



PROVIDING
BETTER POWER

Keep Your Business Running, No Matter What.

ROUGHNECK STANDBY DIESEL: 500KW

The **WILDCAT ROUGHNECK** 500KW emergency standby stationary diesel generator is commercial grade and designed to run for extended periods of time as needed.

Durable Industrial Engine

Usually reserved for industrial applications, the power plant is a premier industrial fixed speed (1,800 RPM) engine built to provide strong, reliable power without giving up quiet operation and engine longevity.

Digital Controls

Designed for single genset applications, the digital controls monitor the genset's voltage, current, power, frequency, engine speed, oil pressure and coolant temperature on a back-lit LCD display for ease of use.

Quality Clean Power

Voltage regulation ensures that electronics are safely powered with less 5% total harmonic distortion (THD) at no load.

Industrial Class Alternator

Protected with Class H insulation and standard 40° C nominal rating, the standard 12-wire winding and 2/3 pitch meet all key international standards and regulations.

NFPA-110

Genset is designed to exceed NFPA-110, Level 2 Emergency Power Supply Systems (EPSS) by providing prime power (PP) to meet EPSS Class 168 Type 10.

Easy To Service

Preventative maintenance and in-field repairs are made easier with our simplified engineering and non-proprietary parts.



Engine Make & Model

HDI Infracore DP158CBK

Alternator Make & Model

Stamford HC5

Controller Make & Model

Deep Sea Electronics DSE 86XX/73XX

Weight (Excluding Diesel Fuel)

12,200 lbs 5,533 kgs

Overall Dimensions (in / mm)

202L x 84W x 99H 5132L x 2134W x 2515H

GENERATOR SET RATINGS

Model	Voltage	Power Factor	Phase	Hertz	Circuit Breaker Amps	KW	KVA	BHP	Duty Cycle	Certifications
Roughneck Diesel 500 RO0500D2BSXE	208 / 120	0.8	3	60	2000	500	625	751	Emergency Standby Stationary	EPA Tier 2
Roughneck Diesel 500 RO0500D2CSXE	240 / 120	0.8	3	60	2000	500	625	751	Emergency Standby Stationary	EPA Tier 2
Roughneck Diesel 500 RO0500D2DSXE	480 / 277	0.8	3	60	1000	500	625	751	Emergency Standby Stationary	EPA Tier 2



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ENGINE SPECIFICATIONS

Engine

Manufacturer	HDI
Type	DP158CBK Powertrain, 4 Cycle, Turbo Charged & Charge Air
Speed (RPM)	1800
Cylinder Arrangement	V-type 8
Displacement (L / cc)	15.1 / 15133
Bore & Stroke (in / mm)	5.04" x 5.78" / 128 x 147
Compression Ratio	14.8 : 1
Governor Type	Electronic
Frequency Regulation Steady Rate	0.25% (+/-)
Frequency Regulation	Isochronous, Constant Speed
No Load To Full Load	
Air Filter Type	Dry
Limited Warranty	3 Year, 5,000 Hour

Lubrication System

Type	Full Pressure
Oil Capacity (qt / L)	58 / 55
Oil Filter (Quantity / Type)	2 / Cartridge type

Cooling System

Radiator Type	Aluminum
Radiator Air Flow (m3 / hr)	44,000

Sound Rating at 7 Meters, Lowest Side

No Load	Level II
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Engine Crankcase Vent System

Engine Crankcase Vent System	Closed Crankcase Vent
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Engine Output Deratings

Rated Temperature (°F / °C)	104 / 40
Rated Altitude	6560 ft (2000m) above sea level
Temperature Derate	1.5% for Each 10°F (5.6°C) Above Rated Temperature
Altitude Derate	2.5% for Each 1,000 ft (305m) Above Rated Altitude

Electrical System

Ignition System	Compression Ignition
Battery Quantity	2
Battery Voltage (VDC)	24
Battery CCA (A)	900
Battery Charging Alternator	
Ground (Negative / Positive)	Negative
Voltage (VDC)	24
Amperage (A)	45
Starter Motor Voltage (VDC)	24

Exhaust System

Exhaust Manifold Type	Dry
Exhaust Flow at Rated Load (CFM)	3507
Exhaust Temp at Rated Load (°F / °C)	982° F / 528° C
Max Allowable Back Pressure (kPa G)	5.9 +/- 1.0

Fuel System

Fuel Type	Ultra-Low Sulfur Diesel
Fuel Injection Pump	Common Rail Fuel Injection
Fuel Filter	Full flow, Cartridge type
24 Hr Fuel Tank Size	1,000 Gallons
Optional Extendable Fuel Tank For 24 / 48 / 72 / 96 Hour Run Times	

Fuel Consumption

Full Load	75% Load	50% Load
38.3 gal / hr	34.3 gal / hr	25 gal / hr



ALTERNATOR SPECIFICATIONS

Wildcat Model	RO0500D3BSXE	RO0500D3CSXE	RO0500D3DSXE
Alternator Model	HC5	HC5	HC5
Manufacturer	Stamford	Stamford	Stamford
Type	Brushless, 12- Lead	Brushless, 12- Lead	Brushless, 12- Lead
Frequency (Hertz)	60	60	60
Phase Voltage	3-Phase 208 / 120	3-Phase 240 / 120	3-Phase 480 / 277
Winding Configuration	Parallel Star	Series Delta	Series Star
Exciter Type	Self Exciter	Self Exciter	Self Exciter
Number of Poles	4	4	4
Voltage Regulator	AS440	AS440	AS440
Insulation Rating	Class H	Class H	Class H
Designed Temperature Rise Limit	125 °C	125 °C	125 °C
Bearing (Quantity / Type)	1 / Sealed	1 / Sealed	1 / Sealed
Coupling	Flexible Disk	Flexible Disk	Flexible Disk
Amortisseur Windings	Full	Full	Full
Voltage Regulation, NL to FL	1.0% (+/-)	1.0% (+/-)	1.0% (+/-)
Total Harmonic Distortion (THD) NL to FL	< 5%	< 5%	< 5%

Complete winding protection for non-harsh environment with relative humidity < 95%. IP23 Protection.

Manufactured according to the following standards: ISO 3046, ISO 8528-1, ISO 8528-3, ISO 8528-5, IEC 60034-1, BS 5000-3

CONTROLLER SPECIFICATIONS

Manufacturer	Deep Sea Electronics
Model	DSE 86XX/73XX
Display	Easy To Read Alpha-Numeric Scrolling Display
Monitoring	Diagnostic Conditions, Fault Codes, Weekly Exercise Cycle

