Metasearch 4 Controller

Features
• Single Board construction
• Auto-balance
• Facility to accept the signal from a Belt Splice pick-up
• 220 volt / 110 volt Supply Voltage
• Ability to operate in either an instantaneous Trigger Mode or require a Reset Signal
• Fault/Trigger Relay & LED indicator
• 3 X Trip Relays & LED indicators
• High / Low (1-100%) range of sensitivity
• Lockable metal enclosure rated IP65
• Microprocessor based with the ability for inputs and outputs to be configured to suit special requirements.
• Solid state user interface with LCD screen.
• Totalizing metal count facility.

Typical Conveyor Installations

Belt passes through coil
Advantages: Most sensitive arrangement and least costly
Disadvantages: Belt requires cutting and joining by vulcanizing
Coil vulnerable to large rocks

Belt passes between 2 coils
Advantages: Suitable for large burden depths
No cutting of belt
Easily replaced
Disadvantages: Coils need to be "phased" correctly
Coil vulnerable to large rocks

Coil positioned below the belt
Advantages: No cutting of the belt
Coil relatively protected from damage
Easily replaced
Disadvantages: Not suitable for large burden depths
Not the most sensitive where small items need detecting.

Most common form of installation for troughed conveyors

Advantages: Ease of installation [No cutting of belt]
Ease of replacement
Disadvantages: Not suitable for large burden depths
Not the most sensitive where small items need detecting

NOTE:
Saflec is capable of manufacturing specially designed coils to suit customer requirements such as the wood chipping industry.
Coil Dimensions

**UNDERSEARCH COIL**

- **Width**
- **Length**
- **Height**

<table>
<thead>
<tr>
<th>Coil Size</th>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M20-1</td>
<td>615</td>
<td>400</td>
<td>150</td>
</tr>
<tr>
<td>M20-2</td>
<td>905</td>
<td>400</td>
<td>175</td>
</tr>
<tr>
<td>M20-3</td>
<td>1320</td>
<td>400</td>
<td>195</td>
</tr>
<tr>
<td>M20-4</td>
<td>1650</td>
<td>600</td>
<td>220</td>
</tr>
<tr>
<td>M20-5</td>
<td>2320</td>
<td>600</td>
<td>315</td>
</tr>
</tbody>
</table>

**STANDARD COIL**

- **Width**
- **Length**
- **Height**

<table>
<thead>
<tr>
<th>Coil Size</th>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M20-1</td>
<td>730</td>
<td>300</td>
<td>50</td>
</tr>
<tr>
<td>M20-2</td>
<td>1230</td>
<td>450</td>
<td>55</td>
</tr>
<tr>
<td>M20-3</td>
<td>1530</td>
<td>660</td>
<td>65</td>
</tr>
<tr>
<td>M20-4</td>
<td>1850</td>
<td>775</td>
<td>65</td>
</tr>
<tr>
<td>M20-5</td>
<td>2300</td>
<td>880</td>
<td>75</td>
</tr>
</tbody>
</table>

**Accessories**

- **Powder Marker**: Marking system to indicate where metal is located on the conveyor belt.
- **Disc Dropper**: Marking system to indicate where metal is located on the conveyor belt.
- **Light**: Audible indication for visual identification of metal detected on belt.
- **Siren**: Allows steel splice clips to pass through the coil without stopping the conveyor.
- **Belt Splice Detector**: Audible indication for identification of metal detected on belt.

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**Contact Information**

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Fax: +27 11 477 5789

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www.saflec.com
Saflec Metasearch
Industrial Metal Detection Information Form

In order for us to quote you correctly on your application please take the time to complete the form below and send it back to us, any additional information and photos of the conveyer may also be helpful. Please send this form to: info@saflec.com or fax to (+27) 11 477 5789 and a sales representative will get back to you shortly.

Company name: ____________________________
Contact person: ____________________________
Contact number: ____________________________
Contact e-mail: ____________________________
Date: ____________________________

General info
Power supply available? ○ 220VAC ○ 110VAC
Is the plant portable? ○ Yes ○ No
Search coil location? ○ Inside ○ Outside
Control Panel enclosure area? ○ Inside ○ Outside
Conveyor framework cover? ○ Full ○ Partial

Detection
What is the smallest size metal to be detected (mm)? ____________________________
What type of material is carried on the belt? ○ Ferrous ○ Non ferrous
Is the metal you require to detect ○ Damp ○ Wet ○ Dry
Is the material on the belt ○ Yes ○ No
If the material on the belt contains metal (e.g. manganese ore, iron ore etc.) what percentage of metal is in the product? ____________________________

Conveyor info
Is the conveyor ○ Troughed ○ Flat
Steel core conveyor ○ Yes ○ No
Metal splice clips ○ Yes ○ No

A Belt width (when troughed): ________ mm
B Burden depth: ________ mm
C Inner stringer distance: ________ mm
D Outer stringer distance: ________ mm
E Trough angle: ________°
Idler diameter: ________ mm
Distance between idlers: ________ mm
Belt Speed: ________ mps

Accessories
○ Marking system ○ Belt splice detector ○ Siren Alarm ○ Light Alarm

Any additional information:
__________________________________________________
__________________________________________________
__________________________________________________
__________________________________________________

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