



EUCLID

R-50

Technical Data



EUCLID R-50

ENGINE.

Make	Detroit Diesel	Cummins	Mercedes Benz
Model	16V-71N	VT-1710-C	OM 424 LA
Aspiration	Natural	Turbo-charged	Turbo-charged
Gross output at 2100 RPM	453kW 608HP SAE	473kW 635HP SAE	
Flywheel output at 2100 RPM	430kW 576HP SAE	452kW 606HP SAE	441kW 600HP DIN
Displacement	18.6 Litres	28.0 Litres	21.9 Litres
Max. torque at	2170 N.m 1600 RPM	2369 N.m 1500 RPM	2450 N.m 1400 RPM

TRANSMISSION

Allison CLBT-6061, remote mounted, Planetary type, full power shift, integral torque converter with automatic lock-up in all ranges and hydraulic retarder, electric shift control 6 forward and 1 reverse ranges.

DRIVE AXLE

Full floating, double reduction with Euclid 2350 differential and single reduction planetary.

Ratios	Standard	Optional
Differential	3.73:1	3.15:1
Planetary	5.80:1	5.80:1
Total reduction	21.63:1	18.27:1
Max. speeds (km/h)		
21.00-35 tyres	53.9	63.9
24.00-35 tyres	56.4	66.9

TYRES (Tubeless)

Standard - Front and rear 21.00-35 (32 PR) E-3
Rim width 381 mm
Optional - Front and rear 24.00-35
Rim width 432 mm
Optional treads and plys available

FRAME

Box section rails bridged by 3 cross members. Box section constant taper rear to front 310 N/mm² (45,000 PSI) yield strength steel. 2 rear cross members are castings with integral body, suspension and drive axle mounts.

SUSPENSION

Front

Independent trailing arm for each wheel. Self compensating hydrogas ride struts are mounted between the trailing arm and frame.

Rear

"A" frame integral with axle housing and spherical bush mount to frame. Track rod link between frame and axle. Rearward mounted self compensating hydrogas ride struts suspend the drive axle from the frame.
Maximum wheel oscillation.....8°

BODY

Horizontal side stiffeners, scow end, continuous exhaust heated. High yield 689 N/mm² alloy steel.

Thickness used :-

Floor	19 mm
Front	10 mm
Sides	10 mm
Canopy	5 mm

The body is rubber cushioned on the frame along its full length.

BODY CAPACITY

Struck (SAE)	23.5 m ³
Heaped 3:1	29.0 m ³
Heaped 2:1 (SAE)	31.7 m ³

STEERING

Independent, open centre hydraulic system, twin double acting cylinders and gear type pump.

System pressure	13.8 MPa
Pump output at 2100 RPM	1.5 litres/s
Reservoir capacity	98.0 litres
Turning circle (SAE)	18.8 m

BRAKES

SERVICE:-

Air/oil operated disc brakes. Two calipers per disc front and rear. Calipers internally ported, each contains three pairs of opposing pistons. Hand operated lever for rear wheel brakes only for slippery road conditions.

Front:-

Disc diameter,	686 mm
Lining area, total	1936 cm ²
Hydraulic pressure	15.9 MPa

Rear :-

Disc diameter,	711 mm
Lining area, total	1936 cm ²
Hydraulic pressure	15.9 MPa

All hydraulic brake system with oil cooled multi disc brake option available.

EMERGENCY

Two independent circuits within the brake system conform to SAE J 1224, manual or automatic operation.

PARKING

Drum, 2 shoe, driveline mounted, automatic application if air pressure drops to a pre-set level. Hand control to park.

Size	305 mm × 127 mm
Area	970 cm ²

RETARDER

Foot operated, integral with transmission. Automatically applied if air pressure drops to a pre-set level.

Maximum retarding HP (including engine friction)
at 2250 rpm.....702kW (941 hp)

AIR SYSTEM

COMPRESSOR	w/Detroit Diesel	5.66 l/s
	w/Cummins	6.23 l/s
	w/Mercedes-Benz	6.67 l/s
SERVICE AIR	Pressure	860 kPa
	Reservoir capacity	147 litres

Visual warning in cab if pressure drops to 410 kPa.

HOIST

Twin Euclid two-stage double acting cylinders mounted outboard of the frame, separate reservoir and pump.

Dump angle	60°
Body raise time	18 seconds

ELECTRICAL

Batteries	Two 12 volt in series.
Alternator	24 volt, 50 amp output.
Lighting	24 volt.

CAB

Euclid designed 2 man steel cab 1422 mm wide, 3 point rubber mounts, safety glass throughout, tinted windscreen, sound and temperature insulation, ventilators dust proof when closed, designed to meet OSHA standards, entry by ladder and catwalk.

SERVICE DATA

Crankcase	Detroit Diesel	61.0	litres
	Cummins	72.0	
	Mercedes Benz	42.5	
Transmission		95	
Cooling system		183	
Fuel tank		700	
Hydraulic tank	Hoist	148	
	Steering	98	
Drive axle		50	

Note: Crankcase and Transmission capacities include filters.

WEIGHTS (approx.)

Total empty weight	kg	34960
Weight distribution empty		
Front axle	17065	
Rear axle	17895	
Loaded weight based on 50.000 kg payload		
Front axle	28380	
Rear axle	56580	
Total	84960	

Exact weight will depend on the equipment options fitted.

Product improvement is a continuing project. Therefore, all specifications are subject to change without notice.

STANDARD EQUIPMENT SUMMARY

GENERAL - Dual air horns, Back-up light, Body down indicator (mechanical), Body prop cable, Closed loop exhaust, Electric shift control, Grille guard, Headlights (4), Mirrors left & right, Mud flaps, Operator arm guard, Reverse alarm, Rock ejector bars, Stop light, Supplementary steering, Tail light.

CAB - Interior light, Heater and defroster, Adjustable seat, Seat belt, Passenger seat, Rubber floor mat, Sun visor, Windscreen wipers and washers.

INSTRUMENTATION - Air cleaner restriction indicator, Ammeter, Back-up light switch, Clutch pressure gauge, Converter oil temp. gauge, Coolant temp. gauge, Engine lube pressure gauge, High beam indicator light, Hoist filter restriction indicator light, Lock-up indicator light, Park brake indicator light, Rear brake malfunction indicator light, Service air pressure gauge, Speedometer, Steer filter restriction indicator light, Tachometer and hourmeter, Wig-wag low air pressure alarm.

OPTIONAL EQUIPMENT SUMMARY

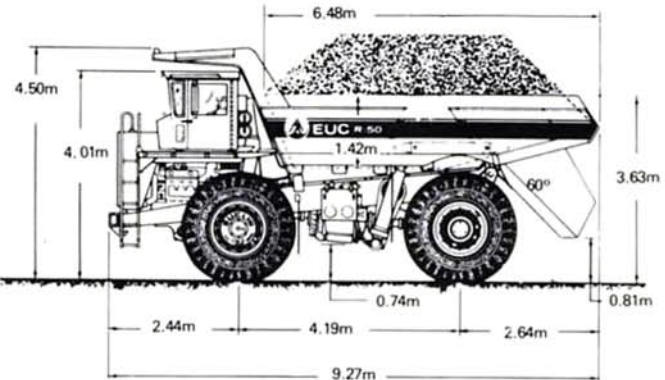
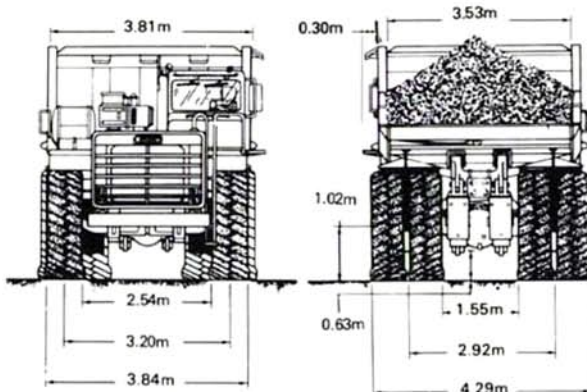
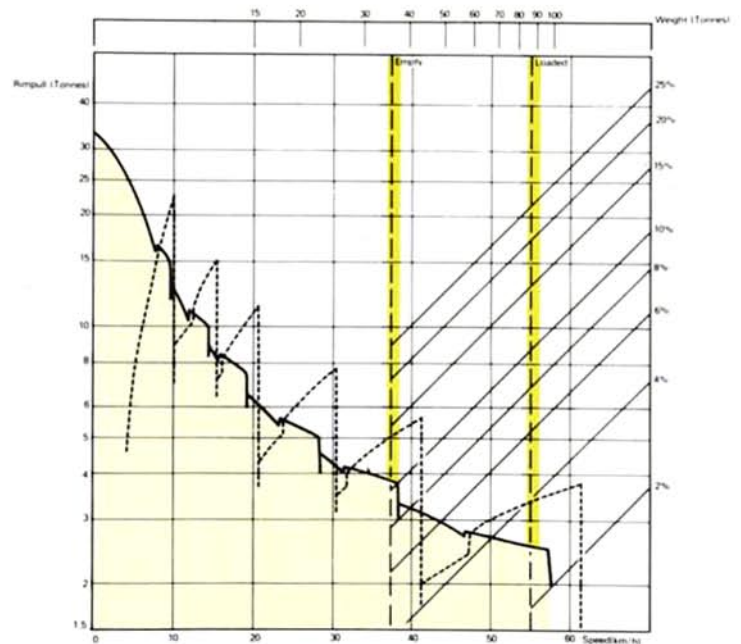
Air conditioning	Hubodometer
Alcohol vaporizer	Hood sides
Automatic shift control	Lube system automatic
Body liner plates	Multi function alarm system
Canopy spill guard ext.	Radiator shutters
Cold weather start aid	Sideboard extensions
Differential NoSpin	Tachograph
Differential ratio 3.15 : 1	Thermatic fan
Fast fueling system	Transmission huard

Standard and optional equipment may vary from country to country. Special options available on request.

EUCLID R-50

Engine:	Cummins VT-1710-C at 473kW (635BHP)
Transmission:	Allison CLBT-6061
Differential ratio:	3.73:1
Axle ratio:	5.80:1
Tyre size:	24.00-35 E-3

Note: The chart is based on 0% Rolling Resistance.



SHIPPING DATA (approximate)

Volume ... 180 m³ Weight ... 34960 kg

Note : Overall height with body in full tip position 8.89 m. Dimensions for 21.00 x 35 tyres

HAULER RANGE



Rear Dumps



R-170



R-130



R-120M



R-120E



R-100



R-85



R-50



R-35



R-25

Bottom Dumps



30-110 Tons



70-110 Tons



120-150 Tons

Special Applications



70-110 Tons Pipe Carrier



R-85 Water Tanker



R-50 Drill Rig

Coal Haulers

**But when you buy EUCLID you get the TOTAL SUPPORT PACKAGE...
.....not just a truck.**

50 YEARS	EXPERIENCE	In the early 30's EUCLID built the first off-highway bottom and rear dump trucks. We have been the industry pioneer ever since.
	SPECIALIST	EUCLID's business, and only activity is haulers. All resources, research and development are concentrated on maintaining EUCLID's No.1 position as the hauler specialist.
	PLANNING	The empirical data gathered during our long experience and the world-wide human resources of EUCLID are available for the most extensive job studies.
	MANUFACTURING	EUCLID produces in the U.S.A., Canada, Belgium and Australia the most complete line of rear and bottom dump haulers from 25 - 170 ton capacity.
	TRAINING	Whatever the job wherever the site, we train your operating and service staff on site or in one of our regional training centres, using all available modern aids.
	SERVICE	Through our world-wide network of dealer and EUCLID locations, we ensure the best "on-site" service facilities, even in the remotest corner of the earth.

THE "TOTAL CONCEPT" from.....

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