



# CYLINDRICAL ALUMINUM HEAT TREATER ANODES



50 YEARS EXPERIENCE IN CATHODIC PROTECTION



JENNINGS ANODES



# ALUMINUM HEAT TREATER ANODES

## DATA SHEET

This cylindrical shaped aluminum anode is a 3" (76 mm) diameter cast anode with a 3/4" (19.05 mm) diameter all-thread steel rod core. It provides a compact solution for cathodic protection of heat treater / exchanger in relatively high temperature and low chloride saltwater environments.

### ■ Quality Substrate Material

Casted in low-iron, high-purity alloys, our indium-activated aluminum anode is designed to meet the standard of ISO, NACE, DNV.

Standard Element	GALVALUM III	DNV-RP-B401-2011	GS EP COR 201
Zinc (Zn)	2.0% ~ 6.0%	2.5% ~ 5.75%	4.75% ~ 5.75%
Indium (In)	0.01% ~ 0.02%	0.015% ~ 0.04%	0.015% ~ 0.02%
Silicon (Si)	0.08% ~ 0.2%	0.12% max.	0.06% ~ 0.12%
Iron (Fe)	0.13% max.	0.09% max.	0.12% max.
Copper (Cu)	0.006% max.	0.003% max.	0.003% max.
Cadmium (Cd)	—	0.002% max.	0.002% max.
Total Impurities	0.1% max.	0.1% max.	0.1% max.
Aluminum (Al)	Remainder	Remainder	Remainder

### ■ Low Driving Voltage

This aluminium anode provides a stable performance in seawater and electrolytes containing chloride ions as its operating potential is kept between -1.05 to -1.10 volts.

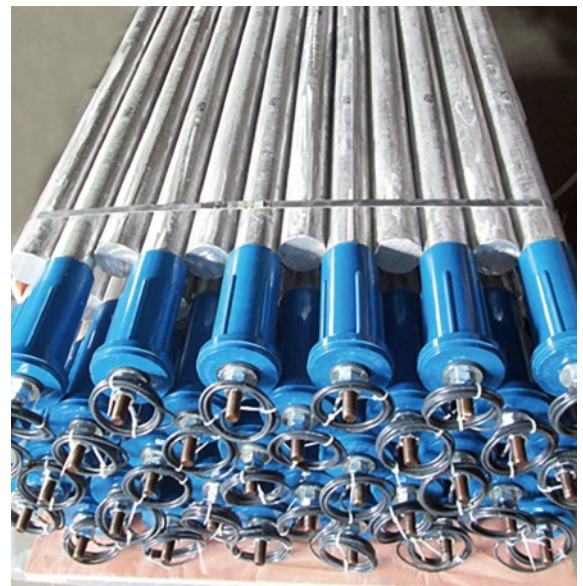
Technical Measurement	Performance
Open Circuit Voltage (-V)	1.10 min.
Closed Circuit Voltage (-V)	1.05 min.
Current Capacity	1135 A.h/lbs (2500 A.h/kg)
Current Efficiency	90% min.
Consumption Rate	7.6 lbs/A.y (3.4 kg/A.y)

\* The open/closed circuit voltage is with respect to a Ag/AgCl reference electrode.

### ■ Two Mounting Head Options

Our heat treater anode can be assembled with high compression molded fiberglass anode mount caps (blue or red) and attached with lead wires for quick installation.

The red cap can be installed in standard 4" SCH 40 fittings with grooved couplings. The blue cap can be used for mounting in standard 4" SCH 80 fittings with grooved couplings. The head cap is designed with four integral ribs that insure optimal skid resistance, proper alignment and superior in-flow anode stability.



# ALUMINUM HEAT TREATER ANODES

## DATA SHEET

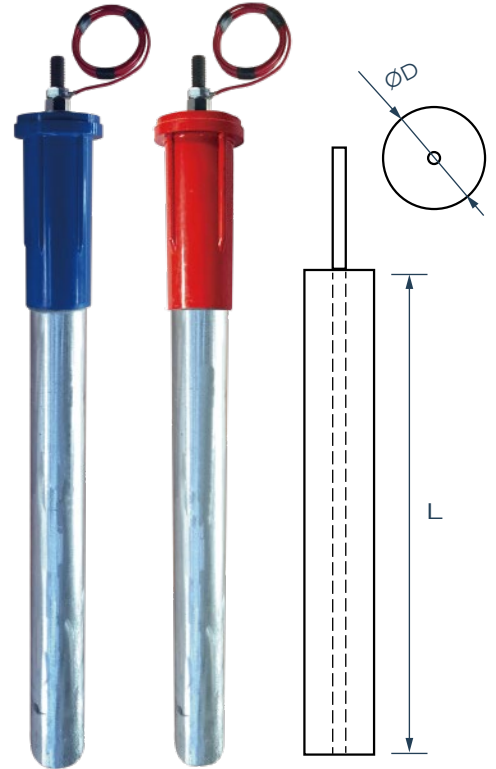
### APPLICATIONS

Aluminum heater treater anode is a sacrificial anode used for excellent corrosion protection in a variety of industries.

- Heat treater / exchanger
- Salt water storage tanks
- Skimmer / Oil-separation vessel
- Pressure vessel

### SPECIFICATIONS

Item No.	Anode Dimensions		Insert Dimensions	Weight	
	ØD	L		N.W	G.W
JA-AL-R30	3" (76 mm)	30" (762 mm)	3/4" - 10UNC	18.5 lbs (8.4 kg)	22 lbs (10 kg)
JA-AL-R60	3" (76 mm)	60" (1524 mm)	3/4" - 10UNC	37.0 lbs (16.8 kg)	44 lbs (20 kg)



### TESTING DETAILS

We employ ISO 9001:2015 quality management system and rigorous internal testing standards to ensure the optimum lifespan and performance of our anodes. Each anode is labelled with a unique serial number for quality tracking.

Technical Measurement	Chemical Composition	Electrochemical Performance	Physical Properties
Testing Standard	DNV-RP-B401	NACE TM0190	Foundry ITP
Testing Content	Chemical Analysis	Circuit Potential Current Capacity Current Efficiency Electrical Resistance	Dimension & Weight Surface Finish Steel Insert
Equipment	Optical Emission Spectrometer OBLF QSN 750	Electrochemical Analyzer EPI 200	Calibrated Digital Measuring Devices

\* Third party testing is conducted by customer's special request at extra charge.

# ALUMINUM HEAT TREATER ANODES

## DATA SHEET



### PACKAGING INFORMATION

We have strict packing protocols to guarantee safe delivery of our products. Clear shipping marks and documentation make delivery acceptance straightforward and simple.

Item No.	Anode Qty ( per pallet )	Pallet Dimensions (L x W x H)	Weight	
			N.W.	G.W.
JA-AL-R30	84	34" x 35.5" x 29.5" (870 x 900 x 750 mm)	1885 lbs (855 kg)	1929 lbs (875 kg)
JA-AL-R60	60	64" x 35.5" x 21.5" (1620 x 900 x 550 mm)	2645 lbs (1200 kg)	2700 lbs (1225 kg)





## Worldwide Service Network

Our worldwide network of sales and service centers can provide immediate advice and assistance on the complete range of products.

### Global Headquarter

3115 Fry Road Ste 303, Katy, Texas  
77449, United States

Email: [sales@jenningsanodes.com](mailto:sales@jenningsanodes.com)  
Tel: +1 (281) 501 8398 / +1 (713) 799 3884

[www.jenningsanodes.com](http://www.jenningsanodes.com)

### UK Office

Tatham Street, Hendon, Sunderland  
SR1 2AG, United Kingdom

Email: [sales@jenningsanodes.co.uk](mailto:sales@jenningsanodes.co.uk)  
Tel: +44 (0) 191 510 8843  
Fax: +44 (0) 191 514 7749

[www.jenningsanodes.co.uk](http://www.jenningsanodes.co.uk)

### Asia Pacific Office

120 Lower Delta Road, #07-13 Cendex  
Centre, Singapore 169208

Email: [inquiries@jenningsanodes.com](mailto:inquiries@jenningsanodes.com)  
Tel: +65 6715 1514



View Our Website



Follow Us On LinkedIn