

SPEC No. OCF/WD/EN WIRE  
Dated: 25.4.2019

## SPECIFICATION FOR HOT ROLLED NORMALIZED WIRE ROD

1. NOMENCLATURE:

Hot Rolled Normalized Wire Rod of Diameter 5.5 mm ± 0.30 mm in Coil form.

2. END USE:

Hot Rolled Normalized Wire Rod is further Cold drawn, Stress Relieved and Surface Treated (Pickling and Phosphated) to a diameter of 3.86 mm to 4.06 mm.

3. PHYSICAL CONDITION:

Coil Size & Dimensions:

Coils shall have the following approximate dimensions and weight:

- a. Coil Inside Diameter : 800 mm.
- b. Coil Outside Diameter : 1200 mm.
- c. Coil Weight : 1000 – 3000 Kg.

The Steel shall be supplied in fully killed condition. The Steel shall be free from harmful defects like cracks. Seams, laps, fold and pits.

4. CHEMICAL COMPOSITION:

The Chemical Composition and tolerances in composition will as per BS970:Part1:1983 Grade 080M40 .The Chemical Composition is mentioned under for reference.

Element	Composition(%age)
Carbon	0.36 to 0.44
Manganese	0.60 to 1.00
Silicon	≤0.40
Phosphorus	0.05 max.
Sulphur	0.05 max.

5. MECHANICAL PROPERTIES OF ROD:

- a. Ultimate Tensile Strength (UTS) : 550 N/mm<sup>2</sup>(min.)
- b. Yield Strength : 280 N/mm<sup>2</sup> (min.)
- c. % age elongation after fracture  
on 5.65√S<sub>0</sub>(min.) : 16
- d. Brinell Hardness : 152-207 HB
- e. Impact Strength (Izod) : 15 ft.lb (min.)

For remaining parameters specification no. BS970: Part 1:1983 Grade 080M40 to follow.

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