METAL SHARK® BIG
Chipper protection Metal Detector

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METAL SHARK® BIG

Features and Benefits

The SHARK® BIG is made for the rough industrial applications at the wood yard. For big products, such as wood logs or paper bales. The installation is typically in a U-trough shaped conveyor with flat belt, as well as in special prepared vibration conveyors.

The SHARK® BIG is available with aperture width 800 to 4500 mm (2,6 to 14,8 ft) and heights of up to 2000 mm (4,6 ft).

High graded aluminum alloy housings provide total shielding against transient influences that cause false/nuisance tripping.

Rugged and sturdy design, vibration proof

The most technologically advanced metal detector available. The exclusive 4 channel DDS and DSP microprocessor provides continuous accuracy and stability. Single board microprocessor with multiple filters that eliminate undesirable noise.

System 'learns' the product and automatically compensates and adjusts for such things as different species, moisture, VFDs and pitch ensuring 95% less false/nuisance tripping.

4-level password protection

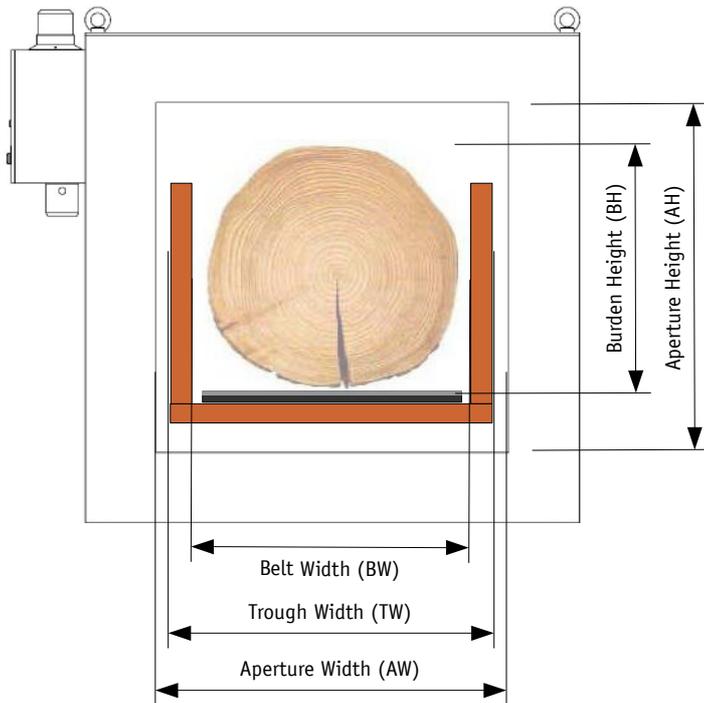Remote support and setup via Ethernet/Internet

Compatible with SHARKNET®-2 data recording for Windows

Specifications

Model	METAL SHARK® 2
Control Electronics	Digital signal processor, digital noise filter, digital balance control, digital frequency control with synthesizer, Power-Drive-Transmitter-Circuit, suitable with multi-frequency sensors, powerful graphics processing unit
Input Signals	8 free configurable, 24 V DC, e.g.: reject confirmation, air pressure monitor, conveyor belt control
Output Signals	2 potential free: Metal and Error
	8 free configurable, 24 V DC, e.g.: pusher magnetic valve, optic/acoustic alarm
Measuring Method	Inductive; multi channel operation, balanced receiver coils
Metal Detection	Ferrous, non-ferrous (e.g. aluminum or copper) and stainless steel
Product Compensation	120 storage spaces, compensation performed automatically, with Teach-Assistant
Protection Type	IP65; with Option LPW: IP66; with Option HPW: IP67
Ambience	Standard: temp. -10°C to +40°C, rel. humidity 30 to 85% not condensing; Options: -40°C or +55°C
Product Temperature	-30°C to +60°C
Power Supply	Single-Phase 110 - 240 VAC, 50/60 Hz, fuse 10 A (slow), typ. power consumption 20W, max. 60W
Interfaces	RS232, USB, optional Ethernet
Maintenance	Maintenance-free, sensor calibrates itself automatically and continuously
Diagnosis	Integrated diagnostic software, automatic selftest

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Dimensions

The sensor head aperture width and height are specified upon the conveyor and product dimensions:

Belt width (BW):

Trough Width (TW):

Burden Height (BH):

Aperture Width (AW) = Trough Width (TW) + 100 ... 200 mm

Aperture Height (AH) = Burden Height (BH) + 200 ... 300 mm

Application examples