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| **APPLICATION DATA SHEET: E/M CONVEYOR SCALE WITH 5 ROLL TROUGHED IDLERS** |

Page 1 of 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Quote Reference:** | | |  | | | | |  | | **Tag:** | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  | |
| **Customer:** | |  | | | | | |  | | **End-User:** | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  | |
| **Fax No:** | |  | | | | | |  | | **Date:** | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |  | |
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| In order to evaluate the application *and* to ensure that any scale subsequently purchased will be compatible with the conveyor frame (stringer), certain minimum data is required. Please enter the data required on the sketch and questionnaire below.  (**\*** indicates applicable to Electro Mechanical Belt Scale models only).  A hand sketch of the conveyor side view with distances to;- tangent points, inclines, between idlers etc., should be drawn on the allocated space **or preferably** attach a drawing (ACAD .dwg or .pdf format)of the conveyor. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **MEASURED DIMENSIONS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **OFF-SCALE FOOT BOLTING PITCH DETAILS (See Note 1 below):**   |  | | --- | |  |   **Notes:**  **1. The idler foot bolting pitch sketch above is only to be completed when the idlers are not supplied by**  **Process Automation.**  **2. The On-Scale idler foot bolting pitch Interface to the PA scale is 250mm (Dim “M”).**  **3. Refer to QD-258 for 3 Roll Idlers** | | | | | | | | | | | | | | | | | | | | | | | | | | **DIM** | | | | | | **MEASURED DIM** | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | A = | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | B = | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | C = | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | D = | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | E = | | | | | |  | | | | | | | | mm | | | |
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|  | | | | | | | | | | | | | | | | | | | | | | | | | | G = | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | H = | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | I = | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | J = | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | K = | | | | | |  | | | | | | | | deg | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | L = | | | | | |  | | | | | | | | deg | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | M= | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | N= | | | | | |  | | | | | | | | mm | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | O= | | | | | |  | | | | | | | | mm | | | |
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| **LOADING CONDITIONS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |
| Product conveyed | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| More than one different type of material conveyed? | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | Yes  No | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | |
| Loading continuous? (- see note below) | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | Yes  No | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | |
| Loading uniform? (- see note below) | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | Yes  No | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | |
| - If “no” to any of the two questions above, please specify maximum instantaneous belt loading (kg/m) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | | | | |  | | |
| Severe vibration? | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | Yes  No | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | **Maximum** | | | | | | | | | | | | | | | **Normal** | | | | | | | | | | **Minimum** | | | | | | | | | | | |
| Calibration Capacity (t/h) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Belt Loading (kg/m) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Material bulk density (kg/m3) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Material surcharge angle (degrees) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Particle size (mm) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Moisture content (%) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Conveyor belt speed (metres/second) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
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| **CONVEYOR CONDITIONS** Page 2 of 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conveyor incline angle (degrees) at point of scale installation | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Conveyor (normal) idler pitch (mm) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Scale idler pitch (mm) – (preferred: 1000mm) | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
| Conveyor fed by | | | | | | |  | | | | | | | | | | |  | | | | |  | | | | | | | |  | | |  | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conveyor take-up type: **\*** | | | | | | | Gravity | | | | | | | | Screw | | | | | | | | | | Hydraulic | | | | | | | | | | None | | | | | | | |
| On which side of the conveyor is the walkway, when viewed in the direction of belt travel? | | | | | | | LHS | | | | | | | | RHS | | | | | | | | | | (Mark Choice) | | | | | | | | | |  | | | | | | | |
| Distance from centre of scale to tail pulley | | | | | |  | | | | | | | | | | m | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Distance from centre of scale to head pulley | | | | | |  | | | | | | | | | | m | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Distance from end of infeed skirt-boards to 1st weigh idler | | | | | |  | | | | | | | | | | m | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Expansion joints at installation point to be welded? | | | | | | Yes  No | | | | | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | |
| Is there a curve in the belt? | | | | | | Yes  No | | | | | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | |
| *(If yes, dimensioned/scaled drawing is mandatory*) | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Are there any trippers on the conveyor belt? | | | | | | Yes  No | | | | | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | |
| Are there multiple feed points? | | | | | | Yes  No | | | | | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | |
| Is it a reversible belt? | | | | | | Yes  No | | | | | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | |
| Is the scale exposed to wind? | | | | | | Yes  No | | | | | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | |
| What is the belt thickness (or class & number of plies)? | | | | | |  | | | | | | | | | | mm | | | | | | | | | | | | | | | | | | | | | |  | | | | |
| Is the belt steel cored? | | | | | | Yes  No | | | | | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | |
| Calibration Method: | | | | | Theoretical  Test Weights\*  Belt Cut  Bulk Material Test | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| In-accuracy allowable: | | | | |  | | | | | | | % | | | | | | | | | | | | | | | | | | | | | | | |  | | | | | | |
| Enclosure type | | | | | Blind  Local Display  Double Door | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power supply available | | | | | 220V AC  110V AC  50 Hz  60 Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | | (Mark Choice) | | | | | | | | | |
| Environmental temperature (°C) | | | | |  | | | | (Maximum) | | | | | |  | | | | | | | | | (Normal) | | | | | |  | | | | | | | | | (Minimum) | | | |
| Enclosure protection class | | | | | IP54 (std)  IP55  IP | | | | | | | | | | | | | | | |  | | | | | |  | | (Mark Choice) | | | | | | | | | | | | | |
|  | | | | |  | | | | | | | | | | | | | | | |  | | | | | |  | |  | | | | | | | | | | | | | |
| Hazardous location? | | | | | Yes  No | | | | | | | | |  | | | | | | | | | | | | | | (Classification) | | | | | | | | | | | | | | |
| Is welding on stringers permissible for installation purposes? | | | | | | Yes  No | | | | | | | | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
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| **GENERAL OPTIONS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calibration test weight required?**\*** | | | | Yes  No | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Manual test weight lifting system required?**\*** | | | | Yes  No | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Automated test weight lifting system required?**\*** | | | | Yes  No | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Certification “Legal for Trade” required?**\*** | | | | Consult Factory | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Paint requirements? | | | | PA Proprietary (Blue)  Galvanized  Other (as per attached)  None | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |  |
| Constant voltage transformer required? | | | | Yes  No | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **APPLICABLE ONLY WITH SCALE UPGRADE** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G-Dimension of torque transmitter: | | | | | |  | | | | | | | | | | mm | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Existing Scale Mounting Centers: | | | | | |  | | | | | | | | | | mm | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Previous SO Number: | | | | | |  | | | | | | | | | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scale duty version: Standard Duty (50mm) | | | | | | Yes  No | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | | | |
| Scale duty version: Heavy Duty (76mm) | | | | | | Yes  No | | | | | | | | | | | (Mark Choice) | | | | | | | | | | | | | | | | | | | | | | | | | |
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| **SPECIAL REQUIREMENTS** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Application Data Sheet: E/M Conveyor Scale with 5 Roll Troughed Idlers | Page 3 of 5 |

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| **SKETCH OF CONVEYOR** (Side View) | | | | | | | | | | | | | |
| **or alternatively** attach a drawing (ACAD .dwg or .pdf format)of the conveyor  (Paying specific attention to indicate the position of the curves with respect to the proposed installation position.)  ***Kindly note that this information is critical to the correct placement of the scale in the conveyor and any omissions could affect the scale performance*** | | | | | | | | | | | | | |
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| **CONFIRMATION OF TECHNICAL DETAILS AS SET OUT ABOVE** (requirement of ISO 9000/9001) | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | |
| Print Name: | |  | | | | |  | | Designation: | |  | |  |
| Signature: | |  | | | | |  | | Date: | |  | |  |
|  | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | |
| **FOR OFFICE USE** | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | |
| Scale model purchased | | | |  | | | | | |  | | | |
| Weigh duty idlers purchased:**\*** | | | | | Yes  No |  | |  | | Qty | | | |
| Dimension "G" selected:**\*** | | | |  | | | | | | mm | | | |
| Load cell capacity selected:**\*** | | | |  | | | | | | kg | | | |
| Scale idler pitch selected:**\*** | | | |  | | | | | | mm | | | |
| Additional requirements: | | |  | | | | | | | | |  | |
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| Application Data Sheet: E/M Conveyor Scale with 5 Roll Troughed Idlers | Page 4 of 5 |

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| **INPUT AND OUTPUT REQUIREMENTS** | | | |
| **Digital Outputs (50V DC max. @0.5 Amperes)** | | | |
| Totaliser pulses | Supplied as Standard | |  |
| Load low alarm | Yes  No |  | |
| Load high alarm | Yes  No |  | |
| Load general alarm (high or low) | Yes  No |  | |
| Rate low alarm | Yes  No |  | |
| Rate high alarm | Yes  No |  | |
| Rate general alarm (high or low) | Yes  No |  | |
| Speed low alarm | Yes  No |  | |
| Speed high alarm | Yes  No |  | |
| Speed general alarm (high or low) | Yes  No |  | |
| Controller deviation alarm | Yes  No |  | |
| Sampler control | Yes  No |  | |
| System healthy | Yes  No |  | |
| Automated test weight operation (2 x outputs) | Yes  No |  | |
| Control set point source (local or remote) | Yes  No |  | |
| Batch control (1 x output) | Yes  No |  | |
| ***Note****: The* ***Digital Outputs*** *are all de-energised on power-up, when they are not allocated to a variable. If allocated to a variable they will assume an appropriate condition to match the status of the variable. The digital outputs are volt free contacts rated at max 50V DC @ 0,5 Amperes.* | | | |
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| **Digital Inputs (24V DC)** | | | |
| Speed sensor replacement | Yes  No |  | |
| Automated test weight (2 x position feedback inputs) | Yes  No |  | |
| \*Automated test weight (2 x control inputs) | Yes  No |  | |
| Variable speed drive “Run” feed back | Yes  No |  | |
| \*Batch control (3 x inputs & 1 x output) | Yes  No |  | |
| ***Note****:* ***Digital Inputs*** *are optically isolated & require a nominal 24V DC (10-40V DC) @ 10 mA each. The Digital Inputs marked with an asterisk (\*) require a momentary (approx. 500 ms) application of the input. All other Digital Inputs are effective during their application only.* | | | |
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| **Analogue Inputs (4-20mA)** | | | |
| Remote set-point | Yes  No |  | |
| Moisture | Yes  No |  | |
| Variable conveyor inclination angle (stacker applications, etc.) | Yes  No |  | |
|  |  | |  |
| **Analogue Output (Optically isolated)** |  | |  |
| Feed rate | Supplied as standard | |  |
| Belt load | Yes  No |  | |
| Belt speed | Yes  No |  | |
| Set-point control | Yes  No |  | |
| ***Note****: The optically isolated* ***Analogue Outputs*** *are set to zero (mA) on power-up, when they are not allocated to a variable. If allocated to a variable they will assume an appropriate condition to match the status of the variable.* | | | |
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| **.** | | | |
| **Serial Communications** (Select one only) **Page 5 of 5** | | | |
| Profibus® DP | Yes  No |  | |
| Dual redundant Profibus® DP (Slave redundancy) | Yes  No |  | |
| Profibus® PA | Yes  No |  | |
| PROFINET-IO® | Yes  No |  | |
| DeviceNet® | Yes  No |  | |
| ControlNet® | Yes  No |  | |
| EtherNetIP® | Yes  No |  | |
| Modbus® Plus | Yes  No |  | |
| Modbus® RTU | Yes  No |  | |
| Modbus® TCP/IP (Ethernet) | Yes  No |  | |
|  | | | |