METALLSEPARATOR QUICKTRON 03 R



- **FERROUS**
- STAINLESS STEEL
- **COPPER**
- **BRASS**
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RELIABLE DETECTION OF FREE OR ENCAPSULATED CONTAMINANTS.



Version 12/10

FRAME MOUNTED METAL SEPARATOR FOR THE INSPECTION OF GRAVITY FED BULK MATERIALS SUCH AS GRAIN, FEED GRANULATES, POWDERS, ...

INDUSTRIES

- PLASTIC INDUSTRY
- RECYCLING INDUSTRY
- CHEMICAL INDUSTRY

APPLICATION

- QUALITY CONTROL (TO MEET THE REQUIREMENT OF ISO 9000 AND HACCP).
- ASSURANCE OF METAL FREE GRANULATES AND PELLETS

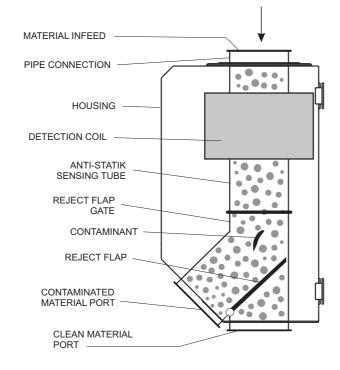
WWW.mesutronic.de



BUILT FOR THE PURPOSE.

- COMPACT DIMENSIONS AND DESIGN. ROUND PORTS ALLOW FOR A EASY AND TROUBLE FREE INTEGRATION INTO THE EXISTING PROCESS. QUICK AND EFFICIENT INSTALLATION.
- DESIGNED FOR ALL APPLICATIONS AND THROUGHPUTS. APERTURES FROM: 30-200 MM (11/4" TO 8.0") AVAILABLE.
- ANTI-STATIC SENSING TUBE PREVENTS STATIC BUILDUP IN AND NEAR THE SENSING TUBE. FALSE REJECTS DUE TO STATIC DISCHARGE ARE AVOIDED.
- PRODUCT EFFECT COMPENSATION GUARANTEES CONTINUOS SENSITIVITY AND TROUBLE-FREE OPERATION EVEN WITH "DIFFICULT" PRODUCTS. "PRODUCT EFFECT" CANNOT CREATE FALSE REJECTS.
- SELF MONITORING IN ADDITION TO THE DETECTION UNIT (COIL AND ELECTRONICS) THE OPERATING PRESSURE AND REJECT FUNCTIONS ARE PERMANENTLY MONITORED AS WELL. AN AUTO-TEST BUTTON IS STANDARD. MALFUNCTIONS ARE INDICATED!
- THE DATA SHEET CONTAINS ADDITIONAL INFORMATION AS TO THE AMD 03 (VERSION 3.4) ELECTRONICS.

WORKING PRINCIPLE



THE QUICKTRON SERIES ELECTRONIC METAL SEPARATORS AUTOMATICALLY DETECT AND REJECT METALLIC CONTAMINANTS FROM FREE FALLING BULK MATERIALS. CLEAN PRODUCT PASSES FREELY THRU THE REJECT ASSEMBLY. A CONTAMINANT IN THE PRODUCT STREAM ALTERS THE HIGH FREQUENCY FIELD GENERATED BY THE SEARCH COIL. THE ELECTRONICS EVALUATE THIS SIGNAL AND GENERATE AN IMPULSE FOR THE SOLENOID AND THE DOUBLE ACTUATING AIR CYLINDER OF THE REJECT ASSEMBLY. THE CONTAMINANT IS INSTANTLY DIVERTED FROM THE GOOD PRODUCT STREAM ASSURING MINIMAL GOOD PRODUCT LOSS. THE REJECT TIME IS ADJUST-ABLE. IN THE CASE OF SEVERAL METAL PARTICLES BEING PRESENT, THE REJECT TIME WILL BE EXTENDED ACCORDINGLY, TO ASSURE A METAL FREE PRODUCT.

(ALL) METAL SEPARATOR QUICKTRON 03R



STANDARD SCOPE OF DELIVERY

- COMPACT UNIT WITH ROUND PORTS, INCLUDING: – FLAP POSITION MONITOR
 - AIR PRESSURE MONITOR
 - "TEST" BUTTON
- USER MANUAL INCL. INSTALLATION INSTRUCTIONS, WIRING DIAGRAM AND SPARE PARTS LIST IN SEVERAL LANGUAGES
- EG CONFORMITY DECLARATION



OPTIONS

- OPTICAL AND ACOUSTICAL SIGNAL UNITS
- REJECTION EVENT COUNTER
- FUNNEL
- (SPECIAL PORT)TRANSITIONS
- COMPRESSED AIR TANK
- AIR COMPRESSOR
- MOBILE MOUNTED WITH DOSIFIER

- BEACON
- BUZZER
- BEACON WITH SIREN
- FOR THE MATERIAL INLET PORT
- FOR THE "GOOD" MATERIAL PORT
- FOR THE "REJECT" PORT (SHAPE AND SIZE ARE PROJECT SPECIFIC, FLANGES ARE AVAILABLE AS WELL)



EXAMPLE "SECONDARY SEPARATION"



CONTROL UNIT AMD 03 (VERSION 3.5)

ADVANTAGES THAT WILL CONVINCE YOU !

AUTO BALANCING

DURING POWER UP AS WELL AS DURING STANDARD OPERATION, THE CONTROL UNIT CONTINUOUSLY BALANCES ITSELF. OVER TIME, COILS MAY SHIFT AND SENSITIVE COMPONENTS MAY LOOS TOLERANCE. TEMPERATURE ALSO HAS AN EFFECT ON THE PERFORMANCE AND MUST BE COMPENSATED FOR. THIS SELF BALANCING ROUTINE INSURES THAT THE DETECTOR IS CONTINUOUSLY OPERATING AT MAXIMUM PERFORMANCE.

TEMPERATURE COMPENSATION

CUTTING EDGE TECHNOLOGY! EVEN EXTREME TEMPERATURE FLUCTUATIONS ARE EFFORTLESS COMPENSATED WITHOUT AFFECTING THE FUNCTIONS OF THE METAL SEPARATOR.

NOISE SUPPRESSION

BY ADDING DYNAMIC DIGITAL FILTRATION CIRCUITRY, VIBRATIONS WHICH ARE OFTEN TRANSFERRED TO THE DETECTOR CAN NOW BE FILTERED OUT WITHOUT HAVING TO LOWER THE SENSITIVITY OF THE SYSTEM.

PRODUCT EFFECT COMPENSATION

ELECTRICALLY CONDUCTIVE OR HUMID PRODUCTS CAN CAUSE EXTREME LOSS OF SENSITIVITY OR EVEN RENDER CONVENTIONAL DETECTORS USELESS. THE EVALUATION ELECTRONIC SYSTEM AMD 03 ELIMINATES THESE PRODUCT EFFECTS ELECTRONICALLY AND GUARANTEES A CONSTANT SENSITIVITY.



SELF MONITORING FEATURES

THE SYSTEM IS FULLY AUTOMATIC AND CONTINUOUSLY MONITORED. MALFUNCTIONS ARE RELIABLY INDICATED. IN ADDITION FAULT S IN THE MAIN COMPONENTS ARE INDICATED THRU LED'S. THE REJECT FLAP REMAINS IN THE REJECT POSITION IN CASE OF A MALFUNCTION, LOSS OF POWER OR AIR PRESSURE UNTIL THE PROBLEM HAS BEEN ELIMINATED.

SERVICE FRIENDLY

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EASY TO DIAGNOSE: OPTICAL FAULT INDICATION WITH LED'S

"DO IT YOURSELF-REPAIRS" ARE EASY. "PLUG AND PLAY" CONNECTORS, A QUARTZ DRIVEN SENDER FREQUENCY AND THE SINGLE MOTHER-BOARD CONSTRUCTION GUARANTEE EASE OF REPAIR. ALL AMD 03 MOTHERBOARDS ARE 100% COMPATIBLE!

EASY TO OPERATE

EASY TO USE CONTROLS ALONG WITH VISUAL DISPLAYS MAKE THE IN-STALLATION AND OPERATION OF THE AMD 03 EFFORTLESS.

<u>QUALITY</u>

SMD (SURFACE MOUNTED DEVICES) ARE USED IN THE PRODUCTION OF THE CONTROLS. THEY NOT ONLY OFFER A COMPACT DESIGN, BUT ALSO PROVIDE HIGHER QUALITY AND MORE ROBUST PERFORMANCE UNDER HARSH CONDITIONS. ALL MESUTRONIC PRODUCTS CONFORM TO THE CE STANDARDS AND ARE DEVELOPED ACCORDING TO TECHNICAL STANDARDS AND NORMS SUCH AS EN, DIN AND UVV.