

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)	m^3/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