

STAINLESS STEEL 304L SEAMLESS PIPE FITTINGS B.O.Q / TERMS & CONDITIONS**MATERIAL STANDARDS**

ASTM A403 WP 304L
UNS Designation S 30403

GENERAL REQUIREMENTS

- i) The Stainless Steel 304L Seamless Pipe Fittings shall be provided in Annealed and Pickled condition.
- ii) The Stainless Steel 304L Seamless Pipe Fittings shall conform to the general requirements of ASTM A 960/A 690M – 12.

BILL OF QUANTITIES

Sr. #	Description	Size / Dimension	Qty (Nos.)
1.1	End Cape, BW	DN 20, Sch. 80s	50 Nos.
1.2	End Cape, BW	DN 40, Sch. 80s	50 Nos.
1.3	End Cape, BW	DN 50, Sch. 80s	100 Nos.
1.4	End Cape, BW	DN 80, Sch. 40s	100 Nos.
1.5	End Cape, BW	DN 200, Sch. 40s	10 Nos.
1.6	End Cape, BW	DN 350, Sch. 40s	20 Nos.
1.7	Concentric Reducer, BW	DN 25 x 15, Sch. 80s	20 Nos.
1.8	Concentric Reducer, BW	DN 40 x 20, Sch. 80s	20 Nos.
1.9	Concentric Reducer, BW	DN 80 x 40, Sch. 40s	05 Nos.
1.10	Concentric Reducer, BW	DN 150 x 80, Sch. 40s	10 Nos.
1.11	Eccentric Reducer, BW	DN 200 x 150, Sch. 40s	10 Nos.
1.12	Reducing Tee, BW	DN 80 x 40, Sch. 40s	15 Nos.
1.13	Reducing Tee, BW	DN 80 x 25, Sch. 40s	15 Nos.

TERMS & CONDITIONS OF SUPPLY

The Stainless Steel 304L Seamless Pipe Fittings shall conform to the requirements of chemical composition & mechanical properties as follow:

DIMENSIONAL REQUIREMENTS

The Stainless Steel 304L Seamless Pipe Fittings shall conform to dimensional requirements of ASME B 16.9.

CHEMICAL COMPOSITION

The steel shall conform to the requirements as to chemical composition prescribed in section 7 of ASTM A403/A403M-12.

MECHANICAL PROPERTIES:

- i) The tensile properties of the material shall conform to the requirements prescribed in section 8, ASTM A403/A403M-12.
- ii) Mechanical Tests required shall be performed in accordance with Test Methods and Definitions ASTM A 370.

TOLERANCES

The permissible variations in mass, wall thickness, inside diameter, outside diameter and length of Seamless Pipe Fittings must be according to section 11 of ASME B 16.9.

MILL TEST CERTIFICATE

Mill Test Certificate provided shall be in accordance with EN 10204:2004 Type 3.1

INTERGRANULAR CORROSION TEST

The material shall pass Intergranular Corrosion Tests conducted for each batch in accordance with Practice A and E of ASTM A262-02a and provide along with Mill Test Certificate.

FINISH AND APPEARANCE

The finished Seamless Pipe Fittings shall conform to the requirements in section 15 of ASTM A 960/960M-12.

PRODUCT MARKING

The finished Seamless Pipe Fittings shall be marked in conformance to section 14 of ASTM A403/403M-12 and section 19 of ASTM A960/960M-12.

INSPECTION

- i) Inspection of material by the purchaser's representative at the production site shall be foreseen as part of the purchase order.
- ii) The manufacture shall afford the purchaser's inspector all reasonable facilities necessary to satisfy the inspector that the material being furnished is in accordance with the specifications.

PACKAGING, MARKING AND LOADING:

The packaging, marking and loading for shipment shall be in accordance with the procedures of Practices ASTM A700.

STAINLESS STEEL 304L PIPE FLANGES B.O.Q / TERMS & CONDITIONS

MATERIAL STANDARDS

ASTM A182 F 304L
UNS Designation S 30403

GENERAL REQUIREMENTS

- i) The Stainless Steel 304L Pipe Flanges shall be provided in Annealed and Pickled condition.
- ii) The Stainless Steel 304L Pipe Flanges shall conform to the general requirements of ASTM A 961/691M – 12.

BILL OF QUANTITIES

Sr. #	Description	Size / Dimension	Qty (Nos.)
2.1	Flanges WRNF, 150 lb	DN 15 Sch. 80s	100 Nos.
2.2	Flanges WRNF, 300 lb	DN 15 Sch. 80s	100 Nos.
2.3	Flanges WRNF, 150 lb	DN 20 Sch. 80s	100 Nos.
2.4	Flanges WRNF, 300 lb	DN 20 Sch. 80s	100 Nos.
2.5	Flanges WRNF, 150 lb	DN 25 Sch. 40s	100 Nos.
2.6	Flanges WRNF, 300 lb	DN 25 Sch. 40s	100 Nos.
2.7	Flanges WRNF, 150 lb	DN 40 Sch. 40s	50 Nos.
2.8	Flanges WRNF, 300 lb	DN 40 Sch. 40s	50 Nos.
2.9	Flanges WRNF, 300 lb	DN 40 Sch. 80s	50 Nos.
2.10	Flanges WRNF, 300 lb	DN 50 Sch. 40s	30 Nos.
2.11	Flanges WRNF, 150 lb	DN 80 Sch. 40s	20 Nos.
2.12	Flanges WRNF, 300 lb	DN 80 Sch. 40s	20 Nos.
2.13	Flanges WRNF, 150 lb	DN 150 Sch. 40s	10 Nos.

TERMS & CONDITIONS OF SUPPLY

The Stainless Steel 304L Pipe Flanges shall conform to the requirements of chemical composition & mechanical properties as follow:

DIMENSIONAL REQUIREMENTS

The Stainless Steel 304L Pipe Flanges shall conform to dimensional requirements of ASME B 16.5.

CHEMICAL COMPOSITION

The steel shall conform to the requirements as to chemical composition prescribed in section 8 of ASTM A182/A182M-12.

MECHANICAL PROPERTIES:

The steel shall conform to the requirements as to mechanical properties prescribed in section 9 of ASTM A182/A182M-12.

TOLERANCES

The permissible variations in mass, wall thickness, inside diameter, outside diameter and length of Pipe Flanges must be according to section 7 of ASME B 16.5.

MILL TEST CERTIFICATE

Mill Test Certificate provided shall be in accordance with EN 10204:2004 Type 3.1

INTERGRANULAR CORROSION TEST

The material shall pass Intergranular Corrosion Tests conducted for each batch in accordance with Practice A and E of ASTM A262-02a and provide along with Mill Test Certificate.

WORKMANSHIP, FINISH AND APPEARANCE

The finished Pipe Flanges shall conform to the requirements in section 14 of ASTM A 182/182M-12 and section 15 of ASTM 961/961M-12.

PRODUCT MARKING

The finished Pipe Flanges shall be marked in conformance to section 19 of ASTM A182/182M-12 and section 20 of ASTM A961/961M-12.

INSPECTION

- i) Inspection of material by the purchaser's representative at the production site shall be foreseen as part of the purchase order.
- ii) The manufacture shall afford the purchaser's inspector all reasonable facilities necessary to satisfy the inspector that the material being furnished is in accordance with the specifications.

PACKAGING, MARKING AND LOADING:

The packaging, marking and loading for shipment shall be in accordance with the procedures of Practices ASTM A700.