BULLETIN NO. 1019-6211

SCOOP LOADER

MODEL DSL-300

3.0 metric tonne · 3.3 short ton payload — 1.22 m³ · 1.60 yd³ capacity

FEATURES

- The DUX DSL-300 compact rugged heavy-duty diesel scoop loader is easily manoeuvrable in confined areas, and is well suited for small narrow-vein mining
- High mechanical availability for long service life
- Easy service access and continuous productivity at the lowest operating cost
- Proven hydrostatic drive
- Permits efficient loading of trucks; and hauling muck and backfill at high production cycles
- Optional quick attachments available on request
- Excellent service and parts back-up worldwide

CAPACITIES

Tramming capacity	3 000 kg	6,614 lb.
Hydraulic break-out force (lift)	4 200 kg	9,260 lb.
Hydraulic break-out force (tilt)	5 370 kg	11,388 lb.
SAE static tipping load	7 000 kg	15,433 lb.
Standard bucket, SAE heaped	1.22 m³	1.6 yd³

WEIGHTS

Operating weight	6 850 kg	15,102 lb.
Total loaded weight	10 600 kg	23,369 lb.

Axles:

Without load, front axle	2 600 kg	5,732 lb.
Without load, rear axle	4 250 kg	9,370 lb.
With load, front axle	6 800 kg	14,991 lb.
With load, rear axle	3 800 kg	8,378 lb.

OVERALL DIMENSIONS

Length	6 020 mm	19′ 9″
Width (engine-side)	1 450 mm	4′ 9″
Width (bucket-side)	1 450 mm	4′ 9″
Height over canopy (variable)	2 200 mm	7′ 3″

TURNING RADIUS @ 42° TURNING ANGLE

Inside	1 980 mm	6′ 6″
Outside	3 960 mm	13′ 0″

BUCKET MOTION TIMES

Raising time	5.0 seconds
Lowering time	4.0 seconds
Dumping time	3.0 seconds

DRIVING PERFORMANCE (LOADED)

Maximum tramming speed	20.0 km/h	12.0 mph
Minimum tramming speed	7.5 km/h	5.0 mph

Printed in Canada

DUX Model DSL-300 Scoop Loader

TECHNICAL SPECIFICATIONS*

Engine

Make and model ..... Cummins QSF 3.8 with Electronic Management
..... System
Derated power ..... 74.6 kW (100 HP) @ 2 200 RPM
Cylinders ..... 4 in-line
Displacement ..... 3.8 L ..... 231 in^3
Aspiration ..... Turbocharged, after-cooled
Starter ..... 24 V electric
Cooling ..... Water and air-to-air cooling
Air intake cleaner ..... Donaldson 2-stage dry type with service gauge
Exhaust system ..... Diesel oxidation catalyst and selective catalytic
..... reduction (DOC-SCR) Cummins system
Emission standard ..... EPA Tier 4 Final/Stage IV
..... CANMET Certificate Number 1313

Transfer Case

– Dana SOH 360, 2-speed

Transmission

– Rexroth hydrostatic with forward/reverse

Axles

– Dana SOH 113, conventional limit slip, 45%

Tires

– Michelin 9.00R20, X-Mine D2, L5 radial

Brakes

Service and ..... 4-wheel totally enclosed multi-disc wet brakes,
emergency/parking ..... Spring Applied Hydraulically Released (SAHR)
Automatic Brake ..... Applies brake in case of engine failure or pressure
Applicator (ABA)..... drop in hydrostatic transmission

Steering

– Articulated frame hydraulic power steering with pilot monostick control
– 89 mm (3.5 ") bore x 44 mm (1.75") rod diameter double acting steering cylinder (1), equipped with electro/mechanical control lever
– $\pm$ 42° steering angle each way for a total of 84°

Oscillation

– $\pm$7° center of oscillation for a total of 14°

Frames and Pins

– Articulated heavy-duty frames made to withstand the high impact and torsional stress associated with mining application
– Large high tensile alloy steel pins in replaceable anchor bushings

Operator Compartment

– Side seated for maximum visibility and bidirectional operation
– Heavy-duty adjustable suspension seat with arm rests and retractable belt

Clean Shell Bucket

– Made from reinforced impact, wear resistant Hardox alloy steel plates, substantially prolongs service life

Hydraulic System

Cylinder bore x stroke x rod diameter:
– Steering cylinder (1).....89 mm (3.5") x 269 mm (10.6") x 44 mm (1.75")
– Lift cylinders (2).....102 mm (4.0") x 421 mm (16.6") x 51 mm (2.0")
– Dump cylinder (1).....152 mm (6.0") x 305 mm (12.0") x 89 mm (3.5")
– Steering/Park brake Vane type pump
– Bucket Vane type pump
– Steering system: control valve, pilot operated, open centre
– Bucket System: control valve, pilot operated, joystick
– Cylinder relief pressure: 17.2 MPa (2500 psi)
– Inline high pressure filter with service gauge
– ¾" inside diameter and over hoses that are four-spiral wire braid and have crimped hose end swivel fittings

Tank Capacities

Fuel..... 125 L .....33 US gallons
Hydraulic oil ..... 114 L ..... 30 US gallons

Electrical System

– 24 V negative ground
– 55 A marine-type alternator with integrated sealed voltage regulator
– Main electric battery cut-off switch
– Heat resistant, waterproof, sealed electric PMA wire harness
– Sealed junction box and stainless steel instrument panel box with sealed multi-stem connectors
– Semi-automatic circuit breakers
– All-directional, front (3)and rear (4) LED lights, shock mounted, with necessary switches
– Heavy-duty batteries (2), 1000 CCA per battery
– Signal horn and audible, adjustable back-up alarm

Standard Features

Cummins QSF 3.8, EPA Tier 4 Final/Stage IV electronic engine • PRAN display monitor with digital fuel gauge • Automatic engine shut-off at low oil pressure and high temperature • Hourmeter • All necessary gauges for engine, converter and brake pressure • Wheel chocks (2) with storage brackets (2) • Neutral engine start protection • Triangular rear reflectors (2) • Parts/Operator/Maintenance manuals • Compliant with MSHA, CANMET and CE regulation

Options

Different engine for high altitude • Battery/electric drive available in mid 2020 • FOPS/ROPS canopy • Automatic lubrication system • Fire suppression system • Video system • Spare rim assembly • Self-contained 24 V electric/hydraulic emergency steering power pack • Rock bucket • Ejector bucket • Knock-down construction for lowering unit down mine shaft • OTHER OPTIONS ON REQUEST

Manufactured by:

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