

Technical Datasheet Integrated Offshore Oil-Free Screw Air Compressor & Dryer Skid

| Category | No. | Key Parameter | Unit | Client Requirement | Supplier Response | Deviations / Remarks |
|----------------|-----|-----------------------------|--------|--------------------------------|-------------------|--|
| 1. Performance | 1.1 | Compression Technology | - | Two-Stage Oil-Free Screw | | Must be 100% physically oil-free |
| | 1.2 | Air Quality Class | - | ISO 8573-1 Class 0 | | Third-party certificate required |
| | 1.3 | Rated Discharge Pressure | barg | [e.g., 8.5] | | |
| | 1.4 | Rated Capacity (FAD) | m³/min | [e.g., 25.0] | | Based on standard sea-level conditions |
| | 1.5 | Pressure Dew Point (PDP) | °C | -40°C or lower | | Tested at max flow and pressure |
| 2. Compliance | 2.1 | Corrosion Protection | - | ISO 12944 C5-M | | Marine-grade coating system required |
| | 2.2 | Explosion Proofing | - | [e.g., ATEX/IECEX Zone 2] | | Includes motor, instruments & panel |
| | 2.3 | Ambient Temp. Range | °C | [-10 to +45] | | Suitable for tropical/polar extremes |
| | 2.4 | Ingress Protection | - | IP66 (Panel) / IP55 (Motor) | | Resists high-pressure spray & salt fog |
| 3. Mechanical | 3.1 | Lifting Frame Certification | - | DNV 2.7-1 / EN 12079 | | Includes pads, slings & NDT reports |
| | 3.2 | Instrument Piping Material | - | SS316L (Stainless Steel) | | Carbon steel or galvanized strictly prohibited |
| | 3.3 | Pressure Vessel Code | - | ASME VIII Div.1 | | U-Stamp or equivalent certification |
| | 3.4 | Cooling Method | - | [Air-cooled / Seawater-cooled] | | Air-cooled requires anti-corrosion fins |
| 4. Control | 4.1 | Control System (PLC) | - | Siemens S7 / AB (Optional) | | HMI Touchscreen required |
| | 4.2 | Comm. Protocol | - | Modbus RTU / Profinet | | Integration with Platform DCS/SCADA |
| | 4.3 | Inlet/Outlet Connections | - | [e.g., ANSI 2" 150# RF] | | Stainless steel flanges required |
| 5. Physical | 5.1 | Skid Dimensions (LxWxH) | mm | [e.g., Max < 3500] | | Critical for deck space optimization |
| | 5.2 | Max Lifting Weight | kg | [Specify Limit] | | Relative to platform crane capacity |
| | 5.3 | Overhaul Interval | hrs | ≥ 50,000 | | For continuous offshore operation |