

PRODUCT SPECIFICATIONS FOR 785D



WEIGHTS - APPROXIMATE

Nominal Rated Payload	141 t
Rated Gross Machine Weight	249476 kg
Body Weight - MSD	21200 kg
Chassis Weight	83130 kg

ENGINE

Gross Power - SAE J1995	1082 kW
Engine Model	Cat® 3512C HD
Bore	170 mm
Stroke	215 mm
Displacement	58.56 l

BODY - DUAL SLOPE

Body Weight	22295 kg
Heaped (SAE 2:1)	78 m ³

BODY - X

Body Weight	25160 kg
Heaped (SAE 2:1)	85 m ³

WEIGHT DISTRIBUTIONS - APPROXIMATE

Front Axle - Empty*	45-46%
---------------------	--------

Rear Axle - Empty*	54-55%
Front Axle - Loaded - Target	33 %
Rear Axle - Loaded - Target	67 %
Rear Axle - Loaded	*Depends on body configuration.
Rear Axle - Empty	*Depends on body configuration.
Note	Weight distributions optimized with Cat body.

TRANSMISSION

Forward - 1	12.1 km/h
Forward - 2	16.3 km/h
Forward - 3	22.2 km/h
Forward - 4	29.9 km/h
Forward - 5	40.6 km/h
Forward - 6	54.8 km/h
Reverse	11 km/h
Top Speed - Loaded	54.8 km/h

FINAL DRIVES

Differential Ratio	2.10:1
Planetary Ratio	10.83:1
Total Reduction Ratio	22.75:1

SUSPENSION

Effective Cylinder Stroke - Front	320 mm
-----------------------------------	--------

Effective Cylinder Stroke - Rear	165 mm
----------------------------------	--------

BRAKES

Brake Surface - Front	61269 cm ²
-----------------------	-----------------------

Brake Surface - Rear	89727 cm ²
----------------------	-----------------------

Standards	ISO 3450:2011
-----------	---------------

BODY HOISTS

Pump Flow - High Idle	750 l/min
-----------------------	-----------

Relief Valve Setting - Raise	17238 kPa
------------------------------	-----------

Body Raise Time - High Idle	15.2 s
-----------------------------	--------

Body Lower Time - High Idle	15.9 s
-----------------------------	--------

Body Lower Time - Float	16.2 s
-------------------------	--------

Body Power Down - High Idle	15.9 s
-----------------------------	--------

SERVICE REFILL CAPACITIES

Fuel Tank - Standard	1893 l
----------------------	--------

Cooling System	379 l
----------------	-------

Crankcase	204 l
-----------	-------

Differential - Final Drives	436 l
-----------------------------	-------

Steering Tank	90 l
---------------	------

Steering System - Including Tank	117 l
----------------------------------	-------

Brake/Hoist Hydraulic Tank	337 l
-----------------------------------	-------

Brake Hoist System - Includes Tank	641 l
---	-------

Torque Converter/Transmission System - Including Sump	248 l
--	-------

CAB

Heater / Defroster	34,462 Btu/kWh
---------------------------	----------------

Air Conditioning	6.9 kW (23,543 BTU/hr)
-------------------------	------------------------

ROPS Standards (1)	ISO 3471:2008 and ISO13459:2012
---------------------------	---------------------------------

FOPS Standards	ISO 3449:2005 Level II and ISO 13459:2012 Level II
-----------------------	--

SOUND

Sound Standards	The dynamic operator sound pressure levels are measured according to work cycle procedures specified in ISO 6396:2008 is 80 dB(A).
------------------------	--

Sound Standards (1)	The dynamic exterior sound power level for the standard machine is tested using ISO 6395:2008 procedures is 121 dB(A).
----------------------------	--

Sound Standards (2)	Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.
----------------------------	--

STEERING

Steer Angle	24 °
--------------------	------

Turning Diameter - Front	29.8 m
---------------------------------	--------

Steering Standards	ISO 5010:2007
---------------------------	---------------

TIRES

Standard Tires	33.00-R51 (E3 & E4)
-----------------------	---------------------

785D STANDARD EQUIPMENT

ELECTRICAL

Alarm, Back-up
Alternator (105 A)
Batteries, 93Ah, Low-maintenance, 12V (2)
Converter, 12V electrical
Electrical System, 24V, 15A
Lighting System

OPERATOR ENVIRONMENT

Air Conditioner
Ashtray/cigarette lighter
Coat hook
Diagnostic connection port
Dome courtesy light
Entertainment radio ready
Gauges/Indicators
Heater/defroster
Horn
Hoist body control, electric
Integrated Object Detection System
ROPS cab insulated/sound suppressed
Storage compartment
Seatbelt, 75 mm (3 in), retractable
Steering wheel, tilt, padded, telescopic
Sun visor
Tinted glass
Window, electric powered, operator
Windshield wiper, intermittent control and washer

POWER TRAIN

Cat 3512C HD-EUI diesel engine
Braking System
Transmission

OTHER STANDARD EQUIPMENT

Air Line Dryer (2)
Body Mounting Group
Auto lubrication system (Lincoln)
Dumping, Auxiliary Quick Connect for "Buddy Dumping"
Steering, Auxiliary Quick Connect for Towing
Continuous rear axle filtration
Diagonal stairway, 600 mm (24 in)
Driveline Operator Safety Guard
Fast-fill Fuel System
VIMS Dataport

Battery Disconnect
High speed crankcase oil change
Reservoirs (Separate)
S•O•SSM sample ports
Supplemental steering (automatic)
Tie Down Eyes
Tow Hooks, Front
Traction Control System
Vandalism Protection Locks
Vital Information Management System (VIMS) includes: VIMS payload monitor, MAX payload and speed manager

785D OPTIONAL EQUIPMENT

BODIES

Body, X
MSD II (Mine Specific Design)
Dual Slope
Custom Body Options

BODY EXTENSIONS

Tail
Wrap around

LINERS

Full-length liner
Tail extension wrap-around

OPERATOR ENVIRONMENT

Footrest, operator
Hose, cab clean-out
Vacuum, cab clean-out

POWER TRAIN

Pre-lube, engine
Oil renewal system
Oil cooler, rear axle

COLD WEATHER

Starting, Cold Weather

TIRES AND RIMS

Spare rims

INFORMATION MANAGEMENT

Control, Road Analysis (RAC)

SERVICE CENTER

Service Center, Wiggins

MISCELLANEOUS

Fire extinguisher, portable

Hub Odometer, Kilometers

Hub Odometer, Miles

Wheel Chocks

Heater, Diesel fuel