

MST

5 Series



THE FUTURE CONSTRUCTOR



The new **MST 5 Series** has top performance at the core of its design. The front loader boasts the highest breakout force in its class. Furthermore, the pin height and truck approach distance values are able to meet the needs of the operator in the best way possible. The positioning of the ergonomic loader control levers ensures maximum comfort for the machine operator.

The **MST 5 Series** powerful, heavy-duty front loader can take on the most demanding tasks. The opening-claw front loader bucket

is manufactured from abrasion-resistant **HARDOX** steel, and has a volume of 1.2 m³. This provides a loading capability which is about 10% greater than that the competitors.



HIGH PRODUCTIVITY & FUEL EFFICIENCY

This newly designed backhoe series brings together increased excavation performance and delicate precision. A sturdy steel construction lets the **MST 5 Series** tackle even the toughest jobs with ease. The extendable boom optional reaches farther and deeper than ever before.



The backhoe bucket can be mounted to two different points on the backhoe arm. This allows the operator to change the pin position as needed, and work with more **power (P)** or more **speed (S)**.

ENGINE

The 100 HP PERKINS diesel engine has been specifically designed for backhoe loader applications and has a volume of 4.4 liters. Its turbocharger feature means that high torque can be achieved even at low rpm, allowing the engine to run with increased power and efficiency.

TRANSMISSION

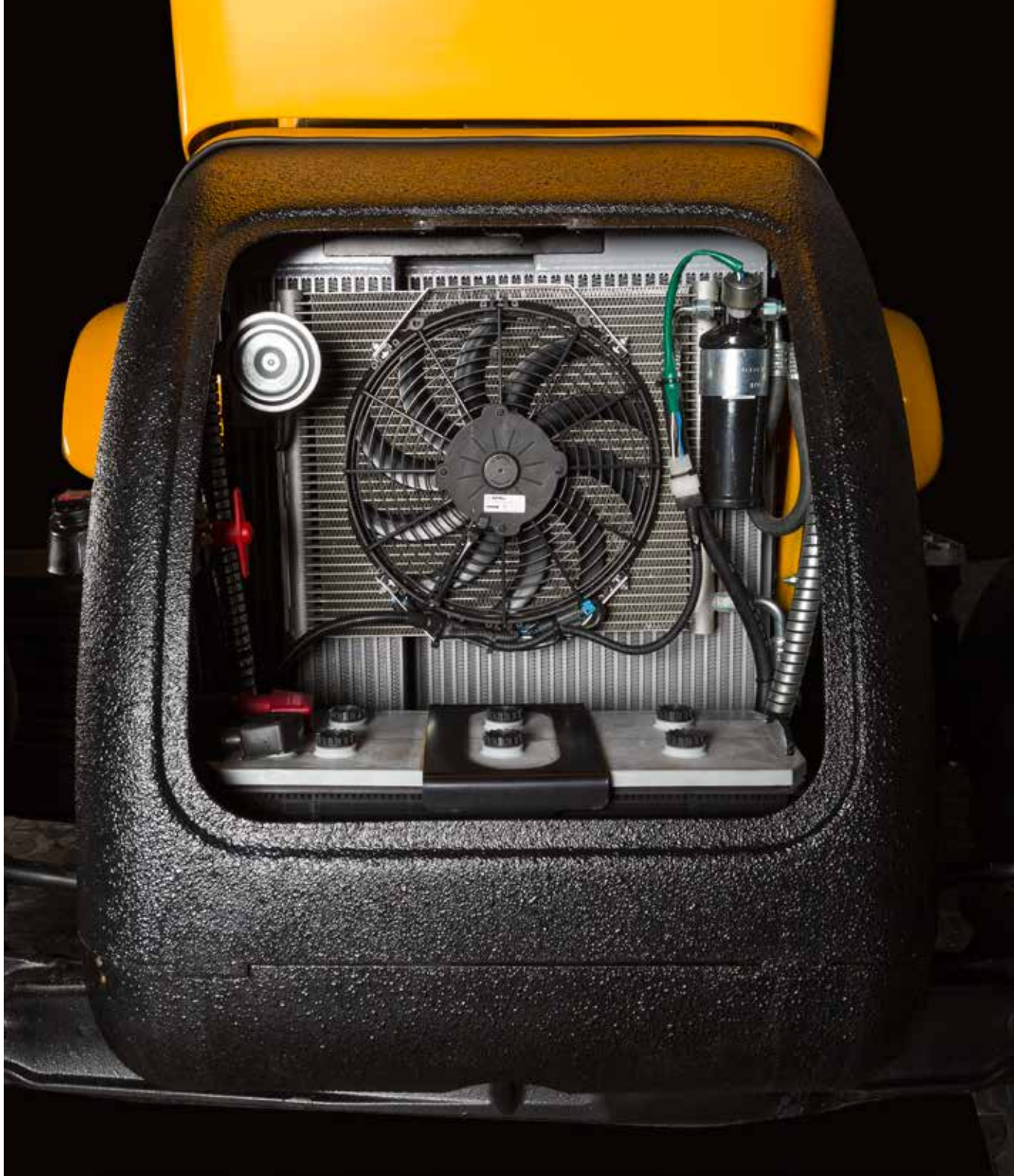
The Auto PowerShift transmission is one of the main components which provide the MST 5 Series with its incredible power. The heavy-duty gearbox includes 4 forward and 4 reverse gears, and has Autoshift capability. The transmission and engine work together in perfect harmony, which means fuel consumption is kept to a minimum.

The gearbox performs seamless automatic gear changes and offers a 4-wheel drive feature while on the job. This feature is automatically disabled in 3rd and 4th gear to maximize fuel economy.

AXELS

The heavy-duty axles used in the MST 6 PLUS Series provide high load-carrying capability and are integral to the machine's robust, sturdy construction.

The LSD (limited slip differential) on the rear axle is able to deliver different levels of torque to the left and right wheels, which reduces the risk of skidding and provides maximum traction, even on challenging worksites and slippery surfaces with this unique function not only tires' lifetime are being extended but also fuel efficiency and work cycle times are being improved.



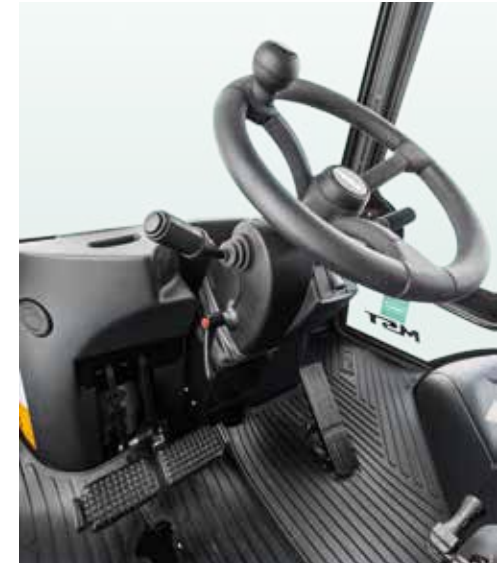




CONFORTABLE & USER FRIENDLY

The cabin designed to provide the machine operator with the best possible working environment and to allow for maximum efficiency. This class-leading cab boasts a panoramic field of vision, enhanced ergonomics and a spacious interior.

- The operator cab is ROPS and FOPS certified.
- The rear boom can be kept stable with the hydraulic boom lock.
- The rear stabilization legs feature a large surface area and guarantee stability, even on uneven surfaces.
- High-powered working lights ensure safe working conditions at night.
- Seatbelts are integrated with the air-suspension operator seat for safety on the job or on the road.
- Improved A/C system
- Steering column's height and angle can be adjusted
- Operator seat with anti-fatigue with mechanical suspension for heavy-duty use over extended periods.
- Ergonomic lever type loader controls
- Ergonomic lever type back-hoe controls
- Stylish breaker pedal
- Radio / MP33 / USB Player
- Coat hook



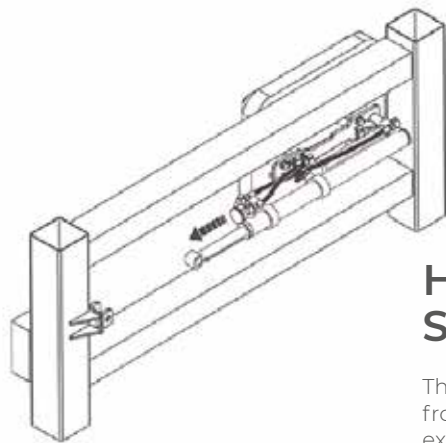
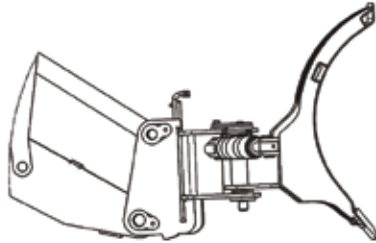


POWERFUL & DURABLE

OPTIONAL ATTACHMENTS

Grading Blade

Rotating grading blade which can be mounted to the arm quickly and easily.

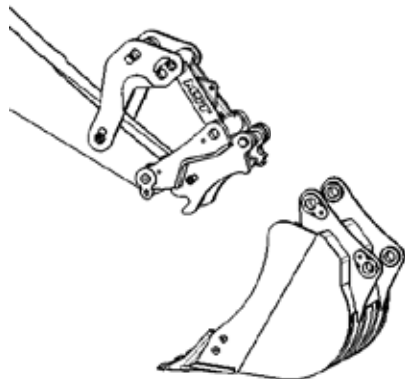


Hydraulic Side-Shifter

The hydraulic side-shifter is controlled from the cab and can slide the excavation set to the right or left. Can be fixed at the desired point.

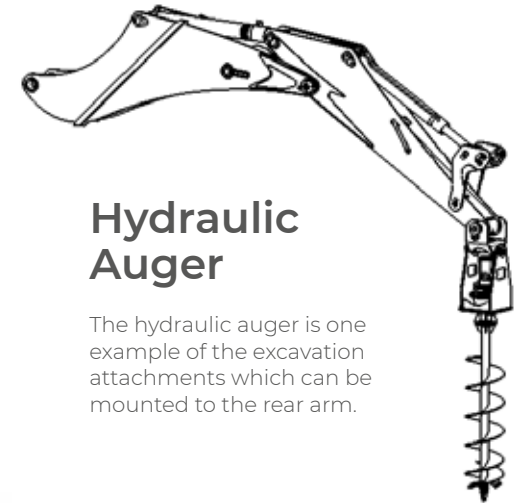
Excavator Quick Coupler

Allows for fast and easy excavation attachment changes. Mechanical options available.



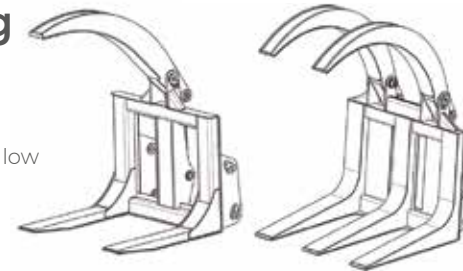
Hydraulic Auger

The hydraulic auger is one example of the excavation attachments which can be mounted to the rear arm.



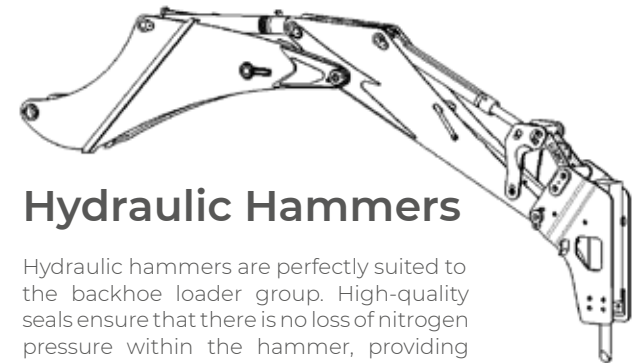
Single and Double Log Grapplers

Hydraulic single and double log grapplers allow logs of any size to be lifted and stacked.



Hydraulic Hammers

Hydraulic hammers are perfectly suited to the backhoe loader group. High-quality seals ensure that there is no loss of nitrogen pressure within the hammer, providing continuous highpowered impact.



ENGINE	
Model	PERKINS 1104C - 44T
Type	Water cooled diesel engine with, 4 cycles, 4 cylinders, water cooled, turbocharger.
Emmission Class	Stage II (Tier 2)
Cylinders	4
Displacement	4.400 cc
Max. Power	74,5 kW / 100 HP (@2000 rpm)
Max. Torque	408 Nm (@1350 rpm)

• Compatible with the Emission Regulations EU Stage II and U.S EPA Tier2

TRANSMISSION	
• Heavy duty Auto Powershift transmission	
• 4 forward and 4 reverse gears	
• 2 or 4 - wheel drive switch	
• 2.64/1 stall ratio converter	
• Transmission lubricant cooling	

AXLES	
• Heavy duty axles	
• 16 degrees front axle oscilation	
• Outboard planetary reduction	
• LSD (Limited Slip Differential) on rear axle	

HYDRAULIC SYSTEM	
• Main Pump	
Type	Gear Type
Max. Flow Rate	90 l/min
Pressure	240 bar
• Auxillary Pump	
Type	Gear Type
Flow Rate	57 l/min
Pressure	207 bar

• Highly efficient tandem gear pump; open-center hydraulic system.

WEIGHT	STANDARD	TELESCOPIC
542	8500 kg	8800 kg
544	9000 kg	9240 kg

• With full fuel tank, hydraulic system and all service fluids and 75 kg operator weight are included

DRIVING SPEEDS	
Bucket Capacity	1,2 m ³
Bucket Breakout Force	7734 kgf
Arm Breakout Force	5905 kgf
Max. Height Lifting Capacity	3100 kg

TIRES	FRONT	REAR
542	16/70 - 20 (12 Layers)	16.9 - 28 (12 Layers)
544	16/70 - 20 (12 Layers)	16/70 - 20 (12 Layers)

DRIVING SPEEDS	
At 2200 rpm	
1st gear	6,14 km/h
2nd gear	10.11 km/h
3rd gear	22.18 km/h
4th gear	41.93 km/h

FILLING CAPACITIES	542	544
Engine Oil	10 lt	10 lt
Engine Cooling System	25,5 lt	25,5 lt
Fuel Tank	140 lt	140 lt
Front Axle Differential	8,5 lt	8,5 lt
Front Axle Heads	2 x 0,8 lt	2 x 1,5 lt
Rear Axle Differential	13 lt	13 lt
Rear Axle Heads	2 x 1,5 lt	2 x 1,5 lt
Transmission	13 lt	13 lt
Hydraulic System (Total)	125 lt	125 lt

BACKHOE PERFORMANCE	
Rear Bucket Capacity	0,17 m ³
Bucket Breakout Force	6424 kgf
Arm Breakout Force	3461 kgf

ELECTRICAL SYSTEM	
Voltage	12 V
Battery	135 Amp
Alternator	85 A



sddf



542

GENERAL DIMENSIONS

		Retracted	Extended
A	Working Height	5799 mm	6505 mm
B	Max. Loading Height (mm)	3821 mm	4524 mm
C	Straight Extension Distance (mm)	5732 mm	6723 mm
D	Machine to central axle distance (mm)	6234 mm	7251 mm
E	Loading Distance (mm)	2056 mm	2905 mm
F	SAE max. digging depth (mm)	4321 mm	5415 mm
G	Extension distance from rear axle (mm)	7048 mm	8051 mm
H	Rear frame base width (mm)	2355 mm	
I	Bucket width (mm)	2400 mm	
J	Total kingpost travel (mm)	1112 mm	
K	Bucket rotation (°)	205°	
L	Dumping height (mm)	2690 mm	
M	Loading height (mm)	3307 mm	
N	Pin height (mm)	3475 mm	
O	Front arm pin to damper distance (mm)	233 mm	
P	Bucket claw to damper distance (mm)	1344 mm	
R	Bucket claw to damper distance at max. height (mm)	1218 mm	
S	Dumping distance (mm)	853 mm	
T	Digging depth	136 mm	
U	Roll back angle (°)	44°	
V	Dumping angle (°)	46°	
W	Rear wheel axle ground clearance (mm)	640 mm	
X	Total travel length (mm)	5863 mm	
Y	Front wheel axle ground clearance (mm)	531 mm	
Z	Departure angle (°)	25°	
QQ	Kingpost clearance	582 mm	
RR	Operator cab roof height (mm)	2995 mm	
SS	Total travel height (mm)	3944 mm	
TT	Steering center ground clearance (mm)	2036 mm	
XX	Wheelbase (mm)	2269 mm	
YY	Slew center to rear axle center distance (mm)	1320 mm	
ZZ	Stabilizer feet clearance (mm)	368 mm	

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GENERAL DIMENSIONS

		Retracted	Extended
A	Working Height	5980 mm	6685 mm
B	Max. Loading Height (mm)	3961 mm	4664 mm
C	Straight Extension Distance (mm)	5732 mm	6723 mm
D	Machine to central axle distance (mm)	6234 mm	7251 mm
E	Loading Distance (mm)	2056 mm	2905 mm
F	SAE max. digging depth (mm)	4240 mm	5333 mm
G	Extension distance from rear axle (mm)	7083 mm	8086 mm
H	Rear frame base width (mm)	2355 mm	
I	Bucket width (mm)	2400 mm	
J	Total kingpost travel (mm)	1112 mm	
K	Bucket rotation (°)	205°	
L	Dumping height (mm)	2719 mm	
M	Loading height (mm)	3387 mm	
N	Pin height (mm)	3510 mm	
O	Front arm pin to damper distance (mm)	258 mm	
P	Bucket claw to damper distance (mm)	1286 mm	
R	Bucket claw to damper distance at max. height (mm)	1245 mm	
S	Dumping distance (mm)	877 mm	
T	Digging depth	110 mm	
U	Roll back angle (°)	44°	
V	Dumping angle (°)	46°	
W	Rear wheel axle ground clearance (mm)	705 mm	
X	Total travel length (mm)	5860 mm	
Y	Front wheel axle ground clearance (mm)	684 mm	
Z	Departure angle (°)	26°	
QQ	Kingpost clearance	626 mm	
RR	Operator cab roof height (mm)	2995 mm	
SS	Total travel height (mm)	3847 mm	
TT	Steering center ground clearance (mm)	2036 mm	
XX	Wheelbase (mm)	2269 mm	
YY	Slew center to rear axle center distance (mm)	1350 mm	
ZZ	Stabilizer feet clearance (mm)	355 mm	

MST

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