

**WASTE SHREDDER**

# **TANA 440 Series**



**Getting results is interesting – not just the machine.**

**TANA**

# Smart people make up to 20% more profit.

Our goal is simple: To help our customers turn waste into value. With the TANA Shark shredder you get maximum value out of your investment and have the possibility to create new business. We think adjusting to changing markets and materials without additional investments is more than smart. Let the results speak for themselves.

Waste treatment is not something you learn from books. You learn it through honest work in everyday life. In order to turn waste into value you only need one TANA Shark. It shreds almost anything and tells you in real time what it is actually doing.



Two men wearing hard hats and safety glasses stand in front of a large pile of waste. The man on the left wears a yellow safety vest over a plaid shirt. The man on the right wears an orange hoodie with a 'KONE' logo. They are standing on a dirt path next to a large pile of brown, fibrous material, possibly compost or mulch. In the background, there is a large pile of white plastic bags and other debris.

**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 440 shredders are extremely easy to adjust. Integrated screens are used to adjust 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. 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. Easy access to service points makes daily routines more efficient, rain or shine.



#### **PLATFORM**

On tracks, semi-trailer or semi-stationary

#### **ENGINE**

Diesel or electric

#### **ROTORS**

6 different kinds

#### **EQUIPMENT**

Customize to your needs

#### **STRENGTHS**

Shreds almost anything

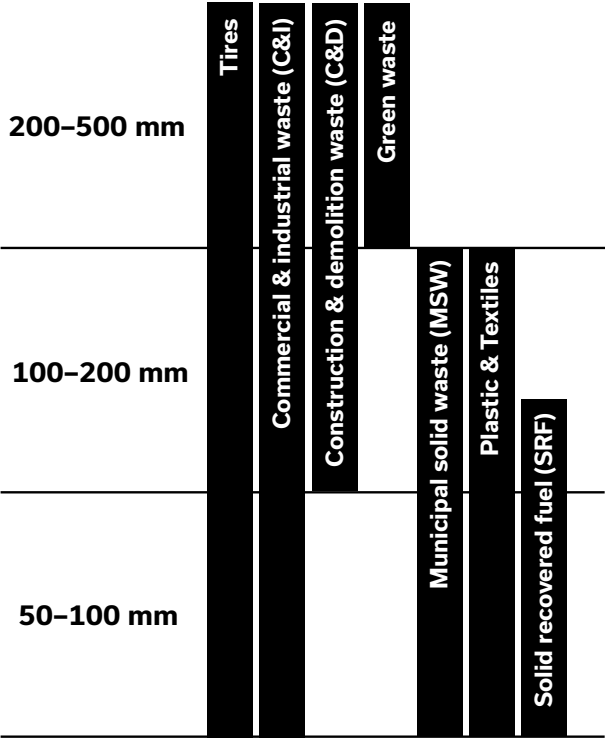
#### **CHARACTER**

Robust and smart



**One single operator  
and one TANA Shark  
can replace up to  
three machines and  
three people.**

# Particle sizes and waste types



# Traditional waste shredding process

Machines	Costs: Fuel and people
 	€ 
  	€ €  € € 
   	€ € €  € € €  

# TANA Shark waste shredding process

Machines	Costs: Fuel and people
 	€ 
 	€ € 
 	€ € 

# 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 size will be determined by the material characteristics and the required end product size.

## Largest variety of toughest materials

- Tires
- Commercial & industrial waste (C&I)
- Construction and demolition waste (C&D)
- Municipal solid waste (MSW)
- Other types of special waste & side streams: ragger 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.





# For profit and 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 have other advantages. Bolt on cleaning combs are convenient to change and maintain.

## TANA Control System

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

## New engines

New Stage V engines guarantee 2 % lower fuel consumption. The possibility to fine-tune the material-specific operating programs to the optimal level is another key element in lowering operating costs.

## 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.



## **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 available with different coatings as an option.

## **PROTECTING YOUR INVESTMENTS**

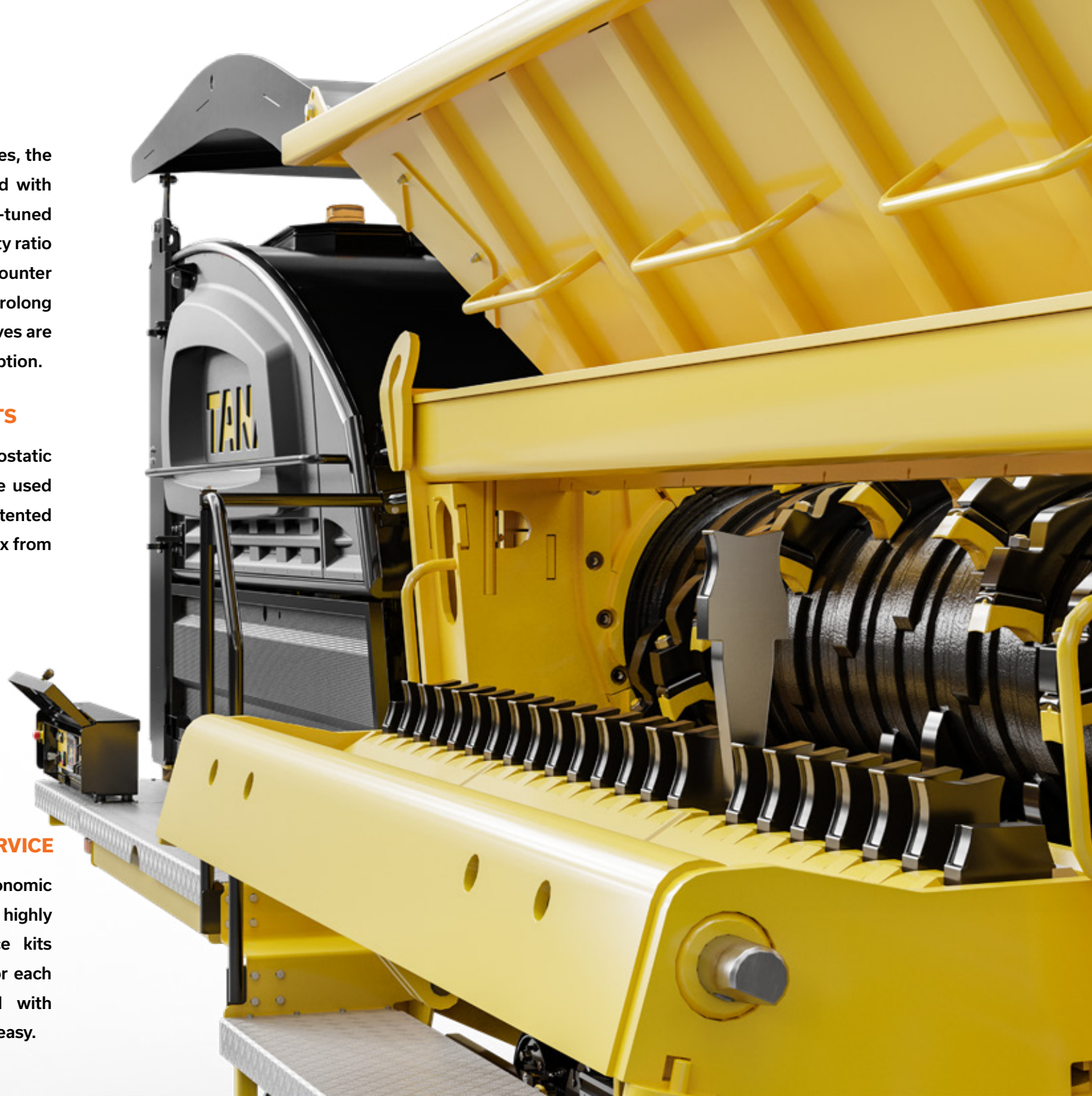
The TANA Shark operates on a hydrostatic power transmission identical to the one used in TANA landfill compactors. The patented swing frame system protects the gearbox from overloading and possible damage.

## **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**

Easy access to all service points is ergonomic and saves 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.





# Tried and tested features of 440 models

## 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.

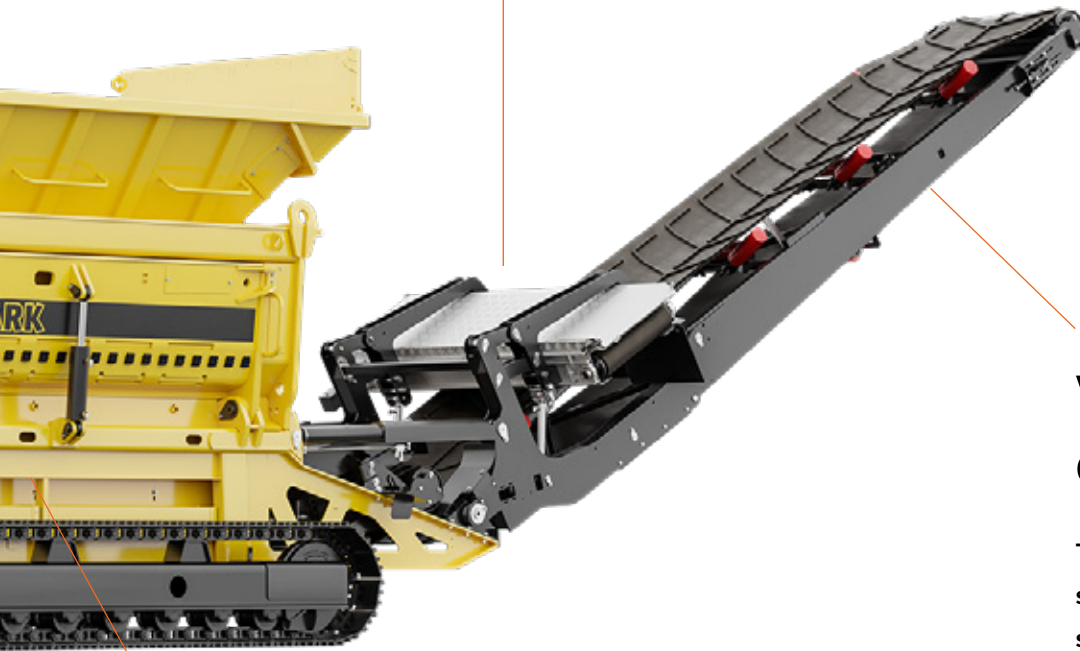
## TANA ProTrack<sup>®</sup>

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



# Overband magnet / HD magnet

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



## 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.

## Folding hopper side wall



## Bolted cleaning combs

## 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.

# 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.

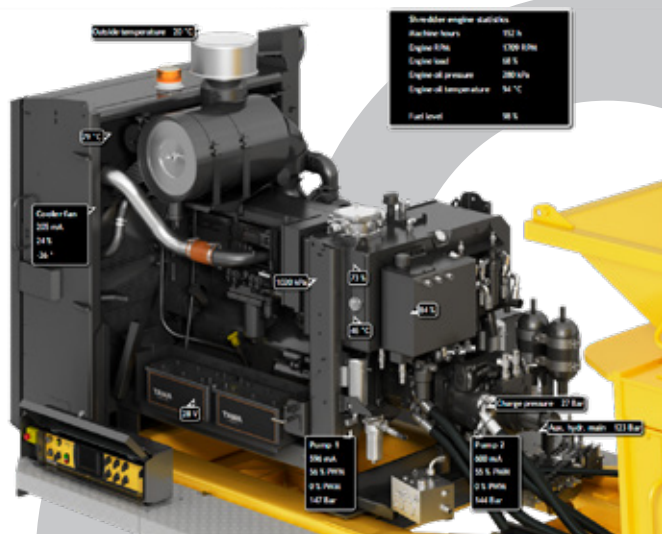
## **Integrated scale collects information**

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 TANA ProTrack® Information Management System. Reports provide an overall understanding of the efficiency of your shredding process.

## **Track processes in real-time with TANA ProTrack®**

Through TANA ProTrack® 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.





## TANA PROTRACK® REPORTS

TANA ProTrack® real-time reports provide access to detailed information about fuel consumption, the amount of shredded materials, productivity and working hours.

## TANA PROTRACK® TRACKING

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

## TANA Control System

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



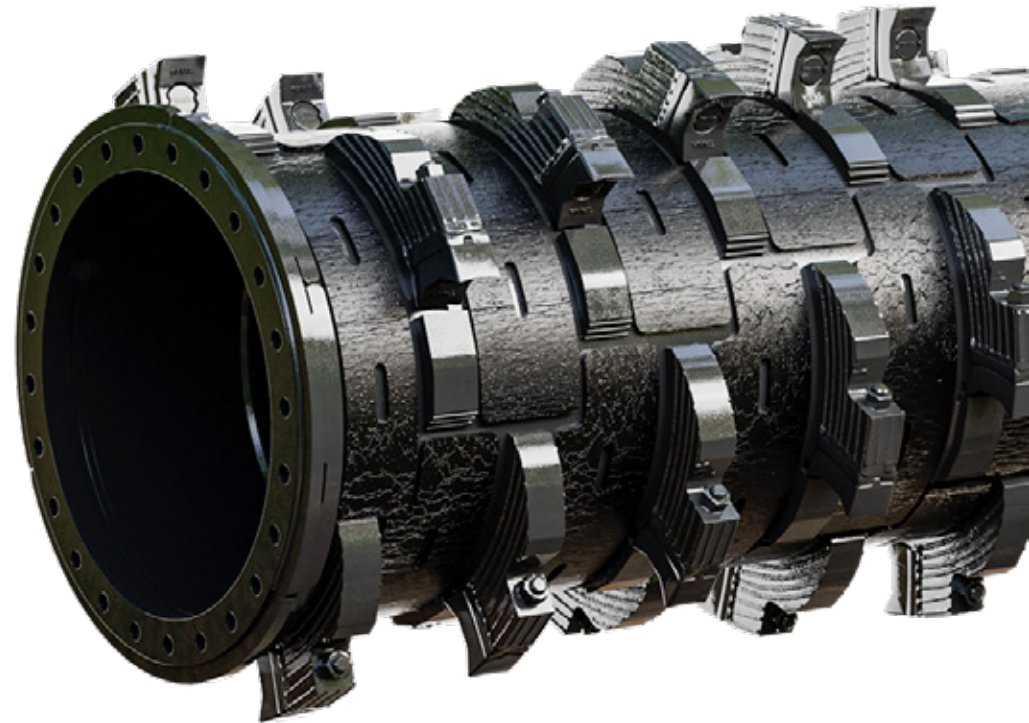
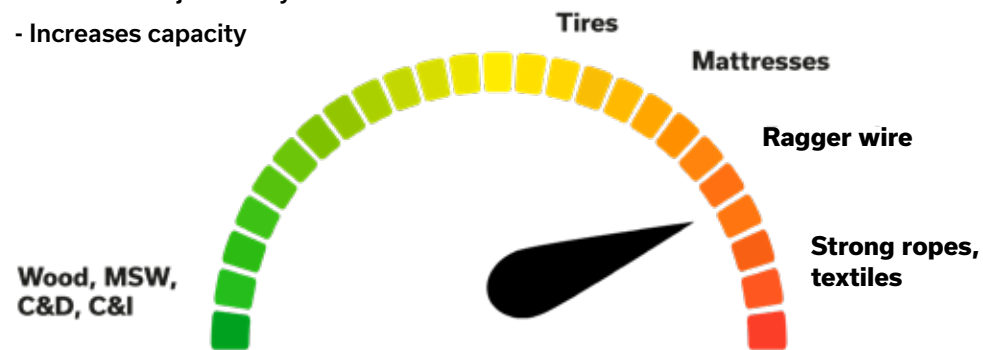
# Unique versatility

- choose the rotor for your needs.

## New

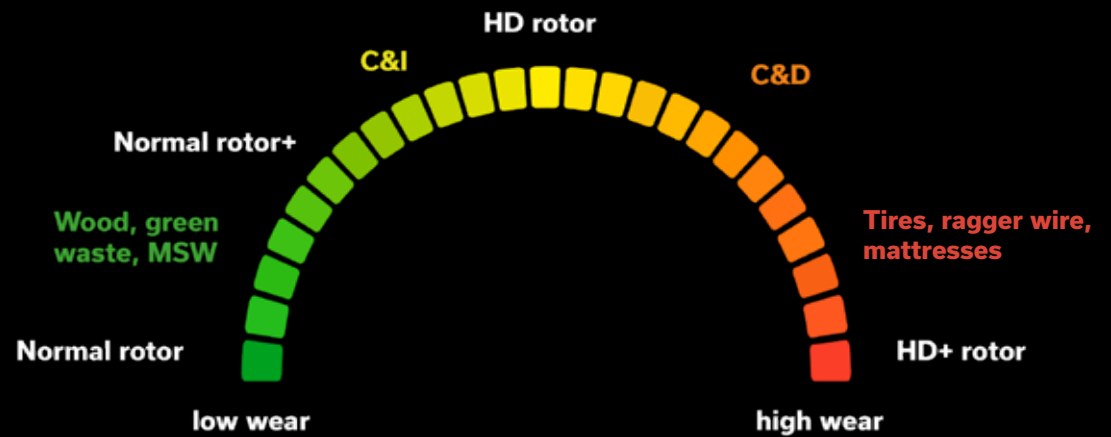
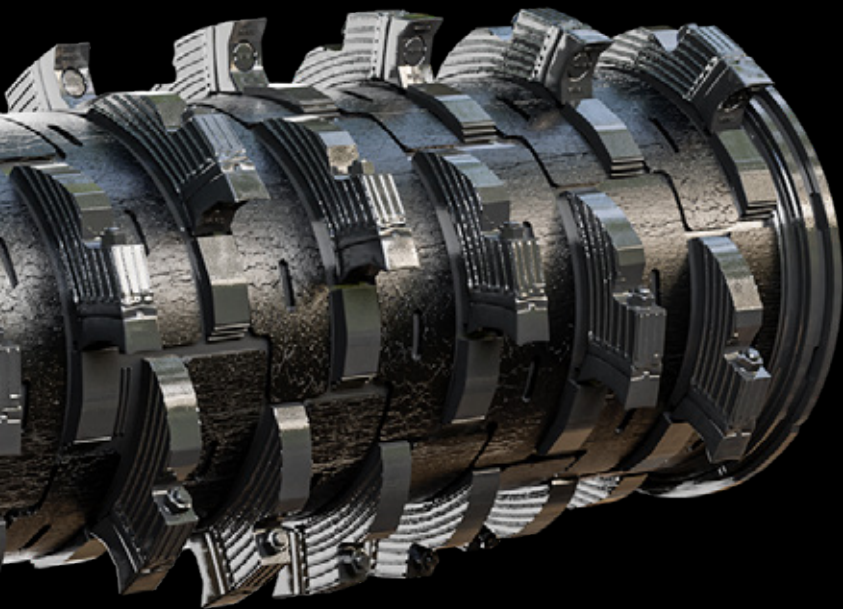
### HD rotor with 44 knives (option)

- Increases versatility
- Increases adjustability
- Increases capacity



## Available rotors:

- Standard rotor with 33 knives
- Standard+ rotor with 33 knives
- Heavy Duty rotor with 33 knives
- Heavy Duty+ rotor with 33 knives
- **NEW** rotor with 44 knives
- **NEW** Heavy Duty rotor with 44 knives





# New DIESEL 440DT & 440DTeco

## New features of the 440DT/440DTeco

- **Raised frame** - over 200 mm more space to guarantee better material flow underneath the rotor
- 44-knife rotor for preshredding e.g. bulky materials
- New conveyor system and scale
- Bolt-on cleaning combs for easier maintenance
- Magnet conveyor improvements: discharge side selected from TCS + hydraulic magnet adjustment during operation



### SHARK ON TRACKS

The most mobile of the TANA shredders, which can be easily moved around by remote control. Multiple new features make your waste management even more profitable.

SHARK ON SEMI-TRAILER

# DIESEL 440D & 440D<sub>eco</sub> ELECTRIC 440EM

- New conveyor system and scale
- Standard frame\*
- Bolt-on cleaning combs for easier maintenance
- Magnet conveyor improvements: discharge side selected from TCS + hydraulic magnet adjustment during operation



\* No raised frame

# Compare and choose your own

## SHARK STATIONARY ELECTRIC ELECTRIC 440E

Stationary model that guarantees

**zero emissions.**

6 dB quieter.





# Technical specifications

General informaton	440D   440D <sup>eco</sup>	440DT   440DT <sup>eco</sup>	440EM	440E
Operating weight, kg *)	25600	29700	28500	24500
Total length in transportation, mm*	10250	10250	10040	6340
Total length in operation, mm	15670	15740	15470	11900
Total width, mm	2520	2860	2530	2420
Total height in transportation, mm	3950	3600	3950	3340
Rotor shaft type	single shaft	single shaft	single shaft	single shaft
Conveyor belt speed (max. m/s)	3	3	3	3
Conveyor width	1000	1000	1000	1000
Discharge & transfer conveyor length (mm)	5430, 7010	5430, 7010	5430, 7010	- **
Conveyor height on operation*	4720	4290	4720	-
Integrated scale	x	x	x	x
Remote control	x (option)	x	x (option)	x (option)
Maximum velocity (models with tracks)		3 km/h		
Engine and power transmission	440D / 440D <sup>eco</sup>	440DT / 440DT <sup>eco</sup>	440EM	440E
Engine & emissions	Cummins X15 (440D) - Fulfills Tier 3, EU Stage IIIA Cummins X15 (440Deco) - 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	VEM, IE3	VEM, IE3
Power rating (SAE J1995) (kW)	399 (440D) 399 (440Deco)	399 (440DT) 399 (440DTeco)	2 x 160 kW*** / 2 x 175 kW****	2 x 160 kW*** / 2 x 175 kW****
Displacement (l) & number of cylinders	15 - 6	15 - 6	-	-
Fuel tank (litres)	700	710	-	-
Urea tank (eco-models only)	56	56	-	-
Rotor drive gears, pcs	2	2	2	2
Nominal rotor torque, kNm	440	440	440	440
Infeed hopper	440D / 440D <sup>eco</sup>	440DT / 440DT <sup>eco</sup>	440EM	440E
Loading height (mm)	3400	3174	3400	2860
Volume m3	5,06	5,06	5,06	5,06
Shredding tools	440D / 440D <sup>eco</sup>	440DT / 440DT <sup>eco</sup>	440EM	440E
Rotor shredding length, mm	3000	3000	3000	3000
Rotor speed max, rpm	28	28	26	26
Rotor diameter, mm	920	920	920	920
Rotor knives, pcs	33 / 44 (option)	33 / 44 (option)	33 / 44 (option)	33 / 44 (option)
Counter knives, pcs	23	23	23	23
Rotor knife type	Bolt-on, reversible knife	Bolt-on, reversible knife	Bolt-on, reversible knife	Bolt-on, reversible knife
Rotor knife size	115x70	115x70	115x70	115x70
Examples of optional equipments:				
Overband magnet	Overband magnet (option)	Overband magnet (option)	Overband magnet (option)	Overband magnet (option)**
Rotor screen, mm	Various mesh sizes available *****	Various mesh sizes available *****	Various mesh sizes available *****	Various mesh sizes available *****
Conveyor side covers	x	x	x	x

\* When at 30° nominal working angle

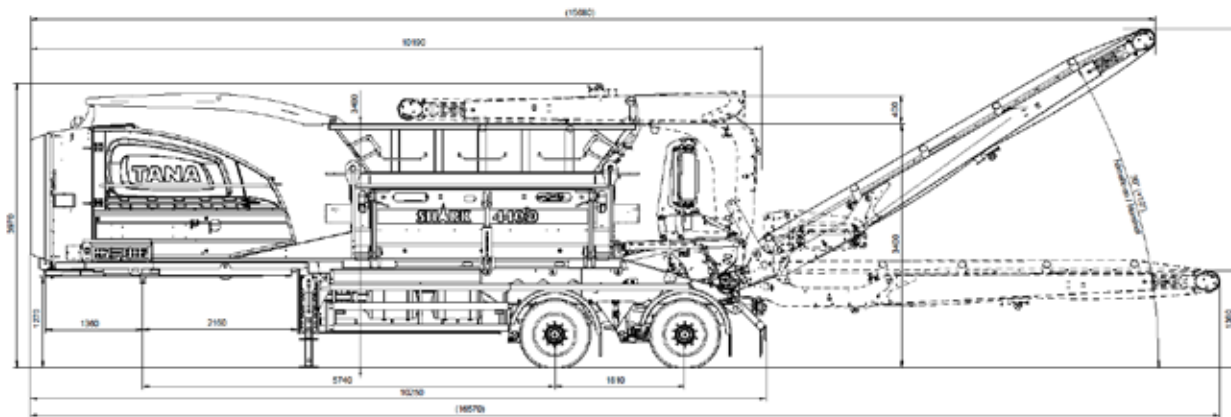
\*\* Underband, overband or both conveyors sold as an option for the 440E model

\*\*\* EU

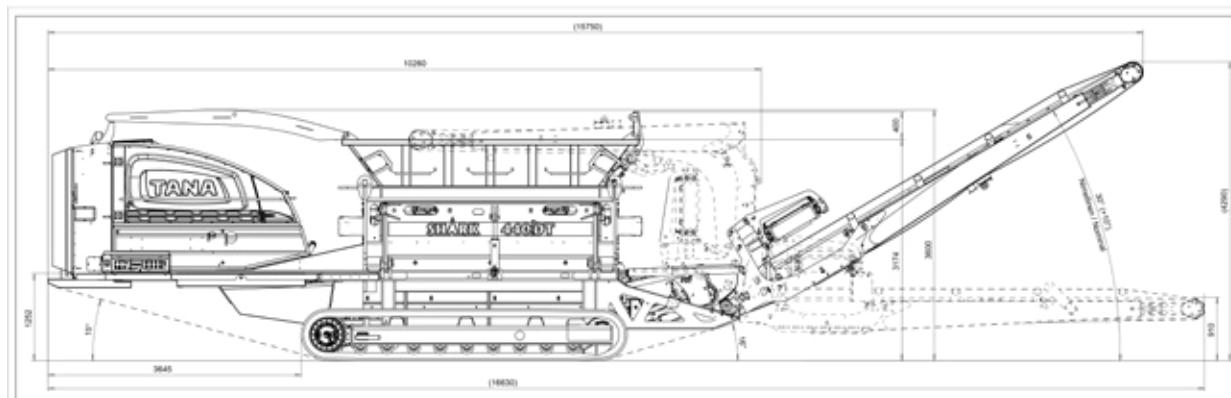
\*\*\*\* USA/ Canada

\*\*\*\*\* 50, 76, 90, 100, 109, 120, 140, 167, 220, 275, special tyre shredding screen

# Technical dimensions

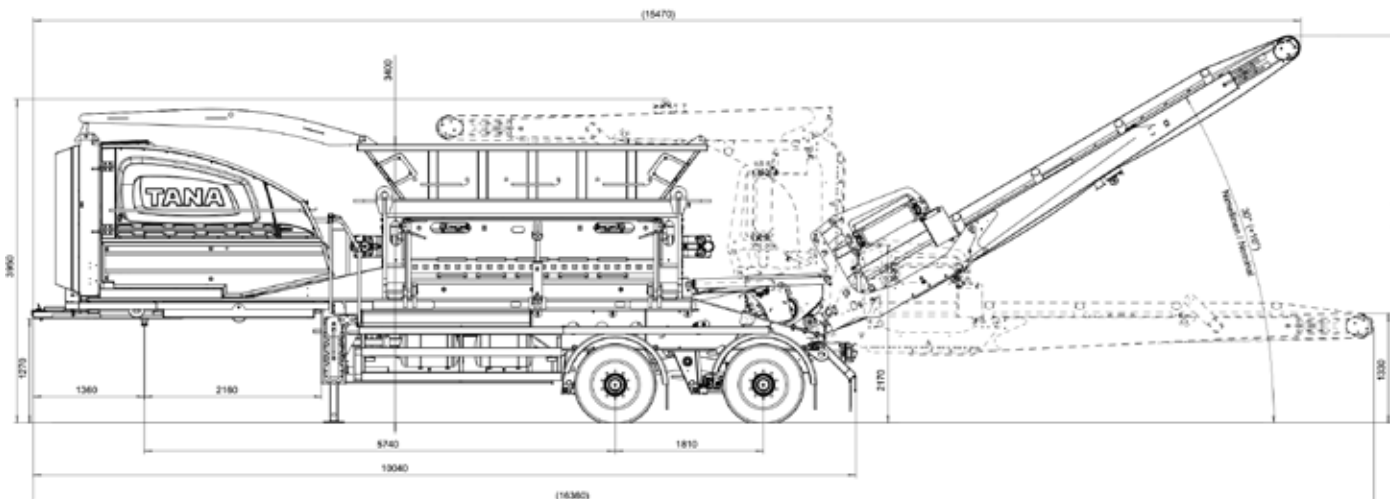


## DIESEL SHARK 440D & 440Deco

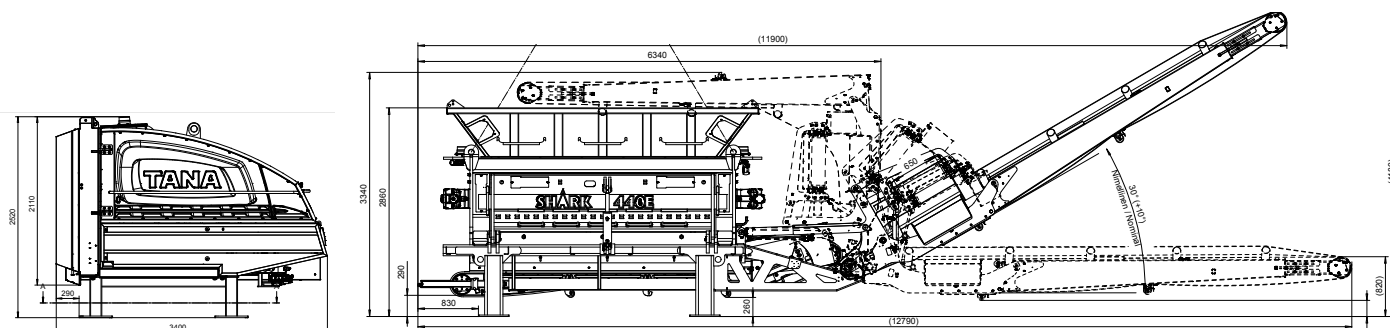


## DIESEL

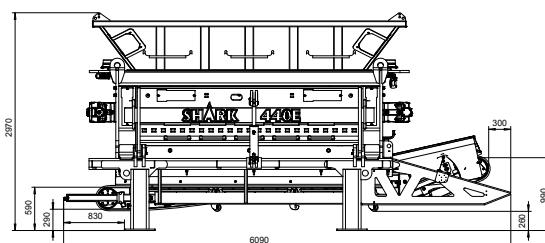
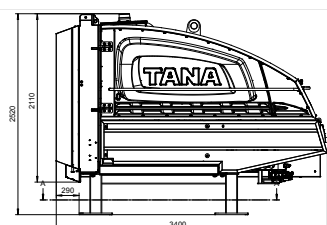
### 440DT & 440DTeco



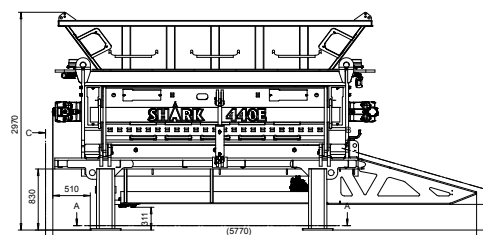
**ELECTRIC**  
**SHARK 440EM**



**ELECTRIC**  
**SHARK 440E**



**With underband conveyor**



**Without conveyors**



# From landfills to recycling business

## 1970

### THE FIRST SMART GUY

Back in 1970 there was a young entrepreneur and inventor who wanted to work smarter. He developed a landfill compactor built around an ordinary tractor and equipped it with rubber wheels. The first real landfill compactor with two full-width iron drums was manufactured for an exhibition in Hannover, Germany, in 1971. The unit was sold and delivered to a German customer, and so Tana's first steps towards becoming a global compactor manufacturer were taken.

## 2008

### SMARTER MACHINES

As material handling grew into an even bigger business, we wanted to help our customers improve their profits. Instead of machines alone, we started to focus on the overall process. We wanted to be one step ahead with IoT and decided to equip our machines with intelligence. Today we can offer a smarter machine that helps our customers manage their operations more efficiently – and ultimately make more money.

## 1995-2003

### BRAVE DECISIONS AND ACTIONS

When TANA was sold, we as the new owners wanted to keep things simple and productive. We made a complete turnaround and started to gather customer experiences and feedback in order to create even better machines. At the turn of the century, waste management changed: landfills were closed and waste was recycled for energy. We started to develop a new, robust and versatile tool for this purpose. The first slow speed shredder was introduced in 2006.

## 2021

### CONNECTING MACHINES AND PEOPLE

Continuous development in close cooperation with our customers is our passion. We want to communicate who we truly are, and what we aspire to be in the future. This is why we started a journey towards the core of TANA. That is a place where things are simple and customers are more important than any machine. By developing our brand, we want to inspire both our staff, partners and customers to do their best in an easier and smarter way.

# **We are here for you.**

## **We know our responsibility and machines**

It is a matter of honor for us that our customers share the feeling of safety. We put serious effort into proactive maintenance because we want to keep our promise. We collect information about our machines constantly with TANA ProTrack®. We ensure that the Authorized Tana Distributors around the world have the best tools for taking excellent care of Tana customers.





# TANA

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