DUX

# LOW PROFILE END DUMP TRUCK

MODEL **DT-22**

## 14.8 cubic yard – 11.3 m³ capacity • 22 tons – 20 tonnes payload



### FEATURES:

- High capacity compact profile articulated 4-wheel drive underground dumper, well suited for the transport of ore, waste rock and back-fill on level and steep ramps
- Permits efficient chute, side and end-loading in low headings
- Excellent load retention — no spillage on steep grades
- Clean discharge guaranteed with the 72° dump angle
- Low center of gravity — less tire wear
- Fuel efficient, maintenance friendly Detroit Diesel series 50 DDEC engine with integrated electronic management system. Optional Deutz or Caterpillar engine
- Proven Clark-Hurth powertrain
- Fail-safe spring applied hydraulic released 4-wheel **Posi-Stop** brake system for long life
- Automatic brake applicator (ABA)
- Large size shock mounted operator's compartment for comfort and safety
- Modular design centralized service points
- Component exchange program assures high performance and maximum machine availability at lowest operating cost

### OVERALL DIMENSIONS:

| | | |
|---|---|---|
| Length [mm] | 26'-4" | [8 025] |
| Width | 8'-4" | [2 504] |
| Height over dump body sides | 7'-2" | [2 185] |
| Ground clearance (middle) | 1'-1" | [330] |

### VOLUME:

| | | |
|---|---|---|
| Capacity SAE | heaped 14.8 yd³ | 11.3 m³ |
| | struck 12.3 yd³ | 9.4 m³ |

### DISCHARGING:

Time (approx.) ..... 15 seconds

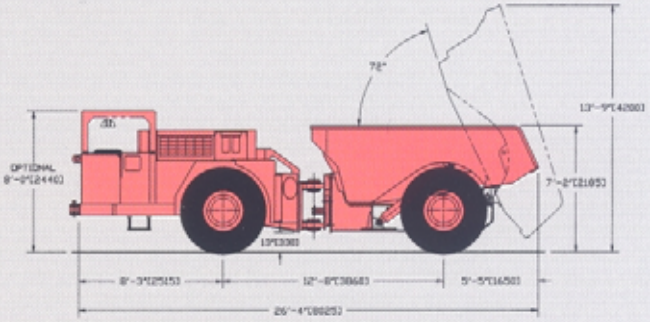
| WEIGHTS: | Tons | Tonnes |
|---|---|---|
| Payload | 22 | 20.00 |
| Empty machine (operating) | 17 | 15.4 |
| GVW | 39 | 35.4 |



**TURNING RADIUS AT 42°**

Inside: 12'-10" [3 910]

Outside: 22'-9" [6 935]



# DUX Model DT-22 Low Profile End Dump Truck

## TECHNICAL SPECIFICATIONS *

### Engine

| | |
|---|---|
| Make & model | Detroit Diesel series 50 DDEC III |
| Type | Inline – 4 cycle |
| Bore and Stroke | 5.12" x 6.30"[130 x 160] |
| Displacement | 518 in3 ..... 8.5 L |
| Derated @ 2100 RPM | 250 hp ..... 186.5 kW |
| Cylinders | 6 |
| Cooling | Water and air to air intercooled |
| Air Intake | Donaldson 2-stage dry-type with service gauge |
| Exhaust | Catalytic purifier system and silencer |
| MSHA ventilation | 29 000 cfm..821 m³/min |

### Transmission

- Clark-Hurth 14.5 HR34000 series powershift with integrated torque converter
- Direct engine mounted
- 4 speeds in forward and reverse

### Axles

- Front and rear Clark-Hurth 16D planetary type, **Posi-Torq** differential and **Posi-Stop** 4-wheel brakes

### Drive Lines

- Extra heavy duty specifically for rough mine service

### Wheels and Tires

- Front and rear full circle, disc type demountable deep drop rims
- Tire Size front and rear 16.00-25, 24 ply mining tires

### Brakes

- **Service**: 4-wheel **Posi-Stop** spring applied hydraulic released fully enclosed, liquid force cooled, multi-disc at each wheel end
- **Emergency/Parking**: same (**Posi-Stop**)
- Accumulator back-up & automatic brake applicator

### Steering

- Articulated hydraulic power steering
- Monostick control
- Turning angle: 84° (42° each way)

### Oscillation

- Center oscillation ±10° for 20° with heavy duty large size roller bearing guaranteeing minimum maintenance; positive 4-wheel ground contact and traction on uneven terrain

### Frames

- Heavy duty specifically for mining application
- Lateral articulation for steering
- Vertical oscillation: mid-shift
- Pins made from high tensile alloy steel
- Pins are located in replaceable anchor bushings

### Dump Body

- Made from abrasion resistant high tensile strength alloy steel, substantially lengthens service life

### Operator's Compartment

- Extra large — ergonomics kept in mind
- Fully adjustable suspension seat with armrests and retractable seat belt
- Shock mounted compartment floor for maximum operator's comfort and safety
- Operator side seated for excellent visibility and bi-directional operation

### Hydraulic system

Double acting cylinders with hard chrome plated stems:

| | | |
|---|---|---|
| Steering (2) | 4" diameter | [101.6] |
| Dumping (2) | 6" diameter | [152.4] |

**Pumps** (heavy duty gear type):

| | | |
|---|---|---|
| Dump & steering | 49.5 GPM | 187 L/min |
| Brake control | 10.0 GPM | 38 L/min |
| Brake cooling | 5.0 GPM | 19 L/min |

**Filters**:

| | |
|---|---|
| Suction | 125 mesh |
| Return | 10 micron |
| High pressure | 10 micron |

Tank Capacities

| | | |
|---|---|---|
| Fuel | 83 US gal | 314 L |
| Hydraulic | 83 US gal | 314 L |
| Brake cooling | 25 US gal | 95 L |

### Electrics

- 24 volt negative ground
- 24 volt, 75 amp alternator with integrated regulator
- Two heavy duty batteries
- 4 front and 2 rear lights
- Main electric cut-off switch
- Heat resistant and sealed electric wire harness
- Sealed instrument panel box with multi-pole Amphenol connectors
- Sealed junction box
- Semi-automatic circuit breakers
- Back-up alarm

### Standard Features

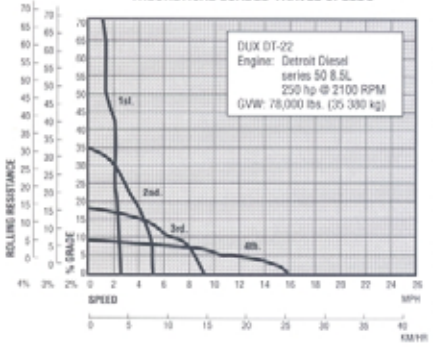
- Engine hour/service meter
- Engine oil pressure gauge
- Engine temperature gauge
- Engine low-lube and high temp alarm
- Remote engine oil drain
- Fuel/water separator
- Dry type two stage air intake cleaner with service indicator
- Exhaust purifier system and silencer
- Converter oil cooler
- Converter temp gauge
- Raised axle vents (2)
- Hydraulic pressure test ports
- Brake release for towing
- Halogen working lights
- Start protection
- Voltmeter
- Articulation safety bar
- Dump body safety bar
- Skid pan below transmission
- Mid-shift bulk head for hydraulic hoses
- Stainless steel tank level gauge plugs
- Modular design
- Detroit electronic control
- Clark-Hurth power train
- **Posi-Stop** 4-wheel brake systems meets and exceeds Can/CSA -M424.2-M90 Mine safety standard

### Options

- Caterpillar or Deutz engines
- Wiggins fast fill system for fuel and hydraulic oil
- Ansul fire protection (manual and automatic quick fire check)
- MSHA canopy or noise insulated and air conditioned safety cab
- Load measuring device
- Expanded computerized electronic monitoring system
- Remote control
- Centralized lubrication — manual or automatic
- Split dump body with location bolts to lower machine through small mine shaft
- Different sized dump bodies for ore or backfill
- Dux model TD-20 Teledump Truck. Dumping height 10'-0" [3.05 m]
- Tailgate

- OTHER OPTIONS ON REQUEST

**GRADABILITY/SPEED**
**THEORETICAL LOADED TRAVEL SPEEDS**




NOTES: Speeds and gradeability shown on the above diagram are based on variables and are offered as a guide of performance and not as a guaranteed statement.

* Specifications subject to change without notice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