



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

المواصفات الفنية

### TECHNICAL SPECIFICATION

BID NO. NWD-TC-2025-T-70-02 عطاء رقم

Item	Qty	UOI	Description	Part No.
	1	UNIT	CATERPILLAR D3512 ENGINE:-	
1		A.	ENGINE:	
			Make / Model : Cat D3512	
			Cooling System : Water Cooled / Radiator	
			Speed : 1,200 rpm	
			Power : 1500 HP @ 1,200 RPM	
			Fuel Used : Diesel	
			No. of Cyinders : V 12	
			Cycle : 4 Stroke cycle IC engine	
			Aspiration : TCAC Jacket water	
			Compression Ratio : 13.0 is to 1	
			Bore : 6.7"	
			Stroke : 7.5"	
			Application : Mud pump Engine	

		<b>FEATURES:</b>	
		1. <b>Air Inlet System:</b> Heavy duty Air cleaners, dual element, service indicators, Air inlet adaptors & shut off. Required square type design	
		2. <b>Cooling System:</b> 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 <b>Engine D3512 , A1100PT Mud Pump application that would fit without any problem.</b>	
		3. <b>Application</b> that would fit in the Rig floor without any problem.	
		4. <b>Exhaust System:</b> Stainless steel exhaust flex fittings, dry manifold, flanges face outlet & mufflers with spark arrestor.	
		5. <b>Fuel system:</b> Primary & secondary fuel filters, with service indicators, fuel priming pump, flexible fuel lines.	
		6. <b>Lube System:</b> 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. <b>Mounting System:</b> Rail mounted floor type. Length to accommodate from radiator to Torque converter. <b>Engine &amp; radiator must be mounted in one oilfield skid.</b>	
		8. <b>Starting System:</b> Air Start	
		9. <b>Governing System:</b> Hydra Mechanical Governor 3161L	Woodward
		10. <b>Shut off system :</b> 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	

			<b>14. Air Actuated Governor Control</b>	
			AIR ACTUATOR	<b>3N9124</b>
			ROD END - BALL BEARING	<b>3H4976</b>
			KIT - ACTUATOR (Includes lever, cover, bearing, push rod, diaphragm)	<b>4W0085</b>
			KIT - DIAPHRAGM (Include brng. & diaphragm)	<b>7W4923</b>
			15. Flywheel & flywheel housing SAE 00 to fit with C300-64 FH National Torque Converter.	
		<b>c</b>	<b>General:</b>	
			- 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 <b>Brand new &amp; of USA origin.</b> Remanufactured are not acceptable	
			- Include Test Certificate, Certificate of conformance, Warranty Certificate & any other needed documentations	
	<b>3</b>	<b>SETS</b>	Complete with Service & user Manual with CD ROM	

			<b>*Warranty*</b>	
			* Training for 3Technicians for 10 days including Air flight tickets, full accommadiotion, 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	
<b>END OF SPECIFICATIONS.</b>				