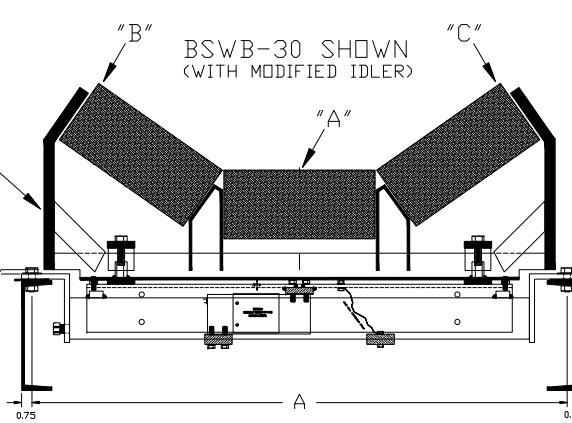
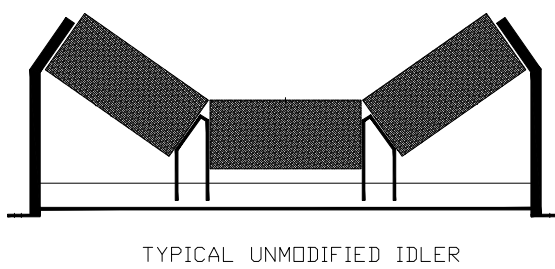
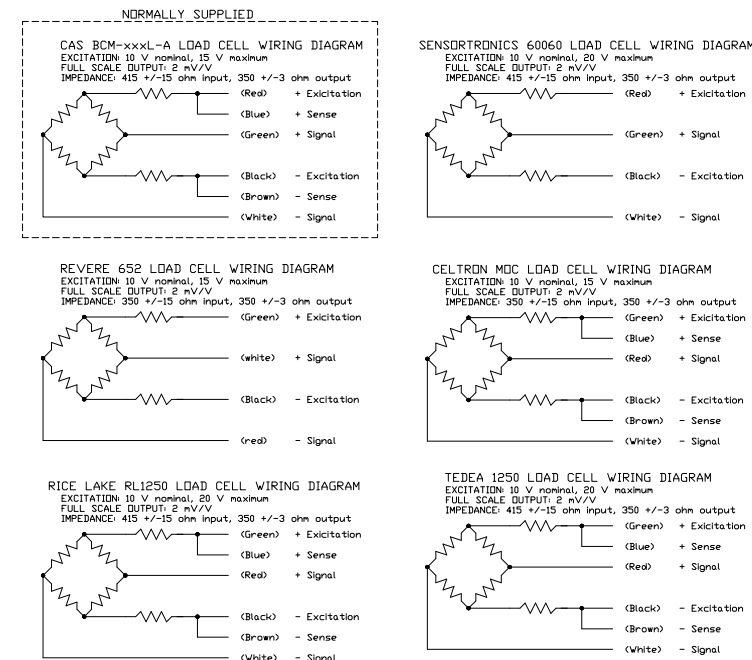


VIEW "F-F"

- ALUMINUM SHIMS
- 2 1/2" X 10"
  - 4 EA. 1/4" THICK
  - 2 EA. 1/8" THICK
  - 4 EA. 1/16" THICK

\*\*\* LOAD CELL WIRING DIAGRAMS \*\*\*



BELT WIDTH	A
24	33
30	39
36	45
42	51

GENERAL NOTES

- MANY FACTORS AFFECT THE WEIGHING ACCURACY AND STABILITY OF A CONVEYOR BELT SCALE. BELOW ARE A FEW OF THE MOST COMMON PROBLEMS/SOLUTIONS.
- WEIGH BRIDGE LOCATION MUST BE WHERE THERE IS NO MATERIAL SLIPPAGE ON THE BELT. THEREFORE THE CONVEYOR INCLINATION SHOULD NOT BE GREATER THAN 17 DEGREES, PARTICULARLY ON HIGHER VELOCITY BELTS.
- THE CONVEYOR MUST HAVE AN AUTOMATIC MEANS OF MAINTAINING UNIFORM BELT TENSION.
- ALL SCALE AREA IDLERS SHOULD BE OF THE SAME MODEL AND MANUFACTURER. THE ROLLERS MUST TURN FREELY, BE IN GOOD SHAPE AND SET TO THE SAME TROUGHING ANGLE.
- THE BELT MUST TRACK THE CENTER OF CONVEYOR UNDER ALL LOADING CONDITIONS. IT MUST BE NEARLY SPLICE FREE, IN VERY GOOD GENERAL CONDITION, AND FLEXIBLE ENOUGH TO CONTACT ALL WEIGH BRIDGE AREA IDLER ROLLS WHEN BELT IS RUNNING EMPTY.
- IF THE WEIGH BRIDGE IS LOCATED WITHIN 25 FEET OF HEAD PULLEY, THE CROWN OF THE HEAD PULLEY MUST NOT BE ABOVE THE TOP OF THE CARRY ROLLS.
- THE CONVEYOR FRAMEWORK MUST BE STRAIGHT AND RIGID WITH NO EXPANSION JOINTS OR STRINGER SPLICES LOCATED WITHIN THE +1 TO -1 IDLER REGION.
- WEIGH BRIDGE MUST NOT BE PLACED IN ANY CONCAVE OR CONVEX CURVE AREAS OF CONVEYOR.
- THE WEIGH BRIDGE AREA MUST BE FREE OF EXCESSIVE MECHANICAL VIBRATIONS AND IN AN AREA REASONABLY PROTECTED FROM EXCESSIVE WIND.
- THE LOCATION MUST BE AT LEAST 10 FEET AWAY FROM ANY SKIRT BOARDS AND AT LEAST 15 FEET FROM THE POINT AT WHICH THE BELT IS LOADED.

INSTALLATION

- RAISE CONVEYOR BELT TO PROVIDE ROOM TO WORK. DO NOT REMOVE BANDING AROUND WEIGH BRIDGE OR LOOSEN SET SCREWS OR RED PAINTED BOLTS UNTIL JUST BEFORE CALIBRATION PROCEDURE.
- MODIFY IDLER TO BE USED WITH WEIGH BRIDGE AS SHOWN BELOW LEFT. CENTER MODIFIED IDLER ON WEIGH BRIDGE AND CLAMP SECURELY AS SHOWN.
- POSITION WEIGH BRIDGE/IDLER ASSEMBLY AT DESIRED LOCATION. DRILL FOUR MOUNTING HOLES AS REQUIRED AND THEN LOOSELY BOLT ASSEMBLY INTO PLACE WITH 3/8" OF PROVIDED ALUMINUM SHIMS UNDER EACH SIDE.
- SCALE AREA IDLERS MUST ALL BE HIGHER THAN OTHERS. RAISE +1 AND -1 IDLERS UP 3/8" ON EACH SIDE OF EACH WITH CUSTOMER SUPPLIED SHIMS. OCCASIONALLY +2 AND -2 IDLERS MUST ALSO BE RAISED IF CALIBRATION DIFFICULTIES ARE ENCOUNTERED (USUALLY BECAUSE OF INSUFFICIENTLY FLEXIBLE BELT).
- ALIGN WEIGH BRIDGE, +1 AND -1 IDLERS HEIGHT AND LEVEL AS SHOWN USING FINE "PIANO" WIRE (OR STRONG STRING) TIED OFF AT ONE END AND WITH SUFFICIENT WEIGHT AT THE OTHER TO ENSURE TAUT STRAIGHT LINES. AT THE SAME TIME BE SURE ALL SCALE AREA IDLERS ARE SQUARE AND PERPENDICULAR TO BELT LINE OF TRAVEL. SECURELY TIGHTEN ALL BOLTS.
- REMOVE BANDING FROM AROUND WEIGHT BRIDGE. REMOVE RED PAINTED BOLTS. INSTALL TEST WEIGHT CRADLES IF PROVIDED. ONE AT A TIME, LOOSEN 4 SET SCREW LOCK NUTS SLIGHTLY AND TURN SET SCREW COUNTER-CLOCKWISE (3/4 TURN FOR 24" BELTS, 1 TURN FOR 30" BELTS, 1 1/4 TURNS FOR 36" BELTS AND 1 1/2 TURNS FOR 42" BELTS) AND RE-TIGHTEN LOCK NUT.

CALIBRATION

- TARE A TRUCK AND NOTE THE ATTACHED SCALE DIGITIZER TON(NE)S. COUNTER READING (OR ZERO IT) AND THEN LOAD AT LEAST 15 TON(NE)S OF MATERIAL AT THE MAXIMUM AGGREGATE RATE (TPH) NORMALLY USED IN STANDARD OPERATIONS. COMPARE THE COUNTER INDICATED WEIGHT TO THE ACTUAL MATERIAL WEIGHT AS CHECKED ON AN ACCURATE TRUCK SCALE.
- ADJUST THE SCALE DIGITIZER PER ITS' INSTRUCTIONS. REPEAT STEP #1 ABOVE AS NECESSARY UNTIL ACCURATE AND REPEATABLE COUNTER READINGS ARE ACHIEVED.
- REPEAT STEP #1 ABOVE EXCEPT AT ONE-HALF THE RATE (TPH). DO NOT ADJUST SCALE DIGITIZER AT THIS TIME.
- (A) IF THE STEP #3 COUNTER READING IS TO HIGH COMPARED TO THE TRUCK SCALE WEIGHT, LOWER THE WEIGH BRIDGE 1/16" ON BOTH SIDES AND REPEAT STEPS #1 THRU #4.  
(B) IF THE STEP #3 COUNTER READING IS TO LOW COMPARED TO THE TRUCK SCALE WEIGHT, RAISE THE WEIGH BRIDGE 1/16" ON BOTH SIDES AND REPEAT STEPS #1 THRU #4.
- REPEAT STEPS #1 THROUGH #4 ABOVE UNTIL SCALE IS WITHIN REQUIRED TOLERANCE AT BOTH TPH RATES.

LOAD CELL/WEIGH BRIDGE SIZE	
NOMINAL	HEAVY LOADING
24" WB = 75 kg	24" WB = 100 kg
30" WB = 100 kg	30" WB = 150 kg
36" WB = 150 kg	36" WB = 200 kg
42" WB = 200 kg	42" WB = 250 kg