



CORPORATE STANDARD

AA7242502

Rev No.03

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ELBOWS 90°, LONG RADIUS, SEAMLESS, BUTT WELDING, CARBON STEEL (HIGH TEMPERATURE SERVICE)

1.0 SCOPE:

This standard gives information as to the designation, material, sizes and dimensions of seamless butt welding 90° long radius elbows.

2.0 DESIGNATION:

A 90° long radius seamless elbow to this standard of nominal size 2" and schedule 40 shall be designated as follows:

2.1 On drawings:

- a) Material specification column: AA7242502
- b) Description column: ELBOW 90° LR 2" SCH 40 BW CS HT

2.2 For placing indents on purchase:

Elbow 90°, long radius, seamless, butt welding, carbon steel nominal size 2" sch 40, AA7242502

2.3 For issuing enquiries and on purchase orders:

While issuing enquires and purchase orders delete BHEL standard number from the clause 2.2 and add the information given under clause 3.0 (delete the material not applicable in Cl.3.2) and 4.0.

3.0 COMPLIANCE WITH NATIONAL STANDARDS:

3.1 Dimensions, Tolerances & General requirements: ASME B 16.9

3.2 Material: Carbon steel to SA 234 Gr: WPB

4.0 TECHNICAL DELIVERY CONDITIONS:

As per BHEL standard AA0851402

5.0 REFERRED STANDARDS (Latest publications including amendments):

- 1) ASME B 16.9 2) AA0851402 3) ASME B 36.10M

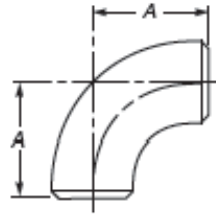
Revisions:
Clause 25.02 of MOM of MRC-SMC+RP

APPROVED:
INTERPLANT MATERIAL RATIONALISATION
COMMITTEE – MRC(SMC+RP)

Rev No.03	Amd No.	Reaffirmed	Prepared	Issued	Dt. of 1 st Issue
Dt:04-07-2013	Dt:	Year:	HPEP, Hyderabad	Corp.R&D	10-02-1981

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ELBOW 90°

(All dimensions in mm unless otherwise specified)

Nom. Pipe Size inches	Schedule	ASME Pipe size OD × Th.	Nearest metric pipe OD × Th.	Outside Dia. at bevel		Centre-to-end A		Wt./ Piece kg	Sub-code
				Nom.	Tol.	Nom.	Tol.		
1/2	80	21.3 × 3.73		21		38		0.07	012
	160	21.3 × 4.78						0.08	020
3/4	80	26.7 × 3.91		27		38		0.10	039
	160	26.7 × 5.56						0.13	047
1	80	33.4 × 4.55		33		38		0.20	055
	160	33.4 × 6.35						0.26	063
1 1/4				42		48			
1 1/2	80	48.3 × 5.08		48		57		0.50	080*
	160	48.3 × 7.14						0.65	098
	XXS	48.3 × 10.15						0.90	101
2	40	60.3 × 3.91		60	±1	76		0.65	110*
	80	60.3 × 5.54						0.90	128
	160	60.3 × 8.74						1.35	136
	XXS	60.3 × 11.07						1.60	144
2 1/2	40	73 × 5.16		73		95		1.36	152
3	40	88.9 × 5.49	88.9 × 4	89		114		2.05	160
	80	88.9 × 7.62						2.80	179
	160	88.9 × 11.13						3.85	187
	XXS	88.9 × 15.24	88.9 × 12.5					5.00	195
3 1/2	40	101.6 × 5.74		102		133		3.05	209
4	40	114.3 × 6.02		114	+2 -1	152		3.90	217
	80	114.3 × 8.56						5.40	225
	120	114.3 × 11.13						6.50	233
	160	114.3 × 13.49						8.10	241
	XXS	114.3 × 17.12						9.90	250*
5	40	141.3 × 6.55		141		190		6.8	268
6	40	168.3 × 7.11		168	+3 -1	229		10.5	276
	80	168.3 × 10.97						15.5	284
	120	168.3 × 14.27						19.5	292
	XXS	168.3 × 21.95						28.5	306



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Nom. Pipe Size inches	Schedule	ASME Pipe size OD × Th.	Nearest metric pipe OD × Th.	Outside Dia. at bevel		Centre-to-end A		Wt./ Piece kg	Sub-code
				Nom.	Tol.	Nom.	Tol.		
8	20	219.1 × 6.35	219.1 × 6.3	219	±2	305		16.0	314
	40	219.1 × 8.18						21.8	993
	80	219.1 × 12.70						31.0	322
	120	219.1 × 18.26						44.0	330
10	20	273 × 6.35		273		381	±2	25.0	349
	30	273 × 7.80	273 × 7.5					31.0	357
	40	273 × 9.27						38.6	985
	80	273 × 15.09						58.0	365
	140	273 × 25.40	273 × 25.0						373
12	20	323.8 × 6.35		324	+4 -3	457		36.0	381
	40	323.8 × 10.31						40.0	390*
	80	323.8 × 17.48						95.0	403
14								533	
16								610	
18								686	
20								762	
22					+6 -5			838	
24								914	

NOTE:

- 1) For thickness of schedule pipes refer ASME B 36.10M
- 2) Weights given in the table are for general reference only and are not meant for commercial transactions.
- 3) Corporate Sub-codes are shown in the table against corporate rationalised sizes.
- 4) Sizes used by individual plants are covered in the Annexure along with complete code numbers.