



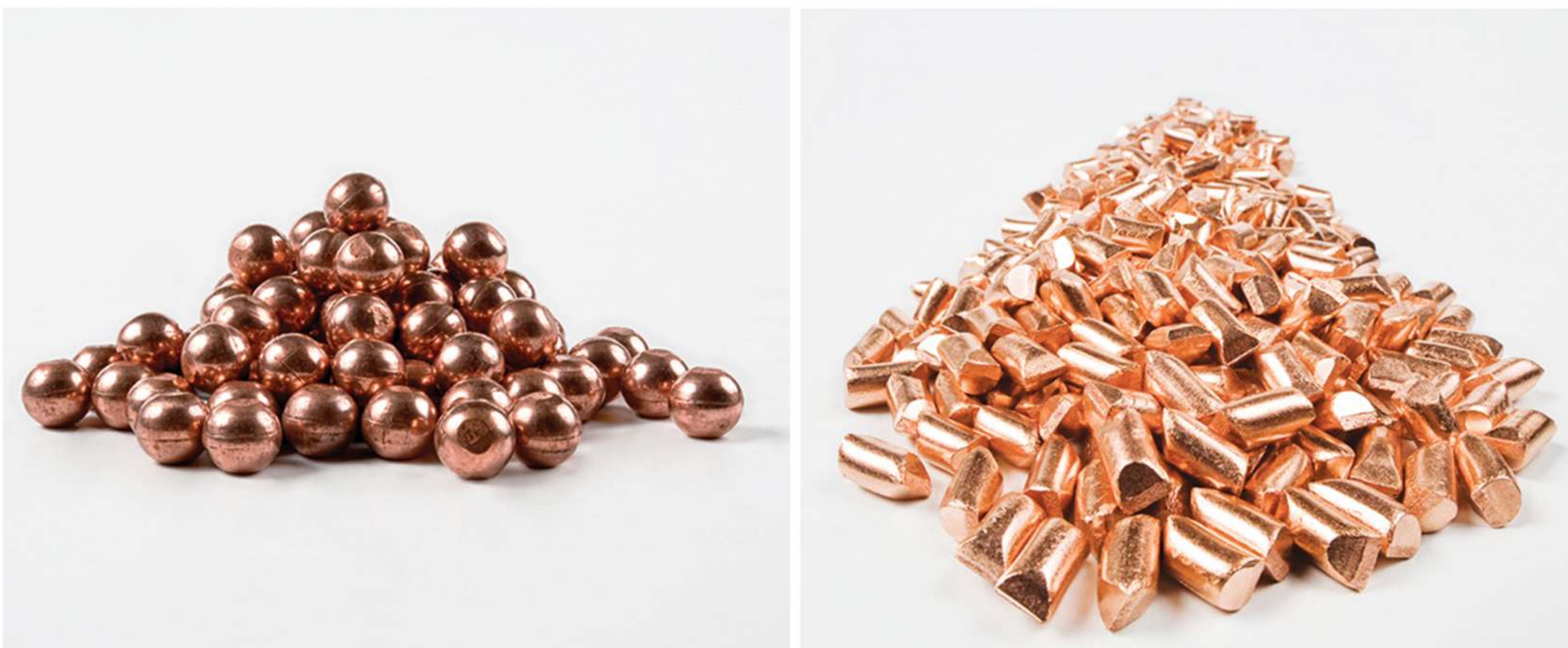
Copper Anodes For Electroplating

Tamra Copper Anodes

Tamra manufactures high purity copper anodes in different shapes and sizes for electrolytic copper plating. Nuggets and bar anodes are produced by a continuous casting process, while balls are produced by forging. After fabrication and sizing, the anodes are cleaned and washed so they are ready to use when they arrive.

Tamra provides two grades of copper to meet the needs of most plating. The oxygen content of oxygen free anodes is controlled to less than 10ppm to provide uniform dissolution in cyanide, pyrophosphate and fluoborate baths. Phosphorised copper anodes containing 0.04-0.06 percent phosphorus are required for acid copper solutions.

Nuggets are the most common form of copper anode. They are typically 1" in diameter by one-inch-long, but other sizes are available. Both OF and Phosphorus copper nuggets are available.



Phosphorus Copper Anode (DHP Gr)

Tamra phosphorous copper anode with high quality plating properties, commences with supreme quality copper cathode melted with precision % of phosphorous under vigilant controlled conditions. Cast continuous rods are produced in inert atmosphere without any scope of copper's contact with air. Stage inspections are assured and monitored strictly during further process. Thus the oxygen free melt remains 0.04-0.06% consistently.

Oxygen-Free Copper Anode (OF Gr)

Tamra oxygen-free copper anodes are manufactured precisely for electroplating. Its fine grain structure with high purity level and clean surface, easily dissolved. The high purity level 99.99% min. with cast crystal structure results into free flowing materials.

Applications

Printed Circuit Boards, Rotogravure Printing Cylinders, ABS Plastic, Coinage, Copper Bonded Earthrod, Electric Connectors, Decoratives, Monogram, Power Distribution Equipments, Ammunitions, Automotive Wheels

Shapes				
Balls (dia.)	15	25		
Slugs (dia.)	8x15	12x8	14x10	25x25
	8x20	12x10	14x20	25x30-40
		12x10		
Plates	25x10xL	100x10xL	152x19xL	175x15xL
	60x12xL	100x15xL	152x15xL	200x10xL
	80x12xL	100x20xL	158x12xL	200x12xL
	80x15xL	130x19xL	170x15xL	200x20xL
All Dimensions; ask for other shapes and sizes.				

Chemical Composition

Element	Phos	OF
Copper	99.95%	99.99%
Phosphorus	0.05%	
Oxygen		10ppm
Iron	8ppm	10ppm
Sulphur	11ppm	10ppm
Lead	6ppm	1ppm
Antimony	3ppm	1ppm
Nickel	1ppm	1ppm
Arsenic	1ppm	0.1ppm
Tin	1ppm	1ppm
Zinc	7ppm	0.1ppm





When you think of Copper,
Think Tamra.

EAST INDIA- HEAD OFFICE

Tamra Dhatu Udyog Pvt. Ltd.
2, N.C Dutta Sarani
Sagar Estate
Unit- #709
Kolkata- 700001
Phone: 033-22315602/05

T.K. Choudhary
Mobile: 8697725029, 9836221720
tushar@tamradhatu.com
Website: www.tamradhatu.com

ISO 9001:2015, 14001:2015, OHSAS
18001:2007 Certified Company

WEST INDIA

MUMBAI

Mr Manoj Tolumbia
Phone: 7303317773
manoj.tolumbia@tamradhatu.com

AHMEDABAD

Mr Narayan Rathi
Phone: 9909017477
naran.rathi@tamradhatu.com

NORTH INDIA

DELHI

Mrs Kusum Sharma
Phone: 9711485586
kusum.sharma@tamradhatu.com

SOUTH INDIA

BANGALORE

Mr V Prakash Nair
Phone: 8095000871
prakash.nair@tamradhatu.com

HYDERABAD

Mr Rajib Lochan Jena
Phone: 9030842472
rl.jena@tamradhatu.com

