TASCOL SHORE BELT WEIGHER QUESTIONNAIRE.

Customer		Date
Conveyor Number and Location		
Enquiry Number		
Contract Number		

COMPLETE THIS PAGE ONLY TO PROVIDE A QUOTATION.

Material name	
Bulk density (Tonnes per cubic metre)	
Working load : Material flowrate in Tonnes per Hour Minimum Normal Maximum	
Accuracy required from weighing system ? **Find out Customer's expectations.** Best achievable is ±0.5% from Double Idler or ±1.0% from Single Idler.	
Belt Speed in m/s Minimum Normal Maximum	
Belt Troughed or Flat ? Most belts will be troughed.	
Belt width ? (measured across belt when flat).	
Pitch of idlers? (distance between roller assemblies).	
Is conveyor horizontal or inclined? (state angle in degrees).	
Does weigh idler require a speed wheel to monitor belt speed ? (it is usual to supply this facility).	
Location – Surface / Underground. Intrinsically safe equipment required ?	
Contact parts and materials of construction ? Mild steel painted / Stainless type 304 (or type 316).	
Is a belt weigher controller required? Manufacturer and type.	Y / N
Controller outputs: (0-10V), 4 to 20mA, RS232 or RS 485 serial comms.	
Controller location : Local or Remote from loadcells (**Try to locate locally**, or give remote distance in metres)	

COMPLETE ALL THE FOLLOWING QUESTIONS FOR LIVE ORDERS.

SEE THE FOLLOWING FOUR DRAWINGS FOR ADDITIONAL IDLER INFORMATION TO BE COMPLETED:

- **M4-0119-392 FOR GENERAL CONVEYOR DETAILS.**
- **M4-0119-393 SHEETS 1 & 2 FOR IDLER DETAILS - <u>SELECT ONE SHEET ONLY</u>. IF THE CONVEYOR IS ENCLOSED THEN COMPLETE SHEET 3 IN ADDITION TO SHEET 1 OR 2.**
- **USE MILLIMETRES AS THE S.I. UNITS.**

MATERIAL.

Maximum particle size	
Characteristics	High temperature Y / N Sticky Y / N Corrosive Y / N Other -

CONVEYOR DATA.

Method of loading belt?	Surge bin Screw Elevator Crusher Other -
Does belt speed vary ? A system will work better if the belt speed is constant.	
Belt thickness in mm ? Look out for varying belt thickness and thick belt jointing clips which can cause problems.	
Is conveyor a new installation or existing?	
Are there any skid plates / deck plates fitted ? Cannot always avoid these and will have to removed or cut out from the area where the belt weigher is to be fitted.	
Are there material loading points in the vicinity of the weighing area ? These must be avoided to obtain good system accuracy.	
Is the weighing area exposed to strong winds ? This must be avoided or some covers retro-fitted to the conveyor.	
Does the conveyor change in inclination ? Upwards / downwards changes are termed catenary / nose-over. Avoid these areas to obtain good system accuracy.	

Number of idlers available for weigh location? (weigh idler plus raised adjacent definition idlers) **odd** number for a single idler belt weigher **even** number for a double idler belt weigher	**7** – Ideal **5** – Good **3** – Bare minimum
Check there are no tracking rollers included in the number of idlers, above. Check all idlers are identical.	
Is the conveyor covered or enclosed ? This may make the installation more difficult and certain parts may have to be removed or cut-out prior to installation.	
Distance of weigh idler from the point of material feed onto the belt ?	
Belt length ? Note true belt length will be twice the inlet / outlet centres, so state which one applies.	

CONTROLLER OPTIONS.

Pulsed volt free output for Totals ?	
Printer required ?	
Belt weigher software package required or other data capture software ?	
4 – 20mA analogue rate indicator ? (separate panel mounted item)	
Resettable / Non-Resettable Totaliser (Digital) – (separate panel mounted item)	
Electricity supply available for controller?	_____ VAC @ _____ Hz **or** _____ VDC

GENERAL HELP GUIDE FOR SELECTING BELT WEIGHER LOCATION.

AVOID:

- Areas near the loading or discharge end of the belt.
- Areas where additional material is added to the belt.
- Areas with excessive vibration.
- Tracking rollers. These will turn and thus alter the weigh length.
- Areas where the conveyor changes it's incline angle, either upwards or downwards.
- Wind lashed areas.
- Areas of excessive heat or where the product is extremely hot.

LOOK FOR:

- 5 identical idlers positioned in a flat, straight and uniform part of the conveyor.
- Positioning the weigh idler above a conveyor stanchion / support leg, for increased stiffness.
- Areas away from strong winds.
- Areas of minimum or nil vibration.
- Possibility of using adjacent cable trays or trunking for any new cables.
- Good access for installation, calibration and maintenance.
- Areas under some sort of weather protection if possible.
- Easy removal or cutting of deck or skid plates prior to installation, if this is applicable.