

PROCESS AUTOMATION Industrial Process Measuring & Control Equipment

QD: 265/07/15

| APPLICATION DATA SHEET: METAL DETECTOR Page 1 of 3 | | | |
|---|--|--|--|
| Quote Tag: Reference: End-User: Customer: Date: | | | |
| In order to evaluate the application and to ensure that any system subsequently purchased will be compatible with the application, certain minimum data is required. Please enter the data required on the sketch and questionnaire below. | | | |
| PROBLEM METALS | | | |
| Smallest size metal to be detected (mm) (L) X (W) X (H) mm Metal Type (s) | | | |
| PROCESS MATERIAL | | | |
| Is material Damp Wet Dry Contain iron Yes No (Mark Choice) What type Yes No Yes No Yes Yes Yes | | | |
| GENERAL INFORMATION | | | |
| Is an existing metal detector being replaced? □ Yes No (Mark Choice) If YES, was the previous metal detector provided by Process □ Yes No (Mark Choice) Automation? □ Yes □ No (Mark Choice) If YES, provide previous metal detector serial and/or SO □ Yes □ No number: □ Yes □ No (Mark Choice) | | | |
| If YES, reason for replacement: | | | |
| Equipment to be protected (Crusher, Belt etc.) mm | | | |
| Crusher Setting (Gap opening, input & output particle size) | | | |
| Power supply available 220V AC 110V AC 50 Hz (Mark Choice) | | | |
| Is power regulated? Ves No (Mark Choice) CONVENTIONAL STRINGER | | | |
| GARLAND STRINGER GARLAND STRINGER GARLAND STRINGER | | | |
| Belt Width (A) mm Belt Speed (m/min) Min: Max: | | | |
| Trough Angle (B) deg Belt Speed Selection Fixed Variable (Mark Choice) | | | |
| Idler Spacing (C) (If variable per above, then 2 off metal clip detectors are required.) | | | |
| Roller Diameter (D) mm Lump Size mm Outer Frames Middle (E) mm Delt Biss (Z) mm | | | |
| Uter Frame Width (E) mm Beit Rise (Z) mm | | | |
| Austrance Narmal Burden Dent (C) mm Stringer Orientation Toe Out (Mark Choice | | | |
| | | | |
| Distance between carry and return belt (200mm minimum recommended) (H) | | | |
| Distance between top of support and carry belt | | | |
| Belt Sag under load | | | |
| Maximum Bed Depth (Total Height with Lumps) | | | |
| Steel Cord Belt | | | |
| Are metal splices or clips used? | | | |
| Is a drip cover required for control electronics? | | | |
| Are belt rip detection loops incorporated into belt? | | | |

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| GENERAL INFORMATION (cont.) | | | | |
| Is a special enclosure required? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, please specify: | | · · · · | | |
| Is a flashing beacon upon metal detection required? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| Is an audible alarm upon metal detection required? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| Desired control unit location (left/right) when viewed in belt movement direction. | | | | |
| Type of marker required? | 🗌 Flag Drop 🔲 Spray | (Mark Choice) | | |
| If a spray marker is required, is there Plant air available? | Yes No | (Mark Choice) | | |
| If YES, what pressure? | | | | |
| Stringer Type? (See sketches on page 1) | rland | (Mark Choice) | | |
| If it is a Garland stringer, please indicate idlers position | nging Loose 🛛 🗌 Fixed | (Mark Choice) | | |
| Will the Client allow structural modification on stringer to fit metal detector? | Yes No | (Mark Choice) | | |
| Is welding permitted? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| Is the Plant portable? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| Is the Plant moved frequently? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, how frequently is the Plant moved? | (e.g. Da | ily, Weekly, Monthly etc.) | | |
| Search Coils (Antennas) location? | Outdoors Indoors | (Mark Choice) | | |
| Are Search Coils (Antennas) in an Explosive area? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, please specify classification rating: | | | | |
| Control Enclosure location? | Outdoors Indoors | (Mark Choice) | | |
| Is the Control Enclosure in an Explosive area? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, please specify classification rating: | | | | |
| Cable length required between search coils and control enclosure. | | (meter) | | |
| Is there lights close to the identified point of installation? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, how far? | | (meter) | | |
| Is there any other metal detector/s in the close vicinity? | 🗌 Yes 🔲 No | _ (Mark Choice) | | |
| If YES, how far? | | (meter) | | |
| Is there a gravity take-up close to the identified point of installation? | 🗌 Yes 🔲 No | _ (Mark Choice) | | |
| If YES, how far? | | (meter) | | |
| Is there any skirtings fitted in or near metal detector installation point? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, can the skirtings be removed or replaced with non-metallic versions. | ☐ Yes ☐ No | (Mark Choice) | | |
| Is there any return rolls in installation area? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, can the return rolls be removed or moved outside the approach & retreat Idler area? | Yes No | (Mark Choice) | | |
| Is there canopies present on the conveyor? (Non-metallic canopies are allowed) | 🗌 Yes 🗌 No | (Mark Choice) | | |
| If YES, will canopies be removed? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| Is there belt magnets on the conveyor? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, what distance from metal detector? | | (meter) | | |
| Is there cable racks on the conveyor structure with electrical cables? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, how far from metal detector? | | (meter) | | |
| Is there a separate cable rack on which the output signal cables from the metal detector electronics can be installed? | 🗌 Yes 📋 No | (Mark Choice) | | |
| Vibration severity on the conveyor structure: | Light Mild Severe | (Mark Choice) | | |
| Is there a tripper car or any movable parts on the conveyor? | 🗌 Yes 🔲 No | (Mark Choice) | | |
| If YES, how far from metal detector? | | (meter) | | |
| Is there any repeater stations/central radio transmitters close to the conveyor? | Yes No | (Mark Choice) | | |
| If YES, how far? | | (meter) | | |
| Can drawings be made available of the conveyor structure (strongly recommended)? | Yes No | (Mark Choice) | | |





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| | SKETCH OF CONVEYOR | |
| <i>If it is a ga</i> <i>Including support structures, and any oth</i> alternatively atta <i>NOTE: It is ALWAYS preferable to have du</i> <i>to include and to conclude metal d</i> | arland stringer please supply detailed drawing ner structures that will NOT be removable during metal detector installation or ch a drawing (ACAD .dwg or .pdf format) of the conveyor rawings of not only the conveyor, but especially the installation point, in order letector design. Photo's of the exact installation point is also preferred. | |
| | | |
| | OTHER SPECIAL REQUIREMENTS | |
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| CONFIRMATION BY CLIENT OF TE | CHNICAL DETAILS AS SET OUT ABOVE (requirement of ISO 9000/9001) | |
| Print Name: | Designation: | |
| Signature: | Date: | |
| CONFIRMATION BY PROCESS AUTOMATION REPRESENTATIVE OF TECHNICAL DETAILS AS SET OUT ABOVE (requirement of ISO 9000/9001) | | |
| Print Name: | Designation: | |
| Signature: | Date: | |
| FOR | COFFICE USE (PROCESS AUTOMATION) | |
| Model purchased: | | |
| Spray marking purchased: | | |
| Clip detector purchased: | | |
| | | |
| | | |
| | | |
| | | |
| | FOR OFFICE USE (TECTRON) | |
| Comments: | | |
| | | |
| | | |
| Suggestions: | | |