

## Even more versatile than before

## Unique versatility

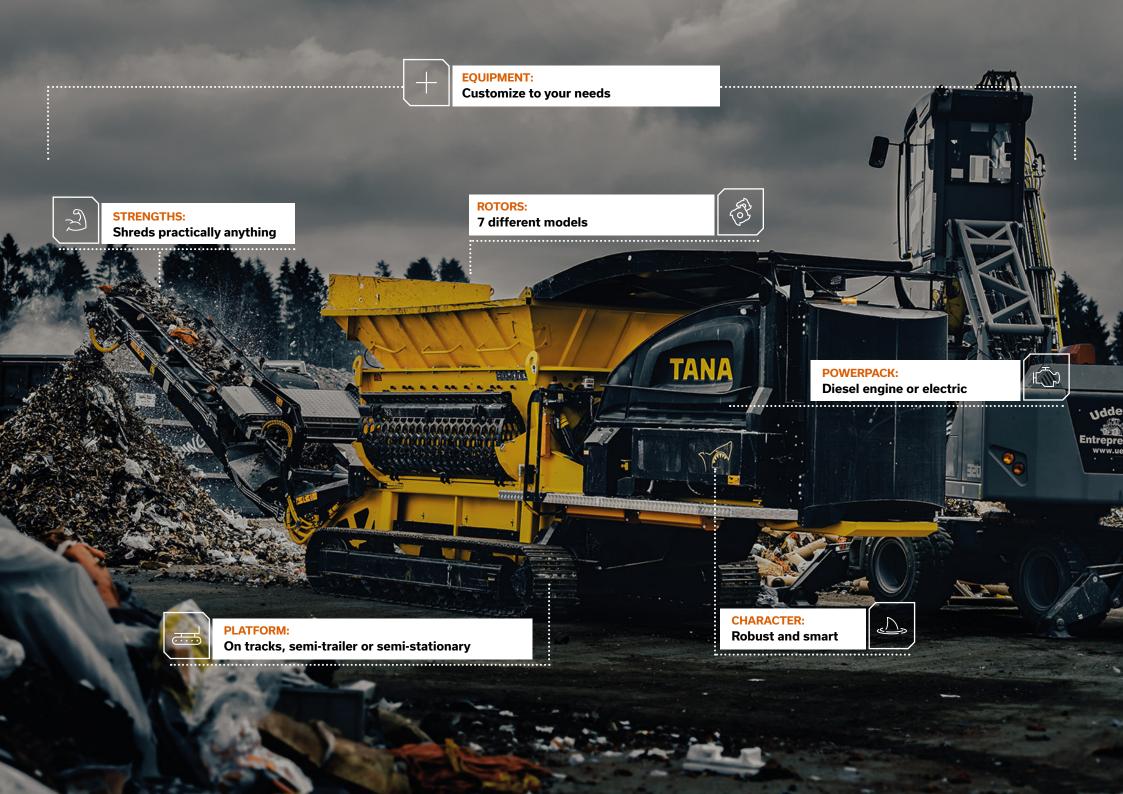
Investing in a TANA shredder opens multiple opportunities. The TANA Shark is able to produce a homogenous particle size and has the capability to process the widest range of materials - even the toughest ones. Our 440 series shredders offer even more flexibility than before thanks to a wider variety 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.



## 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 From waste to energy

- Tvres
- 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

TANA Shark.

Material recovery & re-use

Waste can be transformed into valuable

Material recovery and re-use offer growing

business opportunities. Reducing, re-using

sustainably can be done profitably with the

raw materials - with the right machine.

and recovering waste to manage waste

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 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.

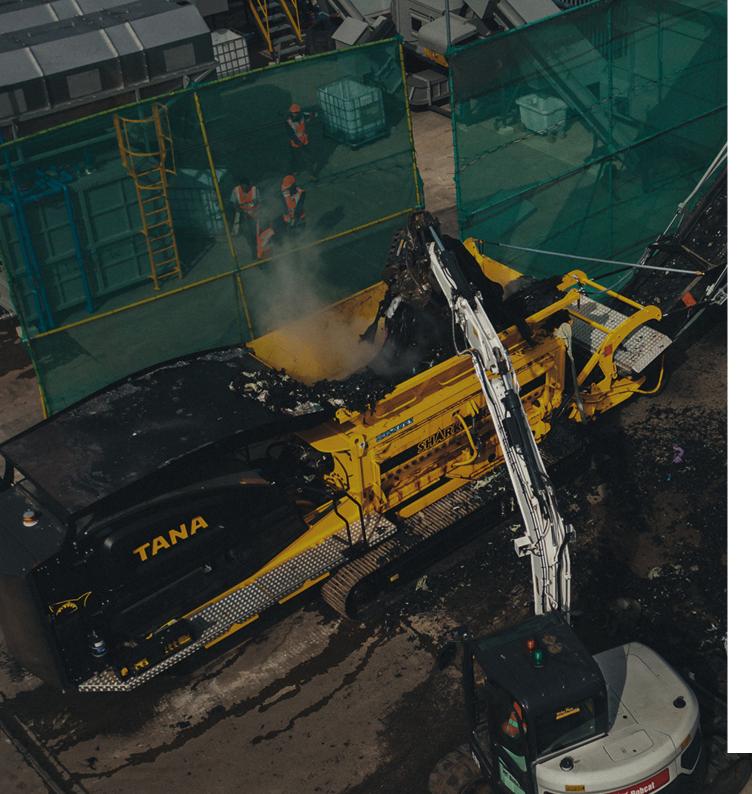
## Power

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 markes 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, meets latest IE4 efficiency requirements.

## 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.



## 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.



## TANA ProTrack®

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



£)

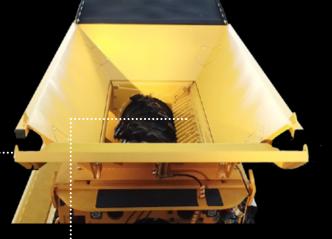
## Overband magnet

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

Prevents material from spilling from the hopper to the conveyor.





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.



## 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.



11 different rotor screen sizes



## 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.

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

TANACONNEC



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.

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



Choose the rotor for your needs.



Heavy Duty Rotor C&D





Standard Rotor Wood, green waste, MSW

low wear

## **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** 

Tires, ragger wire, mattresses



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

Diesel



## 440DTeco

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, VEM / Lönne, IE4 Diesel, EU Stage V/U.S. EPA Tier 4(f)

- Full mobility drives on diesel, shreds on electricity
- · Effortless use of auxiliary power
- Shredding with 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 fuel consumption



## **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



- 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, VEM / Lönne, IE4

- Electric semi-trailer TANA Shark offers the same versatility and reliability as it's 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, VEM / Lönne, IE4

- Electricity boosts the productivity while providing low operating and maintenance costs
- Easy and safe access to power grid is guaranteed with quick couplings
- Five different setup options to precisely match your requirement (e.g. without conveyor, with lower conveyor, lower and upper conveyor etc.)







General informaton	220DTeco	440DT   440DTeco	440D   440Deco
Operating weight, kg *	29700	30200 (440DT) / 30400 (440DTeco)	27300 (440D)/ 27500 (440Deco
otal length in transportation, mm**	10260	10260	10270
otal length in operation, mm	15750	15750	15680
otal width, mm	2550	2550	2530
otal heigth in transportation, mm	3600	3600	3970
Rotor shaft type	single shaft	single shaft	single shaf
Conveyor belt speed (max. m/s)	3	3	3
Conveyor width	1000	1000	1000
Discharge & transfer conveyor length (mm)	5480, 7050	5480, 7050	5480, 705
Conveyor height on operation**	4290	4290	472
ntegrated scale	х	х	
Remote control	x	x	optio
Maximum velocity (models with tracks)	2,5 km/h	2,5 km/h	
Engine and power transmission Engine & emissions	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 Ill, Cummins X15 (440Decc - Fulfills Tier 4 final, EU Stage
Power rating (SAE J1995) (kW)	399	399	39
Displacement (I) & number of cylinders	15 - 6	15 - 6	15 -
uel tank (litres)	720	710	75
Jrea tank (eco-models only)	56	56	5
Rotor drive gears, pcs	1	2	
Nominal rotor torque, kNm	220	440	44
nfeed hopper			
oading height (mm)	3170	3170	340
/olume m3	5	5	
Shredding tools			
Rotor shredding length, mm	3000	3000	300
Rotor speed max, rpm	28	28	2
Rotor diameter, mm	920	920	92
Rotor knives, pcs	33 / 44 (option)	33 / 44 (option)	33 / 44 (option
Counter knives, pcs	23	23	2
otor knife type	Bolt-on, reversible knife	Bolt-on, reversible knife	Bolt-on, reversible knif
otor knife size, mm	115x70	115x70	115x7
xamples of optional equipment:			
Overband magnet	х	х	
Conveyor side covers	х	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 scree

Technical specification D120111/24.10.2023

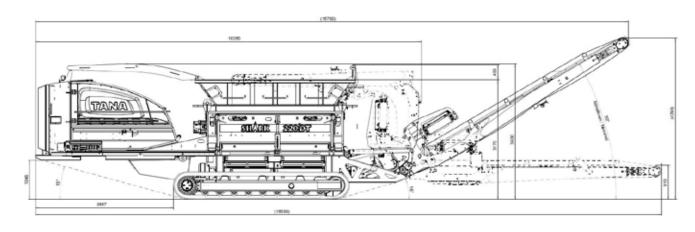
<sup>\*\*\*</sup> Underband, overband or both conveyors sold as an option for the 440E model \*\*\*\*  $50Hz/400\ V$  \*\*\*\*  $60\ Hz/480\ V\ UL$ 

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
otal heigth in transportation, mm	3600	3970	3340
Rotor shaft type	single shaft	single shaft	single shaft
Conveyor belt speed (max. m/s)	1,3	3	3
Conveyor width	1000	1000	1000
Discharge & transfer conveyor length (mm)	5480, 7050	5480, 7050	_ ***
Conveyor height on operation**	4290	4730	-
ntegrated scale	х	х	х
lemote control	option	option	option
Maximum velocity (models with tracks)	1,3 km/h		
ngine and power transmission			
ingine & emissions	VEM / Lönne, IE4	VEM / Lönne, IE4	VEM / Lönne, IE4
	Doosan D34 3,4 liter, 4 cylinder engine		
.UX diesel engine (440ET only)	- Fulfills Tier 4 final, EU Stage V		
	2 x 160 kW***/ 2 x 175 kW****	2 x 160 kW****/ 2 x 175 kW****	2 x 160 kW****/ 2 x 175 kW****
ower rating (SAE J1995) (kW)	2 X 100 KW / 2 X 1/3 KW	2 X 100 KW , 2 X 1 / 0 KW	2 × 100 × × × / 2 × 1/3 × × ×
uel tank litres (440ET only)	55	-	-
lectrical connection/earthing	TN-C	TN-C	TN-C
lain fuse size	630 A	630 A	630 A
otor drive gears, pcs	2	2	2
lominal rotor torque, kNm	440	440	440
nfeed hopper			
oading height (mm)	3170	3400	2296 (without the base)
olume m3	5	5	5
hredding tools			
otor shredding length, mm	3000	3000	3000
otor speed max, rpm	26/28	26/28	26/28
otor diameter, mm	920	920	920
otor knives, pcs	33 / 44 (option)	33 / 44 (option)	33 / 44 (option)
ounter knives, pcs	23	23	23
otor knife type	Bolt-on, reversible knife	Bolt-on, reversible knife	Bolt-on, reversible knife
otor knife size, mm	115x70	115x70	115x70
xamples of optional equipments:			
Overband magnet	х	х	x***
Conveyor side covers	х	х	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.

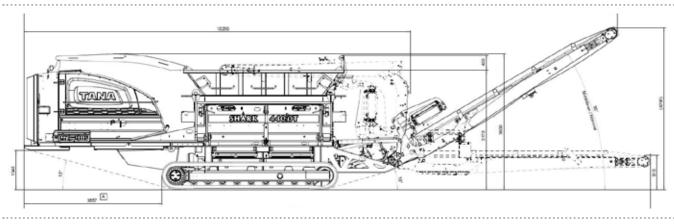
<sup>\*</sup> Operating weight includes the basic machine (fuel tank full)
\*\* When at 30° nominal working angle

## Technical dimensions



**220DT** 

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



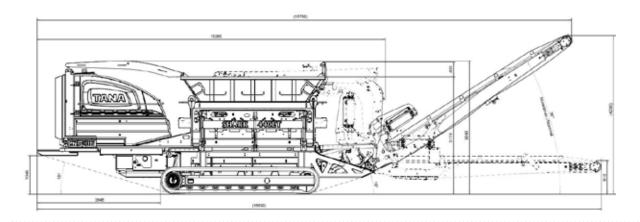
**440DT** 

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

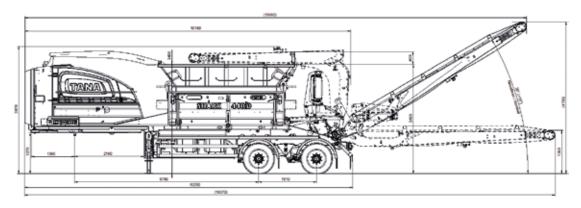
8

440DTeco

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



440ET



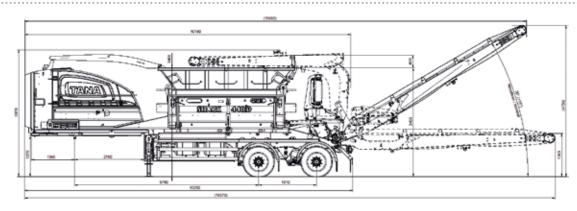
**440D** 

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



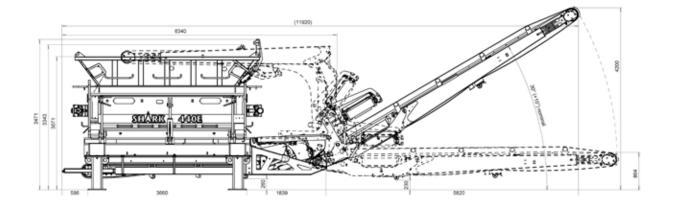
440Deco

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

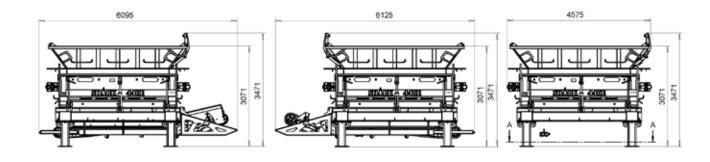


**440EM** 

Electric



## **440E**Electric stationary



# 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

1995-2006

2008

## The beginning

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

### Brave decisions and actions

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

### Intelligence

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

### 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.

2021-2024

## TANA

## CONTACT US

## **Tana Oy**

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Your local Tana distributor:

TANA FROM WASTE TO VALUE®