

TOPTURN X

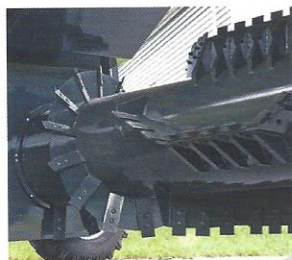
WINDROW TURNER
PERFECT MIXING
WHEEL OR TRACK
ON TOP OF THE SOLUTION





HIGHLIGHTS

- » Large-dimensioned turning drum for high throughput and complete mixing
- » Wheel drive for outstanding traction and quick mobility
Track drive for maximum mobility on unpaved ground
- » Swiveling cab for simplified transportation and easy boarding
- » Get exactly what you need:
Three sizes and many options



TOPTURN X IN OPERATION

The Topturn X is designed for the most demanding applications. Hydraulic drive combined with a solid telescopic frame allows full mobility on any terrain. It provides ideal working conditions for the

driver and ensures ideal windrow rotting conditions with its large, hydraulically-driven turning drum. The choice of three sizes means the right machine size for any operation.



01

**Composting of
Municipal solid waste**



02

**Composting of green waste,
biowaste**



03

**Composting of
sewage sludge**

Composting process

We at Komptech have been working intensively on composting for more than 20 years. The result of close collaboration with experts in science, agriculture and mechanical engineering, results in machines that ensure maximum ecological and economical efficiency.

In windrow-composting pure green waste, mixed with organic waste and sewage sludge, and for residual and household waste, the rotting process is controlled by turning. The turning process must improve ventilation and provide thorough mixing of the different rotting zones. The Topturn X was developed to do just that. The combination of large drum with the perfect shape & powerful drive ensures

that the turner leaves the perfect windrow behind it as it goes. Loosely stacked, with a triangular cross section, the windrow draws in the necessary fresh air through a chimney effect. Decomposition is aerobic and odors are kept down. The thorough mixing evens out moisture and nutrient differences, creating the perfect conditions for microorganisms.

INSIDE THE MACHINE

Designed to take anything

The frame is designed for the most heavy-duty applications. The sturdy, buckle-resistant design enables maximum performance even with the heaviest materials. The generously dimensioned turning drum is mounted on the frame and provides additional stability. If required by the job, the frame together with the drum can be raised 15" / 380 mm on each side of the chassis with a central telescopic unit.

Lift-off to work

Getting started is safe and convenient. Entry into the cab is through a front panel door. Two hydraulic lift arms then swivel the cab from the entry position on the ground into the working position directly above the tunnel. When the cab is in the transport position the turner is very compact, simplifying multi-site use.

Powerhouse power plant

The turning performance of the Topturn X is controlled by the operator, not by the machine. With up to 446 HP, the performance of the Caterpillar® engine is perfectly suited to the machine. A powerful cooling system for the engine and the hydraulic system keeps the machine in the "green" range, even in hot weather.

01

Comfortable entry
through swivelling cabin

02

Efficient
Caterpillar® diesel engine

03

Service steps and platform
simplify maintenance

04

Turning drum
with large diameter

05

Robust
plough blades





Drive

- » Modern CAT®-Acert diesel engine
- » Hydraulic drive with separate circuit for drive and drum function
- » Powerful cooling system



Frame

- » Designed for heavy duty application
- » Frame mounted drum provides stability
- » Telescopic frame enables movement in all situations



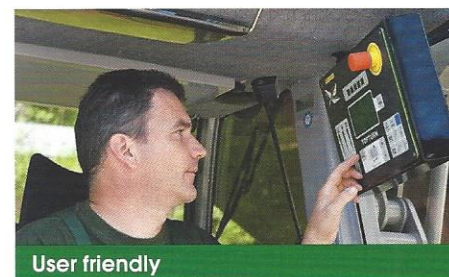
Swivelling cabin

- » Compact size with minimal transport height
- » Comfortable entry from the ground
- » Perfect panorama view in working position



Turning drum

- » Large diameter for perfect mixing
- » Infinitely adjustable speed, reversible
- » Wear resistant tools with armouring



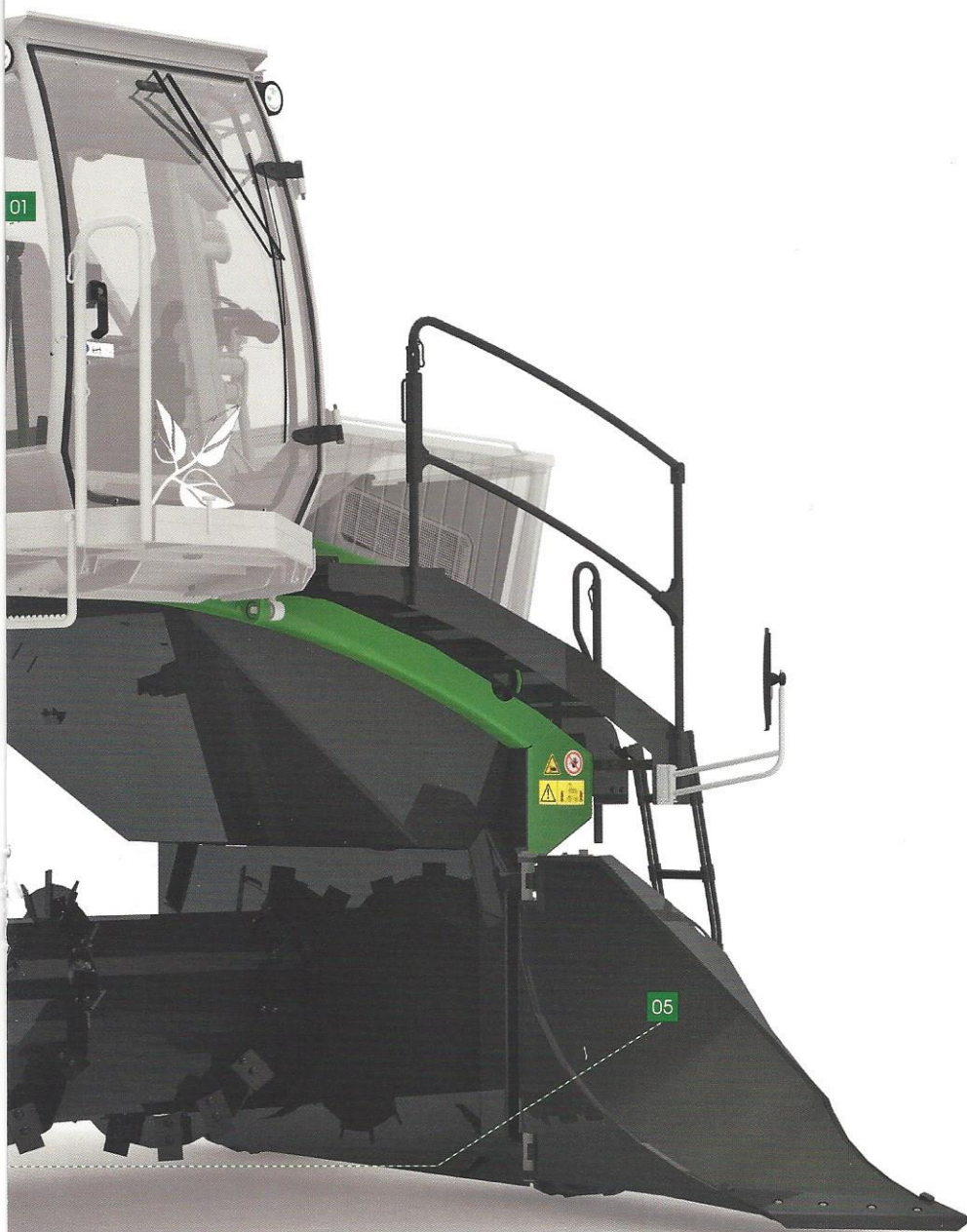
User friendly

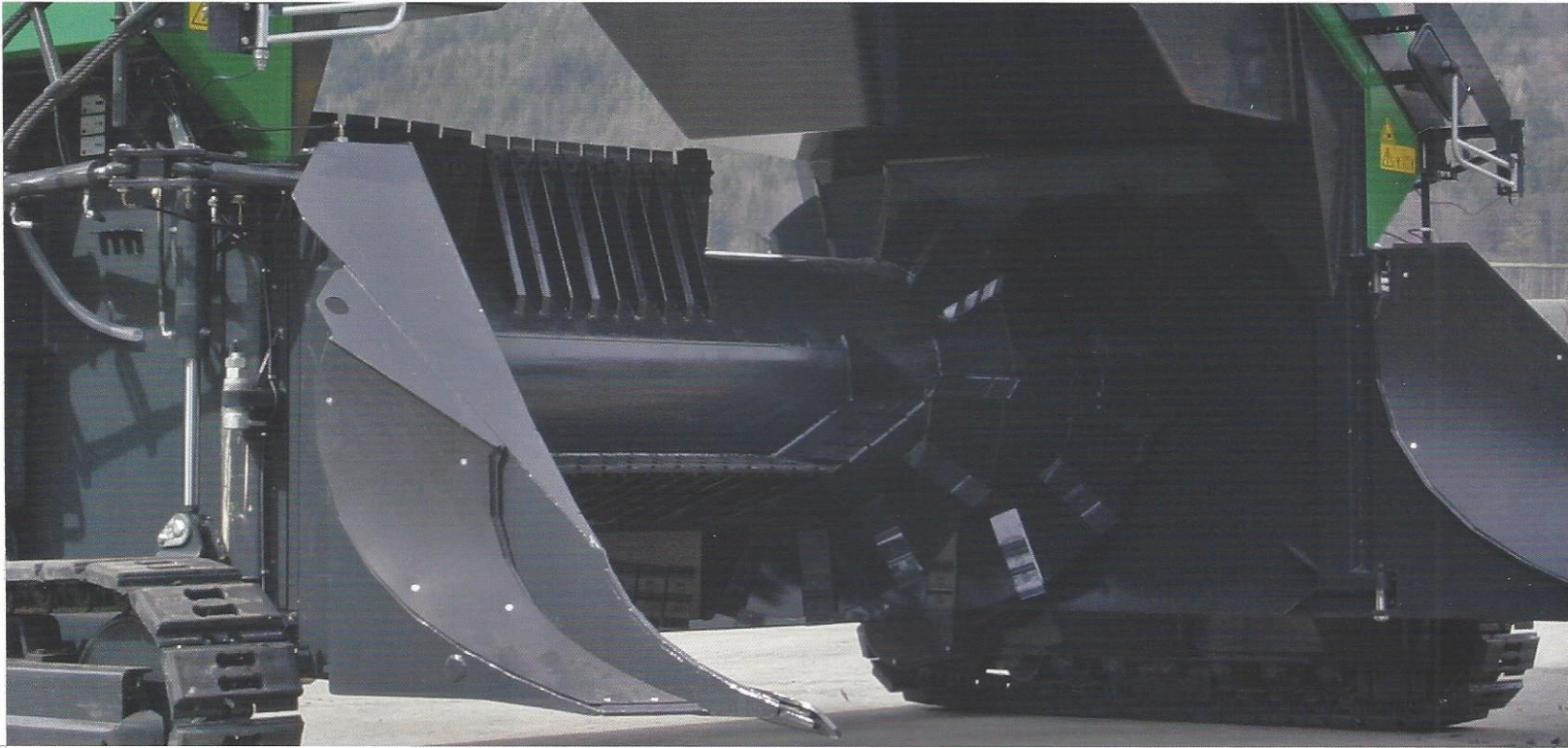
- » Ergonomic working place
- » Monitoring of operational status
- » Simple and logical controls



Service friendly

- » Wide opening side covers
- » Service steps for easy access
- » Automatic central lubrication





HIGHLIGHTS



- » Large drum diameter (up to 5' 9" / 1750 mm) ensures mixing of the entire cross-section of the windrow
- » Perfectly balanced drums provides constant engine efficiency
- » Spiral drum design with correct number of throwing tools guarantee perfect windrow shape
- » Special drum design for thorough mixing
- » Robust tools made of high-tensile strength steel are easy to exchange
- » Rubber coated plough blades allow easy movement through overlapping windrows



PERFECT TURNING

A large, powerful hydraulically driven drum accelerates the turning and rotting processes. Materials are mixed before passing through the drum, so nothing is missed. Together with the reversibility feature, the infinitely adjustable drum speed lets the operator adjust to any situation: low speed at start-up, top speed in the windrow and low reverse at the end

of the windrow. The hydraulically operated plough-shaped blades guide the material into the feed area. Their sturdy design allows driving within overlapping windrows. A separate hydraulic circuit delivers the power to the drive system. Wheel or track drive? At Komptech, this is a decision we leave to our customers.



Wheel drive

The wheeled chassis has impressive benefits on asphalt and concrete. Power is delivered to all four wheels, providing on the spot turning, high traction and quick maneuverability. Combined with the comfortable ride provided by foam filled tires.

- » The best traction on paved surfaces
- » Tough long-life tires
- » Minimum surface wear, especially in hot weather
- » Quick maneuverability with a 2nd gear up to 4.4 mph / 7 km/h



Track drive

The tracked chassis is the ideal option for unpaved ground. Even on difficult terrain, engine power is converted effectively into forward movement. The open track design enables simple cleaning.

- » The best traction on difficult terrain
- » Open track chassis for simple cleaning
- » Low-wear, rubber-coated, self-cleaning drive plates

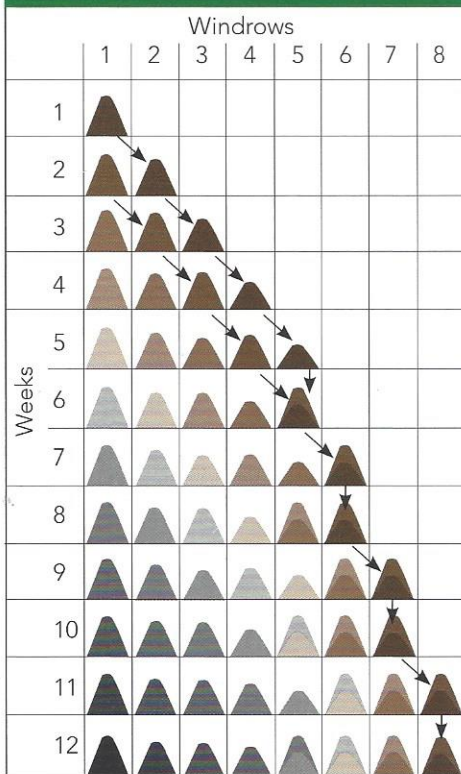
On top of the situation

Things look good from the driver's seat. Centered over the middle of the windrow, the driver has a good view to both sides and everything under control. On the right is the responsive joystick for directional and speed controls. On the left are the function controls. Even on all-day jobs, the driver stays comfortable and focused, thanks to a noise insulation pressurized cabin with tinted glass, A/C, radio and MP3 player, and load-dependent automatic steering (X67 series).





01



Combination of displacement and collapsing with 8 windrow positions gives rotting time of 10 to 12 weeks



OPTIMUM USE OF SPACE

A lateral displacement device can be coupled to the Topturn so that the turned material can be shifted onto the adjacent windrow area. This way raw material can always be windrowed in the same place, while finished material can be removed from the last windrow position. This saves on-site transportation hassles and facilitates supervision and monitoring.

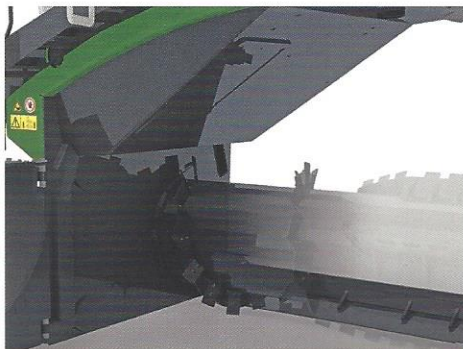
By collapsing two windrows rot shrinkage can be compensated for to make full use of space. To take the lateral displacement device, the Topturn needs to be set up with hydraulic adapters and an extended chassis. The Topturn is then "saddled" with the lateral displacement device and connected hydraulically by a quick coupling device. The lateral displacement device can be easily used to either side.



02

Watering correctly

A powerful hose system which is used for watering is unwound off a drum by the turner and wound up on the drum with a remote control device. During the turning process, water is poured into the material across a wide area via an impact nozzle.



02

Take up everything with the scraper device

A patented scraper device ensures the lowermost ground layer, a potential source of odors, is not left behind. A quick-coupling system allows the scraper to be mounted/removed in just a few quick steps.



03

Quick maneuvering

The "Fast" versions of the Wheel-drive have a second gear, meaning maneuvering around saves far more time because of the (up to) 70% increase in speed in relation to the turning speed.



04

Easy access for maintenance

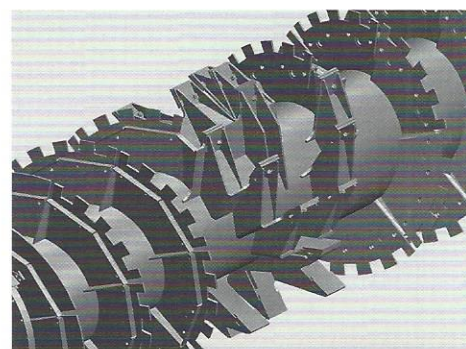
Service steps and the access platform make it easy to reach all service points, and also permit cabin entry and exit when the cabin is raised.



05

Armored tools for prolonged usage

For materials with high abrasive content (sewage sludge, sand, glass), carbide coating and an armored drum body reduce wear and maintenance costs.



06

Good mixing for fast rotting

For demanding mixing applications, the Topturn X53 offers a special mixing drum.



X53

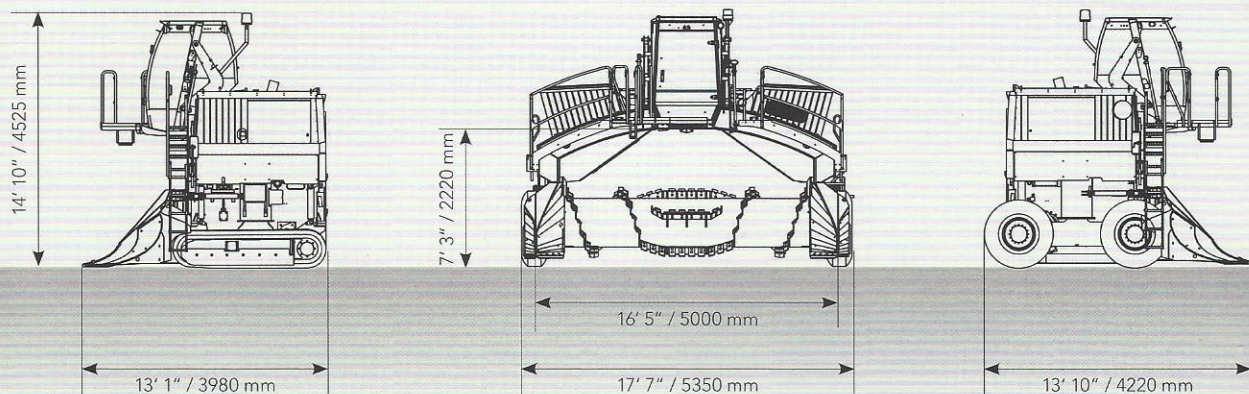
X60

X67

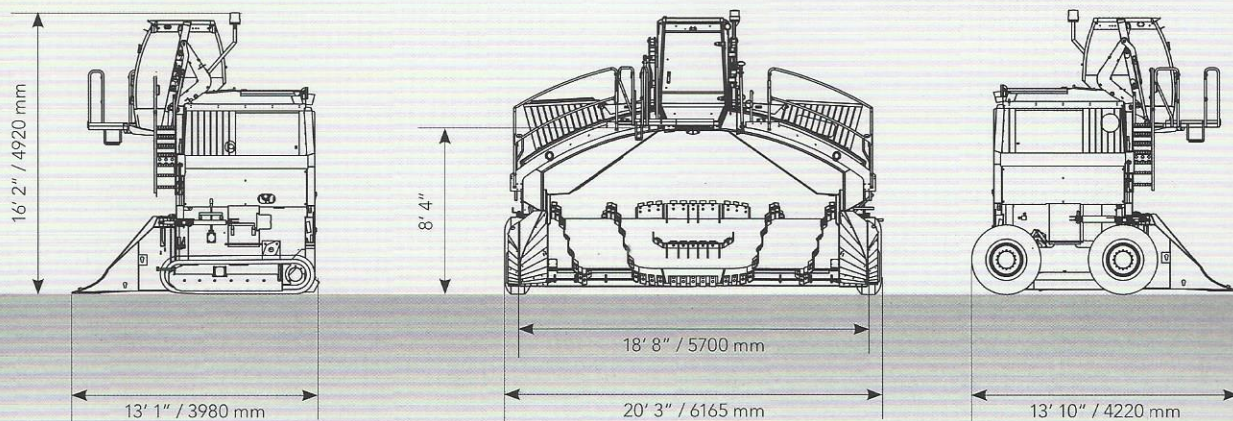
Drive	X53	X60	X67
Diesel engine:	CAT ® C9	CAT ® C9	CAT ® C13
Power:	242 kW / 330 HP	242 kW / 330 HP	328 kW / 446 HP
Turning device			
Drum diameter:	47" / 1200 mm	4' 7" / 1400 mm	5' 9" / 1750 mm
Drum rpm:	0-195	0-195	0-160
Windrow dimensions			
Max. intake width:	16' 5" / 5000 mm	18' 8" / 5700 mm	21' 0" / 6400 mm
Max. windrow height:	7' 10" / 2400 mm	9' 2" / 2800 mm	10' 2" / 3100 mm
Max. windrow cross-section:	~ 70 ft² / ~ 6.5 m²	~ 92 ft² / ~ 8.5 m²	~ 113 ft² / ~ 10.5 m²
Travelling speeds (I standard, II optional)			
Wheel:	I: 0-2.5 mph / 0-4 km/h II: 0-4.4 mph / 0-7 km/h	I: 0-2.5 mph / 0-4 km/h II: 0-3.7 mph / 0-6 km/h	I: 0-1.9 mph / 0-3 km/h II: 0-4.4 mph / 0-7 km/h
Track:	I: 0-2.5 mph / 0-4 km/h	I: 0-2.5 mph / 0-4 km/h	I: 0-2.5 mph / 0-4 km/h II: 0-3.7 mph / 0-6 km/h
Dimensions L x W x H			
Transport dimensions Wheel:	17' 7" x 9' 10" x 9' 10" 5350 x 3000 x 3000 mm	20' 3" x 9' 10" x 11' 4" 6165 x 3000 x 3450 mm	22' 2" x 9' 10" x 11' 8" 6750 x 3000 x 3560 mm
Transport dimensions Track:	17' 7" x 8' 4" x 9' 10" 5350 x 2550 x 3000 mm	20' 3" x 8' 4" x 11' 4" 6165 x 2550 x 3450 mm	22' 2" x 9' 10" x 11' 8" 6750 x 3000 x 3560 mm
Working dimensions Wheel:	13' 10" x 17' 7" x 14' 10" 4220 x 5350 x 4525 mm	13' 10" x 20' 3" x 16' 2" 4220 x 6165 x 4920 mm	16' 4" x 22' 2" x 17' 7" 4970 x 6750 x 5350 mm
Working dimensions Track:	13' 1" x 17' 7" x 14' 10" 3980 x 5350 x 4525 mm	13' 1" x 20' 3" x 16' 2" 3980 x 6165 x 4920 mm	15' 6" x 22' 2" x 17' 7" 4720 x 6750 x 5350 mm
Weight			
Wheel:	~ 15.0 t.sh / 13.5 t	~ 16.5 t.sh / 15.0 t	~ 23.0 t.sh / 21.0 t
Track:	~ 15.5 t.sh / 14.0 t	~ 17.0 t.sh / 15.5 t	~ 23.5 t.sh / 21.3 t
Throughput (dependent on material)			
Throughput performance:	up to 4600 yd³/h / up to 3500 m³/h	up to 4600 yd³/h / up to 3500 m³/h	up to 5900 yd³/h / up to 4500 m³/h
Options			

Mixing drum (X53), two speed level, lateral displacement device, central lubrication, scraper, protective ventilation, service steps, access platform, watering etc.

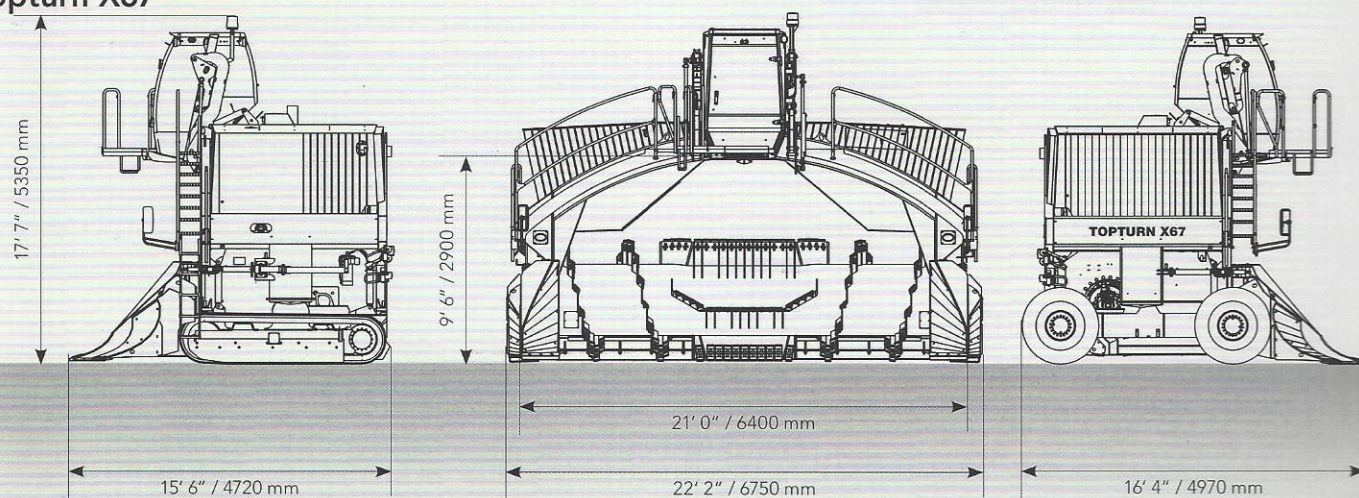
Topturn X53



Topturn X60



Topturn X67



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