

Technical specifications for SS 316L round bars

Part 1: Scope of supply

Testing, pre-dispatch inspection and safe delivery of SS316L round bars as per Table 1, to BARC, Trombay and fulfilling the requirements of this document.

No.	Item	Length (meter)	Approximate weight (kg)
1.	Round bar of diameter 100 mm ; Condition: Annealed and pickled ; Material: SS316L , conforming to the requirements of ASTM A-276	4	252
2.	Round bar of diameter 140 mm ; Condition: Annealed and pickled ; Material: SS316L , conforming to the requirements of ASTM A-276	4	493
Subtotal (approximate weight)			745

Part 2: Technical Specifications

1.0 General requirements:

- 1.1. The minimum piece length of round bars (rod) shall be 1000 mm \pm 10 mm.
- 1.2. The quantity tolerance is 10% on total length of the individual item.
- 1.3. Maximum permissible variation in dimensions shall be as per ASTM A-484M-11.
- 1.4. Surface indentations/deep gauging/scratches are not acceptable.

2.0 Material requirement:

The material shall conform to the chemical composition and mechanical properties requirement of stainless steel, type 316L as per ASTM A-276-10.

3.0 Inspection and testing requirements:

- 3.1. The items must be accompanied by original manufacturer test certificate with properly corroborated heat/lot number. The same shall be furnished before inspection.
- 3.2. The offered items will be inspected dimensionally before any other tests are initiated.
- 3.3. Supplier shall arrange for Positive Material Identification (XRF based) test of all the rods.
- 3.4. **All the items shall be subjected to following qualification tests in a NABL accredited laboratory** in presence of purchaser's representative:
 - (a). Chemical analysis: Specimen for chemical analysis shall be prepared by the supplier from one randomly selected rod by the purchaser's representative from each size and heat number/lot. The samples shall be analysed for mandatory elements- C, Ni, Cr, Mo, Mn, P, S, Si as per ASTM A-751-08.
 - (b). **Mechanical testing:** Test shall be carried out as per ASTM A-370-11. One tension test shall be carried out on a specimen from randomly selected rod (by purchaser representative) from each size and heat no./lot as per ASTM A-484-M-11.
 - (c). **Inter-granular corrosion test:** One specimen per lot/heat no. shall be tested for susceptibility to inter-granular corrosion as per ASTM A-262, Practice-E.

4.0 Delivery:

- 4.1. Shipping release will be issued after satisfactory completion of tests and the receipt of original test certificates. The rods shall be dispatched after obtaining a shipping release.
- 4.2. All items shall be properly packed to avoid damage during transit. Thermocol/Plastic packing material shall not be used for packing of these items.
- 4.3. All items shall be safely delivered to CFB, BARC, Trombay, Mumbai - 400 085.

Part 3: Important notes to Bidder:

1.0 The bidder shall quote the prices on "**Per Meter Basis**" for each item.

~~2.0 For overseas manufacturer, bidder shall categorically submit that end use certification is not required.~~

In absence of relevant mandatory information, the offer would be treated as incomplete and may be summarily rejected. Quotations deficient in clarity about technical and commercial terms may also be summarily rejected.