

**SALES ORDER REQUISITION & SUPPLY COLUMN**

ChemDist Process Solutions Pvt Ltd

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| QRN No. | **QRN:6436 R5** |
| Type. |  |
| Job No. | SO-636 |
| Date | 06/04/2022 |
| Rev | R0 |

# Address:

Plot No J-174/1, J-Block,

PCNTDA, Bhosari, Pune-411026, Maharashtra

Mobile: +91-9545500345

Email[: info@chemdist.in](mailto:info@chemdist.in)

1. **SCOPE OF SUPPLY :**

**Our scope of supply includes Manufacturing & Supply of below listed items:**

|  |  |
| --- | --- |
| 1. **Description** | **Tag No. C-1 (Distillation Column)** |
| **Process Details** | |
| Operating Pressure (torr) | 0.5 |
| Design Pressure (kg/cm2 g) | 3.5/ FV |
| Operating Temperature (Deg C) | 30 To 100 |
| Design Temperature (Deg C) | 150 |
| Shell/End Radiography | spot + All T Joints/Full  - |
| **Vessel Details** | |
| Shell Diameter (ID) | 500 mm  ))\_ |
| Shell Height (Bottom TL to Top Flange end) | ~2245 mm |
| Top enclosure | Reducer |
| Bottom enclosure | 10% Torrispherical Dish |
| Shell Thickness | 6 mm Thk |
| Top/Bottom end Thickness | 6 Thk mm |
| Body Flanges | 710 OD X 30 Thk X 3 nos. |
| Shell MOC | SS 316 |
| Dish ends MOC | SS 316 |
| Body Flange MOC | SS 316 |
| Nozzles pipe MOC | SS 316 |
| Nozzle Flange MOC | SS 316 |
| Insulation Clits | SS 304 |
| Gasket | PTFE Enveloped  non-metallic and asbestos free |
| Qty | 1 No. |

**Nozzle Details:**

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| --- | --- | --- | --- | --- | --- | --- |
| NOZZLE NO. | SERVICE | Qty | NOZZLE PIPE | | End Connection | |
| NB | SCH | Type | Class |
| N1 | Vapour Outlet | 1 | 500 | SCH 10 | T&G | 150# |
| N2 | Vapour Inlet | 1 | 150 | SCH 10 | T&G | 150# |

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| **2. Main Overhead Condenser** | | | | | |
| **Heat transfer area – 6.9 m2 , Six pass on Tube Side (BEM)** | | | | | |
| **Operating Pressure (Torr)** | | Shell Side-0.01 to 0.5 | | Tube Side-2 | |
| **Design Pressure (Kg/cm2 g)** | | Shell Side – 3.5/FV | | Tube Side – 5 | |
| **Operating Temperature (Deg C)** | | Shell Side-50/100 | | Tube Side-10/37 | |
| **Design Temperature (Deg C)** | | Shell Side – 150 | | Tube Side - 150 | |
| **Shell Details -** | | | | | |
| **Shell** | 6 mm Thk X 450 NB X 1800 mm Long | | **Qty.** | | 1 No. |
| **MOC** | SS316 | | | | |
| **Dish End** | 10 % Torrispherical | | **Thk** | | 6 mm |
| **MOC** | SS 304 | | **Qty.** | | 2 Nos. |
| **Bonnet Shell** | 450 NB | | **Thk.** | | 6 mm |
| **MOC** | SS 304 | | **Qty.** | | 2 No. |
| **Tube Sheet Details -** | | | | | |
| **OD** | Approx 590 mm | | **Thk** | | 30 mm |
| **MOC** | SS 316 | | **Qty.** | | 2 Nos. |
| **Tube Details -** | | | | | |
| **Type** | Smooth | | **MOC** | | SS 316 |
| **Size** | 19.05 mm OD | | **Thk** | | 2.108 mm |
| **Length** | 1800 mm | | **QTY.** | | 64 |
| **Passes: Six Passes** | | | | | |
| **Body flanges -** |  | |  | |  |
| **OD** | 590 mm | | **Thk.** | | 30 mm |
| **Qty.** | 2 Nos. | | MOC | | SS 304 |
| **Gasket for body flange** | PTFE Enveloped  non-metallic and asbestos free | | | | |
| **Baffle plate** | Qty –3 nos. | | **MOC** | | SS 316 |
| **Tie rod** | Qty – 4 nos | | **MOC** | | SS 316 |
| **Impregnation Plate** | 5mm Thk (Qty. -1 Nos.) | | **MOC** | | SS 316 |

**NOZZLE DETAILS:**

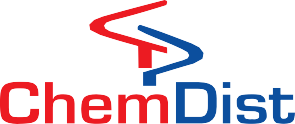
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| --- | --- | --- | --- | --- | --- | --- |
| No. | Nozzle | Service | Size (NB) | Sch/Thk | Qty. | Type |
| 1 | N1 | Process Vapour Inlet | 500 | 6 mm Thk | 1 | #150 T & G |
| 2 | N2 | Process Vapour Outlet | 150 | SCH 10 | 1 | #150 T & G |
| 3 | N3 | Condensate Outlet | 25 | SCH 40 | 1 | #150 T & G |
| 4 | N4 | CW/CHW Inlet | 50 | SCH 40 | 1 | #150 SORF |
| 5 | N5 | CW/CHW Outlet | 50 | SCH 40 | 1 | #150 SORF |
| 6 | N6 | Vent | 25 | SCH 40 | 1 | #150 SORF |
| 7 | N7 | Drain | 25 | SCH 40 | 1 | #150 SORF |
| 8 | N8 | Reflux | 15 | SCH 40 | 1 | #150 SORF |
| 9 | N9 | PG | 25 | SCH 40 | 1 | #150 SORF |
| 10 | N10 | TI | 40 | SCH 40 | 1 | #150 SORF |

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| **Tube Side** | |
| **Nozzle Pipe MOC** | SS 304 |
| **Nozzle Flange MOC** | SS 304 |
| **Shell Side** | |
| **Nozzle Pipe MOC** | SS 316 |
| **Nozzle Flange MOC** | SS 316 |

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| 1. **Description** | **Reflux Drum (0.25KL)** |
| **Process Details** | |
| Operating Pressure (torr) | 0.5 |
| Design Pressure (kg/cm2 g) | FV/4 |
| Operating Temperature (Deg C) | 0 to 100 |
| Design Temperature (Deg C) | 150 |
| Shell/End Radiography | Spot + All T Joints/Full  - |
| **Vessel Details** | |
| Shell Diameter (ID) | 600 mm  ))\_ |
| Shell Height (Bottom TL to Top Flange end) | 850 mm |
| Top enclosure | 10% Torrispherical |
| Bottom enclosure | 10% Torrispherical |
| Shell Thickness | 6 mm Thk |
| Top/Bottom end Thickness | 6 Thk mm |
| Support | Lug Support |
| Shell MOC | SS 316 |
| Dish ends MOC | SS 316 |
| Nozzles pipe MOC | SS 316 |
| Nozzle Flange MOC | SS 316 |
| Insulation Clits | SS 304 |
| Gasket | PTFE Enveloped  non-metallic and asbestos free |
| Qty | 1 No. |

**Nozzle Details:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NOZZLE NO. | SERVICE | Qty | NOZZLE PIPE | | End Connection | |
| NB | SCH | Type | Class |
| N1 | Hand Hole | 1 | 200 | SCH 10 | T&G | 150# |
| N2 | Inlet (J –Bend) | 1 | 40 X 25 | SCH 40 | T&G | 150# |
| N3 | Vent | 1 | 25 | SCH 40 | SORF | 150# |
| N4 | Spare with Flange | 1 | 25 | SCH 40 | SORF | 150# |
| N5 | Inlet For Vacuum | 1 | 25 | SCH 40 | SORF | 150# |
| N6 | N2 Inlet | 1 | 25 | SCH 40 | SORF | 150# |
| N7 | Outlet (Bottom Drain) | 1 | 25 | SCH 40 | SORF | 150# |
| N8 | LI at Top (Side of Tank) | 1 | 25 | SCH 40 | SORF | 150# |
| N9 | LI at Bottom (Side of Tank) | 1 | 25 | SCH 40 | SORF | 150# |



**Equipment Manufacturing Sr. No.**

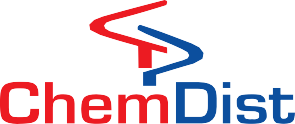
**Distillation Column CDPS-636-C1884-2022**

**Overhead Condenser CDPS-636-E1885-2022**

**Reflux Drum CDPS-636-V1886-2022**

## Notes:

1. All ‘\*’ mark shall be confirmed by design team.
2. All thicknesses shall be confirmed by design team.



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| Delivery Date (Ex-works) | **09th May 2022 ( Ex-works)** |
| Internal Inspection Report | Required |
| TPI | YES |
| Remark/Instruction | Test Certificates Required as per QAP |

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|  | **Signature** | | |
| Prepared By | PMD | | |
| Checked By | PMD |  |  |
| Approved By | TW | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Issued By** | **Signature** | **Received By** | **Signature** |
| Marketing |  | Design/Dwg |  |
|  |  | Manufacturing |  |
|  |  | Purchase |  |