrar: ISO 9001; AS 9100; ISO17025
- TUV Rhineland: PED 97/23-EC; AD 2000-Merkblatt W0
- NADCAP: Heat Treating, Material Testing Lab, Ultrasonic Testing
- Capable of certifying to RCC-M articles
- Routinely audited by customers for NCA-3800 conformance

**That's Carpenter. Engineered materials for a changing world.**

*Carpenter's alloys have been successfully used in critical nuclear applications for more than 40 years.*



Full interactive illustration is available at <http://www.cartech.com/markets/PowerGen/Nuclear.html>

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Carpenter manufactures hundreds of specialty alloys in billet, solid and hollow bar, multi-dimensional bar, precision strip, plate, wire and fine wire. Many of these alloys are also available in loose powder form.

## CAST AND WROUGHT APPLICATIONS

Control rod drive mechanisms	Reactor fueling machines
Coolant pumps	Tubes and overlay
Pressurizers	Valves and fittings
Pumps	Weld wire
Reactor pressure vessel, fuel assemblies	

## POWDER PRODUCT APPLICATIONS

Near-net shapes for valves and pumps  
Storage pools and transport canisters

## ALLOYS

Pyromet® Alloy A-286	Carpenter Stainless Type 347
Pyromet Alloy 600	Carpenter Stainless Type 405
Pyromet Alloy 718	Carpenter Stainless Custom 630
Pyromet Alloy X-750	Custom 450® stainless
Pyromet Alloy 52 weld rod	Custom 455® stainless
Pyromet Alloy 82 weld rod	Carpenter Nickel-Copper 400
Type 304L stainless	Custom Age 625 PLUS® alloy
Types 308L/309L stainless	Micro-Melt® NeutroSorb PLUS® alloys
Type 316L stainless	

## Contact:

For order quantities, pricing and delivery information:

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