

EMP INDUSTRIAL GROUP

Ebtekar Mes Parsian

Manufacturer of Oxygen-Free Copper Wire Rod & Strip

Compliant with ASTM & EN International Standards

99.99%

COPPER PURITY

>101%

IACS CONDUCTIVITY

ASTM-EN

STANDARDS



ABOUT EMP

Company Overview

EMP Industrial Group (Ebtekar Mes Parsian), a Private Joint Stock Company, was established in 2018 to manufacture Oxygen Free Copper (OFC) wire and copper products, and to distribute and sell copper-industry-related goods.

Backed by specialized equipment, internationally recognized standards, up-to-date industrial technology, and local engineering expertise, EMP delivers consistent quality across its copper wire rod and strip production.

HEAD OFFICE

Tehran, Sattarkhan St., Iran

FACTORY

Rafsanjan, Kerman-Rafsanjan Rd. Km 7,
Industrial Town No. 1



Vision & Mission



VISION

To become a leading and trusted brand in Oxygen Free Copper wire rod manufacturing and related products, with a focus on consistent quality, innovation, and expansion into domestic and regional markets.



MISSION

To produce and deliver high-quality copper products using modern technology, engineering expertise, and a customer-centric approach — creating sustainable value for industries and clients.

OUR STRENGTHS

Why EMP



Advanced Technology

Advanced technology and machinery across the production line



Oxygen-Free Wire Rod

Full range of Oxygen Free Copper wire rod production



Precise Quality Control

Rigorous quality control at every production stage



Industrial Versatility

Capacity to serve diverse industrial demands



Local Engineering Expertise

Strong reliance on local technical and engineering know-how

Production Line & Equipment

Two purpose-built lines carry copper from cathode to finished rod, under continuous process control.

CASTING LINE		Rautomead RS3000
Process	Upward continuous casting, graphite furnace	
Feedstock	Grade-A electrolytic copper cathode	
Output rod diameter	8 – 30 mm	
Oxygen content	< 3 ppm (typical)	
Capacity	1,000 – 6,000 tons/year	
EXTRUSION LINE		TLJ300 (CONFORM)
Process	Continuous friction extrusion (CONFORM)	
Extrusion wheel diameter	Ø 300 mm	
Feed rod diameter	Ø 12.5 mm	
Main motor power	110 kW	
Manufacturer	Dalian Konform Technology, China	

8-30 mm	<3 ppm	110 kW
ROD DIAMETER	OXYGEN (TYP.)	EXTRUSION MOTOR



Product Portfolio



Copper Rod

CONFORM PROCESS

General-purpose copper rods and bars, 8-30 mm diameter, $\geq 99.99\%$ Cu



Oxygen Free Copper Wire Rod

ASTM B49-10 · UNS C10100

8 & 12 mm diameters, $>101\%$ IACS conductivity, coils up to 11,000 m



Oxygen Free Copper Strip

ASTM B187 / EN 13601

8 × 6 mm (customizable), $>100\%$ IACS conductivity, 240 N/mm² tensile

PRODUCT

Copper Rod (CONFORM Process)

JIS H3140:2018 · BS EN 13601:2021

Process	CONFORM continuous extrusion
Diameter range	8 – 30 mm
Available sizes	8, 16, 22, 25, 30 mm
Copper purity (Cu)	≥ 99.99% (min.)
Oxygen content	< 10 ppm (max.)
Standards	JIS H3140:2018 / BS EN 13601:2021
Packaging	Bundle
Net weight	Approx. 2.5 tons

≥99.99
%
COPPER PURITY

<10
ppm
OXYGEN (MAX)

8-30
mm
DIAMETER RANGE



PRODUCT

Oxygen Free Copper Wire Rod

ASTM B49-10 · UNS C10100

Standard	ASTM B49-10 / UNS C10100
Copper purity	≥ 99.99% (min.)
Oxygen content	0 – 5 ppm
Diameters	8 & 12 mm
Length per coil	10,000 – 11,000 m
Tensile strength	175 N/mm ²
Hydrogen embrittlement	> 10 bends
Coil weight	4 – 8 ton/coil
Oxide film thickness	15 – 50 Å
Packaging	Wooden pallet, plastic cover (1.8 × 1.8 m)

>101%

IACS CONDUCTIVITY

0-5 ppm

OXYGEN CONTENT

>54%

ELONGATION (A250)



PRODUCT

Oxygen Free Copper Strip

ASTM B187 · EN 13601

Standard	ASTM B187 / EN 13601
Reference grade	OF Copper (ASTM B49, UNS C10200 / EN 1977)
Copper purity	≥ 99.99% (min.)
Oxygen content	≤ 10 ppm (max.)
Size (W × T)	8 × 6 mm — customizable
Length	3,000 – 6,000 m
Coil weight	1.5 – 2.5 ton/coil
Hardness	40 – 100 HV
Density	8.94 g/cm ³
Packaging	Wooden pallet, plastic cover (1.8 × 1.8 m)

>100%

IACS CONDUCTIVITY

240
N/mm²

TENSILE STRENGTH

>35%

ELONGATION



ASSURANCE

Quality Control & Laboratory

An independent QC/lab unit oversees every stage — from raw material to finished product.



Spectrometry

Spectrolab M (Spectro, Germany) — elemental analysis to ppm level across 19 elements.

BS EN 15079:2007



Oxygen Analysis

LECO RO-416 — oxygen concentration measurement in copper and copper alloys.

ASTM E2575 / E1019



Tensile Testing

Hounsfield & Gotech — tensile strength, yield strength, and elongation.

EN 10002-1:2001



Electrical Resistance

Burster Resistomat — resistance measurement from 2 mΩ to 200 kΩ.

ASTM B193-08

GLOBAL REACH

Sales & Export

A dedicated Sales & Export unit serving domestic and international customers — from first contact to final delivery.

- Customer inquiries via email, phone, and direct meetings
- Pricing, product specifications, lead times, and shipping terms
- Coordination of commercial contracts
- Marketing and outreach through international exhibitions
- Technical consulting and order support by sales engineers



GET IN TOUCH

Let's Start Working Together

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