

Form No:	 PE&SD	BHARAT HEAVY ELECTRICALS LIMITED PROJECT ENGINEERING & SYSTEMS DIVISION	PY 52 080
		PRODUCT STANDARD	Rev. No. 00
		MILD STEEL PIPES IS-3589 SEAMLESS/WELDED	Page 1 of 3

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MILD STEEL PIPES IS-3589
SEAMLESS / WELDED
ORDERING SPECIFICATION

1.0 GENERAL

- 1.1 The Mild Steel (MS) Pipes (Seamless/Welded) supplied according to this standard shall conform to the requirements of latest version of Indian Standard IS 3589 "Specification for Steel Pipes for Water and Sewage" and comply with the following additional requirements.
- 1.2 This specification is applicable to MS pipes of outside diameter from 168.3mm to 2540mm.
- 1.3 These pipes shall be suitable Water & Sewage applications.

2.0 MANUFACTURE:

- 2.1 This specification is applicable for both Seamless and Welded Pipes, to be manufactured as per process specified in Indian Standard IS-3589.
- 2.2 The method of manufacture (Seamless / Welded) shall be as per BHEL order. Welded Pipes can be manufactured from either of the Processes ERW or SAW.
- 2.3 The applicable grade of steel (Fe330/Fe410/Fe450) shall be as per BHEL order.
- 2.4 The pipes shall be supplied with Bevel Ends.

3.0 CHEMICAL COMPOSITION:

Shall be as per the requirements of Indian Standard IS-3589.

4.0 CONDITIONS OF DELIVERY:

The pipes supplied shall meet all the requirements of IS-3589.

5.0 DIMENSIONS AND TOLERANCES:

- 5.1 Pipe outside diameter and Wall Thickness shall be as per BHEL order and they shall be specified in "mm" unless otherwise indicated.
- 5.2 Dimensions and Tolerances shall be as per Indian Standard IS 3589.
- 5.3 Unless otherwise specified, pipes shall be supplied in single random lengths of 5 to 7 meters.
- 5.4 Quantity Tolerance shall be 0/+1 random length. No negative quantity tolerance is accepted.

6.0 DESIGNATION:

A welded steel pipe of OD 219.1 mm, wall thickness of 6.3 mm and of grade Fe410, shall be designated as:

PIPE (WELDED) MS 219.1 X 6.3 IS3589FE410.

7.0 TESTING REQUIREMENTS:

All the applicable tests as per the requirements of National Standard IS3589 shall be carried out successfully.

Refer Doc	LAYOUTS & PIPING ENGINEERING	PREPARED	CHECKED	APPROVED	DATE
		 G KALYAN	 SRIKANTH G	 S B RAO	29.06.15

PROJECT ENGINEERING & SYSTEMS DIVISION

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8.0 INSPECTION REQUIREMENTS:
 BHEL's representative shall have free access at all times to all parts of the manufacture's works, until the work on the contract of BHEL is being performed. The manufacturer shall offer BHEL's representative all reasonable facilities, without charge, to satisfy the latter that the material is being furnished in accordance with the specification.

9.0 TEST SAMPLES:
 All Pipes bearing the same designation and manufactured under a single process shall be grouped together to constitute a lot.

 Each lot shall be sampled separately in accordance with IS: 4711.

10.0 TEST CERTIFICATES:
 Three copies of test certificates shall be supplied, unless otherwise stated on the order. In addition, to the above, the supplier shall ensure to enclose one copy of the test certificate along with their dispatch documents to facilitate quick clearance of the material. The test certificate shall bear the following information:

 PY52080: MILD STEEL PIPES IS-3589
 BHEL order No:
 Supplier's Reference:
 Name:
 Identification No:
 Melt No:
 Results of Tests:
 Results of Dimensional inspection.
 Results of chemical analysis and mechanical & hydraulic tests.

11.0 PACKING AND MARKING:
 Each pipe shall be plugged at both ends by means of tight fitting end caps. The pipes shall be suitably packed in bundles/packages to prevent corrosion and damage during transit. Each bundle/package shall bear the following information:

 PY52080: MILD STEEL PIPES IS-3589
 BHEL Order No:
 Consignment/Identification No:
 Nominal bore, Outside Diameter and Wall Thickness:
 Supplier's Name:

12.0 TECHNICAL DELIVERY CONDITIONS:
 For all the requirements not listed in this specification, BHEL Corporate Standard **AA0490001** shall be referred.

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RECORD OF REVISIONS:

Rev No	Date	Revision Detail	Revised by	Approved by
00	29.06.2015	FIRST ISSUE	 G KALYAN	 SRIKANTH G

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