

Form No:	 PE&SD	BHARAT HEAVY ELECTRICALS LIMITED PROJECT ENGINEERING & SYSTEMS DIVISION		PY 52 101
		TECHNICAL SPECIFICATION		Rev. No. 01
		ELBOW 90D, LONG RADIUS, CARBON STEEL, BUTT WELDING		Page 1 of 1

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1.0 GENERAL

- 1.1 The Butt Welding Elbows 90D supplied according to this specification shall conform to the requirements of latest version of ASME Standard B16.9 "Factory-Made Wrought Butt welding Fittings" and comply with the following additional requirements.
- 1.2 This specification is applicable for Butt Welding Elbows of Sizes NPS½" to NPS 48".

2.0 MATERIAL & CONSTRUCTION:

Material, Construction, Chemical Composition, Mechanical Properties, Heat Treatment, Testing and other requirements related to Material shall be in accordance with the ASTM Standard (latest version) as specified below:

- 2.1 For Elbows of size NPS ½" to 14":
Seamless Construction according to ASTM A234 Gr WPB.
- 2.2 For Elbows of size NPS 16" to 48":
Welded Construction according to ASTM A234 Gr WPB-W.
- 2.3 Galvanizing shall be carried out as per ASTM A123, if specified.

3.0 DIMENSIONS, TOLERANCES AND OTHER REQUIREMENTS:

Shall be as per ASME B16.9 (Latest edition).

4.0 SIZE AND THICKNESS:

Elbow Size (NPS in inches) and Wall thickness (Schedule) shall be as per BHEL Enquiry/Order.

5.0 DESIGNATION:

A 10" Sch 40 Carbon Steel 90D Elbow, shall be designated as:

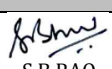
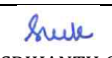
ELBOW 90D CS (A234WPB) 10" SCH 40 BW.

6.0 TECHNICAL DELIVERY CONDITIONS:

- 6.1 Unless otherwise specified on the order, IBR certification is not required.
- 6.2 All other requirements shall be as per BHEL Corporate Standard AA0851402 – Technical Delivery Conditions for Pipe Fittings. ASME Standard B16.28 referred in this TDC shall be read as ASME B16.9.

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RECORD OF REVISIONS:

Rev No	Date	Revision Detail	Revised by	Approved by
00	20.07.2015	FIRST ISSUE	 SRIKANTH G	 S B RAO
01	20.07.2018	Clause 2.0 updated to include Galvanizing Specification.	 G. KALYAN	 SRIKANTH G

Refer Doc	LAYOUTS & PIPING ENGINEERING PROJECT ENGINEERING & SYSTEMS DIVISION	PREPARED	CHECKED	APPROVED	DATE
		 CH MANOJ	 SRIKANTH G	 S B RAO	20.07.15