



# TIER 4 FINAL INDUSTRIAL ENGINES

FUEL: Diesel

**ENGINE:** Hyundai Infracore

# SPECIFICATION SHEET

Fuel	Rating	Power hp (kW) 1,800rpm	Power hp (kW) 3,000rpm
	Intermittent	13.0 (10.0)	23.0 (17.9)
Diesel	Continuous	12.0 (9.0)	21.0 (15.7)
	Max. Torque: ft-lb (N-m)	50.0 (61.0) 1,900 rpm	

Rating Definitions: Rated for 1200 - 2800 rpm. (Corrected per SAE J1349) Intermittent - For varying intermittent loads with no overload capability. Continuous - Continuous prime rating is applicable for supplying power to a varying load for an unlimited amount of running time, with 10% overload capacity available for 1 out of every 12 hours.

#### STANDARD FEATURES:

DT Power Corp Hyundai Infracore Compact Diesel Engines are designed for efficiency, as well as performance, with the durability and quality you expect. Lower fuel consumption, longer maintenance intervals and maintenance-free after-treatment systems lowers the total cost of ownership over the life of your engine.

With its strong power at small displacement, Hyundai Infracore Compact Diesel Engines are ideal for a wide variety of equipments.

Hyundai Infracore Compact Diesel Engines are designed to optimize the application, with the engine performance.

#### Key System Features are:

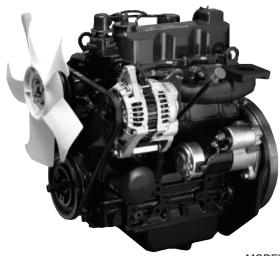
- · EPA Tier 4 Engine certified for Industrial applications
- · Packaged with flywheel housing to SAE standards
- · Flywheel machined to SAE J620 adaptation
- · Compact design to adapt to multiple genset applications
- · Adds value to generator equipment
- No DPF (Diesel Particulate Filter)
- · Strong power and high low-end torque for enhanced performance
- · Low total cost of ownership

## Engine:

- · Hyundai Infracore SU103N
- · Rated for high intermittent power with high torque lower down the power curve for better performance
- Cooling system capable of operation at 120°F ambient
- · Overhead valve assembly with 2-intake and 2-exhaust valves
- · Diesel direct injection
- · Bosch K-type mini pump
- · ECU Woodward APECS 4800
- · Naturally aspirated
- Compression ratio 21.0:1
- · DOC (Diesel Oxidation Catalyst) aftertreatment

## Engine Mountings and Drive Configuration:

- · SAE #5 flywheel housing
- · Suitable for the connection of multiple drive systems
- · Engine configured to fit almost any type of equipment
- · Fittings for mounting exhaust, radiator, and air cleaner
- · All rotating surfaces protected with guards
- · Oil and water drain lines



MODEL DTP10-1 Industrial Engine

#### Maintenance:

- · Oil filter change 500-hours
- Fuel filter change 500-hours
- · Valve adjustment after 1000-hours

#### After Treatment:

While traditional engine makers are relying on conventional technologies to satisfy the regulations of emission control, Hyundai Infracore Infracore has developed a unique after-treatment system.

Hyundai Infracore Compact Diesel engines use a Non-DPF System which is a much simpler system than the DPF-type systems solutions - no concerns on maintenance or quality issues.

Consider the benefits:

- · Elimination of unnecessary parts (DPF with complicated sensors, wires, diagnosis lamp and etc)
- · Prevention of after-treatment quality issues
- Maintenance Free (No regeneration process and ash cleaning required)

#### Advanced Fuel Injection System:

The fuel injection system of Hyundai Infracore Compact Diesel Engines utilize the most advanced design for fuel mixing and combustion within the cylinder head. The Bosch K-type mini pump provides the latest in small compact diesel direct injection technology.

- · Low exhaust gas emission
- · Low noise vibration
- · Better fuel efficiency
- · Optimized governing for each application

#### WARRANTY:

· Engine covered under the original equipment manufacturer's warranty - consult DT Power Corp for details

The manufacture reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.



Air cleaner type

Aftertreatment

Ventilation System

Flywheel housing

Max. back pressure - ins H₂O (kPA)

Sound at 1m from engine block dB(A)

Exhaust Gas Flow - ft³/min (m³/min)

Max. Exh. Temp at full load degrees °F ( °C)

Rotation viewed on flywheel



Canister air cleaner

Diesel Oxidation Catalyst DOC

Closed-Circuit Ventilation

39.39 (9.8)

Counter clockwise

SAE No.5

TBA

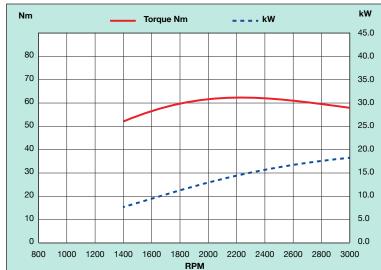
932 (500)

54.0 (1.53) 3000rpm

# TIER 4 FINAL INDUSTRIAL ENGINES

**ENGINE:** Hyundai Infracore **FUEL:** Diesel

DRIVE ASSEMBLY:		FUEL CONSUMPTION 1800 RPM	Continuous / {Intermittent}	
Configuration	Bare engine with mounting points	100%	1.35 (5.0)/{1.51 (5.7)}	
Drive connections	SAE housing	75%	TBA	
Operation	Manual	50%	TBA	
Drive shaft speed rpm	up to 2,800 rpm	25%	TBA	
ENGINE SPECIFICATION:		LUBRICATION SYSTEM		
Manufacturer	Hyundai Infracore	Oil pan capacity with filter - quarts	4.02 (3.8)	
Model	SU103N	Recommended lubricating oil grade	15W 40	
Emissions	Tier 4 - Final & Stage IIIB	Oil pump	Gear type driven by crankshaft	
Crankshaft speed	3,000 rpm	Oil consumption at full load	< 0.1% of fuel consumption	
Engine Type & Combustion	Diesel Direct Injection	Oil Filter	Full flow, cartridge type	
Fuel Injection System	Bosch K-type mini pump	Oil pressure min. – psi (kPA)	35.5 (245)	
Fuel Pressure	Mechanical centrifugal	ELECTRICAL SYSTEM		
Aspiration	Naturally Aspirated	Battery charger	12 volt x 75A Alternator	
Diesel fuel grade	EN590 : 2009 Diesel	Starting motor	12 volt x 2.7kW	
Cylinder Arrangement	In-line 3	Wet cell battery	Lead Acid	
Displacement in <sup>3</sup> (liters)	61.45 (1.001)	Battery Capacity recommended	64AH, 950CCA	
Bore and stroke ins (mm)	2.95 X 2.99 (75 X 76)	Starting Aid	Glow Plugs	
Peak power hp (kW) @ 2800 rpm	24.0 (17.9)			
Cooling	Water Cooled	17.9kW (23hp) DTP10-I Power Curves		
Engine Control	Woodward APECS 4800	Nm Torque Nm	kW kW	
Compression ratio	21.0:1	Iorque Mili	45.0	



	COULING STSTEM FOR OPERATING AT 120 F AMBIENT:				
	Water pump belt driven	Centrifugal type			
Eng. Cooling air flow - ft³/min (m³/min)		51.9 (1.47) 3000rpm			
	Engine Coolant Capacity gallons (Liters)	0.42 (1.6)			

## ARRANGEMENT DRAWING & DIMENSIONS MODEL: DTP10-I Industrial Diesel

KEY DIMENSIONS AND WEIGHT				
Description	Key	Inches		
Height	Н	21.8		
Length	L	20.2		
Width	W	19.0		
Shaft Height	SH	TBA		
Dry Weight Ibs (Kg)		222 (101)		
DT Power Corp				

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