



Fasteners for safety critical applications

Our Safety Critical Fasteners for the Nuclear Market

Helping to Power the Future



Brand Promises & Mission Statement:

Dependable.

Adaptable.

Sustainable.

The Cooper Turner Beck Group's mission is to lead the industry in delivering innovative, safety-critical fastening solutions that drive the globe towards a more resilient and more sustainable future.

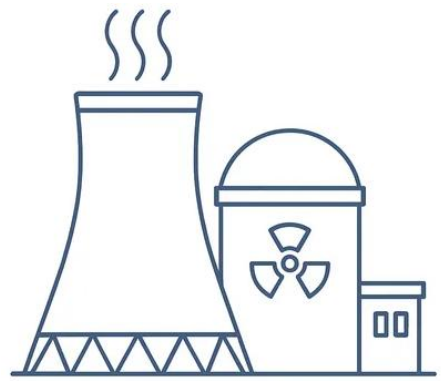
Our dedication to quality, sustainability, and customer satisfaction underpins our end-to-end comprehensive service.

From development to manufacture and distribution, we work together to fasten a secure and sustainable future for generations to come.

Safety-Critical Fasteners For The Nuclear Energy Market

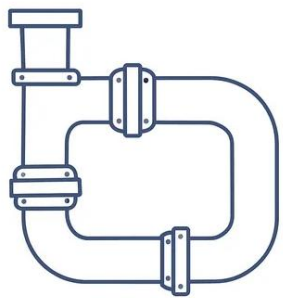
Cooper Turner Beck has been a trusted partner in the nuclear sector for over 40 years, providing products that meet the highest safety, quality, and regulatory standards. Our expertise covers a broad range of applications, including primary and secondary circuit components, reactor core vessels, pressurisers, and supporting civil engineering structures.

Product Categories.



Primary Circuit Products

Reactor Core Vessel, Pressuriser Steam, Generators, Primary Pumps, Control Rod Drive Mechanisms



Secondary Circuit Products

Piping, Valves, Heat Exchangers

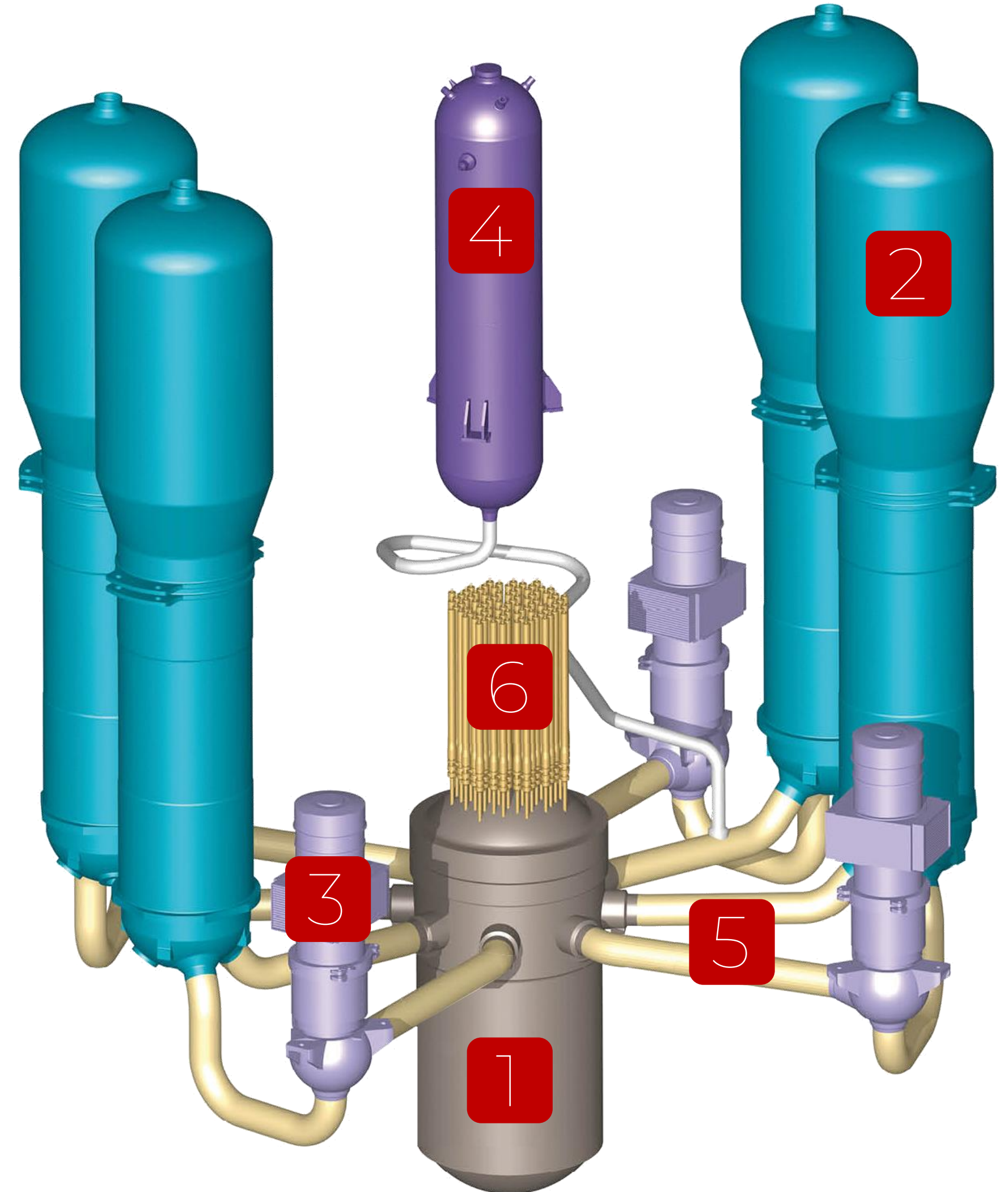


Supporting Civil Engineering Structures





1. Reactor Core Vessel
2. Steam Generator
3. Primary Coolant Pump Units
4. Pressuriser
5. Piping
6. Control Rod Drive Mechanisms





Market Advantages

40+ Years of Expertise

Extensive experience in the nuclear sector, delivering reliable and safe products.

ISO 17025 Certified Testing

All products undergo rigorous testing and quality control in our in-house laboratory.

Tailored Solutions

Custom manufacturing capabilities to meet the unique needs of each project.

Specialist Coatings

Offering a range of advanced coatings for enhanced corrosion resistance and durability.

Regulatory Compliance

Adherence to the highest nuclear standards, ensuring safe, compliant products.





Product Details

Reactor Core Vessel

Manufactured to the RCC-M standard, designed to withstand high pressure and temperature.

Pressuriser

High-quality, durable pressurisers used in primary circuit systems.

Heat Exchangers

Designed to handle extreme temperatures, ensuring efficient heat transfer.

Specialist Coatings

We apply coatings like RCC-M Manganese Phosphate, Xylan, and Delta MKS RCC-M for corrosion resistance and durability



Nuclear Energy Safety-Critical Fasteners For The Nuclear Waste Transportation

We have been a trusted partner in the nuclear waste sector providing products that meet the highest safety, quality, and regulatory standards.

We manufacture a wide range of safety critical fasteners for the transportation of radioactive material.

Fasteners in Nuclear Waste Containers:

Bolted Lids:

Traditional nuclear waste containers often use bolted lids, which require precise tightening and QA checks to ensure proper sealing and containment. However, stainless steel bolts in stainless steel tapped holes can be prone to galling, making them difficult to remove later.

Other Fasteners:

Fasteners are also used in the structural components of containers, like the welded seams in the Capsa container's body and the attachment of the domed end.



Nuclear Energy Safety-Critical Fasteners For The French Nuclear Navy

Cooper Turner Beck has been a trusted partner to the French Navy, supplying various studs and bolts to their nuclear-powered aircraft carriers and ten nuclear submarines (4 SSBN, 6 Rubis class SSN), with six Barracuda class SSN coming online from 2021.

Our safety-critical fasteners for the French nuclear navy, such as those used in submarine reactor compartments, are crucial for ensuring the structural integrity, safety, and performance of these vessels.

Our fasteners, often custom-designed and rigorously tested, must meet stringent standards and certifications to withstand the demanding conditions of underwater operation and the unique challenges of a nuclear environment.

Products Supplied

- nuclear boiler studs
- reactor studs
- pipework studs and bolts





1

End-to-End Capabilities

Consultancy

Our experts collaborate with clients to define project requirements, ensuring precision in design, material selection, and regulatory compliance.

2

Prototyping

We bring initial designs to life through rapid prototyping, allowing clients to assess performance and confirm specifications before full production.

3

Testing

Our ISO-certified testing ensures every product meets the highest safety and durability standards through comprehensive stress and environmental trials.

4

Manufacturing

Using advanced techniques like CNC machining and automation, we deliver complex, high-quality fasteners tailored to each client's needs.

5

Storage

Our strategically located warehouses support just-in-time delivery, with optimal storage conditions that maintain product integrity.

6

Distribution

With 21 global facilities, our distribution network ensures timely, cost-effective delivery to keep client projects on schedule.



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For further details please contact:

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