

TANA SHARK 440E SHREDDER

Technical specification 440E-D222000- 1.2.2011

GENERAL

Single rotor slow speed shredder
Stationary, separate powerpack and shredding units
Powered by electric motors (400V/50Hz) (2 x 160 kW)
Hydrostatic shredding rotor transmission
Suitable for large variety of different materials and fractions
Controlled by electronic Tana Control System (TCS)
Left side counter wall is operated with hydraulic cylinder in order to remove unsuitable materials from the rotor area
Rotor knives and counter knives can be serviced when the counter wall is opened

MAIN DIMENSIONS

	SI	US	
Weight	18100 kg	39900 lb	
Total length in operation	7190 mm	23 ft	7 in
Total length in transportation			
Total width	2290 mm	7 ft	6 in
Total height in operation	2460 mm	8 ft	1 in
Total height in transportation			
Height of the fifth wheel coupling			
Feeding height	2380 mm	7 ft	10 in
Ambient operating temperature	-30 °C...+50 °C		
Exhaust emissions			
Warranty	Basic warranty 12 months/1500 operating hours		

SHREDDING TOOLS

	SI	US	
Rotor shredding length	3000 mm	9 ft	10 in
Rotor diameter	920 mm	3 ft	
Nominal rotor torque	440 kNm		
Rotor speed	0-21 rpm		
Turnable, bolt-on rotor knives with two wearing surfaces			
Number of rotor knives	33 pcs		
Turnable, drop-in counter knives with two wearing surfaces			
Number of counter knives	23 pcs		

ELECTRIC MOTORS
Two electric motors, nominal power 2 x 160 kW
Supply voltage 400V/50Hz
Nominal current 2 x 279A
Minimum supply fuse size 630A
Electric motors are controlled with advanced motor management and protection system. It is able to guard against all motor malfunctions; overload, overheating, current peak, excessive consumption, etc.
Motor control and monitoring system is part of TCS system. Motor protection components are electronic type of fuses.

POWER TRANSMISSION
Closed circuit hydrostatic transmission
Continuously variable and automatic rotor speed control
Allows direction of rotor rotation in both directions
Variable displacement axial piston pumps with electrical control
Hydraulic motors with planetary gears in both ends of shredding rotor
Air operated oil cooler
Return line filter and two charge pressure filters with electrical indication
Pressurized planetary gear lubrication

AUXILIARY HYDRAULICS
Open circuit system
Electro-hydraulic control
Used for counter wall open/close, conveyor drive, conveyor tilt, overband magnet drive and overband magnet height control

HYDRAULIC OIL TANK
Hydraulic oil tank is located inside the engine hood.
Oil level indicator with alarm
Breather filter

CONTROL SYSTEM (TCS)
Electronic control system
CAN-bus communication between control modules
Operational switch panel with colour display
USB-connection for software updates etc.
Remote control (Option)

ELECTRIC BACK UP
Battery based back up power supply with automatic recharge
Back up system enables use of control system in case of main power supply errors (self diagnosis can detect faults in power supply)

PRO TRACK
12 month wireless Pro Track connection to TANA Control System through Internet

MAIN COMPONENTS AND INSTALLATION
MAIN COMPONENTS: powerpack, shredder unit and operation switch panel
Powerpack can be installed about 2 - 12 meters from shredder unit.
Powerpack can be installed indoor but cooling air flow requirements must be considered.
If powerpack installed outdoor then optional hoods recommended.
Operation switch panel can be installed max about 10 meters from powerpack.

DISCHARGE CONVEYOR (optional)			
	SI	US	
Discharge height	3600 mm	11 ft	10 in
Belt width	1030 mm	3 ft	5 in
Hydrostatic drive			
Adjustable belt speed			

SCREEN SYSTEM (optional)
Shredder can be equipped with under rotor screen
Size of end product can be easily calibrated by using proper size of screen
Mesh sizes 109 - 275 mm

OVERBAND MAGNET (optional)
Permanent type magnet
Hydrostatic drive

TOOLS AND PARTS
Hand tool kit
Tools for wear part care
Filters to be changed after the first 50 operating hours

LITERATURE
MANUALS
TANA – operation manual
TANA – service & maintenance manual
TANA – spare parts manual
Weights and measurements are given within normal tolerances. Weight of D-, EM-, DT- and ET-models includes overband magnet, screen and screen support bars. Manufacturer reserves the right to alter the above as necessary.