



# TIER 4 FINAL INDUSTRIAL ENGINES

FUEL: Diesel

**ENGINE:** Hyundai Infracore

# **SPECIFICATION SHEET**

Fuel	Rating	Power hp (kW) 2,400rpm	Power hp (kW) 2,800rpm
	Intermittent	128.0 (96.0)	134.0 (100.0)
Diesel	Continuous	115.0 (86.0)	120.0 (90.0)
	Max. Torque: ft-lb (N-m)	368.8 (500.0) 1,400 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

#### 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 OEM applications
- · Adds value to off-highway equipment

the application, with the engine performance.

- No DPF (Diesel Particulate Filter)
- · Strong power and high low-end torque for enhanced performance
- · Low total cost of ownership

# Engine:

- · Hyundai Infracore D34
- · 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
- DELPHI DFP 4.4 injection pump for direct injection engine
- · High Pressure Common Rail operating at 1800 bar
- · Full electronic engine management with ECU governor control
- · External cooled EGR
- Aspiration as waste gate type turbo-charged with inter-cooler
- · DOC (Diesel Oxidation Catalyst) aftertreatment

# Engine Mountings and Drive Configuration:

- · SAE #4 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



#### 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

Consider the benefits:

· Elimination of unnecessary parts (DPF with complicated sensors, wires, diagnosis lamp and etc)

solutions – no concerns on maintenance or quality issues.

- · 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 is 1,800 bar common rail system. The advanced fuel injection system enables accurate fuel injection control thanks to high pressure of the common rail.

- · 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)

**COOLING SYSTEM FOR OPERATING AT 120°F AMBIENT:** 

Rotation viewed on flywheel



Canister air cleaner

Diesel Oxidation Catalyst DOC + SCR

Closed-Circuit Ventilation

120.6 (30)

Counter clockwise

SAE No.3

88.1

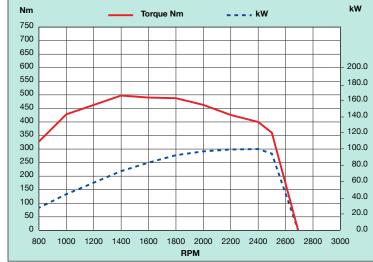
1004 (540)

159 (4.5) Intermittent

# TIER 4 FINAL INDUSTRIAL ENGINES

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

DRIVE ASSEMBLY:		FUEL CONSUMPTION	Continuous / {Intermittent}	
Configuration	Bare engine with mounting points	100%	2.96 (11.2) / {3.41 (12.9)}	
Drive connections	SAE housing	75%	2.25 (8.5) / {2.56 (9.7)}	
Operation	Manual	50%	1.61 (6.1) / {1.77 (6.7)}	
Drive shaft speed rpm	up to 2,800 rpm	25%	0.95 (3.6) / {1.00 (3.8)}	
ENGINE SPECIFICATION:		LUBRICATION SYSTEM		
Manufacturer	Hyundai Infracore	Oil pan capacity with filter - quarts	9.01 (8.6)	
Model	D34	Recommended lubricating oil grade	10W30 CJ-4	
Emissions	Tier 4 - Final & Stage IV	Oil pump	Gear type driven by crankshaft	
Crankshaft speed	1,800 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	High Pressure Common Rail	Oil pressure min. – psi (kPA)	43.5 (300)	
Fuel Pressure	1800 bar	ELECTRICAL SYSTEM		
Aspiration	Turbo-Charged & Intercooled	Battery charger	12 volt x 75A Alternator	
Diesel fuel grade	EN590 : 2009 Diesel	Starting motor	12 volt x 2.7kW	
Cylinder Arrangement	In-line 4	Wet cell battery	Lead Acid	
Displacement in <sup>3</sup> (liters)	208 (3.409)	Battery Capacity recommended	100 AH, 950CCA	
Bore and stroke ins (mm)	3.86 X 4.45 (98 X 113)	Starting Aid	Glow Plugs	
Peak power hp (kW) @ 2800 rpm	134.0 (100.0)			
Cooling	Water Cooled	100.0kW (134hp) DTP34-I Power Curves		
Engine Control	Full Electronic Engine Management	Nm Torque Nm	kW kW	
Compression ratio	17.0:1	750 Torque Hill		



Water pump belt driven	Centrifugal type	
Eng. Cooling air flow - ft³/min (m³/min)	281 (4.603)	
Engine Coolant Capacity gallons (Liters)	1.06 (4.0)	

# ARRANGEMENT DRAWING & DIMENSIONS MODEL: DTP34-I Industrial Diesel

KEY DIMENSIONS AND WEIGHT					
Description	Key	Inches			
Height	Н	35.1			
Length	L	35.3			
Width	W	25.8			
Shaft Height	SH	8.0			
Dry Weight Ibs (Kg)		737 (335)			

DT Power Corp 5820 NW 84th Avenue Miami, Florida 33166 Call: 305.592.9745

