Our Ref. No.: 19/KP/0001431 Date: 16-05-2019

(To be quoted for all correspondence) Page: 1/6

To: M/s. Fax No.:

Attention:

Subject: **QUOTATION FOR SUPPLY OF "PIPE, FLANGES, ELBOWS AND CONE REDUCER"**

We intend to purchase goods as per attached Annexure-A,B,C,D,E.

Kindly send us your best offer in accordance with the following General Conditions as stated below:

General Conditions:

(a)	Submission of Quotation	Provide quotation which may be sent immediately through Fax or E-mail but Original Proforma Invoice along with detailed technical brochures / literature must reach us by mail before the last date mentioned below
(b)	Last Date of Quotation	**10-06-2019**
(c)	Validity	At least 45 days
(d)	Price Basis	C&F Firm & Fixed.
(e)	Payment Mode	• We accept payment through L/C with condition that all domestic bank charges will be borne by us while all bank charges in beneficiary's country including all L/C conformation (if desired by the supplier) charges will be borne by the beneficiary. • We accept Pre-payment only against unconditional & irrevocable Bank Guarantee through First Class bank.

Annexure-A

Pipes, Flanges, Elbows and Cone Reducer

Sr.#	Description	Material	Qty. (Nos.)	Wt.(Kg.) (Approx.)	CO
1	Pipe DN 250, Sch.80s , L= 3000 mm	SA-312 304 as per attached specification No. DNF003-HX001-MS-02/ 126 (Rev.0)(Annexure-C)	1	243	DNF005
2	Pipe DN 150, Sch.40s , L= 6000 mm		1	168	DNF007
3	Pipe DN 100, Sch.80s , L= 6000 mm		1	132	DNF005
4	Pipe DN 50, Sch.80s , L= 6000 mm		1	42	
5	Pipe DN 50, Sch.40s , L= 6000 mm		1	30	DNF007
6	Pipe DN 32, Sch.40s , L= 6000 mm		1	18	DNF005
7	Pipe DN 25, Sch.80s , L= 6000 mm		1	18	
8	Pipe DN 15, Sch.80s , L= 6000 mm		1	12	
9	Pipe DN 15, Sch.40s , L= 6000 mm		1	6	DNF007
10	Pipe DN 10, Sch.40s , L= 6000 mm		1	6	
11	Pipe DN 8, Sch.80s , L= 6000 mm		1	6	DNF005
12	Flange WNRF DN 250 # 600 Sch.80s, ASME B16.5	SA-182F 304 as per attached specification No. DNF003-HX001-MS-03/ 126 (Rev.0)(Annexure-D)	2	181	
13	Flange WNRF DN 150 # 600 Sch.40s		2	68	DNF007
14	Flange WNRF DN 50 # 600 Sch.40s, ASME B16.5		4	16	DNF005
15	Flange WNRF DN 50 # 600 Sch.80s		1	5	
16	Flange WNRF DN 25 # 600 Sch.40s, ASME B16.5		4	8	
17	Flange SORF DN 15 # 600		6	8	DNF005 DNF007
18	Blind Flange DN 250 # 600		2	210	DNF005
19	Elbow LR 90^0 DN 50, Sch.40s, ASME B16.9	SA-403 304 as per attached specification No. DNF005-HE001-MS-02/ 126 (Rev.0)(Annexure-E)	3	3	
20	Cone Reducer DN 25/ DN15, Sch.80s, ASME B16.9		1	0.25	

Total weight (Kg)= 1180.3

Note:

Please submit check list (Annexure-B) along with your quotation, after encircling either "Yes" or "No"

Annexure-B

Technical Check List

1- All the technical details i-e chemical composition, mechanical properties and testing requirements given in applicable specification have been carefully read and understood.	Yes	No
2- Mill Test Certificates having Chemical & Mechanical properties will be supplied with plates as per attached specification.	Yes	No
3- All the contents of MTCs i-e chemical composition, mechanical properties and testing requirements will be carefully checked and corrected, for complete compliance to applicable specification.	Yes	No
4- All the items to be supplied, will be qualified in Inter granular Corrosion Testing (IGC) in accordance with ASTM specification A-262 Practice E.	Yes	No
5- Manufacturer's name/logo, Heat Number, Material Grade and Size as per identification/marking requirements of applicable specification, will be present on the items.	Yes	No
6- The items and their material grade will be examined at our works if required.	Yes	No

Note:

This check list must be submitted along with your quotation, after encircling either "Yes" or "No", otherwise the offer may not be entertained.

Material Specification

No. DNF003-HX001-MS-02/ 126

Date: 1.2.2018 Rev. No. 0

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Product : Stainless Steel Pipes

Material : SA 312 / SA 312 M TP304

Condition : Seamless Process, hot finished in solution annealed pickled passivated.

Technical Requirement : The material furnished under SA 312 TP304 shall meet the requirements of ASME B & PV Code Section II Part A and SA 999 / SA999 M (Edition 2015)

Chemical Composition : As per Table below;

Chemical Composition(%)						
C	Mn	P	S	Si	Cr	Ni
≤ 0.08	≤ 2.0	≤0.045	≤ 0.03	≤ 1.0	18-20	8-11

Mechanical Properties : As per Table below;

Tensile Strength MPa (min)	Yield Strength MPa (min)	Elongation in 50 mm % (min)	
		Longitudinal	Transverse
515	205	35	25

Mill Test Reports

i) Mechanical test report for each lot of pipes.

ii) Chemical analyses report of each lot of pipes from a specific heat.

iii) Flattening test report.

iv) Hydrostatic test report of each and every pipe for a test pressure as per requirements SA-999/SA-999M

v) Inter Granular Corrosion Test (IGC) report in accordance with ASTM specification A-262 Practice E.

Quality

The furnished pipes shall be reasonably straight and having workman like finish.

Dimensional Standard

The dimensions of the furnished pipes shall be as per ANSI B36.19.

Product Marking

The manufacturer's name or brand, the specification number and grade, heat number and size, Schedule number, length and hydrostatic test pressure shall by legibly marked on each finished pipe length

Annexure-D

Material Specification	No. DNF003-HX001-MS-03/ 126 Date: 1.2.2018 Rev. No. 0 Page 5 of 1

Product : Stainless Steel Forged Pipe Flanges

Material : SA 182 F 304

Condition : Solution treated and quenched

Technical Requirement : The material furnished under SA-182 F304 shall meet the requirements of ASME B & PV Code Section II Part A, SA-484/SA-484M and SA-961/SA-961M (edition 2015).

Chemical Composition : As per Table below;

Chemical Composition (%)							
C	Mn	P	S	Si	Cr	Ni	N
≤ 0.08	≤ 2.0	≤ 0.045	≤ 0.03	≤ 1.0	18-20	8-11	≤ 0.1

Mechanical Properties : As per Table below;

Tensile Strength MPa (min)	Yield Strength MPa (min)	Elongation in 2 in.(50mm) or 4D % (min)	Reduction of Area min, %
515	205	30	50

Mill Test Reports

i. Mechanical test report.
ii. Chemical analyses report.
iii. Inter Granular Corrosion Test (IGC) report in accordance with ASTM specification A-262 Practice E.

Dimensional Standard

Dimensions shall conform to ASME/ANSI B 16.5.

Quality

The forgings shall have workman-like finish and should be free of injurious defects.

Product Marking

The manufacturer's name, specification number and grade, heat number and size shall by legibly marked on each forging

Annexure-E

Material Specification

No. DNF005-HE001-MS-02/ 126
Date: 08.04.2019 Rev. No. 0
Page 1 of 1

Product : Austenitic Stainless Steel Pipe Fittings (Elbow, Tee, Reducer, Cap, Coupling etc)

Material : SA-403 / SA-403M WP304

Condition : Seamless Process, solution annealed, pickled and passivated.

Technical Requirement : The material furnished under SA-403/SA-403M, WP304 shall meet the requirements of ASME B & PV Code Section II Part A, SA-960/SA-960M-2017 including the following.

Chemical Composition : As per Table below;

Grade	Chemical Composition (%)						
	C	Mn	P	S	Si	Cr	Ni
WP304	≤ 0.08	≤ 2.0	≤ 0.045	≤ 0.03	≤ 1.0	18.0-20.0	8.0-11.0

Mechanical Properties : As per Table below;

Grade	Tensile Strength MPa (min)	Yield Strength MPa (min)	Elongation in 50 mm, min.,%	
			Longitudinal	Transverse
WP304	515	205	28	20

Heat Treatment: Fitting shall be furnished in the solution annealed condition as per Table 4 of SA-403/SA-403M

Inter-granular corrosion test:
Test in accordance with ASTM specification A 262 Practice E shall be submitted. No inter-granular corrosion is allowed.

Material Test Report:
i) Mechanical test report for each lot as per SA370.
ii) Chemical analyses report of each cast / heat as per SA-751.

Quality:
i) The furnished fittings shall having workman like finish.
ii) Fittings shall be examined visually. Selected typical surface discontinuities shall be explored for depth. The fittings shall be free from surface discontinuities that penetrate more than 5 % of the specified nominal wall thickness.

Marking:
Each piece shall be legibly marked with the specification designation, grade and class, the heat number or heat identification, size, and schedule or thickness, if applicable.

Dimensions:
Butt welded fitting shall be as per ASME B16.9. Socket Welded and Threaded fitting shall be as per ASME B16.11, unless otherwise specified.

Certification:
Manufacturer's certificate, certifying that fittings have been made to the requirements as mentioned above and as given in relevant section of ASME and ASTM standard, shall be submitted. Certificates shall be traceable to the supplied fittings.

Language:
All certificates & reports shall be in English language.