



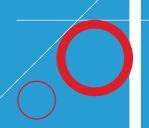
# PRECISION ELECTRIC RESISTANCE WELDED TUBES





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GANDHI SPECIAL TUBES LTD. CIN: L27104MH1985PLC036004









Gandhi Special Tubes Ltd. delivers innovative and reliable tubular solutions to a diverse range of industries & niche markets in core sectors such as automotive and commercial vehicles, hydraulics, and general engineering. The Group manufactures client-specific seamless steel tubes, high-pressure tubes, welded tubes, and coupling nuts. We blend our technical expertise with uncompromising standards to provide top-notch quality with utmost precision.

We listen, we adapt, and we innovate to ensure that every interaction with us is a step towards achieving your goals. Our dedication for customer centricity along with our 38 plus years of experience has been instrumental in nurturing long standing relationships, establishing us as the preferred choice for our customers.

Throughout our history, we have remained steadfast in our commitment to quality, flexibility, and reliability. We continue to embrace new challenges and strive to redefine industry standards, driven by our passion for precision and our desire to shape the future of tubular solutions.

#### **Product Process & Highlights**

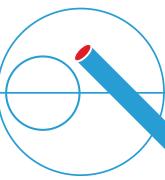
- Our small diameter welded and cold-reduced tubes deliver a harmonious blend of strength and quality across an extensive range of sizes.
- The journey begins with low carbon steel CRCA coils meticulously sourced from prime steel plants globally.
- We utilize advanced German technology to manufacture our precision welded steel tubes.
- The process involves Continuous Forming, Direct Current Welding, and Sizing by passing through a set of stretch reducing rolls.
- Strict process controls ensure that the internal weld bead is held to a minimum, and any external flashing is meticulously removed.
- Our tubes undergo bright annealing in an advanced German continuous Roller Hearth Furnace, resulting in a product that is soft, scale-free, and radiantly bright, boasting excellent physical properties.
- To ensure robust quality, each tube undergoes rigorous pressure testing at up to 70 Kg/cm sq pressure with dry nitrogen under water.
- Our tubes can be supplied in Plain, Copper Coated, or Electrogalvanized conditions.

#### **Product Range**

- Outer Diameter: From 3.1mm up to 12.7mm.
- Wall Thickness: From 0.5mm up to 1.22mm.

  (Our continuous manufacturing process enables us to supply tubes in straight lengths or coils, reaching lengths of up to 700 meters)





### **Applications**

- Heating Elements
- Fuel Lines
- Compressor Tubes
- Air Brake Lines
- Evaporative Coils
- Oil Lines
- General Engineering





### **Specifications**

- DIN 2393 SAEJ 526
- DIN 2394 SAEJ 356 etc or equivalent
- EN 10305-3 IS 3074

# **Common Specifications**

[Chemical Composition]

Steel Grade	C% (Max)	Si% (Max)	Mn%	P% (Max)	S% (Max)	Al (Min)
DIN2393 RSt34-2	0.15	0.30	≤ 0.60	0.025	0.025	0.02
EN 10305-3 E155 +N	0.11	0.35	≤ 0.70	0.025	0.025	-
En 10305-3 E195 +N	0.15	0.35	≤ 0.70	0.025	0.025	-
IS 3074 ERW1 OR CEW1	0.12	-	≤ 0.60	0.04	0.04	-

## **Mechanical Properties**

Steel Grade	Tensile Strength Kg/Sq mm	Yeild Strength	% Elongation
DIN 2393 RSt 34-2 NBK	31.6-41.8	20.9	28
En10305-3 E155 +N	27.5-41.8	15.8	28
En10305-3 E195 +N	30.6-44.9	19.9	28
IS 3074 ERW1/ CEW1 ANNEALED	>32	>17	25

#### **Surface Coatings**

Based on specific end usage our versatile tubes can be supplied in various

#### **Electrogalvanizing**

For specific applications requiring corrosion protection, we offer tubes with external electrogalvanizing. Our tubes undergo this process in a sophisticated, continuous electrogalvanizing and passivation plant. We provide different passivation options, including Trivalent Chrome (blue and yellow) and Hexavalent Chrome (yellow).

#### Copper Plating

Steel strips undergo copper plating in an innovative continuous electro-copper plating plant. This process results in tubes with a uniform copper coating on the internal as well as external surface.

#### **Quality & Inspection**

Nothing is more important to us than Quality! We have implemented a robust quality management system that leaves no room for compromise. Our products conform to Indian & International standards and are manufactured with optimum process control and quality checks at every step from incoming raw material to dispatch of finished products.

Each tube is precisely crafted to meet the most stringent tolerances that our customers demand. Our manufacturing plant is fully equipped with a chemical laboratory, metallurgy department and advanced destructive and non-destructive testing equipment conducted by highly qualified engineers to ensure that each tube meets our clients desired specifications.

- Microhardness Test
- Tensile Test
- Hydrostatic Pressure Test
- Eddy Current Test

- Bubble Test
- Hardness Test
- Burst Test
- Salt Spray Test
- Chemical Composition
- Metallurgical & Stereo Microscopy
- Dimensional Checks
- Flattening, Flaring, Bending Test
- Surface Roughness Test





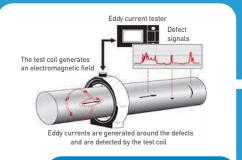


Flaring Test









**Eddy Current Test** 

