TECHNICAL BULLETIN TB-007

PLANNING A CATHODIC PROTECTION SYSTEM

WHAT PURITY CAN HELP WITH — AND WHEN YOU NEED A CORROSION ENGINEER

A guide to understanding the design process, your responsibilities, and how Purity Casting Alloys can support your project.

1 DEFINE THE PROTECTION REQUIREMENTS (WITH A CORROSION ENGINEER)

A qualified corrosion engineer will assess your structure, environment, and performance goals to design an appropriate cathodic protection (CP) system. This typically includes:

- Required level of protection (criteria)
- Current demand and total anode mass (capacity)
- Number, type, size, and placement of anodes
- Design service life
- Environmental conditions (water chemistry, soil resistivity, etc.)
- Monitoring and maintenance considerations

2 PROVIDE THE ANODE SPECIFICATIONS TO PURITY

Once the CP design is complete and anode requirements are established, provide us with the key details (e.g., alloy type, weight per anode, quantity, core material, configuration, and installation requirements).

If you are unsure how to provide this information, see *TB-006 How to Order a Custom Anode.*

3 PURITY MANUFACTURES YOUR ANODES

We manufacture high-quality aluminum, zinc, and other sacrificial anodes to your exact specifications, with verified alloy chemistry and consistent quality. Our team can:

- Recommend practical anode sizes and configurations based on your required weight and installation method
- Discuss core options (steel strap, cable, threaded rod, etc.)
- Review drawings or help develop manufacturing drawings
- Provide certification and documentation as required
- Support special requirements for coatings, marking, or packaging

4 GET EXPERT SUPPORT

If you do not yet have a corrosion engineer, we can help connect you with a qualified CP engineering firm. We work with experienced partners who can assist with system design, engineering studies, and project support.

HAVE A PROJECT IN MIND?

Contact our sales team to discuss your anode requirements or to request a quote.

Email: sales@purityalloys.com | Phone: 604-888-0181

We look forward to supporting your project.

> **Proper cathodic protection starts with the right design. We manufacture the anodes to make it work.**

IMPORTANT NOTE

Purity Casting Alloys **does not** design cathodic protection systems, determine the number of anodes required, calculate current demand, or specify anode placement. These services must be performed by a qualified corrosion engineer.

We manufacture sacrificial anodes to customer-supplied requirements and can assist with practical anode sizing, configuration, and manufacturing based on your specified weight and installation needs.

NEED A CORROSION ENGINEER?

We can help connect you with experienced corrosion engineers who specialize in cathodic protection for marine, industrial, and infrastructure applications.