



TECHNICAL SPECIFICATIONS

ENGINE

MAKE	Scania
MODEL	DC13
NUMBER OF CYLINDERS	6
RATED POWER GROSS (HP PER SAE J1995)	345 hp (257 kW) @ 1800 rpm
RATED POWER NET (HP PER SAE J1349)	345 hp (257 kW) @ 1800 rpm
MAXIMUM TORQUE (GROSS) (SAE J1995)	1180 lbf.ft. (163 kgf-m) @ 1300 rpm
PISTON DISPLACEMENT	775 in ³ (12.7 L)
BORE AND STROKE	5.1 x 6.3 in. (130 x 160 mm)
STARTER	24V, 8.6 hp (6.0 kW)
BATTERY (QTY 2)	2 x 12V, 200AH
ALTERNATOR	28V, 100 amp
AIR CLEANER	Double Elements

HYDRAULICS

MAIN PUMPS	1 x 70 gpm (1 x 266 L/min)
SYSTEM PRESSURE (WORK)	4641 psi (326 kgf/cm ²)
SYSTEM PRESSURE (STEER)	3046 psi (214 kgf/cm ²)
BOOM SPEED – UP	6.0 sec
BOOM SPEED – DOWN	2.7 sec
BUCKET SPEED – CROWD	2.3 sec
BUCKET SPEED – DUMP	1.6 sec

TRAVEL SPEEDS

TRAVEL SPEED – FORWARD (4)	4.5 / 7.6 / 11.6 / 22.6 mph (7.2 / 12.2 / 18.6 / 36.4 km/h)
TRAVEL SPEED – FORWARD (5) (US15 PACKAGE ONLY)	4.5 / 7.8 / 12.1 / 17.4 / 24.9 mph (7.2 / 12.5 / 19.5 / 28 / 40.0 km/h)
TRAVEL SPEED – REVERSE (3)	4.5 / 7.6 / 16.5 mph (7.2 / 12.2 / 26.5 km/h)
MAXIMUM GRADE	51% (27°)

ENVIRONMENT

SOUND LEVEL (2000/14/EC)	106 dB(A)
CABIN SOUND LEVEL (ISO 6396)	70 dB(A)



REFILL CAPACITIES

FUEL TANK	84 gal. (318 L)
DEF TANK	15.9 gal. (60 L)
COOLING SYSTEM (RADIATOR CAPACITY)	14.5 gal. (54.8 L)
ENGINE OIL	11.9 gal. (45 L)
TRANSMISSION	14.5 gal. (55 L)
FRONT AXLE	11.1 gal. (42 L)
REAR AXLES	11.1 gal. (42 L)
HYDRAULIC SYSTEM	58.9 gal. (223 L)

HYDRAULIC CYLINDERS

STEERING (2)	3.9 in. x 2 in. x 17.4 in. (100 mm x 50 mm x 442 mm)
LIFT ARM (2)	5.9 in. x 3.7 in. x 31.3 in. (150 mm x 95 mm x 795 mm)
BUCKET (1)	6.3 in. x 3.9 in. x 24.2 in. (160 mm x 100 mm x 615 mm)

BORE x ROD DIAMETER x STROKE

The piston rods and cylinder bodies are made of high-strength steel. A shock-absorbing mechanism is fitted in at the base and rod end of the lift and bucket cylinders and the rod end of the steering cylinders to ensure shock-free operation and extended piston life.

NOTE: Where applicable, dimensions are in accordance with Society of Automotive Engineers (SAE) and ISO standards. Specifications and design are subject to change without notice. Pictures of Doosan® wheel loaders may show other than standard equipment. All dimensions are shown in inches. Respective metric dimensions are enclosed by parentheses. Doosan construction equipment is manufactured with a Quality Management System that is in compliance with ISO 9001:2008. All dimensions are given for Doosan wheel loaders equipped with standard tires.

DL 420

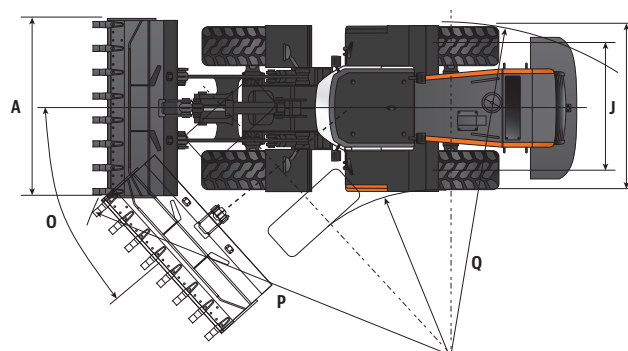
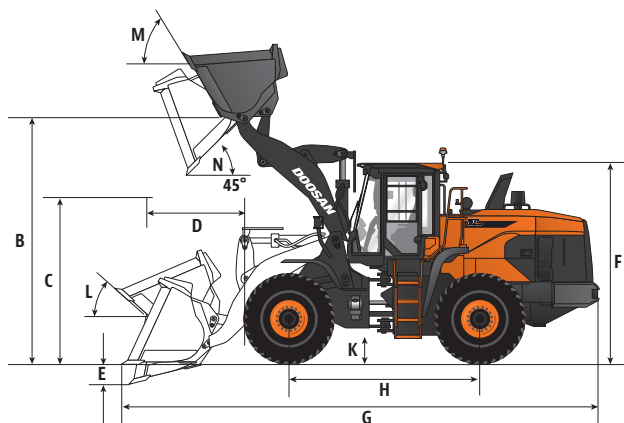
DIMENSIONS

STANDARD ARM

HIGH-LIFT

BUCKET CAPACITY, HEAPED ISO/SAE		5.5 yd ³ (4.2 m ³)	
BUCKET WIDTH	A	10' 8" (3270 mm)	
HINGE PIN HEIGHT, MAX.	B	13' 11" (4265 mm)	15' 6" (4745 mm)
DUMP HEIGHT (45°) – FULLY RAISED	C	10' (3055 mm)	11' 7" (3537 mm)
DUMP REACH (45°) – FULLY RAISED	D	4' 1" (1255 mm)	4' 3" (1309 mm)
DIGGING DEPTH	E	3" (100 mm)	4" (115 mm)
OVERALL HEIGHT, ROPS CABIN	F	12' (3660 mm)	
OVERALL LENGTH	G	29' (8836 mm)	30' 7" (9314 mm)
WHEEL BASE	H	11' 6" (3525 mm)	
WIDTH AT TIRES	I	10' 6" (3200 mm)	
TREAD WIDTH	J	7' 7" (2311 mm)	
GROUND CLEARANCE	K	1' 7" (495 mm)	
MAX. TILT ANGLE ON GROUND		44°	45°
MAX. TILT ANGLE AT CARRY POSITION	L	48°	51°
MAX. TILT ANGLE AT FULLY RAISED	M	62°	64°
MAX. DUMP ANGLE AT FULLY RAISED	N	45°	
STEERING ANGLE, MAX.	O	40°	
EXTERNAL RADIUS, BUCKET EDGE	P	23' (7010 mm)	23' 2" (7055 mm)
EXTERNAL RADIUS, OUTSIDE TIRE	Q	20' 11" (6385 mm)	
TIRE SIZE		26.5R25 – L3	
OPERATING WEIGHT		51,553 lb. (23,380 kg)	52,159 lb. (23,660 kg)
STATIC TIPPING LOAD (STRAIGHT)		42,719 lb. (19,377 kg)	34,099 lb. (15,467 kg)
STATIC TIPPING LOAD (AT FULL TURN)		37,686 lb. (17,094 kg)	30,080 lb. (13,644 kg)
BREAKOUT FORCE		41,365 lbf. (18,763 kgf)	39,791 lbf. (18,049 kgf)

Front Lift Arm Configuration
 Standard: US10, US11
 High-Lift: US20, US21





STANDARD & OPTIONAL EQUIPMENT

Standard Base Package, US10

● Standard Equipment
■ Optional Equipment
– N/A

ENGINE

EMISSIONS, T4 (EPA)	●
HIGH-PRESSURE COMMON RAIL (HPCR)	●
TURBO, VARIABLE GEOMETRY (VGT)	●
COOLED EXHAUST GAS RECIRCULATION (CEGR)	●
DIESEL OXIDATION CATALYST (DOC)	●
SELECTIVE CATALYST REDUCTION (SCR)	●
DIESEL EXHAUST FLUID (DEF)	●
FUEL FILTER WITH WATER SEPARATOR	●
COOLANT RECOVERY TANK	●
DUAL ELEMENT DRY-TYPE AIR FILTER WITH EVACUATOR	●
PRE-CLEANER	●
ELECTRONIC ENGINE CONTROL (ECU)	●
AUTO-IDLE (WORKING TO STANDBY)	●
AUTO-SHUTDOWN (TIME ADJUSTABLE)	●
OVERHEAT & LOW OIL PRESSURE ENGINE PROTECTION	●
COOLING FAN – RADIATOR, VARIABLE SPEED	●
COOLING FAN – RADIATOR, AUTOMATIC REVERSIBLE	●
REMOTE DRAIN PORT – ENGINE OIL	●
BLOCK HEATER (110V)	■

HYDRAULIC

VARIABLE DISPLACEMENT AXIAL PISTON PUMP	●
CLOSED-CENTER SYSTEM	●
MAIN CONTROL VALVES – PILOT	●
MAIN CONTROL VALVES – ELECTRIC	–
REMOTE TEST PORTS	●
REMOTE DRAIN PORT – HYDRAULIC OIL	●
SPRING APPLIED HYDRAULIC RELEASE BRAKE	●
AUXILIARY HYDRAULICS (3RD VALVE)	●
AUXILIARY HYDRAULIC DETENT (EMCV ONLY)	–
AUTOMATIC BOOM/LIFT KICK-OUT, ADJUSTABLE (IN CAB)	●
AUTOMATIC RETURN-TO-DIG POSITION, ADJUSTABLE	●
BOOM FLOAT	●
LOAD ISOLATION SYSTEM	■

CABIN

STEEL, ALL-WEATHER & SOUND-SUPPRESSED	●
ROPS (ISO 3471)	●
FOPS (ISO 3449)	●
FRONT WINDOW WITH WIPER/WASHER	●
REAR WINDOW WITH WIPER	●
TINTED SAFETY GLASS	●
VISOR, RETRACTABLE	●
ADJUSTABLE SLIDING SIDE DOOR WINDOW	●

CABIN (CONTINUED)

DEFROST, FRONT WINDOW	●
LOCKABLE DOORS	●
SEAT - AIR SUSPENSION - 2" (51 MM) SEAT BELT - ADJUSTABLE HEIGHT & RECLINE - ADJUSTABLE FORE/AFT - ADJUSTABLE ARMRESTS	●
3" (76 MM) SEAT BELT	■
CONTROL STANDS - HEIGHT ADJUSTABLE - FORE/AFT ADJUSTABLE	●
STORAGE FOR OPERATOR'S MANUALS	●
MIRROR, INTERIOR REAR VIEW (1)	●
MIRROR, EXTERIOR (2) HEATED	●
MIRROR, EXTERIOR (2) HEATED - ELECTRONIC ADJUSTABLE	■
FULLY AUTOMATIC HVAC W/ AMBIENT TEMPERATURE SENSOR	●
DOOSAN SMART TOUCH DISPLAY - 8" TOUCH-ENABLED - ADJUSTABLE HEIGHT & ANGLE	●
AM/FM STEREO WITH BLUETOOTH®	■
SPEAKERS (2)	●
ANTENNA, ROOF-MOUNTED	●
EMERGENCY BREAKOUT TOOL	●
HOT/COLD BEVERAGE COMPARTMENT	●
POWER SOCKET, 12V	●
POWER SOCKET, USB	●
BEVERAGE HOLDER	●
INTERIOR LIGHT	●
COAT HANGER	●

ELECTRICAL

SYSTEM VOLTAGE – 24V	●
ALTERNATOR – 24V, 80 AMP	●
2 X 12V BATTERIES, 100 AH RESERVE CAPACITY, 900 CCA	●
BLADE-TYPE FUSE PANEL	●
MAIN CIRCUIT BREAKER	●
LIGHTS, WORK (LED): FRONT (2), REAR (2)	●
LIGHTS, WORK (LED): FRONT (4), REAR (4)	■
LIGHTS, WORK (LED): FRONT (6), REAR (6)	■
LIGHTS, HEADLIGHTS (HALOGEN) - HI/LO BEAMS (2)	●
LIGHTS, STOP, TAIL & DIRECTION INDICATORS	●
HORN	●
ROTATING BEACON	■
HOURLY METER	●
ENGINE RESTART PREVENTION SYSTEM	●
REARVIEW CAMERA	●
LAPTOP SERVICE PORT	●
SELF-DIAGNOSTICS SYSTEM	●

DISPLAY MONITOR & WARNINGS

BUZZER - ENGINE OIL PRESSURE - COOLANT TEMPERATURE - TRANSMISSION OVERHEAT	●
GAUGES - FUEL LEVEL - DEF LEVEL - ENGINE COOLANT TEMPERATURE - TRANSMISSION OIL TEMPERATURE - ENGINE RPM - SPEEDOMETER - TRANSMISSION GEAR INDICATOR - BATTERY VOLTAGE - ECO - DOOSAN SMART GUIDANCE SYSTEM - DIGITAL CLOCK - TRIP METER - HOUR METER - TOTAL OPERATION TIME - FUEL CONSUMPTION	●
WARNING & INDICATOR LIGHTS - SEAT BELT - ERROR CODE - SCR WARNING - CHECK ENGINE - ENGINE OIL PRESSURE - ENGINE PRE-HEAT ENGAGED - RADIATOR COOLANT LEVEL & TEMPERATURE - AIR FILTER - FUEL LEVEL - DEF LEVEL - LOW - WATER IN FUEL - BATTERY CHARGE - LIGHTS (HIGH, MAIN, WORK, BEACON) - DIRECTION SIGNAL - EMERGENCY STEERING - HYDRAULIC OIL TEMPERATURE - HYDRAULIC CHARGE PRESSURE WARNING - HYDRAULIC PILOT FILTER - HYDRAULIC RETURN FILTER - TRANSMISSION MODE - TRANSMISSION WARNING - TRANSMISSION LOCK-UP - TRANSMISSION OIL TEMP - TRANSMISSION GEAR INDICATOR - BRAKE FLUID PRESSURE WARNING - REVERSE FAN INDICATOR - MIRROR HEAT INDICATOR - PARKING BRAKE INDICATOR	●
BACK-UP ALARM	●
SCALE SYSTEM, DOOSAN INTEGRATED SMART SCALE	■
SCALE SYSTEM, LOADRITE® SCALE	■
ADJUSTABLE STEERING COLUMN - TILTING - TELESOPING	●
EMERGENCY SECONDARY STEERING	■
THROTTLE PEDAL (ACCELERATOR)	●
BRAKE PEDAL, RIGHT	●
BRAKE PEDAL, LEFT	■
BRAKE PEDAL TRANSMISSION KICK-OUT	●
GEAR SELECTOR (FNR)	●
JOYSTICK CONTROL	●
FINGERTIP CONTROL (3-LEVER)	■
SWITCHES, CONSOLE-MOUNTED - STARTER (BUTTON) - PARKING BRAKE - PILOT CUTOFF - TRANSMISSION CUTOFF - WORK LIGHT - REVERSIBLE COOLING FAN	●
EMERGENCY STOP SWITCH	●
POWER MODE (P, S, E)	●
TRANSMISSION MODE	●
WIPER CONTROL PANEL	●
AUDIO CONTROL PANEL	●

FRAME & DRIVELINE

Z-BAR LIFT ARM	●
Z-BAR LIFT ARM, HIGH-LIFT	■
STEERING CYLINDER, DOUBLE-ACTING (2)	●
TRANSMISSION - 4F / 3R SPEED - FULL AUTOMATIC POWER SHIFT - TORQUE CONVERTER	●
TRANSMISSION - 5F / 3R SPEED - AUTOMATIC - POWER SHIFT - TORQUE CONVERTER LOCK-UP CLUTCH	■
DIFFERENTIALS - LIMITED SLIP FRONT - LIMITED SLIP REAR	●
DIFFERENTIALS - HYDRAULIC LOCKING FRONT - OPEN REAR	■
HYDRAULIC POWER STEERING	●
OUTBOARD PLANETARY AXLES	●
FIXED FRONT AXLE	●
OSCILLATING REAR AXLE	●
PARKING BRAKE, SPRING-APPLIED HYDRAULIC RELEASE	●
SEALED, SELF-ADJUSTING BRAKES	●
TIRES, 20.5R25 L3 BIAS	●
TIRES, 20.5R25 L3 RADIAL	■
TIRES, 23.5R25 L3 BIAS	■

OTHER

CENTRALIZED LUBRICATION	●
AUTOMATIC LUBRICATION SYSTEM	■ ¹
AIR COMPRESSOR	■
HANDRAILS, ENTRANCE & SERVICE STEPS	●
HANDRAILS, ROOF-MOUNTED	■
SKID-RESISTANT ENTRANCE STEPS	●
SKID-RESISTANT SERVICE PLATFORMS	●
DRAWBAR AND PIN	●
WHEEL CHOCKS	●
REAR FENDER, FULL	■
ADDITIONAL COUNTERWEIGHT	■ ²
MANUALS - OPERATION & MAINTENANCE - PARTS - AEM SAFETY MANUAL	●
DOOSANCONNECT® - LOCKABLE MONITORING - NO CONTRACT OR FEES	●
VANDALISM PROTECTION - LOCKABLE PANELS - LOCKABLE FLUID FILL POINTS - ANTI-THEFT PROTECTION (PASSWORD)	●

1 Dealer-Installed Only
2 Standard on High-Lift Models

877-745-7814
na.DoosanEquipment.com/dl420-7

©2021 Hyundai Doosan Infracore. All rights reserved.

Hyundai Doosan Infracore is an affiliate of Hyundai Heavy Industries Group.
The Doosan trademark, **DOOSAN**, is used under license from Doosan Corporation.

DOOSAN®