

AUSTDAC PTY LTD



Serving the mining industry since 1983

Austdac Company Details



- Austdac Pty Ltd has been in the business of manufacturing Conveyor monitoring and control equipment as well as hazardous area communications, since 1983.
- A Global Supplier to the Mining Industry of communications, gas monitoring, I.S. lighting and Conveyor control equipment
- Since 2006, Austdac has been part of Hubbell Incorporated (Group of 80 plus companies: Gai-Tronics, Burndy, Hawke, Killark, Raco, Gleeson Reel, Aclara....)
- GAI-Tronics based in Reading & Pittsburgh handles Austdac products sales, support and service for North and South America.
- Over 84 longwall monitoring and control systems installed worldwide.
- More than 2,000 conveyor monitoring and control systems installed worldwide.
- Represented by CHESS CONTROLS

Austdac Conveyor Monitoring System



The difference....

- Austdac supports Multi-National companies by ensuring long term product support, continual innovation with new technology and ensured long term availability.
- The **SILBUS** systems are certified to the highest world safety standards – the only system with SIL3 rating. We also comply to SIL2, CAT3 and PL2.
- Products are supported by in house Engineering and a team of fully trained field service technicians for commissioning, Auditing and training support worldwide.
- The **SILBUS** system is the most flexible Industrial field bus system on the market with a vast selection of digital and analogue transmitters and receivers, ensuring easy interface to any field device.
- Interface to PLC's and SCADA systems via Fiber, Ethernet, MODBUS RS485 TCP / IP, etc...
- The Austdac system has the flexibility to ensure the customers requirements and preference for system design and configuration are met.
- SILBUS helps to Reduce Downtime, Increasing Production and Lowers Cost of ownership....



Underground Conveyor

Integrated Communication Systems & Monitoring of Conveyors



Longwall

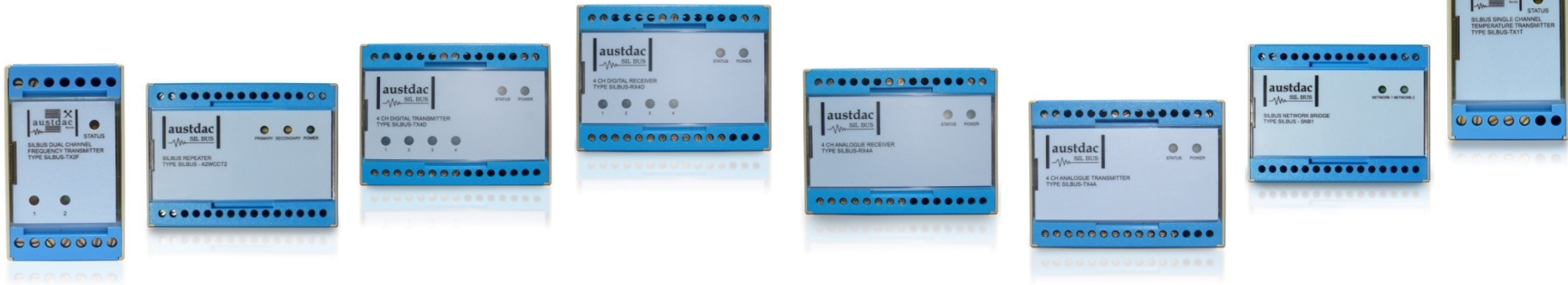
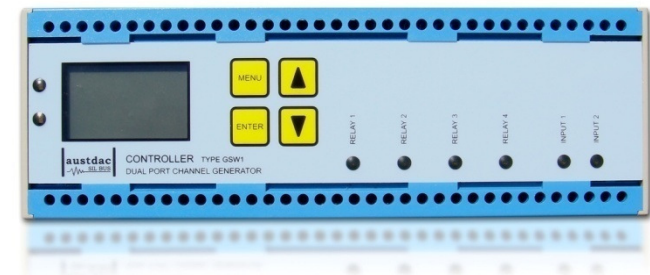


Above Ground Conveyor

SILBUS Modular system



- **SILBUS** GSW1-xxx System Controller
- Dual Channel Frequency Transmitter
- 4 Channel Digital Transmitter
- 4 Channel Digital Receiver
- 4 Channel Analog Receiver
- 4 Channel Analog Transmitter
- Repeater
- Network Bridge
- Single Channel Temperature Transmitter
- System Monitoring unit for EOL



Austdac Conveyor Monitoring System



LONG DISTANCE SAFETY SYSTEM

- **SILBUS** is unique in its ONE CABLE approach to both monitoring and control of long distance conveyors.
- UL/CSA, SIL 2 & 3 safety rating.
- **SILBUS** allow for the combined transmission conveyor emergency stop signals with monitoring and control signals from field devices:
 - belt misalignment switches,
 - tilt switches,
 - belt rip switches as well as
 - analogue values such as bearing temperature and vibration.
- All SIL 3 safety and standard digital inputs are down line powered. No external power required on length of conveyor
- The address modules in the pullkeys are loop powered, thus eliminating the need for power along the length of the conveyor.





Austdac Conveyor Monitoring System

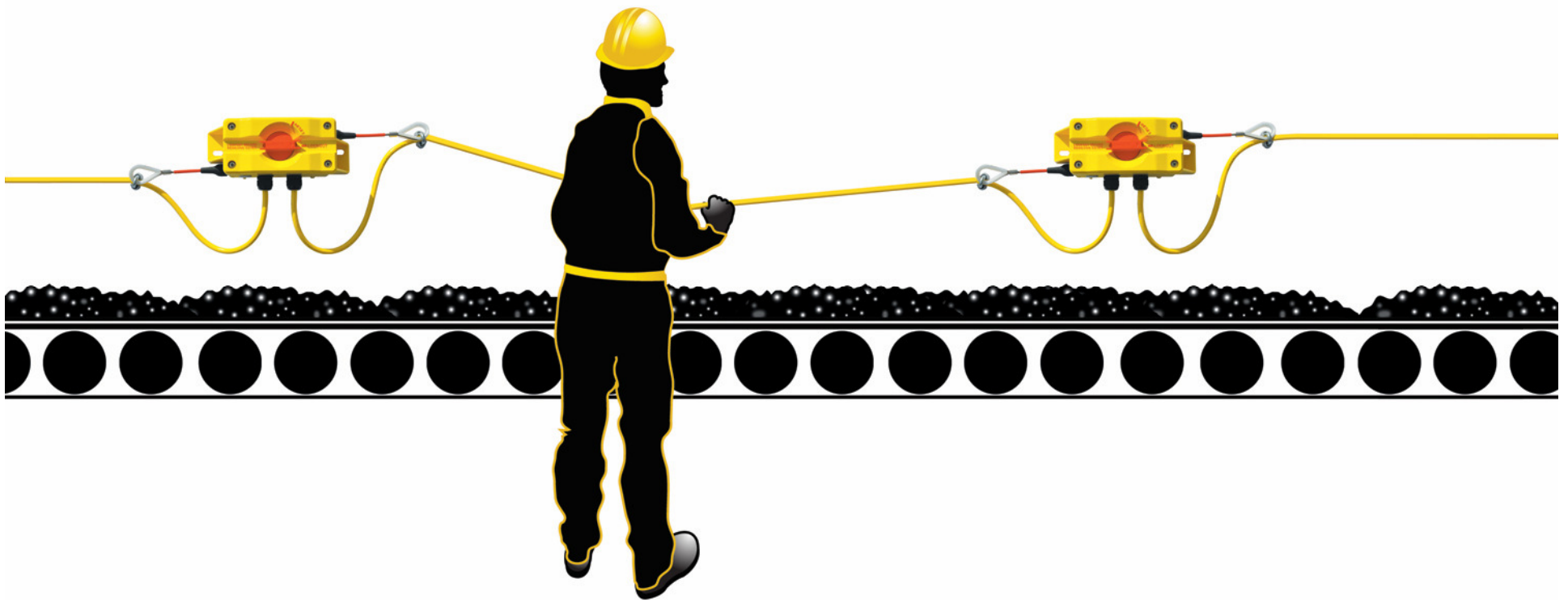


SINGLE CABLE SOLUTION FOR LONG DISTANCE CONVEYORS

- Austdac's pullwire Lanyard cable has been designed specifically for the Electrical and Mechanical Environments which exists along conveyors.
- One cable solution means SIL2 or 3 rated emergency stop system, digital inputs such as belt wander, chute full signals and analogue values such as bearing temperature, vibration monitoring as well as conveyor pre start warning on the same cable that is used as the pullwire. **Huge savings in material and installation costs.**



PULLKEY ESS3 (Cable Pull Safety Switch)





AUSTDAC PULLKEY ESS3 FOR CONVEYORS

PULLKEY ESS3



FEATURES:

- 6 form C, SPDT switches
- Large wiring cavity with 4 conduit glanded entries
- Tensioned or monitored lanyard versions
- Not susceptible to temperature change (Day / night)
- Snap action latching operation w/ Manual reset
- Passive and active (optional) status indication
- Single or double side acting
- Flexible pull actuators with eyelet (thimble)
- Fully compatible with either a tensioned or non tensioned system

PULLKEY ESS3 (Cable Pull Safety Switch)

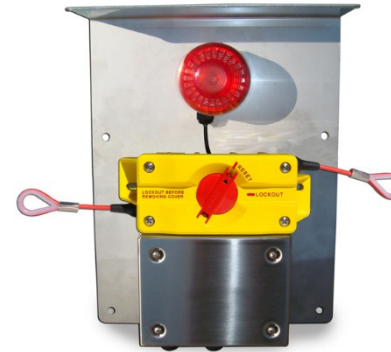
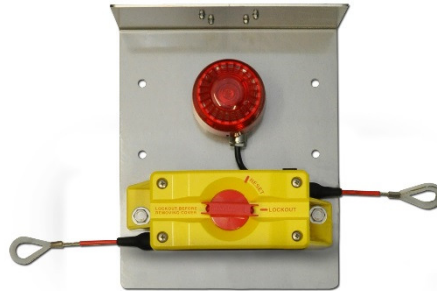


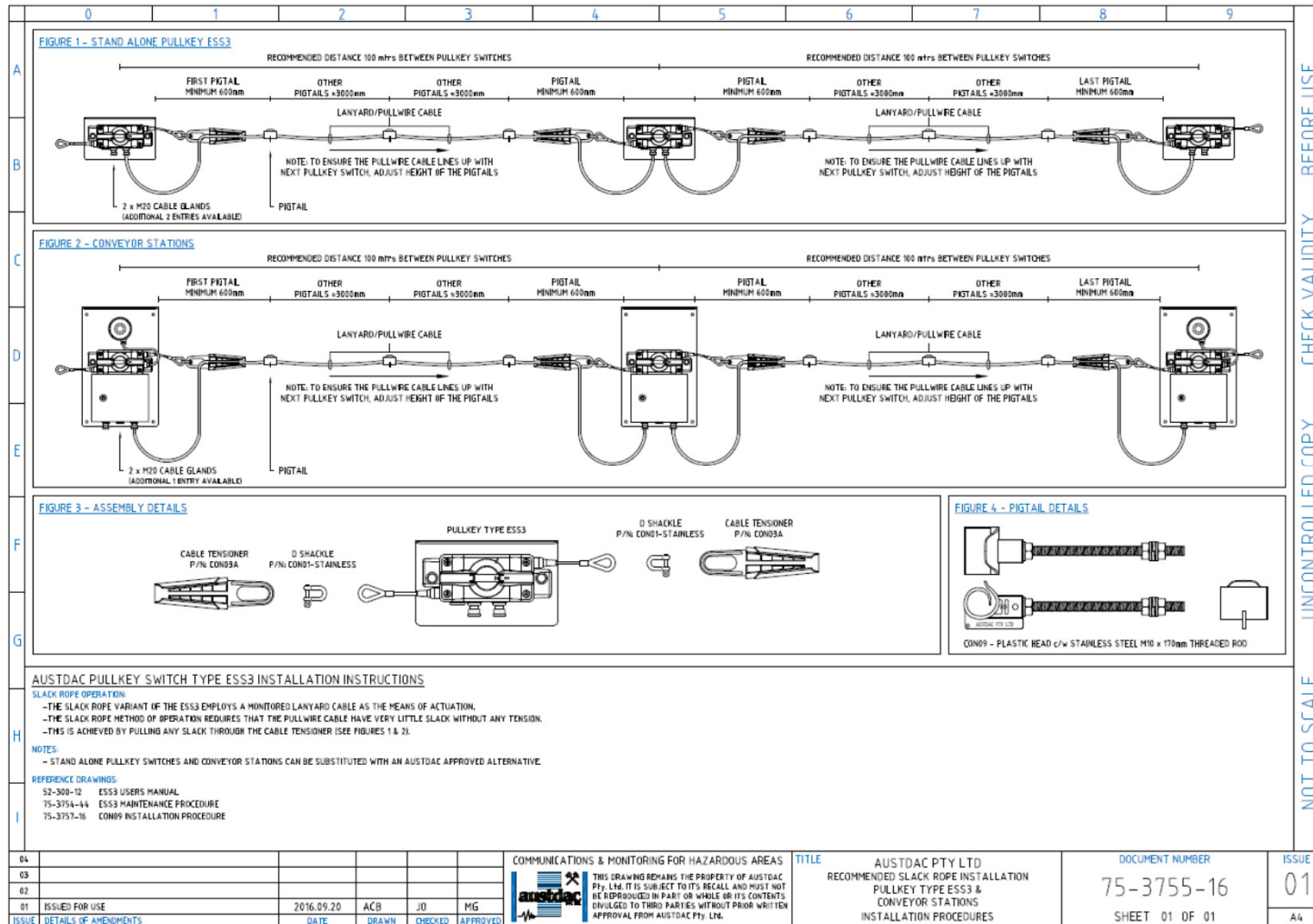
TECHNICAL DATA:

- Contact rating 5A, 125V AC
0.5A, 60V DC (inductive load)
1A, 60V DC (resistive load)
- Contact material Ag or AuNi or AuAgPt
- Mechanical life 10 x10⁶ operations (min)
- Electrical life 1 x10⁴ operations @ max load (min)
- Ingress protection IP67, Nema 4x
- Temperature range **-50°C to +60°C (-58F to +158F)**
- Housing material Polycarbonate UL94V-0 yellow
- Cable tension <75N
- Conduit entries up to 4 x 20mm
- Terminals 2.5mm² cage clamp
- Dimensions 270mm (L) x 100mm (W) x 120mm (D)
- Mounting centres 230mm
- Mounting holes 10mm x 20mm
- Mass 1.6kg



Typical Overland Conveyor Station

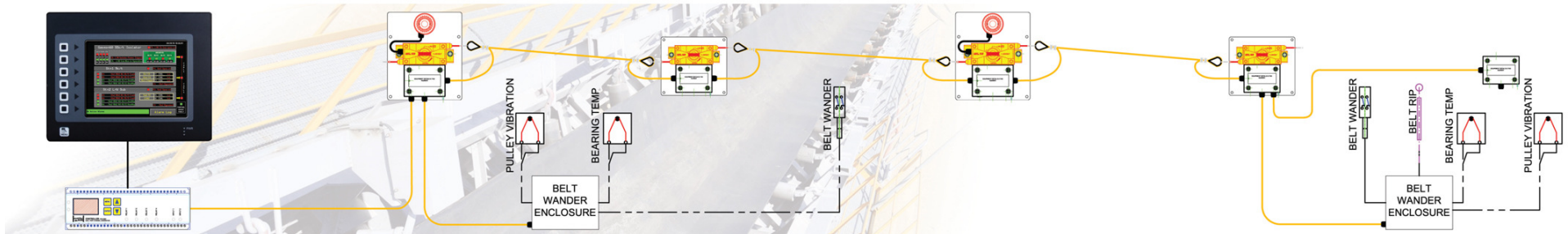




Austdac Conveyor Monitoring System



Globally Certified System SIL2 & SIL 3 Rated



THE COMPLETE SYSTEM APPROACH TO LONG DISTANCE SIL3 COMPLIANT MONITORING AND CONTROL

Austdac Conveyor System



Certifications and Accreditations

- Certified and tested to Safety Integrity Level (SIL) 2 & 3 as tested to IEC and AS 61508 safety standard
- Tested by TUV testing authority
- Full tested and certified to Safety Category 4 relating to EN954-1 and AS4024.1 Machine guarding standards
- Fully compliant to AS 1755-2000 Australian Standard Conveyors-Safety Requirement
- Tested and compliant to International Standards: CE, UL, CSA, SEV, VDE
- The only comparable system with Australian C tick certification for electromagnetic interference
- Tested and Certified intrinsically safe by:
 - TestSafe Australia
 - IEC International Standard
 - ATEX Europe and the UK
 - MSHA USA
 - GOSHT Russia
 - South African Certification

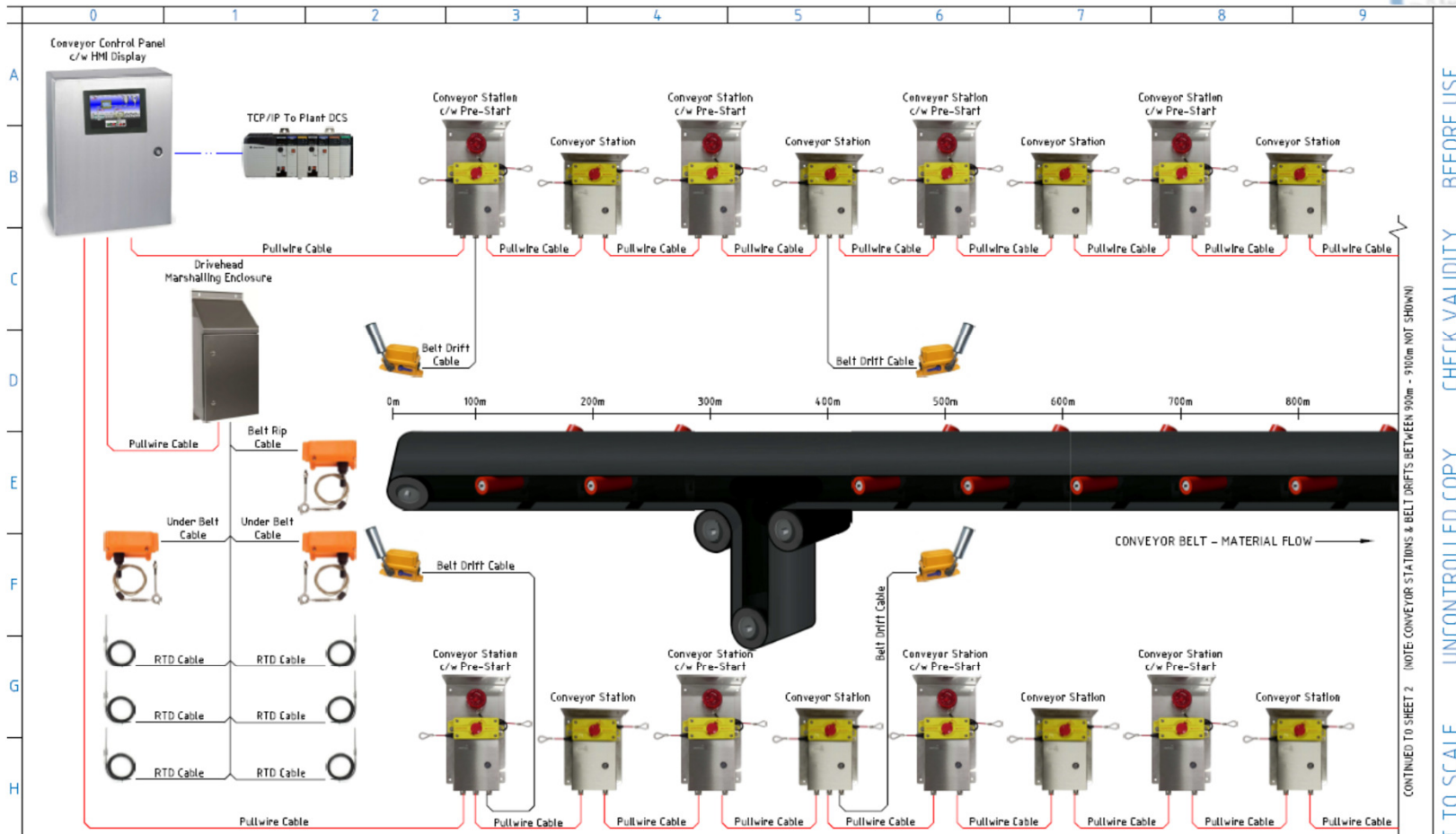


CONVEYOR MONITORING SYSTEMS
DESIGNED FOR LONG DISTANCE CONVEYORS IN
EXTREME
TEMPERATURE CONDITIONS

- 50°C

+ 60°C





- NOTES:
 1 CONVEYOR STATIONS EVERY 100m
 2 PRE-START CONVEYOR STATIONS EVERY 500m
 3 CONVEYOR BELT SWAY SWITCH EVERY 100m

CONTINUED TO SHEET 2 (NOTE: CONVEYOR STATIONS & BELT DRIFTS BETWEEN 900m - 9100m NOT SHOWN)

NOT TO SCALE UNCONTROLLED COPY CHECK VALIDITY BEFORE USE

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