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#### LOW-SPEED UNIVERSAL WASTE SHREDDER

## TERMINATOR

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EDITION WITH AUGMENTED REALITY CONTENT Download the "Komptech LookBeyond!" app. Scan marked and numbered projects with the "LookBeyond! eye" to see additional information.

#### APPLICATION

## TERMINATOR UNIVERSAL

## HIGHLIGHTS

- » Shreds even the toughest materials
- » Tough and resistant to contraries
- » Different shredding units for a perfect fit with the application
- » Mobile machines with numerous chassis and equipment options
- » Stationary machines with optional hydraulic or mechanical power

The processing of waste for materials recycling or energy production usually starts with shredding, to condition the waste cross-spectrum for further process steps. This is exactly what the Terminator is built for. As a low speed single-shaft shredder it can be used on all types of waste. Through variations in the drum and counter comb system, the applications range from coarse break-up to defined shredding.

Stepless cutting gap adjustment allows sizing of the output for its intended purpose. On the mobile machines, hydraulic drive with load-dependent speed control ensures full use of the engine power. On the stationary versions, there is also the option of electro-mechanical drive for the highest efficiency.



Waste wood, mixed construction waste

Few shredders have as large a feed hopper as the terminator, which is naturally a great advantage for bulky for waste wood. The aggressive feed of the F shredding unit and programmable reverse cycles keep throughput high with waste wood. The tough, contrary-resistant U shredding unit has no problems dealing with mixed construction waste. With the shredding gap open, it can coarsely break up even the toughest materials.



#### Household waste, residual waste

These waste streams demand even shredding and long tooth life. The U and F units offer both, with armoured teeth and easily replaceable wear guards that keep operating costs low, especially with electromechanical drive.

The adjustable shredding gap makes it possible to match the degree of shredding to the downstream processing steps.



#### Bulky waste, commercial waste

With its inhomogeneous composition, this waste stream requires the highest shredding forces, which the Terminator's powerful drive delivers. The drum can also reverse at any time to pull free and get unstuck, preventing stoppages. The F or XXF units are used for this application, depending on the desired degree of shredding.



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#### Special applications

The Terminator can handle almost any material. All types of tyres, from cars to special machinery, can be shredded with the XXF unit due to the high available tooth force. So can paper rolls, textile waste, refrigerators, washing machines etc. you name it.

## INSIDE The machine

The Komptech brand stands for quality, reliability and value retention. Accordingly, from the engine to the discharge conveyor, only top-quality components are used in the Terminator.

The power plant of the mobile Terminator is a modern CAT® diesel engine. The complete encapsulation of the engine room reduces noise emissions to a minimum. The hydraulic drum drive with load-dependent speed control develops the maximum shredding force, while preventing stoppages - the drum can reverse at any time to pull free and get unstuck. If a massive contrary gets into the shredding chamber, the overload protection feature prevents tooth or machine breakage. The logical organization of the function keys makes operation simple and sure. Control electronics constantly monitor the operating status and intervene to protect the machine if there is a fault.

#### 01

Large feeding area with flap and fold system for filling hopper

#### 02

Shredding drum with replaceable teeth

#### 03

High performance CAT® diesel engine

#### 04

Hydraulic drive with constant power control

05 Track Fast tracks (option)

#### TECHNOLOGY AND FUNCTION



#### ENGINE - MOBILE MACHINES

- » Modern Caterpillar® diesel engines
- » Powerful cooling system for engine and hydraulics
- » Easy access to all maintenance points



#### HYDRAULICS

- » Load-dependent speed control
- » S version options: Double drum drive for higher shredding force
- » Starting and reversing even under load



#### OPERATOR CONSOLE

- » Easily understandable operating console
- » Monitoring by on-board computer
- » Reversing program to adapt to material and for drum self-cleaning





#### LOADING / DISCHARGE

- » Broad discharge channel with excellent access to the discharge conveyor
- » High clearance track option: 1 m high discharge channel for problem-free discharge of coarse shred
- » Folding hopper for easy material feed

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» Steplessly adjustable discharge conveyor inclination



#### ADJUSTABLE COUNTER COMB

» For adjustment of the particle size

- » Tooth wear compensation
- » Excellent access to the shredding chamber



#### STATIONARY UNIT

- » Use as standalone machine or part of a process chain
- » Electro-hydraulic or electro-mechanical drum drive
- » Numerous options in terms of frame and periphery

#### SHREDDING UNIT

## SHRED ANYTHING

### HIGHLIGHTS

- » Extremely large intake area, 2 m wide x 3 m long
- Three shredding units for a perfect fit with the application
  U for Universal
  F for Fine
  XXF for Extra Fine
- » Variable particle size through cutting gap adjustment
- » Low wear costs thanks to re-usable teeth, with optional armouring

Even the toughest kinds of waste don't stand a chance against the Terminator. It gets it all down to the desired particle size. Depending on the shredding unit, material is coarsely broken down or shredded to a defined grain. The hydraulic adjustment of the gap between drum and counter comb makes it possible to match the shred to the downstream processing steps.

Folding the counter comb all the way to one side makes the shredding chamber freely accessible for all types of maintenance. The massive teeth are firmly bolted on and can be re-used multiple times. Armouring increases their life and easily replaceable wear rings protect the body of the drum factors that keep wear and maintenance costs low.



#### U (UNIVERSAL) -FOR COARSE BREAKUP

The drum has two spiral rows of triangular teeth, 30 in all. The spiral arrangement ensures proper movement and even shredding. The 16 teeth on the counter comb are a perfect fit for the geometry of the drum teeth.

- » Ideal for initial breakup
- » Very contrary-resistant
- » Triple-use drum teeth
- » Cutting gap adjustable from 5-80 mm
- » For bulk waste, municipal waste, white goods, waste wood, railroad ties, mixed construction waste etc.



#### F (FINE) -FOR A WIDE RANGE OF USES

The drum has two spiral rows of left and right cutting rectangular teeth, 16 per row. The degree of shredding can be set by adjusting the radial cutting gap. The fixed axial cutting gap provides a defined shred. A new mounting system on the counter comb keeps teeth firmly in place while allowing easy tooth replacement.

- » Perfect as pre-shredder for treatment systems
- » Large teeth for positive material pull-in
- » Radial cutting gap adjustable from 0-45 mm
- » Double-use drum teeth
- » For municipal waste, bulky waste, commercial waste, waste wood



#### XXF (EXTRA FINE) -FOR THE FINEST SHREDDING

The XXF drum has 22 F drum teeth. The tooth mountings are arranged in a chevron (herringbone) pattern that moves the material flow to the middle of the drum.

The axial cutting gap is just 2 mm, while the radial cutting gap is hydraulically adjustable from 0 to 45 mm.

- » Ideal for prepping refuse-derived fuel
- » Full shredding force concentrated on one tooth
- » Even particle size with high degree of shredding
- » For commercial waste, bulk waste, waste wood

### APPLICATION RANGE



#### FEATURES & OPTIONS

## TERMINATOR MOBILE

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## HIGHLIGHTS

- » The right chassis for any application and ground
- » Mobility at the work site through self-propulsion or towing facility
- » Full access to all maintenance points and the shredding chamber
- » Numerous options for more functionality and ease of use



The mobile Terminator gives you the choice between hook, three-axle trailer or tracked versions. On the hook version, a towing facility provides manoeuvrability at the site. The trailer version has air-cushioned axles and positioning capability for comfortable mobility. The tracked version with two-stage drive and extra-wide treads is mobile on unhardened surfaces.

Complete maintenance access is standard on all versions. Doors in the panels grant access to all maintenance points, while the hydraulically movable counter comb enables problem-free access to the shredding chamber. Options like overbelt magnet or magnet roller, remote control, central lubrication and much more provide additional functionality and convenience.



#### WITHIN EASY REACH

With the redesigned engine compartment, all maintenance can now be performed from outside the machine. Easily opened doors give access and fold-out platforms provide safe footing.



#### MORE ROOM FOR DISCHARGE

A special option is available for tracked Terminators - High Clearance. This higher discharge channel (1 m instead of 0.6 m) adds leeway to make sure that coarsely broken and bulky items can clear the machine easily.



#### GET THE IRON OUT!

The overbelt magnet is now mounted in a specially designed, steplessly adjustable holder that gives parallel positioning of the magnet over the discharge conveyor regardless of the conveyor slope. This gives the best possible separation performance in all working positions.



#### MAN AND MACHINE

The new operating console with its big colour display makes it easy for new users to work with the machine, and gives pros many ways to optimize operation. The operating panel on the machine has a colour display that clearly shows all functions and operating status with symbols and colour coding.



#### LOADING MADE EASY

Load material into the big hopper - the machine does the rest. Hydraulic folding hopper sidewalls make the already generous shredding chamber even bigger, for a loading volume of up to seven cubic metres. That means less strain in loading and less outfall around the machine from overloading.



#### EASIER WORKING

Optional accessories let users configure the Terminator for the exact task. Central lubrication simplifies maintenance. Wireless remote control gives pushbutton control. A moistening system helps keep down dust, while an extended discharge conveyor permits higher material cones.

#### STATIONARY

## TERMINATOR DIRECT

### HIGHLIGHTS

- » Electric drive for high efficiency and minimal maintenance
- » About 20-35 percent lower specific consumption than comparable hydraulic systems
- » Low space requirements: The drive system fits snugly in the machine
- » The same functionality and contrary resistance as the hydraulic versions
- » Exact material fit through intelligent control with two drum speeds

Electrically driven stationary machines, with their energy efficiency, low maintenance burden and technical control advantages, are perfect for large plants with long machine running times. Stationary Terminator customers can choose between hydraulic and mechanical drum drive. Mechanical direct drive offers high efficiency combined with low energy costs, and is the ideal solution for most applications. The drum is driven a gearbox with two shredding speeds and a reverse gear. Like with the hydraulic version, if there is a blockage the drum goes into reverse.

DIRECT

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**TERMINATOR 3400** 

The drum frees itself up and then continues shredding. Integration in a processing line is straightforward, as a modular system offers numerous options for setup, material feed and discharge, and controls to meet almost any requirement.

### STATIONARY

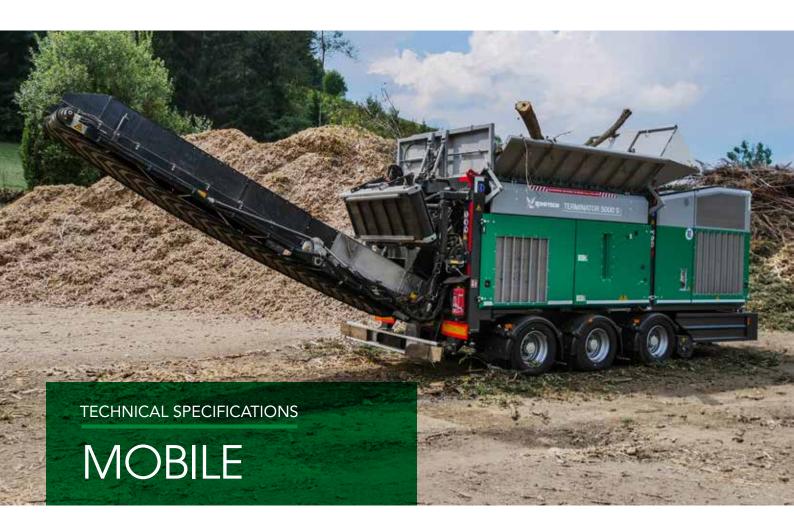
## TERMINATOR HYDRAULIC

The stationary hydraulic Terminator is useful for materials that are difficult to shred and can be expected to require a lot of reversing. Hydraulic drive is also a good choice where frequent changes of materials require constant throughput rate adjustments to accomodate downstream machines, thanks to integrated throughput regulation by the drum speed.

In addition, the drive can be physically separate from the shredding unit if desired. This saves space in the processing line since only the compact shredding unit needs to go there, while the drive unit can be set up in a container or utility room where it is protected from dust and is easy to get to. Like for the mechanical versions, many preconfigured adaptation options are provided.

### HIGHLIGHTS

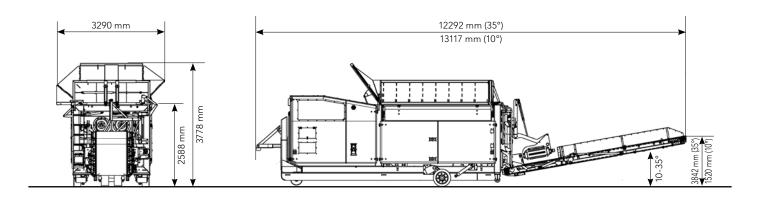
- » Hydraulic drive for high shredding power and stepless throughput control
- » Separate installation with hydraulic drive:
  - Protects the drive unit
  - Saves in-line installation space
- » Numerous options are available for setup, material intake/output, drive and controls



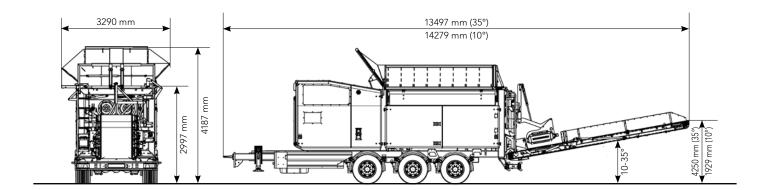
	3400	3400 S	5000	5000 S	6000 S			
Engine								
Diesel engine:	CAT ® C9 T4F/Stage IV or T3/Stage IIIA	CAT® C9 T4F/Stage IV or T3/Stage IIIA	CAT® C13 T4F/Stage V or T3/Stage IIIA	CAT® C13 T4F/Stage V or T3/Stage IIIA	CAT® C18 T4F/Stage V or T3/Stage IIIA			
Power kW / HP:	242 / 330	242 / 330 Drum drive on both sides	328 / 446 (Stage V) 354 / 480 (Stage IIIA)	328 / 446 (Stage V) 354 / 480 (Stage IIIA) Drum drive on both sides	447 / 608 (Stage V) 429 / 583 (Stage IIIA) Drum drive on both sides			
Shredding unit								
Drum rpm mobile machines:	max. 29	max. 29	max. 29	max. 32	max. 38			
Drum length (mm):	3000							
Drum diameter (mm):	1050							
Loading heights mobile machines								
Loading heights (mm):	Hook: 2596 Trailer: 3005 Track: 2906							
Discharge heights (mm, 10°-35°):		Hook: 1388 - 3710	Trailer: 1919 - 4250	Track: 1830 - 4150				
Dimensions mobile machines transp	oort position/working p	osition (Conveyor belt 3	5°)					
L x W x H Hook (mm):	7290 x 2490 x 2905 / 12361 x 3327 x 3325							
L x W x H Trailer (mm):	9120 x 2550 x 3360 / 13553 x 3327 x 3734							
L x W x H Track (mm):	6940 x 2855 x 3265 / 11371 x 3327 x 3635							
Weight mobile machines (dependent	: on equipment)							
Hook (t):	~ 21.1	~ 21.9	~ 21.3	~ 22.1	~ 22.6			
Trailer (t):	~ 23.9	~ 24.7	~ 24.1	~ 24.9	~ 25.5			
Track (t):	~ 25.0	~ 25.8	~ 25.2	~ 26.0	~ 26.5			
Throughput (dependent on material)	)							
Throughput performance (t/h):	up to 45	up to 50	up to 60	up to 80	up to 100			
Options								

Armoured drum teeth, forward movement device (Hook, Trailer), towing unit (Hook), remote control, extended discharge conveyor, central lubrication, over-belt magnet with swinging arm, magnetic pulley etc.

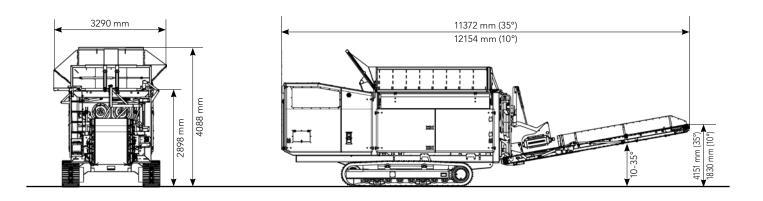
## HOOK



### TRAILER



### TRACK



TECHNICAL SPECIFICATIONS

## STATIONARY

Terminator direct	1700	2200	3400	3400 S	5000 S	6000 S
Drive						
Power, mechanical (kW):	1 x 75	1 x 132	1 x 160	2 x 75	2 x 110	2 x 160
Shredding unit						
Drum rpm mobile machines:	14 / 10	17 / 13	19 / 14	14 / 10	20 / 14	28 / 20
Drum length (mm):	3000	3000	3000	3000	3000	3000
Drum diameter (mm):	1050	1050	1050	1050	1050	1050
Dimensions (shredding unit incl. hopp	er)					
L x W x H (mm):	5575 x 3175 x 3908					
Weight (dependent on equipment)						
Weight (t):	~ 13.6	~ 13.6	~ 14.0	~ 15.0	~ 15.3	~ 15.8
Throughput (dependent on material)						
Throughput performance (t/h):	up to 15	up to 20	up to 30	up to 35	up to 55	up to 75
Options						

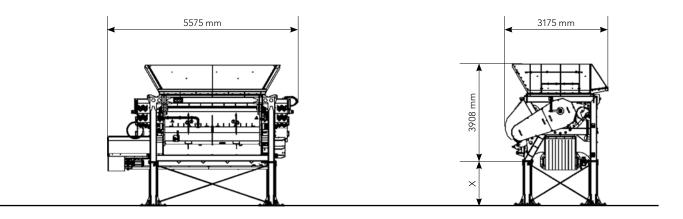
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Armoured drum teeth, soft-start, control panel external, variants for hopper, outfeed conveyor, discharge conveyor, remote control, central lubrication, steelwork-substructure etc.

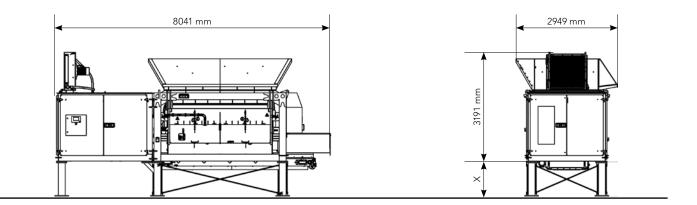
Terminator hydraulic	2200	3400	3400 S	5000	5000 S	6000 S	
Drive							
Power, hydraulic (kW):	1 x 132	1 x 160	1 x 160	1 x 200	1 x 200	1 x 280	
Shredding unit							
Drum rpm mobile machines:	29	29	27	29	29	38	
Drum length (mm):	3000	3000	3000	3000	3000	3000	
Drum diameter (mm):	1050	1050	1050	1050	1050	1050	
Dimensions L x W x H (mm) (shreddir	ng unit incl. hopper)						
Combined unit:	8041 x 2949 x 3191						
Separated unit:	5772 x 2949 x 3191						
Weight (dependent on equipment)							
Weight (t): Combined unit	~ 15.1	~ 15.5	~ 16.5	~ 15.8	~ 16.8	~ 17.1	
Throughput (dependent on material)							
Throughput performance (t/h):	up to 30	up to 45	up to 50	up to 60	up to 80	up to 100	
Options							

Armoured drum teeth, soft-start, electrical control system internal/external, control panel internal/external, variants for hopper, outfeed conveyor, discharge conveyor, remote control, central lubrication, steelwork-substructure etc.

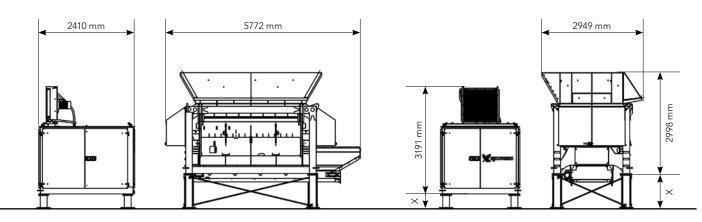




### HYDRAULIC (COMBINED UNIT)



## HYDRAULIC (SEPARATED UNIT)



# TECHNOLOGY FOR A BETTER **ENVIRONMENT**



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We reserve the right to make technical changes in the course of ongoing development. E2019