



الشركة الوطنية لحفر وصيانة آبار النفط
National Oil Wells Drilling & Workover Co.

المواصفات الفنية

TECHNICAL SPECIFICATION

BID NO. NWD-TC-2025-T-70-01 عطاء رقم

Item	Qty	UOI	Description	Part No.
	2	UNIT	CATERPILLAR D3508 RIG ENGINE:-	
1		A.	ENGINE:	
			Make / Model : Cat D3508	
			Cooling System : Water Cooled / Radiator	
			Speed : 1,200 rpm	
			Power : 680 HP @ 1,200 RPM	
			Fuel Used : Diesel	
			No. of Cyinders : V 8	
			Cycle : 4 Stroke cycle IC engine	
			Aspiration : TCAC Jacket water	
			Compression Ratio : 14. 5 is to 1	
			Bore : 170.00 mm (6. 69")	
			Stroke : 190.00 mm (7. 48")	
			Application : Rig Floor Engine	

			FEATURES:	
			1. Air Inlet System: Heavy duty Air cleaners, dual element, service indicators, Air inlet adaptors & shut off. Required square type design	
			2. Cooling System: Radiator with guard for desert operation@ 50° C ambient temperature capability with expansion tank, coolant drain lines with valves, fan belt & guards, be shipped with Cat extended life coolant. Fan should be blower type. Inform supplier to make sure that we receive the right size of Radiator intended for Rig Engine D3508	
			3. Application that would fit in the Rig floor without any problem.	
			4. Exhaust System: Stainless steel exhaust flex fittings, dry manifold, flanges face outlet & mufflers with spark arrestor.	
			5. Fuel system: Primary & secondary fuel filters, with service indicators, fuel priming pump, flexible fuel lines.	
			6. Lube System: Lubrication Oil filters, oil level regulator, oil lines with valves, fumes disposal with lines, gear type lube oil pump, electronic & air pre-lube oil pump, deep oil sump.	
			7. Mounting System: Rail mounted floor type. Length to accommodate from radiator to Torque converter. Engine & radiator must be mounted in one oilfield skid.	
			8. Starting System: Air Start	
			9. Governing System: Hydra Mechanical Governor 3161L	Woodward
			10. Shut off system : Engine should have Hydra Mechanical Shut OFF Protection for LOW Oil Pressure, Low water level, High Water temperature, OVER CRANK & Overspeed Engine RPM can be controlled from Driller's Console.	
			11. With lifting eyes	
			12. Instrument panel should be right hand mounted	
			13. Filters should be cartridge type	

			14. Air Actuated Governor Control	
			AIR ACTUATOR	3N9124
			ROD END - BALL BEARING	3H4976
			KIT - ACTUATOR (Includes lever, cover, bearing, push rod, diaphragm)	4W0085
			KIT - DIAPHRAGM (Include brng. & diaphragm)	7W4923
			15. Flywheel & flywheel housing SAE 00 to fit with C245-125 FH National Torque Converter.	
		c	General:	
			- Engine RPM and Emergency Shutoff can be controlled from driller console - Each engine assembly should have a separate Oilfield skid with Rubber mounting capable of towing & skidding as it should be used on Mobile Rigs.	
			- The engine should be permanently mounted on the skid & does not require to be removed from skid during every Rig move.	
			- The engine should be Brand new & of USA origin . Remanufactured are not acceptable	
			- The new Cat D3508 with Torque Converter should be applicable to be used for Oil well 1600 Compound Drive Serial No. H37 -26 or H 37 -28	
			- Include Test Certificate, Certificate of conformance, Warranty Certificate & any other needed documentations	
	4	SETS	Complete with Service & D48 user Manual with CD ROM	
			Warranty	
			* Training for 2 Technicians for 10 days including Air flight tickets, full accommodation, any personal expenses will be borne by your Company	
			* Inspection and Witnessing by NWD personnel prior to shipment	
			-The offer must include Detailed Technical Offer, Data sheet, they can make also checklist based on our requirements for to evaluate easily	
END OF SPECIFICATIONS.				