

TANA

TANA WASTE SHREDDERS

TANA FROM WASTE TO VALUE®



Even more versatile than before

Unique versatility

Investing in a TANA shredder opens multiple opportunities. The TANA Shark is able to produce a homogenous particle size and has the capability to process the widest range of materials - even the toughest ones. Our 440 series shredders offer even more flexibility than before thanks to a wider variety of rotors, screen sizes and platforms. All our shredders are electric or diesel powered.

Ease of use

TANA shredders are extremely easy to adjust. Integrated screens are used to control the end product size and can be changed in just ten minutes. Non-crushables can be removed through the opening side wall. The TANA Control System (TCS) offers 12 preset operating programs for different types of waste. The touchscreen is state of the art, and software updates can be done remotely.

Ease of maintenance

Easy access to all service and maintenance points is one of the most appreciated features of TANA products. In addition to more efficient daily routines, optimal ergonomics maximize uptime. The opening side wall provides access to the rotor and the counter knives making rotor maintenance smooth and easy compared to other players on the market.



EQUIPMENT:
Customize to your needs



STRENGTHS:
Shreds practically anything

ROTORS:
7 different models

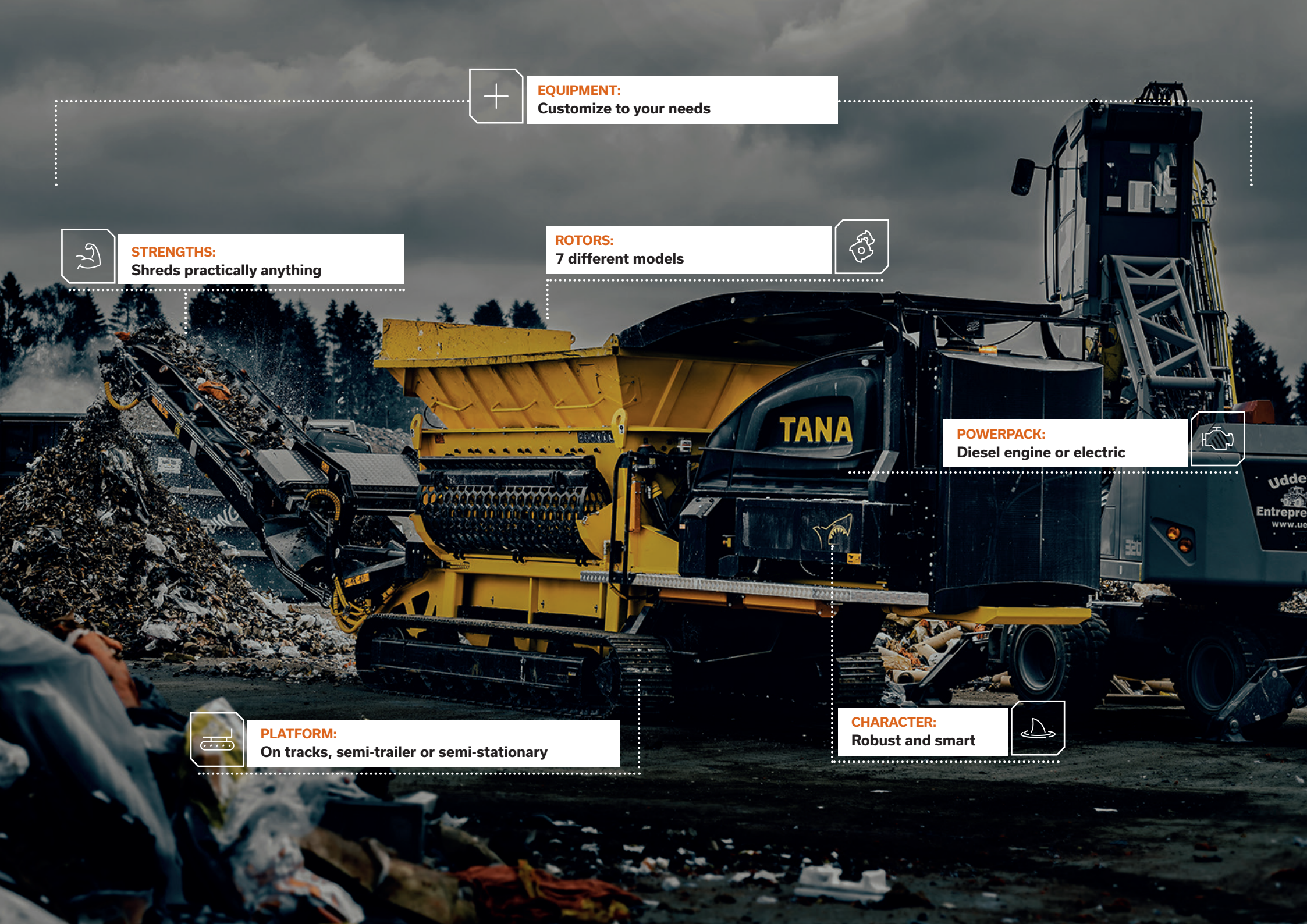


POWERPACK:
Diesel engine or electric



PLATFORM:
On tracks, semi-trailer or semi-stationary

CHARACTER:
Robust and smart



All you need to know

Best adjustability

With TANA you can make even-sized end products. You can adjust the particle size from 50 mm to 500 mm. The right screen size will be determined by the material characteristics and the required end product size.

Largest variety of materials

- Tyres
- Commercial & industrial waste (C&I)
- Construction and demolition waste (C&D)
- Municipal solid waste (MSW)
- Other types of special waste & side streams: ragged wire, plastics, pallets and waste wood, household waste, mattresses and furniture, paper, barbed wire, shingles

Most versatile use

- Pre-shredding
- Secondary shredding
- Final shredding

Material recovery & re-use

Waste can be transformed into valuable raw materials – with the right machine. Material recovery and re-use offer growing business opportunities. Reducing, re-using and recovering waste to manage waste sustainably can be done profitably with the TANA Shark.

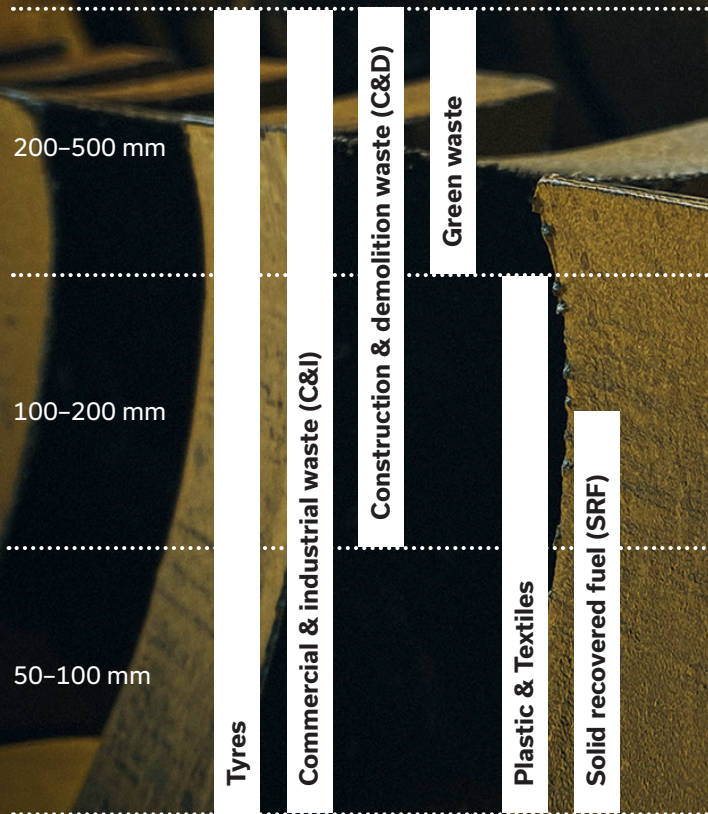
From waste to energy

Produce alternative fuel like SRF, RDF or TDF. The composition of waste streams changes constantly. The waste shredding process needs to be adjustable, as the quality of the source and end material vary. Commercial and industrial waste, tires, construction and demolition waste, and other types of waste can be crushed one after another and even mixed after shredding.

Traditional waste shredding process

TANA Shark waste shredding process

Particle sizes and waste types



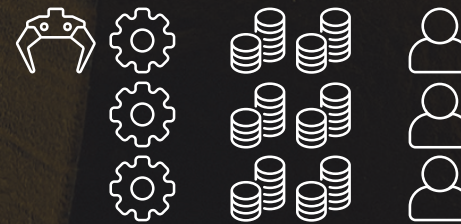
Machines

Costs:
Fuel and people



Machines

Costs:
Fuel and people



For the best performance

Bolted cleaning combs

Cleaning combs at the back of the machine also affect the level of even quality of the end product size. Long cleaning combs help in producing a homogeneous particle size. Short combs are a good choice when working with heavily contaminated or difficult to shred materials. Bolt on cleaning combs are convenient to change and maintain.

Electrically controlled hydraulics

The electronic control of the rotor hydraulics allows faster and more precise control over the entire shredding process. TCS optimizes and adjusts the entire system, ensuring the best combination of performance and fuel economy. This way the performance and the capacity of the machine stay in balance with the operating costs at all times, from easily shreddable materials to the most challenging ones.

Power

Choice of two excellent options. Powerful and reliable Cummins diesel engines offer durable and efficient power generation and full mobility for all shredding purposes. Available for all marks in Tier IIIA and Stage V / Tier 4 Final versions.

Electrically driven powerpack offers VEM electric motors coupled together with proven TANA hydraulics for cases where electricity is available. Same performance, lower OPEX, zero CO2 local emissions.

TANA Control System

The TANA Control System (TCS) controls machine operations and automatically stops the machine in case of overloading, for example. TanaConnect® is a useful tool for taking care of timely and correctly scheduled maintenances. Critical alarm notifications may even prevent machine breakdowns.



Flexible operations

By adjusting the amount of counter knives, the end product size can be regulated, and with an adequate rotor screen, it can be fine-tuned and the optimal end product size-capacity ratio achieved. Both the rotor knives and the counter knives have two wearing surfaces that prolong their service life. Rotors and counter knives are also available with a carbide coating for extreme wear resistance.

Protecting your investments

The TANA Shark operates on a hydrostatic power transmission identical to the one used in TANA landfill compactors. The patented swing frame system protects the gearbox from overloading and possible damage.

Operational efficiency

Easy access to daily inspection points makes the routines more efficient and maximizes the machine's uptime. The removal of non-crushables is quick and easy through the opening side wall.

Ease of maintenance and service

Easily accessible service points improve ergonomics and save time, both of which are highly appreciated by TANA owners. Service kits including the needed filters and parts for each scheduled maintenance are delivered with TANA machines – convenient, rapid and easy.

Special features of TANA waste shredders



TANA Powerpack

Side-opening engine covers give easy access to service points that are designed to be user-friendly. Service platforms around the machine make daily maintenance more comfortable, efficient and safe.



Patented swing frame

The patented swing frame system protects the gearbox and prevents breakdowns.



TANA Control System (TCS)

TANA TCS has been updated with a new touchscreen display module. Choose one of the 12 preset shredding programs to ensure an optimized process.



TanaConnect®

TanaConnect® provides online access to your machine wherever you are. For maximizing machine uptime and optimizing your operations.

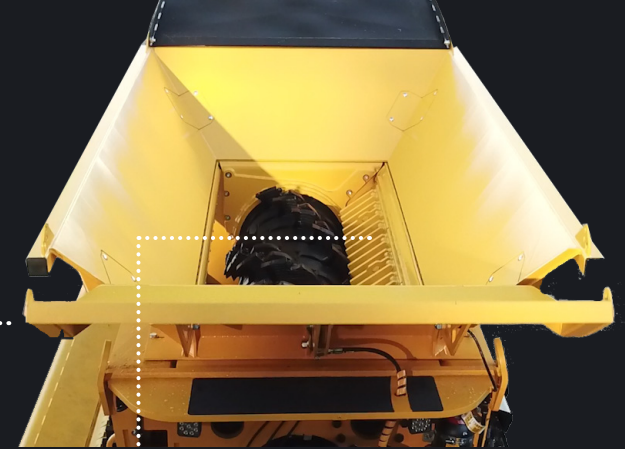


Overband magnet

Separating ferrous metals from the shredded material results in a cleaner end product and additional income. The height and direction can be controlled easily through TCS.



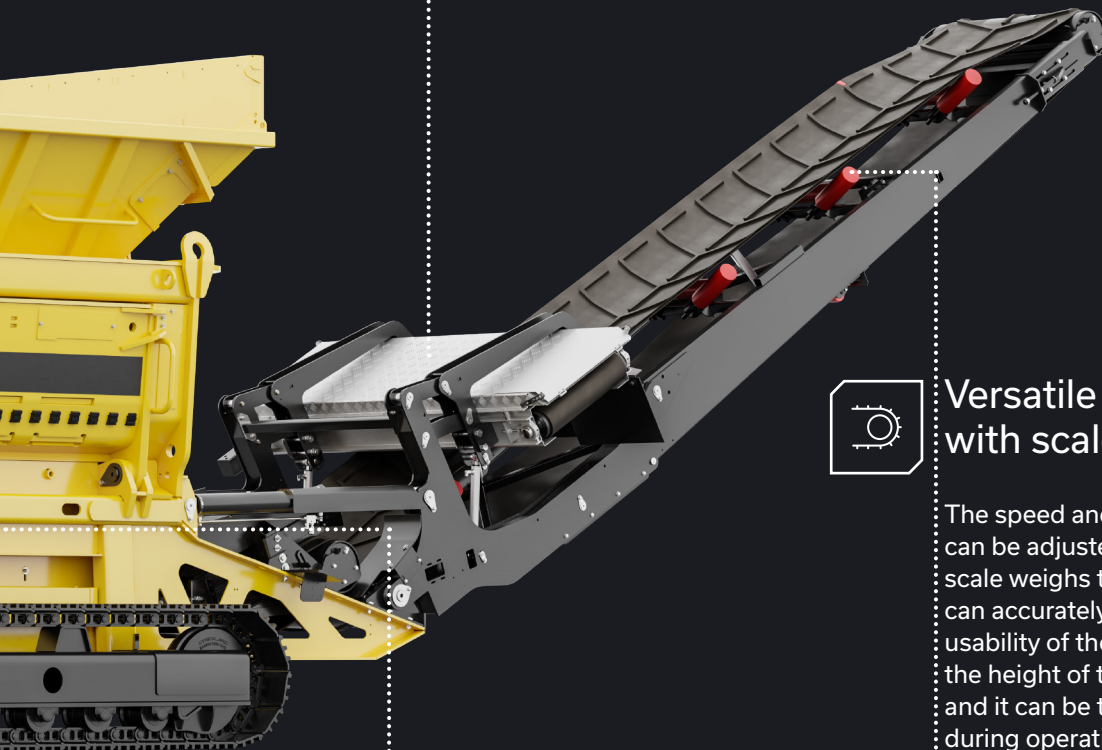
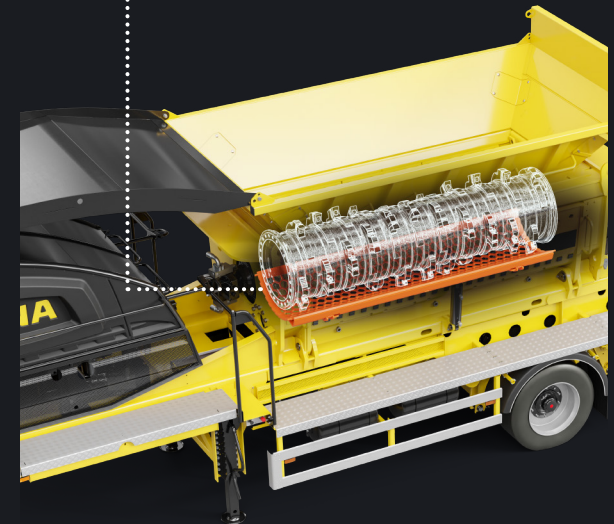
Folding hopper side wall



Bolted cleaning combs



11 different rotor screen sizes



Versatile 2-part conveyor with scale

The speed and direction of each conveyor can be adjusted separately. The conveyor scale weighs the shredded material so you can accurately monitor your process. The usability of the magnet is state of the art – the height of the magnet can be adjusted and it can be turned off and back on again during operation. The direction of the magnet to the left or right can be chosen, which improves flexibility.



Torque and robustness

The highest torque on the market and robust structure ensure its capability to shred the toughest materials, like big tires and ragger wire.

Unique Intelligence



Control system optimizes and controls operation

The TANA Control System (TCS) monitors and controls the machine functions. The operating programs adjust the shredder functions to the optimal level needed for the shredding process in question. It is the key element in controlling operating costs.

Integrated scale collects information

The integrated scale will keep you up to date on the amount of shredded waste. The scale automatically weighs the shredded materials and sends the information to the TanaConnect® information management system. Reports provide an overall understanding of the efficiency of your shredding process.

Track processes in real-time with TanaConnect®

Through TanaConnect® the operation can be followed in real time. Critical alarm notifications help to prevent potential problems, and if something happens, troubleshooting and diagnostics are faster and more accurate, minimizing downtime. As a machine owner you will have control of the machine anywhere and anytime.

TanaConnect® has an integrated information management system that collects real-time and detailed data about the shredding process, amounts of shredded materials and the machine itself.



TanaConnect® is a digital service portal providing all needed information and tools in one place, including a fleet management system, to efficiently operate TANA machines.

The **TANA Control System (TCS)** monitors and controls the machine functions.

Unique versatility

Choose the rotor for your needs.

Available rotors:

- Standard 33
 - Standard 33+
 - Heavy duty 33
 - Heavy duty 33+
 - Standard 44
 - Heavy duty 44
 - Heavy duty 44+
- The plus rotors can withstand up to six times more fatigue making them a safe, long-term choice for heavy applications with intensive wear.
 - The HD rotors offer ease of maintenance in the form of easily replaceable wear plates, which are available as individual pieces of full sets for the entire rotor.
 - 33 knife rotor offers flexibility and suitability for all applications and is meant especially for applications where the infeed material size is bulky or large.
 - 44 knife rotors offer increased performance and capacity in applications where the particle size is controlled with a screen and the infeed material is homogenous.



Heavy Duty Rotor
C&D



Standard Rotor+
C&I



Standard Rotor
Wood, green waste, MSW



Heavy Duty+ Rotor
Tires, ragger wire, mattresses

low wear

high wear

SHARK ON TRACKS

The most versatile mobile waste shredder with excellent capacity and productivity. You will get excellent performance with better fuel efficiency, lower machine operating costs and improved usability and serviceability.

440DT & 440DTeco

EU Stage IIIA/U.S. EPA Tier 3
Diesel

EU Stage V/U.S. EPA Tier 4(f)
Diesel

- Raised frame with more space to guarantee better material flow underneath the rotor
- Integrated scale for staying up to date on the amount of shredded waste
- Bolt-on cleaning combs for easier maintenance
- Magnet conveyor: discharge side selected from TCS + hydraulic magnet adjustment during operation
- Full mobility with tracks - move around by remote control



440ET

Electric

- Full mobility - drives on diesel, shreds on electricity
- Effortless use of auxiliary power
- Less noise and zero emissions
- Quick couplings for power grid



220DTeco

EU Stage V/U.S. EPA Tier 4(f)
Diesel

- Equipped with all the well-known TANA features
- Affordable and safe investment
- Ease of use
- Low operating costs



SHARK ON SEMI-TRAILER

Easy to move. Choose diesel or 6 dB quieter electric engine with zero emission. TANA shredder's efficiency and unique versatility provide TANA owners with opportunities to increase profits and reduce costs.

440D

EU Stage IIIA/U.S. EPA Tier 3
Diesel

&

440Deco

EU Stage V/U.S. EPA Tier 4(f)
Diesel

- Integrated scale for staying up to date on the amount of shredded waste
- Standard frame (no raised frame)
- Bolt-on cleaning combs for easier maintenance
- Magnet conveyor improvements: discharge side selected from TCS + hydraulic magnet adjustment during operation



440EM

Electric

- Electric semi-trailer TANA Shark offers the same versatility and reliability as its diesel equivalent, while being more ecofriendly in terms of emissions and noise.
- It provides a sustainable process with low operations costs, cleaner site and safer working environment.
- Easy and safe access to power grid is guaranteed with quick couplings



STATIONARY WASTE SHREDDER

Stays put and guarantees zero emissions. Less noise. TANA's exceptional reliability, efficiency and productivity.

440E

Electric

- Electricity boosts the productivity while providing low operating and maintenance costs
- Easy and safe access to power grid is guaranteed with quick couplings
- Magnet conveyor rotation direction can be chosen
- Multiple different setup options to precisely match your requirement:

Shredding unit + powerpack

Shredding unit + powerpack + base

Shredding unit + powerpack + base + lower conveyor

Shredding unit + powerpack + base + lower & upper conveyor

Shredding unit + powerpack + base + lower & upper conveyor + magnet





DIESEL MODELS

General informaton	220DTeco	440DT 440DTeco	440D 440Deco
Operating weight, kg *	29700	30200 (440DT) / 30400 (440DTeco)	27300 (440D) / 27500 (440Deco)
Total length in transportation, mm**	10260	10260	10270
Total length in operation, mm	15750	15750	15680
Total width, mm	2550	2550	2530
Total height in transportation, mm	3600	3600	3950
Rotor shaft type	single shaft	single shaft	single shaft
Conveyor belt speed (max. m/s)	3	3	3
Conveyor width	1000	1000	1000
Discharge & transfer conveyor length (mm)	5480, 7050	5480, 7050	5480, 7050
Conveyor height on operation**	4290	4290	4720
Integrated scale	x	x	x
Remote control	x	x	option
Maximum velocity (models with tracks)	2,5 km/h	2,5 km/h	
Engine and power transmission			
Motor & efficiency	Cummins X15 - Fulfills Tier 4 final, EU Stage V	Cummins X15 (440DT) - Fulfills Tier 3, EU Stage IIIA Cummins X15 (440DTeco) - Fulfills Tier 4 final, EU Stage V	Cummins X15 (440D) - Fulfills Tier 3, EU Stage IIIA Cummins X15 (440Deco) - Fulfills Tier 4 final, EU Stage V
Power rating (SAE J1995) (kW)	399	399	399
Displacement (l) & number of cylinders	15 - 6	15 - 6	15 - 6
Fuel tank (litres)	720	720	755
Urea tank (eco-models only)	56	56	56
Rotor drive gears, pcs	1	2	2
Nominal rotor torque, kNm	220	440	440
Infeed hopper			
Loading height (mm)	3170	3170	3400
Volume m3	5	5	5
Shredding tools			
Rotor shredding length, mm	3000	3000	3000
Rotor speed max, rpm	28	28	28
Rotor diameter, mm	920	920	920
Rotor knives, pcs	33 / 44 (option)	33 / 44 (option)	33 / 44 (option)
Counter knives, pcs	23	23	23
Rotor knife type	Bolt-on, reversible knife	Bolt-on, reversible knife	Bolt-on, reversible knife
Rotor knife size, mm	115x70	115x70	115x70
Examples of optional equipment:			
Overband magnet	x	x	x
Conveyor side covers	x	x	x
Rotor screen sizes (mm)	50, 76, 90, 100, 109, 120, 140, 167, 220, 275, special tyre shredding screen	50, 76, 90, 100, 109, 120, 140, 167, 220, 275, special tyre shredding screen	50, 76, 90, 100, 109, 120, 140, 167, 220, 275, special tyre shredding screen

Technical specification D120111/ 24.10.2023

Weights and measurements are given within normal tolerances limits. The manufacturer reserves the right for any changes.

* Operating weight includes the basic machine (fuel tank full)

** When at 30° nominal working angle

*** Underband, overband or both conveyors sold as an option for the 440E model

**** 50Hz / 400 V ***** 60 Hz / 480 V UL

ELECTRIC MODELS

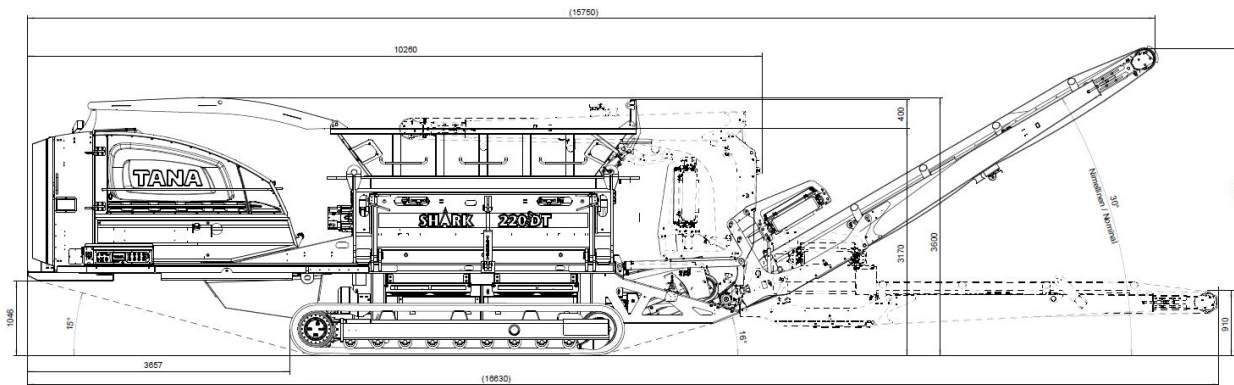
General informaton	440ET	440EM	440E
Operating weight, kg *	31900	27400	24500
Total length in transportation, mm**	10260	10060	6340
Total length in operation, mm	15750	15480	11900
Total width, mm	2550	2530	2420
Total heigth in transportation, mm	3600	3970	3340
Rotor shaft type	single shaft	single shaft	single shaft
Conveyor belt speed (max. m/s)	3	3	3
Conveyor width	1000	1000	1000
Discharge & transfer conveyor length (mm)	5480, 7050	5480, 7050	- ***
Conveyor height on operation**	4290	4730	-
Integrated scale	x	x	x
Remote control	x	option	option
Maximum velocity (models with tracks)	1,3 km/h		
Electric motor and power transmission			
Motor & efficiency	VEM, IE4 Doosan D34 3,4 liter, 4 cylinder engine - Fulfills Tier 4 final, EU Stage V	VEM, IE4	VEM, IE4
AUX diesel engine (440ET only)			
Power rating (SAE J1995) (kW)	2 x 160 kW****/ 2 x 175 kW*****	2 x 160 kW****/ 2 x 175 kW*****	2 x 160 kW****/ 2 x 175 kW*****
Fuel tank litres (440ET only)	55	-	-
Electrical connection/earthing	TN-C	TN-C	TN-C
Main fuse size	630 A	630 A	630 A
Rotor drive gears, pcs	2	2	2
Nominal rotor torque, kNm	440	440	440
Infeed hopper			
Loading height (mm)	3170	3400	2296 (without the base)
Volume m3	5	5	5
Shredding tools			
Rotor shredding length, mm	3000	3000	3000
Rotor speed max, rpm	26/28	26/28	26/28
Rotor diameter, mm	920	920	920
Rotor knives, pcs	33 / 44 (option)	33 / 44 (option)	33 / 44 (option)
Counter knives, pcs	23	23	23
Rotor knife type	Bolt-on, reversible knife	Bolt-on, reversible knife	Bolt-on, reversible knife
Rotor knife size, mm	115x70	115x70	115x70
Examples of optional equipments:			
Overband magnet	x	x	x***
Conveyor side covers	x	x	x
Rotor screen sizes (mm)	50, 76, 90, 100, 109, 120, 140, 167, 220, 275, special tyre shredding screen	50, 76, 90, 100, 109, 120, 140, 167, 220, 275, special tyre shredding screen	50, 76, 90, 100, 109, 120, 140, 167, 220, 275, special tyre shredding screen

Technical specification D120111/ 24.10.2023
Weights and measurements are given within normal tolerances limits. The manufacturer reserves the right for any changes.

* Operating weight includes the basic machine (fuel tank full)
** When at 30° nominal working angle

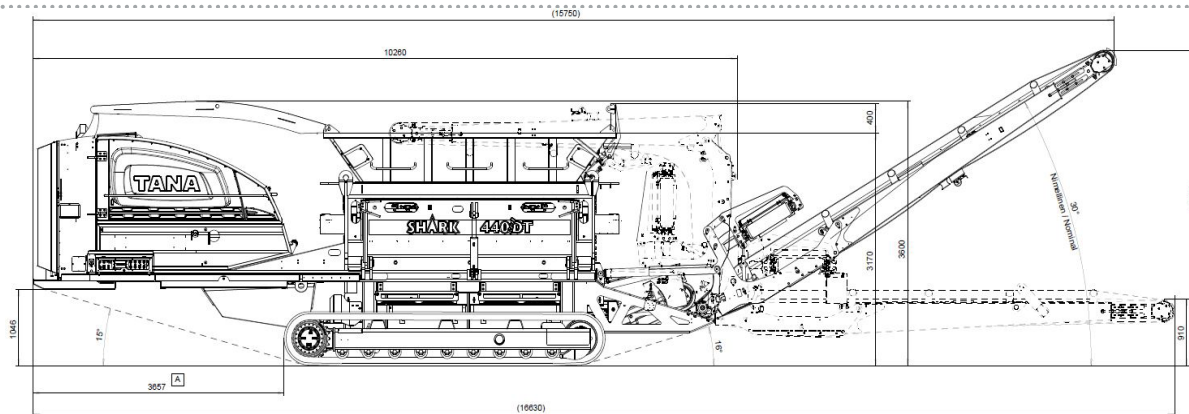
*** Underband, overband or both conveyors sold as an option for the 440E model
**** 50Hz / 400 V ***** 60 Hz / 480 V UL

Technical dimensions



220DTeco

EU Stage V/U.S. EPA Tier 4(f)
Diesel



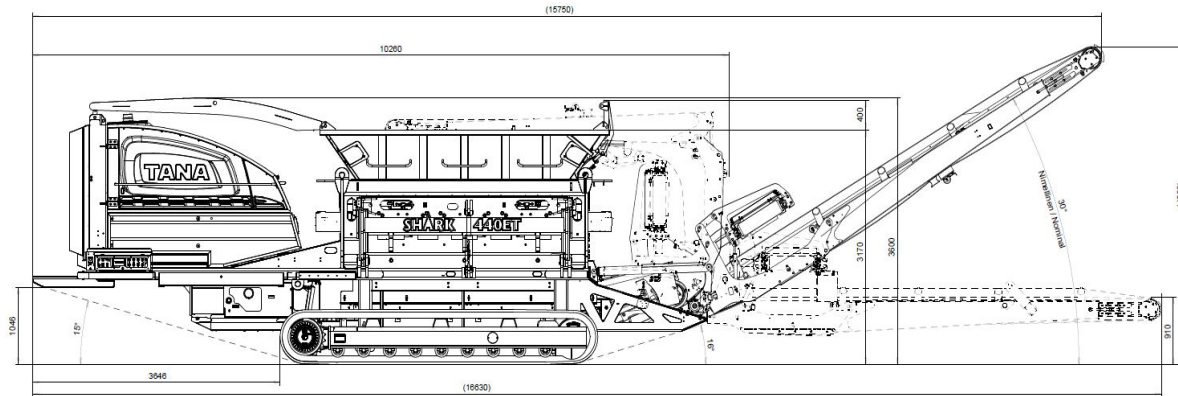
440DT

EU Stage IIIA/U.S. EPA Tier 3
Diesel

&

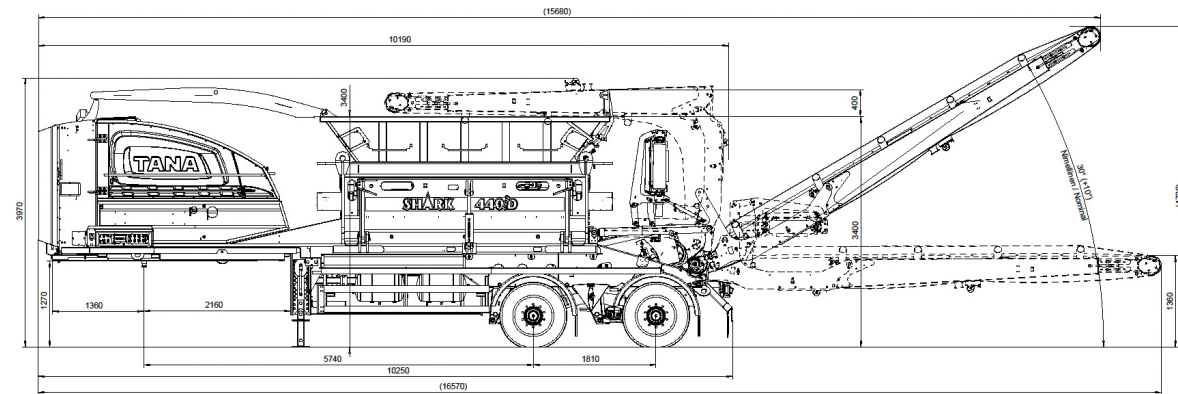
440DTeco

EU Stage V/U.S. EPA Tier 4(f)
Diesel



440ET

Electric



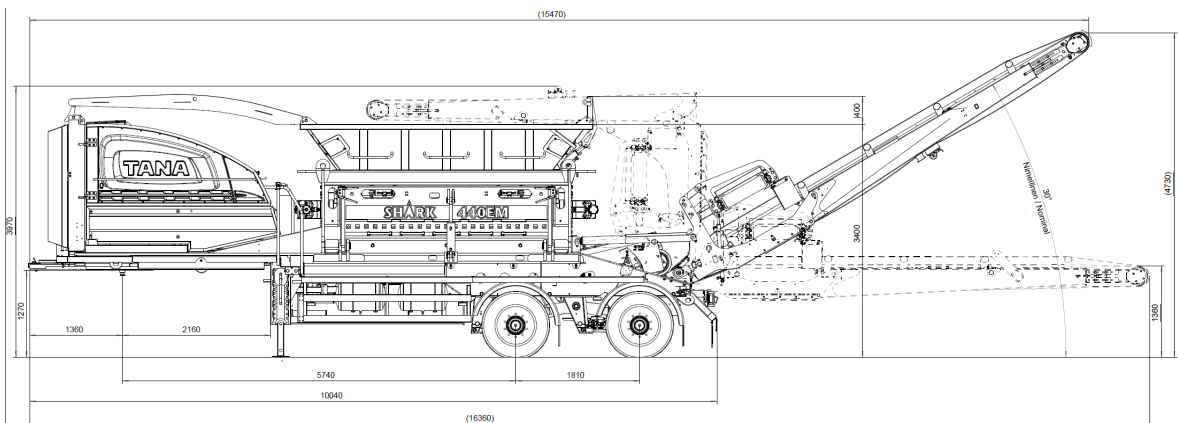
440D

EU Stage IIIA/U.S. EPA Tier 3
Diesel

&

440Deco

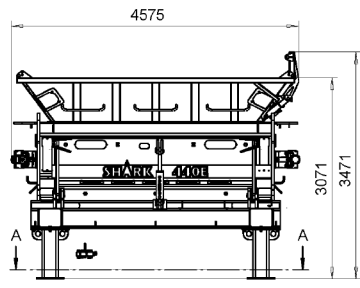
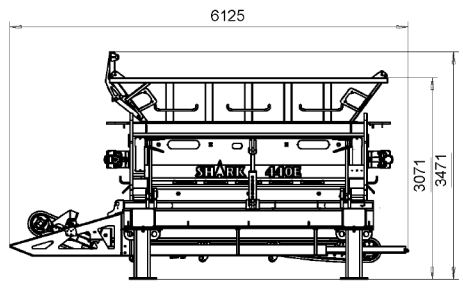
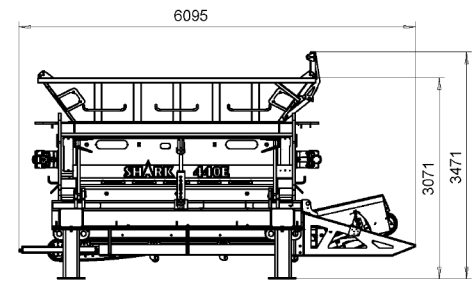
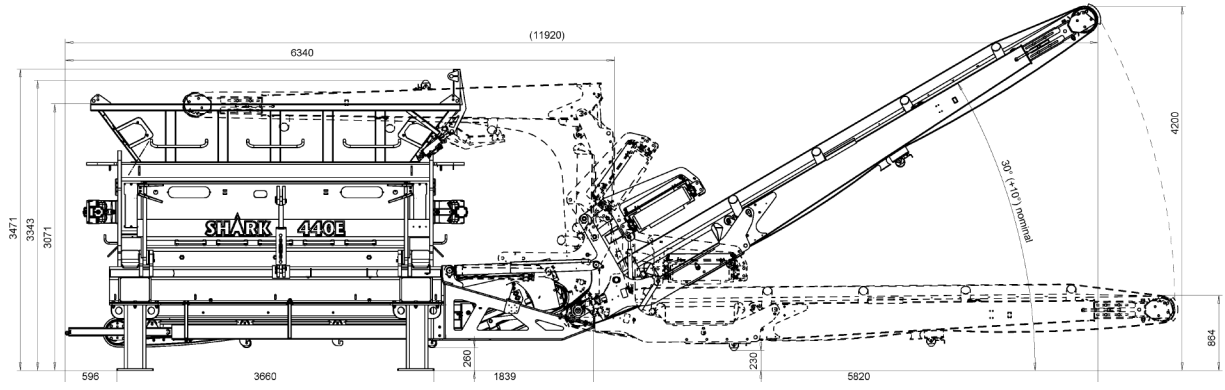
EU Stage V/U.S. EPA Tier 4(f)
Diesel



440EM

Electric

440E



We are here for you.



We know our responsibility and machines

Tana Oy is an environmental technology company that promotes sustainable development by providing smart equipment and solutions for solid waste management. It is a matter of honor for us that our customers share the feeling of confidence. We put serious effort into proactive maintenance because we want to keep our promise. We ensure that the Authorized Tana Distributors around the world have the best tools for taking excellent care of Tana customers.

1970

The beginning

The first purpose build landfill compactor with two full-width iron drums was manufactured for an exhibition in Hannover.

1995-2006

Brave decisions and actions

Waste management changed and new solutions were needed. The first slow speed shredder was introduced in 2006.

2008

Intelligence

We wanted to be one step ahead with IoT and decided to equip our machines with intelligence. TANA ProTrack® was launched.

2021-2024

From Waste to Value

By developing our brand, we want to inspire both our staff, partners and customers to do their best in an easier and more efficient way.

TANA

CONTACT US

Tana Oy

P.O.Box 160
Schaumahin puistotie 1
FI-40101 Jyväskylä
Tel. +358 20 7290 240
mail@tana.fi
www.tana.fi

Your local Tana distributor:



TANA FROM WASTE TO VALUE®