

Our Ref. NASH/21992/2024/R1

21<sup>st</sup> Feb 2025

DELTA GMBH

E-mail: [BD@delta-gmbh.eu](mailto:BD@delta-gmbh.eu)

**Attn:** Mr. Amin Malekinia

**E-Mail Dated:** 25<sup>th</sup> Nov 2024 & its attachments.

**Sub:** PR200-Material Requisition for Instrumentation Work-Compressor Skid-Rev.00

**Techno-Commercial Offer**

Dear Sir,

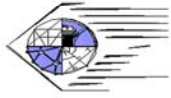
In response to your enquiry towards Supports Fabrication and Instrumentation works on Compressor skid, we are pleased to submit our revised Techno-Commercial offer as described below

We trust that you will find our offer of interest and, should you require any information or assistance, whether Technical or commercial please do not hesitate to contact

Yours Faithfully,

Udhaya kumar

General Manager – Engineering & Estimation



**A. Nash Engineering Scope of Work (Structural Supports):**

1. Receipt of Structural Support Fabrication drawings from client.
2. Procurement and Fabrication of supports such as Junction Box Supports, Slide Valve Assembly Support, LCP & tubing Supports as per drawings (Refer scope Table)
3. All materials are considered from the local stockiest & reputed vendors.
4. Support Material A36/S275 JR
5. Submission of WPS/PQR/ITP and other work procedures as per requirements.
6. Delivery Ex-works- Nash Engineering FZCO.

**B. Nash Engineering Scope of Work (E&I Instrumentation Works):**

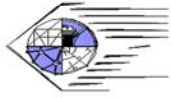
1. Receipt of E&I Hook-up drawing from client.
2. E&I related work for Compressor Skid.

❖ **Free Issued Items by Client(Delta): -**

- Compressor Skid Assembly (PR-200) – Full Package.
- Supply of all types of field instruments (PIT, PG, DPIT, TIT, etc.)
- Supply of all types of Gauges (PG, LG, TG/TI/TW etc.)
- Junction/ Control Panel
- Temperature Instrument, Solenoid Valves, level Switch, Adaptors, JB Sunshade and Electric Heater (Drawings required)
- Cable Tray and Accessories, Cable Gland and Cables.
- Tubing, Tubing Fittings, U-Clamps and Accessories for Tubing
- Instrument Cables.

❖ **Consumables (Nash Scope): -**

- Different types of Lugs
- SS316 Cable Tie U/V resistance with PVC Coated and Nylon Cable ties.
- Ferrules, marker sleeves, Heat Shrink & accessories,
- Earthing materials (Earth Bar & Earth Boss)
- Cable tags & Traffolyte tags.
- Bolts & nuts Accessories.



❖ **Installation Scope: -**

- Installation of free issued field Instruments & JB's.
- Installation of Free Issued Cable Trays, Cables & Cable Glands along with supports
- Glanding & Termination of JB's.
- Installation of earthing materials for all Instruments, JB's & Cable Trays.
- Installation of cable tags, cable trays & instrument supports.

**C. Scope Excludes the Following:**

Our quoted price does not include the followings: -

1. Design & Preparation of any type of Engineering Documents such as Instrument data sheets, Cable schedule, Instrument connection & Earthing diagram, Instrument Hook-up drawings, Cable tray layout drawing, etc.
2. Any type of Site installation and commissioning activities.
3. Supply of incoming Power Supply Distribution for all JB's.
4. DCS, SCADA, PLC control panel, RTU unit.
5. Any MCC Switch boards, AC to DC Supply Converter, etc.
6. Any interconnection cabling, controls, software, programming etc.
7. Flow testing.
8. All Types of HILTI Studs, Anchor Bolts & Gun Propeller.
9. Supply of Compressor Skid, Transmitters, Cable Trays, Tubings, Valves and Instruments
10. Instrument Cable for Level Switch (Due to small quantity we are unable to Source from market)
11. Leak Test for the Skid.

**D. Technical Scope Clarifications:**

1. We have proposed the quantity for all the items mentioned in client provided drawings only.
2. Instruments and Supports details have been taken from client provided drawings only.
3. **Please refer Scope of Work Annexure for reference (Annexure-A)**



## E. Prices:

Our prices for the Fabrication of Instrumentation Work and Support Fabrication as per scope of work mentioned above are as follows:

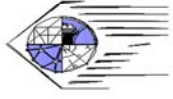
Sl. No	Equipment	Description	Material	Qty.	Unit Price (USD)	Total Price (USD)
1	STRUCTURAL	Supports (JB, Slide Valve, Tubing, LCP, Small Supports) 0.25 MT	ASTM A36	2 Nos.	1,185.00	2,370.00
2	E&I ASSEMBLY MAN-HOURS & CONSUMABLES	Instrumentation Works with E&I Man-hours and Consumables Material: Free Issue by Delta	-	2 Nos.	8,550.00	17,100.00
<b>TOTAL COST (USD)</b>				-----	<b>9,735.00</b>	<b>19,470.00</b>
<b>USD – Nineteen Thousand Four Hundred and Seventy Only</b>						

## F. Delivery: (Ex-Works) – Loaded On Truck

## G. Commercial Term:

Sl. No.	Mile Stone Payment	Description	Payment Type
M1	25%	Advance along with purchase order.	Through T/T
M2	25%	Upon Receipt of Free Issued Items from Client	Through T/T
M3	40%	Upon Completion of E&I Works and Supports Fabrication	Through T/T
M4	10%	Ex-works readiness before Dispatch	Through T/T

- 1) Milestone M1 to M4 payments to be paid within 30 days from the date of invoice.
- 2) Milestone M3 to M4 to paid Within 30 Days from the date of invoice or before Dispatch whichever occurs earlier



H. **Proposal Validity:**

This proposal is valid for 30 days from the letter date. Any extension of validity must be in writing by Nash Engineering.

I. **Reference Document:**

25<sup>th</sup> November 2024 E-mail and the details.

## ANNEXURE - A

**SO : PR200 - DELTA**

REVISED AND UPDATED 21/02/2025

**Specification : Scope of Supply list**

**Document No: PR200-I02 Rev. 0**

			Design		Supply		Installation		Inspection		Comment	Nash Comment
Line	Rev.	Process , Piping and Instrument data	DE	Mfg	DE	Mfg	DE	Mfg	DE	Mfg		
D01		P&I diagram	X									For reference only
D02		Instrument list	X		X			X	X			For reference only
D03		Unit layout	X		X			X	X	X	3-D drawing will be provided by ME	For reference only
D04		Instrument hook-up and MTO	X		X			X				For reference only
D05		Instrument Cable List										For reference only
D06		Electrical Cable List										For reference only
D07		Tubing Support										For reference only
D08		JB and LCP Wiring										For reference only
D09		3D Model										For reference only
D10		General Arrangement Drawing										For reference only
<b>Line Rev. Piping</b>												
			Design		Supply		Installation		Inspection		Comment	Nash Comment
Line	Rev.	Piping	DE	Mfg	DE	Mfg	DE	Mfg	DE	Mfg		
P01												Not Applicable
P02												Not Applicable
P03												Not Applicable
P04												Not Applicable
P05												Not Applicable
P06												Not Applicable
P07												Not Applicable
P08												Not Applicable
P09												Not Applicable
P10												Not Applicable
P11												Not Applicable
P12												Not Applicable
P13												Not Applicable
P14												Not Applicable
P15												Not Applicable
P16												Not Applicable
P17												Not Applicable
P18												Not Applicable
P18												Not Applicable
P19												Not Applicable
P20												Not Applicable
P21												Not Applicable
P22												Not Applicable

Line	Rev.	Instrumentation (Compressor Skid) (2 Identical Units)		Design		Supply		Installation		Inspection		Comment	Nash Comment
				DE	Mfg	DE	Mfg	DE	Mfg	DE	Mfg		
I01		Transmitters	All types	X		X			X				Only Installation and Material Free Issue by Delta
I02			Mating fl'g	X		X			X			Not Applicable. Connections are threaded	Not Applicable
I03			Tubing	X		X			X	X	X		Only Installation and Material Free Issue by Delta
I04		Indicators and Gauges	All types	X		X			X	X			Only Installation and Material Free Issue by Delta
I05			Mating fl'g	X		X			X	X		Not Applicable. Connections are threaded	Not Applicable
I06			Tubing	X		X			X	X	X		Only Installation and Material Free Issue by Delta
I07		Temperature instrument	Instrum. and thermowell	X		X			X	X			Only Installation and Material Free Issue by Delta
I08			Mating bolting	X		X			X	X		Not Applicable. Connections are threaded	Not Applicable
I09		Solenoid Valves		X		X			X	X			Only Installation and Material Free Issue by Delta
I10			Mating fl'g	X		X			X				Only Installation and Material Free Issue by Delta
I11			Tubing	X		X			X	X	X		Only Installation and Material Free Issue by Delta
I12		Level Switch		X		X			X	X	X		Only Installation and Material Free Issue by Delta
I13		Junction boxes		X		X			X	X	X		Only Installation and Material Free Issue by Delta
I14		Local Control Panel		X		X			X	X	X		Only Installation and Material Free Issue by Delta
I15		<b>Cable glands</b>		<b>X</b>		<b>X</b>			<b>X</b>	<b>X</b>		<b>For both instrumentation and junction boxes with exclusion of multi-cores</b>	<b>Noted, Material Free issue by Delta</b>
I16		Adaptors		X		X			X	X			Only Installation and Material Free Issue by Delta
I17		<b>Tubing for Oil separator oil recovery</b>		<b>X</b>		<b>X</b>			<b>X</b>	<b>X</b>		<b>Refer to Hook up. Existing tubing to be removed and new tubing to be installed</b>	<b>Noted, Material Free issue by Delta</b>
I18		Cable tray	Tray routing	X		X			X	X		Hot dip galvanised (perferated)	Only Installation and Material Free Issue by Delta
I19			Tray installation	X					X	X	X		Only Installation and Material Free Issue by Delta
I20			Tray supporting	X			X		X	X			Cable Tray and Materials by Delta, Angle support fabrication is Nash Scope of work
I21			<b>Tray to tie-in</b>	<b>X</b>			<b>X</b>		<b>X</b>	<b>X</b>		<b>No cutting accepted on original pieces for creation of T-ins.</b>	<b>Noted, Trays and Accessories materials free issue by delta</b>
I22		<b>Wiring</b>	<b>Cable end preparation</b>	<b>X</b>			<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>		
I23			Instruments	X		X			X	X	X	Instrument Cable is supplied by DELTA and execution by Manufacturer	Only Installation and Material Free Issue by Delta
I24			Solenoid Valves	X		X			X	X	X	Instrument Cable is supplied by DELTA and execution by Manufacturer	Only Installation and Material Free Issue by Delta
I25			Level switches	X			X		X	X	X	Instrument Cable is supplied and Executed by Manufacturer	<b>Material shall be free issued by delta due to small quantity(30M).</b>
I26			Potentiometer	X		X			X	X	X	Transmitter Located in Junction Box. Wiring from Compressor to JB is needed.	Only Installation and Material Free Issue by Delta
I27			Shielding	X		X			X	X	X		Only Installation and Material Free Issue by Delta
I28			<b>Wiring check</b>	<b>X</b>			<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>		
I29		Heat tracing	Wiring	X		X			X	X		Not applicable	Not Applicable
I30		Earth cables	Cable end preparation	X			X		X	X	X		<b>Noted</b>

I31			Earth bars	X			X		X	X	X	Opposite of the skid incl. per junction box to connect cable trays and supports. Instrumentation earth bar and equipment earth bar to be seperated from each other.	Noted.
I32			Wiring to bars	X		X			X	X	X	Electrical Cable is supplied by DELTA and execution by Manufacturer	Noted
I33			Wiring check	X			X		X	X	X		Noted
I34		Junction boxes supports		X			X		X	X	X		Nash Scope (Ref: MPE007-JB-SPRT-02, REV.0) Nash Scope (Ref: MPE007-JB-SPRT-03, REV.0) Nash Scope (Ref: MPE007-60690-SPRT, REV.0 - Loose Supports)
I35		Local Control Panel Support		X			X		X	X	X		Nash Scope (Ref: MPE007-JB-SPRT-01, REV.2)
I36		Slide valve support		X			X		X	X	X		Nash Scope (Ref: MPE007-T0175-SPRT, REV.1)
I37		Pressure Transmitter Support		X			X		X	X	X		Nash Scope (Ref: MPE007-PIT-RU0001A-SPRT, REV.2)
I38		Bolts, washer and 2 nuts for Supports		X			X		X	X	X		Nash Scope (For above JB, LCP & Tubing Supports)
I39		Welding Support to skid		X					X	X	X		Nash Scope (Refer Above Drawings I34 to I38)
I40		Bolting Support to skid		X					X	X	X		Nash Scope (Refer Above Drawings I34 to I38)
I41		Loctite 577					X		X	X			Noted
I42		Teflon					X		X	X			Noted
I43		U Clamps for Tubing		X			X		X	X	X		Tubing U-Clamps Supply by Delta and Installation by Nash
I44		Termination inside Instruments		X					X	X	X		Only Installation and Material Free Issue by Delta
I45		Termination inside Junction Box's		X					X	X	X		Only Installation and Material Free Issue by Delta
I46		Termination inside Local Control Panel		X					X	X	X		Only Installation and Material Free Issue by Delta
I47		Function test of Instruments		X					X	X			Noted
I48		Tag plate for Instrument Cable		X			X		X	X	X		Material supply and Instllation by Nash
I49		Electrical Heater		X		X			X	X	X	Electrical Heater is threaded connection	Only Installation and Material Free Issue by Delta
<b>Line</b>	<b>Rev.</b>	<b>Packaging, Miscellaneous</b>		<b>Design</b>		<b>Supply</b>		<b>Installation</b>		<b>Inspection</b>		<b>Comment</b>	<b>Nash Comment</b>
				<b>DE</b>	<b>Mfg</b>	<b>DE</b>	<b>Mfg</b>	<b>DE</b>	<b>Mfg</b>	<b>DE</b>	<b>Mfg</b>		
A01		Skid separation		X	X				X	X		Not applicable	Not Applicable / Not in Nash scope of Work
A02		Touch-up painting					X		X			Before final inspection to be executed	Noted.
A03		Platform / Loose parts dismantling							X			Not applicable	Not Applicable / Not in Nash scope of Work
A04		Spare parts					X					Not applicable	Not Applicable / Not in Nash scope of Work
A04		Nitrogen charge (0,5barG)					X		X		X	Not applicable	Not Applicable / Not in Nash scope of Work
A05		Seaworthy packing		X				X	X	X		Not applicable	Not Applicable / Not in Nash scope of Work
A06		Disposal of waste							X			Waste generated by production	Noted.
A07		Ex-works delivery							X	X		Lift the skid and put on the Truck is in manufacturer scope of work	Noted.
A08		Final documentation			X		X				X	Not applicable	Not Applicable / Not in Nash scope of Work