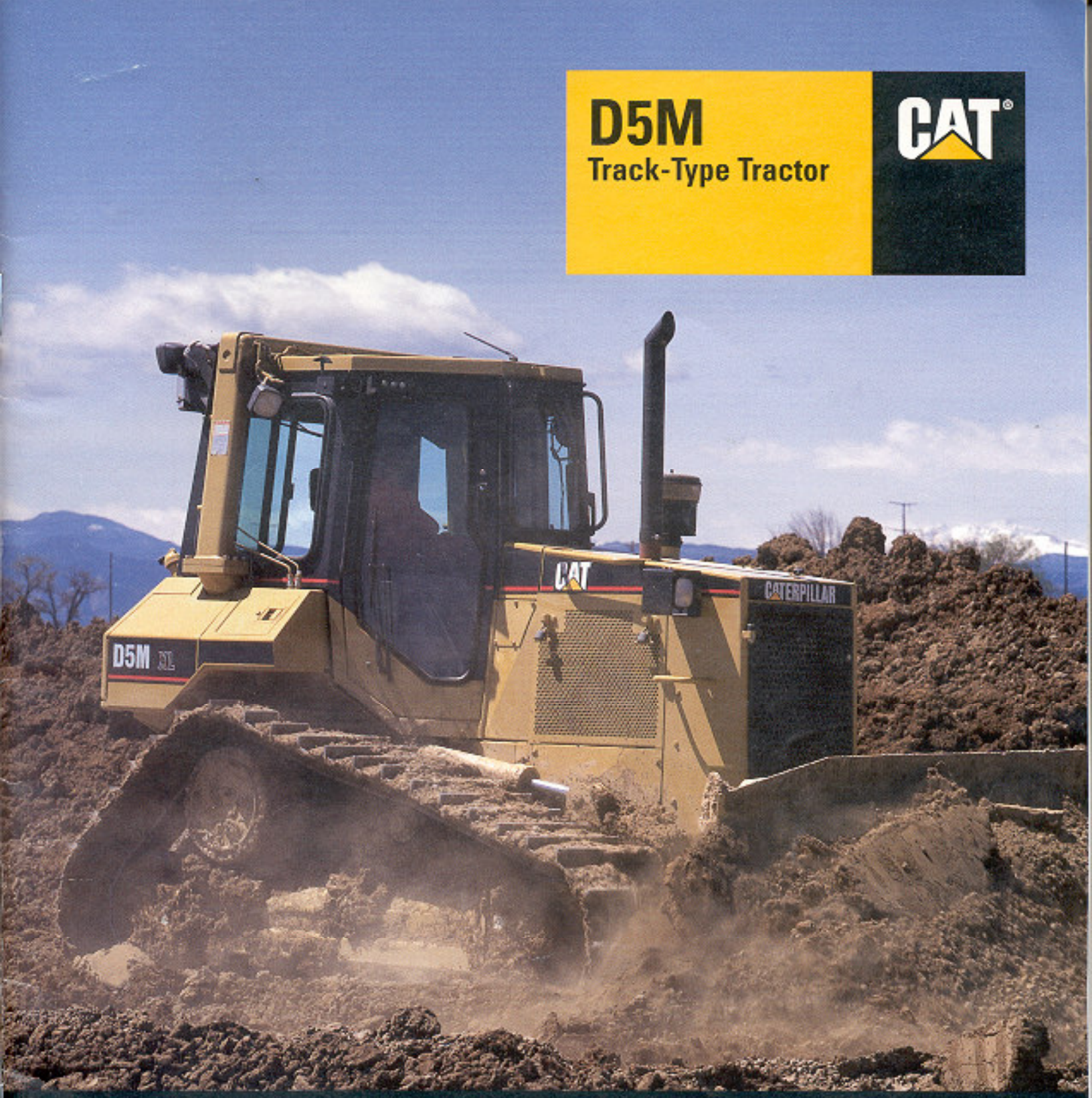
D5M
Track-Type Tractor



XL & LGP

Cat® 3116 turbocharged diesel engine		
Power shift		
Gross horsepower	90 kW	121 HP
Flywheel horsepower	82 kW	110 HP

Operating weight		
XL arrangement		
Power shift	12 250 kg	27,006 lb
LGP arrangement		
Power shift	13 100 kg	28,880 lb
Blade capacity		
XL arrangement	2.59 m^3	3.37 yd^3
LGP arrangement	2.03 m^3	2.64 yd^3

D5M Track-Type Tractor

An outstanding choice for productivity and versatility.

Power Train
Perfectly matched power train. From the powerful and fuel efficient *3116 DIT engine to the durable power shift transmission,* all Caterpillar® components work together to deliver responsive power when you need it.
pg. 4-5

Undercarriage
The elevated sprocket moves the final drives above the work area, isolating them from ground impacts for long power train component life. Choice of XL and LGP configuration as well as various shoe options to best match the application. **pg. 6-7**

Structure
Mainframe is designed and built for durability by using the latest technology in engineering and manufacturing. It provides solid support and perfect alignment for major components. **pg. 7**

Engineered to exceed your most demanding goals. *The D5M is the logical evolution of six former D4 and D5 models. It combines power and versatility with proven components to deliver the reliability and durability you need in tough and varied working conditions.*

Operator Station

Ergonomically designed for maximum productivity and comfort. Controls are intuitive, low-effort and easy to reach, viewing area is excellent, instrument panel is easy to read and informative, sound level is reduced and storage space has been increased.
pg. 8-9

Optional Finger Tip Control

✔ *Effortless and precise one-hand electronic steering and transmission control* with auto shift and auto-kickdown features to increase operator efficiency and reduce operator fatigue.
pg. 10

Work Tools

✔ *Variable pitch Power Angle Tilt (VPAT) blade*, rippers and other options allow you to customize the D5M to match specific applications. **pg. 11**

Serviceability

Major modular components are designed for excellent serviceability, and allow fast in-field component exchange. **pg. 12**

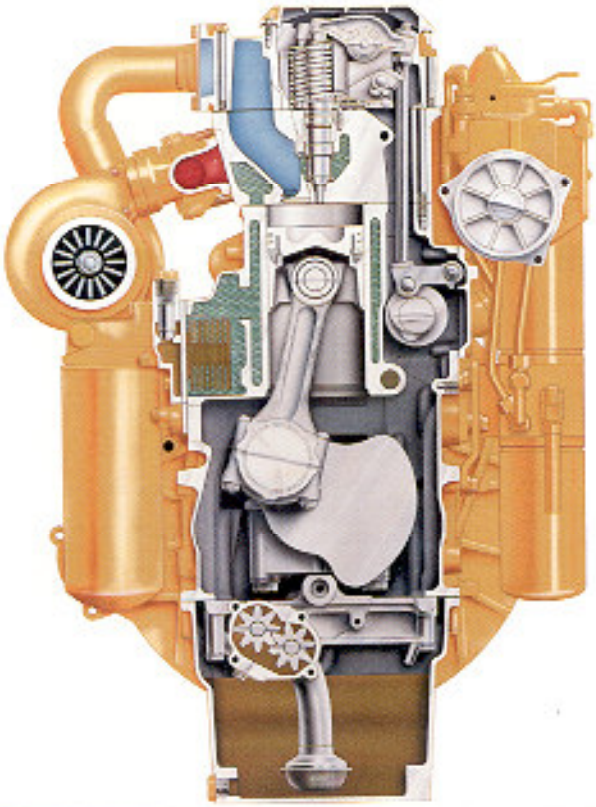
Customer Support

The best parts availability and the best service capability. **pg. 13**

✔ *New feature*

Power Train

The Caterpillar 3116 engine, optimally matched with torque converter and power shift transmission, provides an excellent balance between efficiency and power.



Cat 3116 Engine. Caterpillar 3116 engine performs at full-rated net power of 82 kW (110 hp) at 2100 rpm. High torque rise of 36% occurs at 1400 rpm. High horsepower, combined with high torque rise, give the D5M the ability to doze through tough material. Plus, this engine meets all the latest emission regulations around the world.

Turbocharging improves response and performance at low to medium engine speeds.

Direct Unit Injection Fuel System eliminates external high pressure fuel lines and provides excellent control of injection timing with individually metered, high-pressure, direct-injection of fuel. Result is improved engine response and reliability plus low fuel consumption and emissions.

Resilient engine mounting for quieter operation and less vibration.

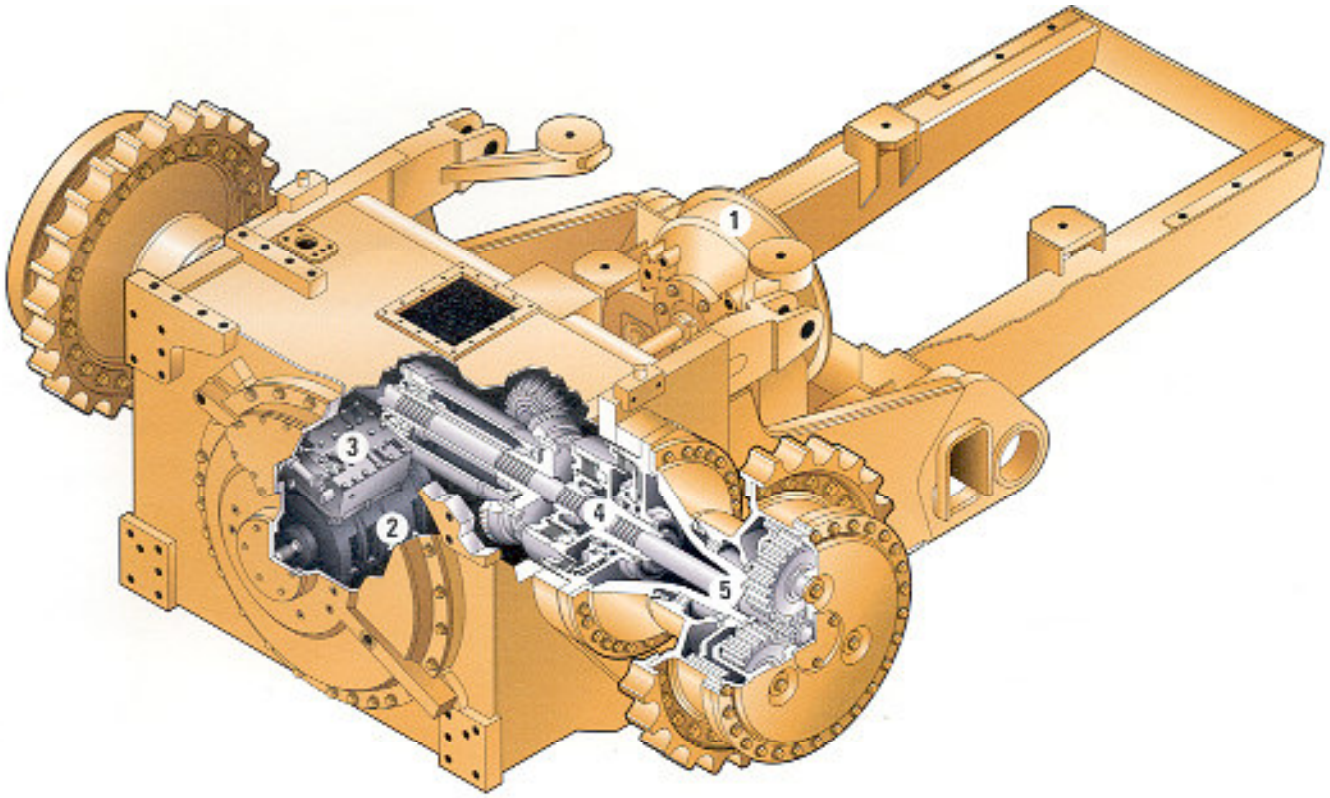
Long-life design

- One-piece, stress relieved, cast iron cylinder block for increased rigidity.
- High-strength, one-piece cylinder head with replaceable stainless steel intake valve seat and nickel alloy exhaust valve seat.
- Optimized camshaft location, short pushrods and roller followers to reduce flexing.
- Full-length, water-cooled cylinders for maximum heat transfer.
- Large engine oil cooler to maintain optimum engine oil temperature.
- Main and rod bearing surfaces increased for better wear life.
- Two piece articulated piston with forged steel crown for added durability.
- Low-mounted oil pump for quick start-up lubrication.

Easy maintenance. The engine can be rebuilt for a second life. Caterpillar remanufactured parts are available to economically replace many components. Some innovative maintenance features of the 3116 engine:

- Parent-metal cylinder block can be rebored twice and dry-sleeved.
- Connecting rods can be removed through the tops of the cylinders.
- Camshaft followers and pushrods can be easily replaced without removing the camshaft.
- Water pump can be serviced as a unit or rebuilt.

Improved multiple row modular radiator efficiently cools engine for optimum engine performance in tough environments and applications.



Drive train components are matched and balanced to deliver exceptional performance and durability.

1 **Torque converter** responds to changing load conditions by providing torque multiplication for increased drawbar pull while protecting the drive train from shock loads.

2 **Power shift transmission.** Proven planetary design delivers fast, smooth speed changes while distributing loads over multiple gears for long life. Perimeter-mounted clutches provide superior heat dissipation and a large contact area for long service life.

3 **Electronic Clutch Pressure Control** for smooth and automatic shifting features for Finger Tip Control machines.

4 **Clutches and brakes.** Oil-cooled, hydraulically actuated multiple-disc clutches and brakes for smooth, precise turns.

5 **Final drives.** Precision, high load capacity gears and bearings give long-lasting performance and durability.

Undercarriage

The Caterpillar elevated sprocket undercarriage arrangements are designed for better balance, performance and component life.

Final drives and associated power train components are raised above the work area, isolating them from ground-induced impact loads, as well as implement and roller frame alignment loads, extending power train component life.

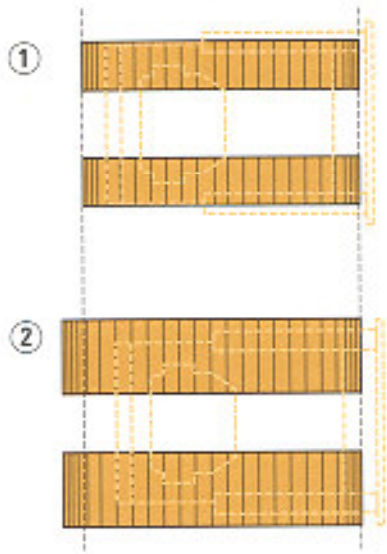
Sprocket position keeps sprocket teeth, bushings and final drives away from the abrasive materials and moisture, resulting in longer final drive gear and seal life.

High flange improved track rollers (optional) combined with center or full length roller guard attachments greatly improve track guiding for demanding side slope conditions.

Track configurations

1 **XL (Extra Long) arrangement** features forward idler position providing additional track on ground for finish grading applications. Wide gauge for enhanced side slope stability.

2 **LGP (Low Ground Pressure) undercarriage** is especially designed to work in soft and spongy conditions. Wide track shoes, long track frame and wider gauge increase track contact area, reduce ground pressure for improved stability and provide excellent flotation in swampy conditions.



Track options

All tracks are sealed and lubricated.

- **Heavy Duty (HD) track** (standard) is best suited for operation in higher impact conditions.
- **Rotating Bushing Track (RBT)** (optional) is especially designed for operation in higher-abrasion conditions with only low to moderate impacts. RBT features bushings which rotate when in contact with the sprocket. As a consequence, the relative motion between the bushings and the sprocket teeth is virtually eliminated. The minimal wear that does occur is evenly distributed around the bushings. Therefore, no bushing turn is required, and sprocket segment wear is dramatically reduced. In effect, Rotating Bushing Track does an ongoing bushing turn as the machine works.

Shoe options
Caterpillar single-grouser shoes are made from heat-treated, rolled steel for added strength.

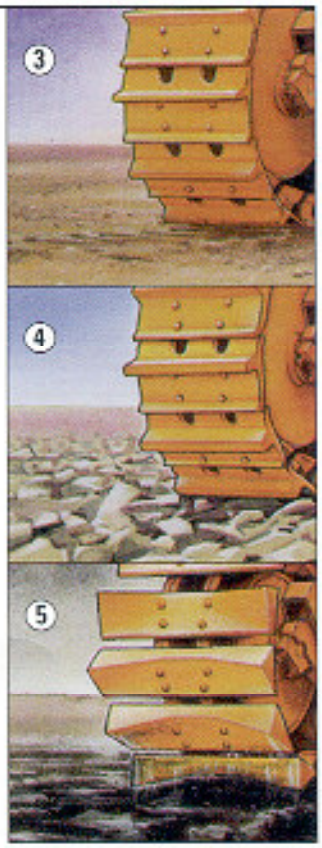
3 **Moderate Service (MS) shoes** (standard) are for use in only moderate-impact and medium-abrasive conditions. They provide good penetration and offer resistance to wear and bending.

4 **Extreme Service (ES) shoes** (optional) feature more hardened wear material in the grouser and plate areas for use in higher-impact conditions.

5 **Self-cleaning shoes** (optional with LGP arrangement) are cast steel and are designed to reduce material buildup for better traction, especially in spongy applications.

Shoe width

- **Standard width shoes** — 560 mm (22") on XL arrangements, 760 mm (30") on LGP arrangements — provide excellent flotation in most applications.
- **Narrower shoes** — 510 mm (20") on XL arrangements, 610 mm (24") on LGP arrangements — are for use in dryer conditions.



Structure

Engineered and manufactured to provide durability in the most demanding work.

High strength steel mainframe. The D5M mainframe absorbs high impact shock loads and twisting forces.

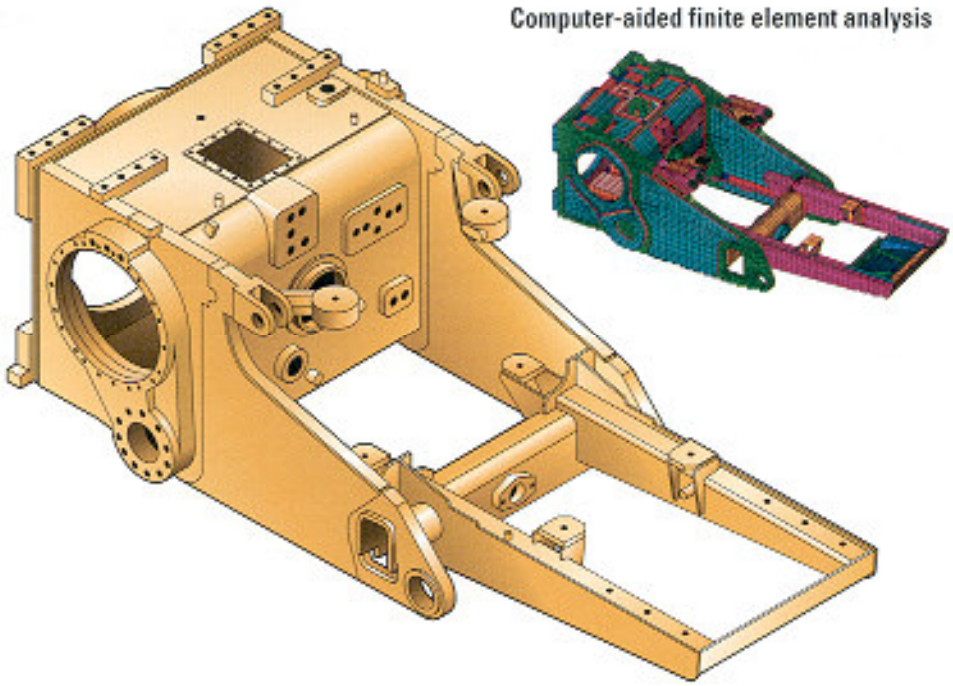
Computer-aided finite element analysis used to evaluate and ensure high durability.

Full scale structural testing analysis to verify and ensure integrity of the mainframe.

Robotic welding provides deep penetration and consistency for long life.

Precision top level machining for perfect alignment of bores and surfaces.

Pivot shaft and pinned equalizer bar for maintaining track roller frame alignment.



Computer-aided finite element analysis

Operator Station

Ergonomically designed for operator's maximum comfort and productivity.

1 **Operator's station** provides excellent viewing area to blade and rear of machine. Optional isolation-mounted cab has reduced vibration and operator sound level below 79 dB(A) for comfortable operation. Standard cab is radio-ready with mounting brackets, AM/FM antenna and speakers.

2 **The Caterpillar Contour Series Seat** is ergonomically designed and fully adjustable for maximum comfort. The seat cushion reduces the pressure on the lower back and thighs while allowing unrestricted arm and leg movement. (Cloth contour series seat is standard with cab; vinyl contour series seat is available for ROPS canopy.)

Standard clutch and brake lever steering machines.

3 **Standard clutch and brake lever steering** offers traditional, easy-to-reach, low-effort controls.

4 **Standard instrument panel** for the clutch and brake lever steering machine is the traditional Electronic Monitoring System (EMS) with standard gauge group.

Optional Finger Tip Control (FTC) equipped machines.

5 **One-hand steering and transmission control** is intuitive and effortless, providing maximum comfort and productivity.

6 **Instrument panel** for the Finger Tip Control (FTC) equipped machines is the new Caterpillar Monitoring System (CMS) which includes scroll through digital display for gear selection, engine speed, hour meter, diagnostic codes and other vital information. Also has gauge group displaying fuel level, coolant, power train oil and hydraulic oil temperatures. This system also provides instant feedback on machine systems with three levels of operator alert.

Other improvements include:

- Storage for lunch box, cup and insulated bottle.
- Adjustable armrests with kneepads; electric adjustment on FTC console.
- Dash-mounted heater for OROPS attachment.
- Storage box to left of operator.
- Vinyl/floor covers enlarged to cover the complete floor area and under seat.

Finger Tip Control

Combines steering, machine direction and gear selection into a control system which can be operated with one hand, for enhanced operator comfort and increased productivity.

Finger Tip Controls are clustered for easy, one-handed operation to the operator's left. They control steering, machine direction and gear selection.

1 Electronic Clutch and Brake steering system allows the operator to work more precisely in close areas, around structures, obstacles, grade stakes and other machines. It consists of two small levers which send signals that control the steering valve.

- Levers require less than 3 pounds of pull to actuate.
- Steering is accomplished in much the same way as with traditional clutch and brake arrangements but with less time and effort.

Finger Tip Control module can be manually adjusted up and down and fore/aft for maximum comfort. Optional electrical vertical adjustment is available for added convenience.

2 Machine direction is controlled by a pivoting knob which can be actuated by the thumb of the left hand. Rotating the knob up shifts the machine transmission to forward. Rotating the knob down reverses the machine. The middle setting puts the machine transmission in neutral.

3 Gear selection is made by two buttons to the right of the machine direction knob. The top (up-shift) button shifts the machine transmission to the next higher gear while the bottom (down-shift) button shifts to the next lower gear.

Auto shift and auto-kickdown in Finger Tip Control machines include the following features.

- Auto shift allows the operator to preselect a forward and reverse gear for frequent directional changes. The settings include first-forward to second-reverse (1F — 2R), and second-forward to second-reverse (2F • • 2R).
- Auto-kickdown automatically downshifts when the machine detects a significant increase in load.
- Depending on your application, choose from auto shift and auto-kickdown, auto shift only, auto-kickdown only, and manual mode.

4 Parking brake switch electronically locks Electronic Clutch and Brake steering.

Work Tools

Caterpillar work tools include tailored dozers, rippers and winch.

Variable Pitch Power Angle and Tilt (VPAT) Blade. Manually adjustable blade pitch for optimum performance.

- Blade pitch is changed easily by adjusting four bolts and shims.
- Top corners of blade are clipped for better operator visibility. (XL arrangement only).
- Full hydraulic control of lift, dig, angle and tilt functions.
- C-frame is solidly pinned to the main frame for good blade control and elimination of blade motion due to track oscillation.
- Lubrication points located at all pin joints reduce wear.
- C-frame to tractor joint is sealed and lubricated with remote lube for extended service life and quiet operation.
- Angle cylinder bypass valve and additional hardware help reduce stress.
- Line guards help protect angle cylinder lines from sharp objects and abrasive materials.

VPAT blade positions.

1 54° position offers maximum blade loads. Also, is the most aggresive position when dozing. Best for production dozing, carry, backfill, land clearing.

2/3 57.5° and 60° positions. Intermediate positions to better match all requirements. The higher the angle, the lower the material blade retention. Best for general dozing.

4 62° position. This higher angle makes an unrutted surface. Best for finish grading.

Rippers

- Rugged radial design for high production ripping.
- Socket beam design means easy servicing.
- Multi-shank ripper includes three shanks.

Winches — PACCAR PA55

- Standard speed or slow speed with freespool
- Single lever control actuates both clutch and brake functions to improve operator efficiency. A separate lever is used for freespool operation.
- Input clutches on PTO shaft reduce engine horsepower losses, provide fuel efficiency — economy.
- Clutch engagement and brake release are automatically synchronized for smooth operation.
- Winch components can be serviced with winch mounted on tractor.

Drawbar

- Up sized.
- Larger jaw opening and pin diameter.
- Able to tow a wider range of implements.

Serviceability

Modular design concept moves Cat® elevated sprocket tractors a generation ahead in simplified service and repair.

Modular design of power train components permits fast removal and installation.

Pre-testing modular components before installation or after repair assures high quality.

Grouped service points and excellent access to service areas make routine checks fast and convenient.

Quick, easy service access and inspection of daily maintenance items.

Computerized Caterpillar Monitoring System analyzes critical temperatures and pressure — gives visual and audible warning for fast troubleshooting.

Electrical system diagnostic connector enables fast troubleshooting of starting and charging problems.

Modular cooling system, with individual core assemblies, provides improved serviceability, reduced replacement costs and improved durability.

Caterpillar Remanufactured dozer hydraulic cylinders and rods, starters, alternators, cylinder heads, short blocks, engines, oil pumps and final drive hubs are available for fast, economical repairs.

Ecology drains provide an environmentally safer method to drain fluids. They are included on the radiator, hydraulic tank and major power train components.

Complete Customer Support

Cat dealer services help you operate longer with lower costs.

Your Cat dealer offers a wide range of services that can be set up under a Customer Support Agreement when you purchase your equipment. The dealer will help you choose a plan that can cover everything from machine and attachment selection to replacement, to help you get the best return on your investment.

Selection. Make detailed comparisons of the machines you are considering before you buy. How long do components last? What is the cost of preventative maintenance? What is the true cost of lost production? Your Cat dealer can give you precise answers to these questions.

Purchase. Look past initial price. Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

Operation. Improving operating techniques can boost your profits. Your Cat dealer has training videotapes, literature and other ideas to help you increase productivity.

Maintenance. More and more equipment buyers are planning for effective maintenance before buying equipment. Choose from your dealer's wide range of maintenance services at the time you purchase your machine. Repair option programs, such as Customer Track Service, guarantee the cost of repairs up front. Diagnostic programs such as Scheduled Oil Sampling and Technical Analysis help you avoid unscheduled repairs.

Replacement. Repair, rebuild or replace? Your Cat dealer can help you evaluate the cost involved so you can make the right choice.

Product support. You will find nearly all parts at our dealer parts counter. Cat dealers utilize a world-wide computer network to find in-stock parts to minimize machine down time. Save money with remanufactured parts. You receive the same warranty and reliability as new products at cost savings of 40 to 70 percent.

Engine

Four-stroke cycle, six cylinder 3116 turbocharged diesel engine.

Ratings at 2100 RPM*	kW	HP
Gross power	90	121
Net power	82	110

The following ratings apply at 2100 RPM when tested under the specific standard conditions for the specified standard:

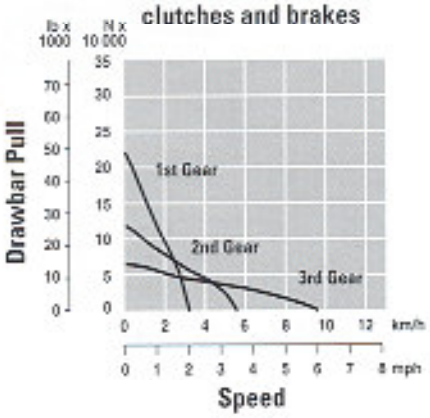
NET POWER	kW	HP	PS
Caterpillar	82	110	—
ISO 9249	82	110	—
EEC 80/1269	82	110	—
SAE J1349	82	110	—
DIN 70020	—	—	114

Dimensions		
Bore	105 mm	4.13 in
Stroke	127 mm	5.0 in
Displacement	6.6 liters	403 cu in

***Power rating conditions**

- based on standard air conditions of 25°C (77°F) and 99 kPA (29.32 in Hg) dry barometer
- used 35° API gravity fuel having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 30°C (86°F) [ref. a fuel density of 838.9 g/L (7.001 lb/U.S. gal)]
- net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, muffler and alternator
- no derating required up to 2300 m (7500 ft) altitude

Power shift with steering clutches and brakes



Features

- direct injection fuel system with individual adjustment-free unit injectors
- 3-ring forged steel crown pistons with aluminum skirts.
- heat resistant sil-chrome steel intake and stellite-faced exhaust valves
- forged steel connecting rods
- one-piece cylinder head designed with cast intake manifold
- cast cylinder block with oil cooler cavity cast into block
- induction-hardened, forged crankshaft that is dynamically balanced
- direct electric 24-volt starting and charging system
- two 12-volt, 100 amp-hour, 750 CCA, maintenance-free batteries
- 70-amp alternator
- plate-type, water-cooled oil cooler
- vertical-flow, steel-fin, tube-type radiator
- dry-type, radial-seal air cleaner with primary and secondary elements

Transmission

Three-speed planetary power shift, remotely mounted from engine.

Speeds with power shift transmission approximate

		km/h	MPH
Forward	1	3.27	2.03
	2	5.81	3.61
	3	9.93	6.17
Reverse	1	4.01	2.49
	2	7.09	4.41
	3	12.06	7.49

Weight (approximate)

Shipping weight

Includes VPAT blade, three-valve hydraulic control, lubricants, coolant, ROPS canopy, track end guiding guards, rigid drawbar, forward warning horn, precleaner, 5% fuel, decelerator and standard shoes.

	XL		LGP	
Power shift	12 000 kg	26,455 lb	12 850 kg	28,329 lb

Operating weight

Includes above plus operator and full fuel tank.

	XL		LGP	
Power shift	12 250 kg	27,006 lb	13 100 kg	28,880 lb

Final Drive

Single reduction final drives.

Features

- isolated from ground-impact and blade-induced loads
- modular design reduces removal and installation time
- segmented sprocket simplifies replacement

Hydraulic Controls

Load-sensing, variable displacement piston pump.

Pump output at 2200 pump RPM (2100 engine RPM) and maximum pressure		
	95.0 liters/min	25 gpm

Relief valve setting		
XL and LGP	20 685 kPa	3000 psi

Control positions

- lift cylinders — raise, hold, lower, float
- tilt cylinder — left, right, hold
- angle cylinders — left, right, hold
- ripper cylinder — raise, hold, lower

Steering and Braking

Choice of Lever Steering or Finger Tip Control System meets SAE J1026 APR90.

Features — Lever steering

- hand-lever steering/braking controls
- oil-cooled, hydraulically actuated multiple-disc steering clutches and brakes
- single brake pedal brakes both tracks without disengaging steering clutches
- mechanically actuated, spring applied parking brake

Features — Finger Tip Control

- Finger Tip Control of transmission and steering clutches and brakes
- oil-cooled, electro-hydraulically actuated multiple-disc steering clutches and brakes
- single brake pedal brakes both tracks without disengaging steering clutches
- electro-hydraulically actuated, spring applied parking brake

Cab

Caterpillar cab and Rollover Protective Structure (ROPS). ROPS canopy required in U.S.A.

Features

- meets OSHA and MSHA limits for operator and sound exposure with doors and windows closed (according to ANSI/SAE J1166 JUL87)
- ROPS meets the following criteria:
  - SAE J395
  - SAE J1040 APR88
  - ISO 3471-1 1986
  - ISO 3471-1 1994
- also meets the following criteria for Falling Objects Protective Structure:
  - SAE J231 JAN81
  - ISO 3449 1992 Level II

Note

When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ANSI/SAE J1166 MAY90, meets OSHA and MSHA requirements for operator sound exposure limits in effect at time of manufacture. The operator sound pressure level is 77 dB(A) when measured per ISO 6394 and 79 dB(A) when measured per ISO 6396.

Pivot Shaft and Equalizer Bar

Pivot shaft and pinned equalizer bar oscillation system.

Features

- pivot shaft transmits ground impact loads directly to main frame
- protects power train components
- pinned equalizer bar keeps track roller frame in proper alignment
- system provides smooth machine underside
- prevents collection of mud and debris

Heavy Duty Sealed and Lubricated Track

Heavy duty design for superior track life.

Features

- improved sealability and link rail wear life
- wider bushing strap provides improved bushing retention and resistance to bore stretching and cracking
- wider pin boss and longer pin improves pin-to-link retention
- more rail material increases link and roller system wear life
- extends undercarriage maintenance intervals
- reduces overall undercarriage operating costs
- Heavy Duty track and Moderate Service shoes standard on both XL and LGP arrangements

Service Refill Capacities

	Liters	Gallons
Fuel tank	218	57.6
Crankcase and filter	26	6.9
Transmission, bevel gear and steering clutch (includes torque converter or oil clutch)	105	27.7
Final drive (each side)	6	1.6
Cooling system	46	12
Implement hydraulic system (includes tank)	67	17.7
Hydraulic tank	32	8.5
Recoil spring compartments (each side)	20	5.3

Winch

Rugged PA55 winch with freespool.*

Features

- hydraulically actuated multiple-disc wet clutch and brake
- single lever control of clutch and brake functions
- separate lever for freespool operation
- standard or slow speed

Weight	1276 kg	2814 lb
Winch length	1120 mm	44.1"
Winch case width	975 mm	38.4"
Flange diameter	504 mm	19.8"
Drum width	330 mm	13"
Drum diameter	254 mm	10"
Cable size:		
Recommended	16 mm	0.63"
Optional	19 mm	0.75"
Drum capacity:		
Recommended cable	177 m	580'
Optional cable	122 m	400'
Oil capacity	74 L	19.6 gal
Cable/ferrule sizes (OD x length) 54 mm X 65 mm	2.13" X 2.56"	

*PA55 winch is manufactured for Caterpillar by PACCAR Inc.

Track Roller Frame

Tubular design resists torsional loads.

Features

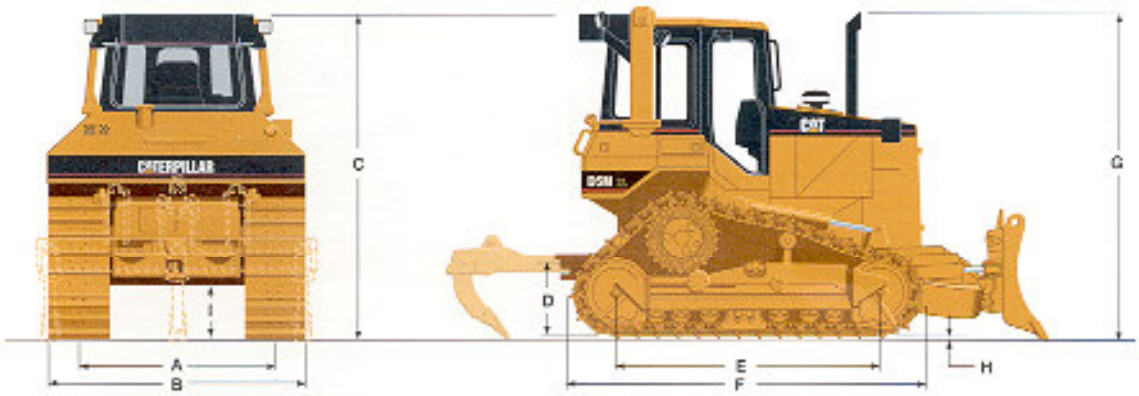
- Lifetime Lubricated rollers and idlers are directly mounted to roller frame
- oscillating roller frames attach to tractor by pivot shaft and pinned equalizer bar
- large pivot bushings operate in an oil reservoir
- equalizer bar saddle connection is low-friction bushing with remote lube line
- recoil system fully sealed and lubricated

	XL		LGP	
Oscillation:				
front and rear idlers at gauge line (total)	218 mm	8.6"	280 mm	11.0"
at pivot shaft	±2.6°		±3.1°	
Number of rollers (each side)	7		7	
Number of shoes (each side)	41		44	
Width of:				
standard shoes	560 mm	22"	760 mm	30"
optional shoes	510 mm	20"	—	
optional shoes	—		610 mm	24"
self-cleaning shoes	—		770 mm	30"
Length of track on ground	2388 mm	94"	2604 mm	103"
Track gauge	1770 mm	70"	2000 mm	79"
Ground contact area with:				
510 mm (20") shoes	2.44 m^2	3775 in^2	—	
560 mm (22") shoes	2.67 m^2	4146 in^2	—	
610 mm (24") shoes	—		3.18 m^2	4924 in^2
760 mm (30") shoes	—		3.96 m^2	6135 in^2
self cleaning 770 mm (30") shoes	—		4.01 m^2	6216 in^2
Ground Pressure*:				
510 mm (20") shoes	0.50 kg/cm^2	7.05 psi	—	
560 mm (22") shoes (std)	0.46 kg/cm^2	6.51 psi	—	
610 mm (24") shoes	—		0.41 kg/cm^2	5.76 psi
760 mm (30") shoes (std)	—		0.33 kg/cm^2	4.70 psi
self cleaning 770 mm (30") shoes	—		0.33 kg/cm^2	4.77 psi

*Ground pressure is calculated for machine equipped with Heavy Duty (HD) tracks, and Moderate Service (MS) Shoes.

Dimensions

(approximate)



Tractor Dimensions

	XL		LGP	
A. Track gauge	1770 mm	70"	2000 mm	79"
B. Width of tractor, with standard shoes and the following blades:				
Without blade	2330 mm	92"	2760 mm	109"
With VPAT blade, angled 25°	2797 mm	110"	3106 mm	122"
With special narrower VPAT blade, angled 25°	2615 mm	103"	3066 mm*	120.7"
C. Machine height from tip of grouser with the following equipment:				
ROPS canopy	2999 mm	118"	3043 mm	120"
ROPS cab	3002 mm	118"	3046 mm	120"
D. Drawbar height (center of clevis) from				
ground face of shoe	486 mm	19"	537 mm	21"
E. Length of track on ground	2388 mm	94"	2604 mm	103"
F. Length of basic tractor (with drawbar)	3544 mm	140"	3720 mm	146"
With the following attachments, add to basic tractor length:				
Ripper	898 mm	35"	898 mm	35"
PA55 winch	381 mm	15"	381 mm	15"
VPAT blade, straight	1011 mm	39"	1402 mm	55"
VPAT blade, angled 25°	5086 mm	200"	5557 mm	219"
Special narrower VPAT blade, angled 25°	4938 mm	194"	5539 mm	218"
G. Height over stack from tip of grouser	3082 mm	121"	3126 mm	123"
H. Height of grouser	55 mm	2.17"	47 mm	1.85"
I. Ground clearance from ground face of shoe (per SAE J1234)	385.5 mm	15.2"	437.5 mm	17.2"

Bulldozer Specifications

	(XL) 5VPAT Blade		(LGP) 5VPAT Blade	
Blade capacity (SAE J1265)	2.59 m³	3.37 yd³	2.03 m³	2.64 yd³
Blade width (over end bits)*	3077 mm	121"	3360 mm	132"
Blade height	1109 mm	43.7"	910 mm	35.8"
Digging depth	441 mm	17.4"	491 mm	19.3"
Ground clearance	916 mm	36.1"	923 mm	36.3"
Maximum tilt	460 mm	18.1"	491 mm	19.3"
Weight (without hyd. controls)	1932 kg	4259 lb	2000 kg	4409 lb
Total operating weight (with blade)	11 700 kg	25,800 lb	12 600 kg	27,800 lb

*Narrower 5VPAT blade is available for applications with 3000 mm (118") transportation width restriction. Contact Custom Products.

Ripper

Multi-shank design with three curved shanks to match job conditions.

	XL		LGP	
Beam width	1951 mm	76.8"	1951 mm	76.8"
Cross section	165 x 211 mm	6.5 x 8.3"	165 x 211 mm	6.5 x 8.3"
Ground clearance under beam (raised)	895 mm	35.2"	949 mm	37.4"
(Under tip at full raise)	482 mm	19.0"	536 mm	21.1"
Number of pockets (teeth)	3		3	
Max. penetration	350 mm	13.8"	298 mm	11.7"
Max. pryout force	191 260 N	42,165 lb	192 600 N	42,461 lb
Max. penetration force				
(VPAT blade equipped — power shift)	40 100 N	8840 lb	46 690 N	10,293 lb
Weight				
With three teeth	758 kg	1671 lb	758 kg	1671 lb
Each tooth	34 kg	75 lb	34 kg	75 lb

Note: Straight shanks are also available.

Standard Equipment

Standard and optional equipment may vary. Consult your Caterpillar dealer for specifics.

- Air cleaner, dry-type, with precleaner
- Air cleaner service indicator
- Air intake heater
- Alternator, 70-amp
- Armrest, electric adjustable (Finger Tip Control models only)
- Automatic shifting features (Finger Tip Control models)
  - Auto-kickdown (auto-downshift)
  - Auto shift (2R-1F, 2R-2F)
- Back up alarm
- Batteries (2), 12-volt each, 24-volt total
- Blower fan
- Brake system, service, parking and emergency
- Canopy, ROPS (regional)
- Computerized Caterpillar Monitoring System on Finger Tip Control models. Electronic monitoring system on Lever Steering models
- Decelerator
- Diagnostic connector (Finger Tip Control models)
- Drawbar, rigid
- Dual fuel filters
- Ecology drains
- Electric hour meter
- Electric starting, 24-volt direct
- Engine, 3116 turbocharged diesel
- Engine enclosures, lockable
- Extended life coolant
- Front pull device
- Fuel gauge
- Fuel priming pump
- Gauge package, temperature:
  - Coolant
  - Hydraulic oil (Finger Tip Control models)
  - Power train oil
- Guards:
  - Center section track guiding (LGP only)
  - Crankcase, normal service
  - End track guiding
  - Instrument panel (OROPS)
  - Radiator, hinged
  - Rear
- Horn
- Hydraulics, three-valve for VPAT bulldozer
- IMRM radiator
- Lifetime Lubricated rollers and idlers
- Lockable storage compartment
- Mirror, rearview
- Muffler
- Precleaner
- Seat, vinyl suspension, with adjustable armrests
- Seat belt, 76 mm (3-inch)
- Segmented sprocket
- Single key start
- Steering system:
  - Lever Steering or Finger Tip Control
- Track:
  - Adjusters, hydraulic
  - Carrier rollers
  - Heavy Duty (HD) Sealed and Lubricated Track with single grouser, Moderate Service (MS) track shoes
    - XL — 41-section, 560 mm (22")
    - LGP — 44-section, 760 mm (30")
  - Two-piece master link
- Transmission, power shift
- Vandalism protection
- Water separator

Optional Equipment

Approximate changes in operating weights.

	kg	lb
Air conditioning system	130	287
Backup alarm	2	5
Bulldozers	(see page 17 for weights)	
Cab, ROPS, sound suppressed, with heater and fabric Cat Contour Series suspended and adjustable seat	571	1256
Fan, reversible	11	24
Guards:		
Crankcase, heavy duty	63	139
Fuel tank (for ROPS cab or canopy)	70	154
Precleaner	7	16
Radiator, heavy duty, hinged grill	20	44
Rear screen:		
for ROPS cab without air conditioner	67	148
for ROPS cab with air conditioner	51	112
for ROPS canopy	55	121
Track guiding, center section only (XL)	34	75
Track roller, full length	146	321
Heater, dash mounted (for ROPS canopy)	34	75
Hydraulic controls: four-valve for VPAT bulldozer and one rear implement	216	475
Lighting system, six lights:		
For use with ROPS cab	16	35
For use with ROPS canopy	16	35
Precleaner with prescreener	5	11
Ripper, radial with 3 curved teeth**	758	1671
Each tooth	34	74
Seat, with adjustable armrest		
Air suspended Contour Series, cloth (for cab only)	41	89
Contour Series, vinyl, suspended (for cab, standard on canopy)	2	4
Low back, vinyl:	0	0
Sound suppression (for cab)	65	143
Starting aids		
Ether starting aid	3	7
Heater, engine coolant, choice of 120 or 240 volt (dealer installed)	1	2
Heavy duty batteries	42	94
Sweeps, for ROPS cab	140	309
Sweeps, for ROPS canopy	132	290
Tool kit (dealer installed)	7	16
Track, pair, Heavy Duty Sealed and Lubricated*		
XL arrangement, 41-section:		
510 mm (20") MS/HD	-170	-375
510 mm (20") ES/HD	80	176
560 mm (22") ES/HD	200	441
510 mm (20") MS/RBT	-116	-256
560 mm (22") MS/RBT	-20	-44
LGP arrangement, 44-section:		
610 mm (24") MS/HD	-220	-485
610 mm (24") MS/RBT	-250	-551
770 mm (30") MS/RBT	0	0
770 mm (30") self-cleaning/HD	348	767
Track rollers, high flange	15	33
Winch, standard or low-speed	1161	2560
Winch fairlead		
3 Roller	293	645
4 Roller	320	704

*ES = Extreme Service shoes, MS = Moderate Service shoes, HD = Heavy Duty track, RBT = Rotating Bushing Track

**Straight teeth available for ripper.

Model Comparisons

Former Model	kW	HP	Current Model
D4H	67	90	**D5M** 82 kW(110 hp)
D4H Series II Standard	71	95	
D4H Series III XL & LGP	78	105	
D5B	78	105	
D5H	89	120	
D5H Series II Standard	89	120	