

**Bureau of Indian Standards
Eastern Regional Laboratory**

Reference: ERL/Metallographic Lab

Date: 11-09-2024

Subject: Initiation of Metallographic Lab at Eastern Regional Laboratory, Kolkata

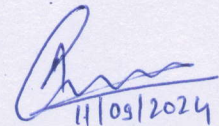
This is with reference to the initiation of the Metallographic Lab at the Eastern Regional Laboratory (ERL) in Kolkata.

Some of the major metallurgical tests of metals and related products according to Indian Standards can now be undertaken at ERL:

- | | |
|---------------------|----------------------------|
| 1. Microstructure | 5. Carbide Spheroidization |
| 2. Grain size | 6. Non-Metallic inclusions |
| 3. Decarburization | 7. Internal defects, etc. |
| 4. Inclusion Rating | |

BOs can now send samples to ERL, Kolkata for metallurgical tests as per Indian Standards given at Annex-A. The inclusion of parameter in LIMS for the 49 ISs has been informed to LIMS support for updation, however in case BO intends to send samples for a particular IS for which LIMS status has not been updated yet, ERL may be informed to do the needful.

NOTE: Since numerous metallurgical properties in addition to the above 7 tests can be measured using the microscope, BOs are also encouraged to enquire about the same from ERL while sending samples.



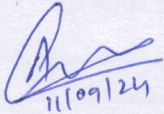
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Annex-A

SI No	IS No.	Title
1	2255:1977	MS wire rod for manufacture of machine screws,CHP
2	9442:1980	Hot rolled steel plates, sheets and strips for manufacture of agricultural tillage discs
3	9476:1980	Cold Rolled Steel Strips for carbon steel Razor Blades
4	9962:1981	Steel wire for needles
5	4882:1979	Low carbon st wire for rivets for bearing industry
6	3195:1992	Steel for manufacture of volute & helical springs ,Railway Rolling stock
7	3930:1994	Flame and induction hardening steels
8	4397:1999	CR carbon steel strips for ball & roller bearing cages/Retainers
9	4432:1988	Case hardening steels
10	6603:2001	Stainless steel bars and flats
11	7887:1992	Mild Steel wire rods for general engg purposes
12	8917:1978	Steel Plates for Galvanising Pots
13	5651:1987	Steel for Pneumatic Tools
14	410:1977	Cold rolled brass sheet, strip and foil
15	IS 17111:2019	Heat Treated Steel , Alloy-Steels and free cutting Steels- ball and Roller bearing Steels
16	2507:1975	Cold rolled steel strip for springs
17	3444:1999	CORROSION RESISTANT HIGH ALLOY STEEL AND NICKEL BASE CASTINGS FOR GENERAL APPLICATIONS
18	3885:1:1992	Steel for manufacturing of laminated springs : flat section
19	3885:2:1992	Steel for mnfr of laminated spring: rib & grve sec
20	5517:1993	Steels for hardening and tempering
21	8951:2001	Steel cast ingots, billet & blooms for production of High carbon Steel wire
22	8952:1995	Steel ingots,blooms,billets for production of MS wire rods for general engineering purposes
23	1875:1992	Carbon steel billets, blooms, slabs, bars for Forgings
24	13387:1992	Tool steel forgings for metal forming
25	210:2009	Grey iron castings
26	7291:1981	18 percent nickel maraging steel bars and rods
27	7904:1995	HIGH CARBON STEEL WIRE RODS
28	11169:1:1984	Steels for cold heading, cold extrusion , Pt 1 Wrought Carbon & Low alloy steel
29	11169:2:1984	Steels for cold heading,cold extrusion , P 2 Stainless Steel
30	1148:2009	Hot-rolled rivet bars (upto 40mm dia) for structural purpose
31	14652:1999	18 percent nickel maraging steel bars and rods
32	14698:1999	C & LA Steel Billets, Blooms ,Slabs , Bars For Shell Bodies & Proof Shots

33	2062:2011	Structrural steel (fusion welding quality)
34	4454:1:2001	Patented & cold-drawn st wires for spring, unalloy
35	3431:1982	Steel for Manufacture of volute helical & laminated springs for automotive suspension
36	4398:1994	C-Cr steel for manufacture of balls, rollers & bearing races
37	5518:1996	STEELS FOR DIE BLOCKS FOR DROP FORGING
38	7283:1992	HOT-ROLLED BARS FOR THE PRODUCTION OF BRIGHT BARS AND MACHINED PARTS FOR ENGINEERING APPLICATIONS -
39	6967:1973	Steel for electrically welded round link chains
40	7557:1982	Specification for Steel wire : (upto 20 mm) for the manufacture of cold forged rivets
41	8052:2006	Steel ingots, billets blooms for Springs, Rivets, Screws, for Gen Engg appl
42	9294:1979	Cold rolled stainless steel strip for razar blade
43	9396:1:1987	ROUND OPEN TOP SANITARY CANS FOR FOODS AND DRINKS -PART 1- TINPLATE
44	11952:1986	Steels for piston pins (Gudgon pins)
45	IS 4454 : PART 2 : 2001	Steel wire for mechanical springs Part-2 oil hardened and tempered steel wire.
46	IS 10238	Fasteners - Threaded steel fasteners - Step bolts for steel structures - Specification (First Revision)
47	IS 6623	High Strength Structural Nuts
48	IS 4368	Specification for alloy steel billets, blooms and slabs for forging for general engineering purposes
49	IS 14899	Liquefied petroleum gas (LPG) containers for automotive use - Specification (First Revision)


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