



**LEVELTEC**

**Innovative Solutions  
Leading Manufacturers  
Quality Products**

Leveltec is an innovative industry leader, a specialised Australian manufacturer, equipment asset manager, and engineering solutions provider.

As a trusted provider of innovative solutions our focus is building long-term partnerships with companies, delivering innovative and market leading products and services, while exceeding customer expectation. Our people, systems, and sustainable processes allow us to provide the highest quality products on time and within budget.

MANUFACTURING AND SUPPLY	ASSET MANAGEMENT	ENGINEERING SOLUTIONS
We build, source and deliver	We monitor, service, repair and overhaul	We configure, develop and provide solutions
<ul style="list-style-type: none"><li>Local manufacturing and assembly of sensors, power and control equipment</li><li>Supply of world class products that are economical, reliable and robust</li><li>Customised plastic and sheet metal fabrications, consoles and assembly</li><li>OEM manufacturing under contract</li></ul>	<ul style="list-style-type: none"><li>Factory trained technicians to get the most out of your equipment with back-to-base repairs</li><li>Strategic through life support rotatable maintenance programs tailored to your onsite or offsite needs</li><li>Wireless IoT data logging services for real time reporting and analytics of any sensor</li></ul>	<ul style="list-style-type: none"><li>Onsite applications engineering for product selection</li><li>Configuration of products into electrical enclosures for turnkey solutions</li><li>Product development and software integrations</li><li>IoT systems development and deployment</li></ul>





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# ABOUT LEVELTEC

**Leveltec Engineering is a proud Australian-owned manufacturing and technical distribution business delivering engineering solutions to the biggest names in the mining, agriculture, ports, renewables and rail transport sectors.**

For more than 30 years, our team has specialised in the bulk material handling industry. As operations expanded so did our solutions, which include operator machine interfaces, wireless monitoring and electronics, as well as power distribution. ‘

Leveltec started as a family-owned and run manufacturing business producing tilt switches for the mining industry. The business and team continue to grow, bringing in new, high quality brands to service a number of applications and industries.

Through selective vendor relationships, Leveltec Engineering are exclusive distributors in Australia and New Zealand of world class industrial equipment applied across both electrical and mechanical solutions in all markets. We are embarking on exciting new opportunities in the expanding markets of IoT (Internet of Things) – being a network platform for all interconnected devices to share data – including sensors, trackers, and instrumentation supporting global applications in the industrial, retail and consumer sectors.

All of our products are further value added in our purpose-built manufacturing facility located on the mid-north coast of New South Wales.

This facility is also the head of our manufacturing centre with fitting, welding, sheet metal fabrication, product assembly and product development. Here we manufacture temperature probes, slack rope switches, tilt switches and operator control systems. We perform asset management services via our service repair overhaul programmes, as well as design and build custom enclosures for electrical control systems, software and IoT solutions.



**CEO**  
**Ben Stokes**

# APPLICATIONS & SOLUTIONS

## Bulk Material Handling

Underground or above, if it's rolling, stacking, conveyed, transferred, stockpiled or exported, Leveltec sensors and switches have got you covered. Whether you require remote monitoring of a transfer point on an overland conveyor, or are looking for a fast cable replacement option to collect more digital, analogue or temperature data with existing infrastructure, our range of wired transmitters, wireless radio and IIoT systems will bring your operations into the digital world.



## Cable Handling, Cable Chain & Protection Systems

From moving robotic machines, to stationary high voltage trailing cables, Leveltec provides cable protection systems for all applications. Our turnkey cable carrier solutions provide connection systems for moving machines where fixed installation of cables and hoses are not possible.



## Operator Interfaces & Control Equipment

We understand the need for world-class equipment to minimise downtime and provide operators with ergonomic, safe, and quality solutions. We provide an extensive range of industrial automation equipment including joysticks and master controllers for all markets, from draglines to defence, to foot switches and swing pedals.



## Automation, Electronics & Wireless Monitoring

Leveltec manufactures and supplies wireless monitoring solutions for the industrial internet of things (IIoT) sectors. Smart sensors, digitalisation, data analytics and machine learning projects are possible with our rapidly deployed hardware and software. We can also tailor automation equipment for bulk material handling markets, including tilt switches, bearing temperature and vibration monitoring devices, specialist earth leakage and cam switchgear.

## Power Distribution & Switchgear

Energy distribution runs in our veins and is the lifeline to many applications. Leveltec provides a range of power switching and connecting devices from extra low voltage, low voltage, medium voltage and high voltage.



## Industrial Solutions

Our purpose-built 1500sqm facility located on the mid-north coast of New South Wales is the home of solutions. Our operations teams have the capacity and capability to deliver customer focused solutions that are fit for purpose, add value, and solve industry challenges. We are multi-disciplined with electrical, mechanical and fabrication trades, and use advance manufacturing techniques in our process.



## Renewables

Switchgear and wireless monitoring products are our core focus. We co-manufacture and distribute solar switches and solar combiners certified to Australian and New Zealand standards that are world-class and fit-for-purpose in domestic, commercial, and industrial applications.



## Service & Repair

Keeping your equipment in safe working order is our priority to ensure production rates are up and downtime is reduced. Leveltec offers an asset management, through-life support program where we manage your inventory at agreed service levels, as well as back-to-base repairs and OEM spare parts.



# BRANDS & PRODUCTS





Sourcing your tilt and temperature switches from Leveltec means you benefit from high-quality Australian-made products, quick turnaround on orders, bespoke solutions and the knowledge you are supporting the local manufacturing industry.

## TILT SWITCHES

Leveltec manufactures a wide variety of tilt switches, with both mercury and snap action non-mercury tilt probe solutions for bulk material handling. Tilt switches are commonly used to monitor blocked chute, stockpile and conveyor transfer points alerting the control system of high bin level avoiding spills and machine downtime.

Leveltec tilt switches are proudly Australia made.



### Snap Action: Non mercury - LP01, LP02

The snap action tilt switch is an Australian made approved non-mercury product with an in-built hydraulic damper for stability, no extra control required for use, and can drive loads up to 250VAC 7A. Available in a variety of body types including chromed steel, stainless steel and PVC.

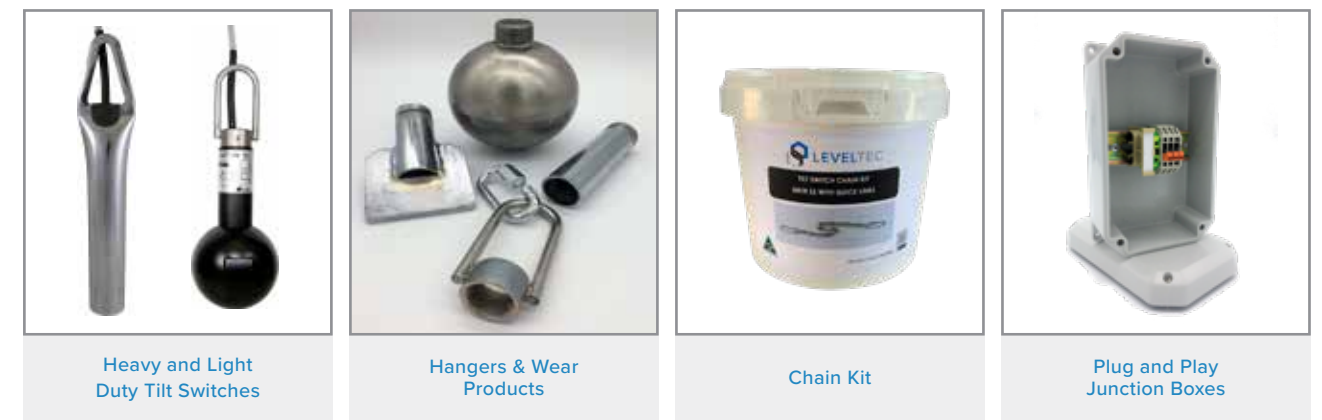
### Snap Action: Hazardous Area - LP03

Designed for use with Intrinsically Safe Circuits. The independently tested LP03 tilt switch can be used in hazardous areas. The tilt switch is classed as a simple device and does not contain components capable of storing or producing an electric charge. As a simple device the LP03 tilt switch can be used in hazardous applications provided it is isolated by an intrinsically safe barrier. An easy to identify blue cable offers clear identification of the device.

### Instant Action: Mercury - LP04, LP05

The instant action tilt switch is an Australian made approved mercury product that rapidly switches on tilt, no extra control required for use however it's common practise to use a timing function to avoid nuisance tripping. Available to drive loads up to 240VAC 0.8A. Available in a variety of body types including chromed steel, stainless steel and PVC.

## TILT SWITCHES AND ACCESSORIES



FROM LEFT TO RIGHT: Heavy duty & Light duty tilt switches LP01 & LP02. Hangers, chain kits, extensions, wear plate and float ball. Hazardous area barrier and enclosures. Field junction box and denounce timers. Battery/Solar Powered wireless tilt switch.

## FIXED PLANT TILT SWITCHES

Standard and custom ranges of fixed tilt switches are commonly used to detect an unplanned movement or fall over of fixed plant and equipment. The VTS vertical tilt switch has been developed as a solution to monitor slack or loose wire ropes in shaft hoisting systems for conveyance of raw materials in mines. Often referred to as slack rope switch or slack rope detection.



## TEMPERATURE TILT SWITCHES

Developed as a bespoke solution for underground mining applications, the Leveltec range of temperature switches can monitor not only temperature, but angular displacement. This is used to alert the control system that a static or rotating conveyor roller bearing housing has increased in temperature or the bearing is failing causing rotation of the housing tripping the angular alarm.





Spohn + Burkhardt design and manufacture joysticks, operator control stations and resistors for use in machinery worldwide. We exclusively distribute a range of world class master controllers from Spohn + Burkhardt which are used to operate machines such as draglines, electric shovels and drill rigs. We build it so you can control it.

## JOYSTICKS

World class joysticks for all sectors. Locally assembled, repaired and serviced at our head office means we can produce everything from individual units to the mass production, according to requirements.



## OPERATOR CONSOLES, PORTABLE CONTROL STATIONS AND FOOT PEDALS

Operators often spend countless hours in control stations, meaning they need to be comfortable and suitable for long periods of sitting. For this reason, Spohn + Burkhardt equip our control stations with ergonomic seats and a variety of individual adjustment possibilities as standard equipment.



## RESISTORS

Whether brake resistors or load resistors – our products for industry always have the highest quality. A service life of 20 years is nothing unusual with Spohn + Burkhardt. The individual components of resistors can be replaced easily, and Leveltec offer repairs, servicing and spares.



## SERVICE, REPAIR & SPARES

**SERVICE | Have it maintained for you**  
We understand that your equipment needs to operate to the highest performance. Utilising our through-life support program can reduce annual running costs while increasing machine availability. We'd love to discuss how we can increase your operational efficiency on new and used equipment through scheduled repairs and overhauls.

**REPAIRS | Have it fixed for you**  
Leveltec also offers ad hoc repair overhaul service for your equipment in our purpose-built workshop. Repairs can be booked in via our online system, and our factory trained technicians provide the highest service levels for application, repairs, and spares to get you going as soon as possible.

**SPARES | Fix it yourself**  
We stock the most popular spares including joystick boots, contacts, buttons and electronic components. Our team can also work with you to partner spares with other trusted parts in stock.



**PCE MERZ Switchgear offers a diversified and high-quality product range of low-voltage switchgear. The product portfolio includes enclosed and open cam and compact switches for direct and alternating current applications. PCE Merz switchgears are suitable for use across mechanical engineering, air conditioning, ventilation technology, underground mining, food machinery manufacturers, elevator companies, as well as the photovoltaic industry.**

## ENCLOSED MAINTENANCE SWITCHES

World class joysticks for all sectors. Locally assembled, repaired and serviced at our head office means we can produce everything from individual units to the mass production, according to requirements.



## COMPACT SWITCHES

The term 'Compact Switch' is common practice in the industry and describes a design of disconnect switches. It is about On-Off switches arranged for switchboard installation. In the majority of cases the switches are drafted for snap-on DIN rail mounting, base mounting or front mounting in the door. The terminal screws are all accessible from one side and are situated in line with the duct. The Compact Switches are classified in three groups starting with the basic series ML0 with applications from 16A to 32A. The well proven series ML1 to ML3 from 25A up to 125A and the high-performance series ML4- ML7 from 125A to 630A.



## CAM SWITCHES

The MERZ Cam Switches of the series MN104 - MN 756 are available for a power range from 10A -125A. They are freely configurable thanks to their modular design and can be adapted to virtually any customer requirements. We custom cut cam switches to OEM requirements and adaptors such as trap key and flameproof enclosures.



## UNDER VOLTAGE SWITCHES

The MERZ UVR-Switches with undervoltage release are available for a power range from 32A – 63A. The undervoltage release switch (UVR) is an electromechanical device which automatically shuts down when the supply voltage falls below a certain value. In such case the handle moves back to the OFF-position. The switch has been designed to open its contacts (release-free), even though the handle is eventually blocked. The undervoltage release is required in many countries, especially for machines with rotating tools.



UVR

## CHANGE OVER SWITCHES

The MERZ MLS series of changeover switches have eight switching contacts and allow for changeover of supply from 25-125A. Din Mounted with extension shaft and door coupling optional.



MLS

## VOLTAGE CHANGE OVER SWITCHES FOR GENERATORS

The MERZ VCS switches are built for generator systems from 10kw to 1.2MW. The use of the VCS removes the requirement to changing tapping on generators to achieve different voltage outputs.



VCS

## MAINS CHANGEOVER AND BYPASS SWITCHES

The MERZ mains changeover and bypass switches allow the switch of 1, 2, 3 and 4 poles. Available in switching functions, UPS or UTILITY, Normal or Bypass, and Normal or Test or Bypass. Pad lockable and key operated versions, auxiliary contacts and various switching programs from 20- 315A and higher on request.



MBS

## DC SWITCHES

The MERZ DC Switches are specially developed for the DC area switch disconnectors. They are specially designed for use in the field of photovoltaics. The product range includes series that can safely carry a current of 16A to 160A and safely switch off and disconnect generator open circuit voltages up to 1500VDC. The switches are available for front and bottom mounting and they are approved by IEC 60947-1 / -3, CCC and UL508i. Enclosed versions Tested and Certified to AS 60947-3:2018 AS/NZS IEC60947.1:2015 Utilization category DC-PV2. They Comply with AS/NZS 5033:2014/Amdt 2:2018 \*



MDC





**Tekon Electronics develops and manufactures wireless solutions for measurement and monitoring applications. Their wireless technology is used across a number of industries including Agriculture, Mining, Data Centers, Construction, Cold Chain, Food Industry, Renewable Energy, Retail, and Pharmaceuticals. Leveltec is an exclusive Australian and New Zealand distributor of Tekon Electronics supplying wired transmitters, wireless systems, the Tekon IOT Platform and accessories.**

## WIRED TRANSMITTERS

Temperature Head Transmitters with the most common sensors input (PT100, Thermocouple, universal and head with Modbus RTU output). High precision and accuracy with low operating temperature drift are possible specifications.



In head



TDU301-I - Universal Temperature Isolated Din Rail Transmitter

## WIRELESS TRANSMITTERS

Tekon Electronics presents a wide range of wireless products and solutions that cover the most demanding needs. The new technology available nowadays, enable advanced solutions in order to replace cable connection between several points. With Tekon Electronics wireless systems, you not only save money and time during installation, as you get fast and simple redesign at your system layout.



One



Duos



Plus



Wireless Serial

## IOT MONITORING PLATFORM

Tekon IoT Platform is a complete software solution for managing organisation's data. An IoT Platform helps companies stay connected to processes, and improve profitability.



CONNECTED  
ANYWHERE  
ANYTIME

PLUS  
WIRELESS  
SYSTEM

TEKON  
WIRELESS SYSTEMS TECHNOLOGY

## TEMPERATURE PROBES AND LEVEL SENSORS

Tekon Electronics has a department specialised in the production of temperature probes for a wide range of industries. Competence and professionalism ensure the production of reliable solutions and increased quality. Orders are always followed by advice from a team with extensive experience in the producing of temperature and level measurement solutions.



RTD Temperature



Thermocouple Temperature



Thermistor



Terminal Heads



Components  
and Accessories



Level

## SYSTEMS DEVELOPMENT R&D AND OEM

End-to-end turnkey solutions for deployments of IoT systems including sensor, transmitters, real time data monitoring, apps and dashboards to deliver your projects from concept to reality.



Foxtam Controls designs and manufactures low voltage control and instrumentation products including Mining Specific Relays, Electronic Timers, Sensing Control and Monitoring Relays, Plug In, Sockets, Power, Latching and Other Relays, as well as DC Power Supplies and DC to DC Converters. Many products have been developed for specific applications in industries such as mining, BMS and HVAC, railways and transportation, clean water supply and sewage treatment, as well as telecommunications and PV solar installations.

## INDUSTRIAL TIMERS, SENSING & CONTROL RELAYS

### Timers

- Din Rail mounted
- Modern modular design
- Width 18mm (1 module)
- SPCO output
- Dual LED indication
- Low power consumption
- CE marked



Electrical Timer

### Mechanical Timers

- No supply voltage required
- Clockwork spring driven
- Easy screw fixing
- Rugged construction
- Changeover or SPDT contact



Mechanical Timer

### Power Relays

- Din Rail mounted
- Modern modular design
- Width 27mm (1.5 modules)
- SPCO & 3PCO versions
- LED indication
- CE marked



Power Relay

### AC Earth Fault Relay

- 3 Earth fault primary ranges (5-100mA, 50mA-1A, 0.5-10A)
- Fixed hysteresis at 5% (other values on request)
- Latching facility (manual or auto reset)
- Test input
- Adjustable time delay on tripping 0.1-10sec
- LED for output status & supply healthy
- SPCO output rated 10A



AC Earth Fault Relay

- Electronic Multifunction Timers
- Sensing and Control Relays
- Signal Conditioning
- AC & DC Earth Fault Relays

## DC EARTH FAULT RELAY COMPLETE WITH DC EARTH FAULT CT

- Range switchable between 1-20mA & 10-200mA
- Auxiliary supply voltages between 9VDC & 1200VDC / 24VAC & 480VAC
- Fixed hysteresis at 2% (other values on request)
- Latching facility (manual or auto reset)
- Teeth input
- Time delay "On" & "Off" individually adjustable
- LED indication for output relay status & supply healthy
- LED indication for fault direction
- SPCO output rated 10Amps



DC Fault Relay

## SPECIAL RELAYS

Leveltec in partnership with Foxtam controls are able to manufacturer special purpose relays for mining applications including:

- 1000v phase failure / phase reversal relays
- Earth leakage relays for AS2081



Special Relay





PATTON & COOKE CO.

Patton & Cooke supply solutions for the mining, electrical, rail, manufacturing and transport industries. Patton & Cooke's electrical equipment, including its trailing cable couplers, has proven to be among the safest and most dependable in the world. We stock and distribute the standard range of products that include handling tools, skids, lifting devices and stands.

## TRAILING CABLE COUPLERS

Safe operation and handling of cable couplers. Ranging from 25KV down to 600V. The coupling system incorporates cable couplers and support skids, accessories, termination kits and tools - all the equipment necessary for a complete and manageable cable connection.



## CABLE PROTECTION

A wide variety of cable protection systems including cable crossover, illuminated cable/coupler stands, risers, strain relief and metal skids.



Cable Crossovers



Cable Stands



Cable Riser Brackets



Strain Relief Clamps

## CABLE SUPPORT

Lifting, hoisting, moving and securing trailing cables.



Split Strain Relief Clamps



Cable Buns



V-Clamps



Rope Brakes

## SKIDS

Skid mounted couplers are a well-proven and cost effective method for extending the service life of couplers and cable. Protect your personnel and equipment by making couplers and cable more visible.



## ACCESSORIES

Splitter enclosures, junction boxes, mechanical interlocking and voltage indicating light rings.



Splitter Boxes



Junction Boxes



Mechanical Interlocking



Voltage Indicating Light Rings (LLI)



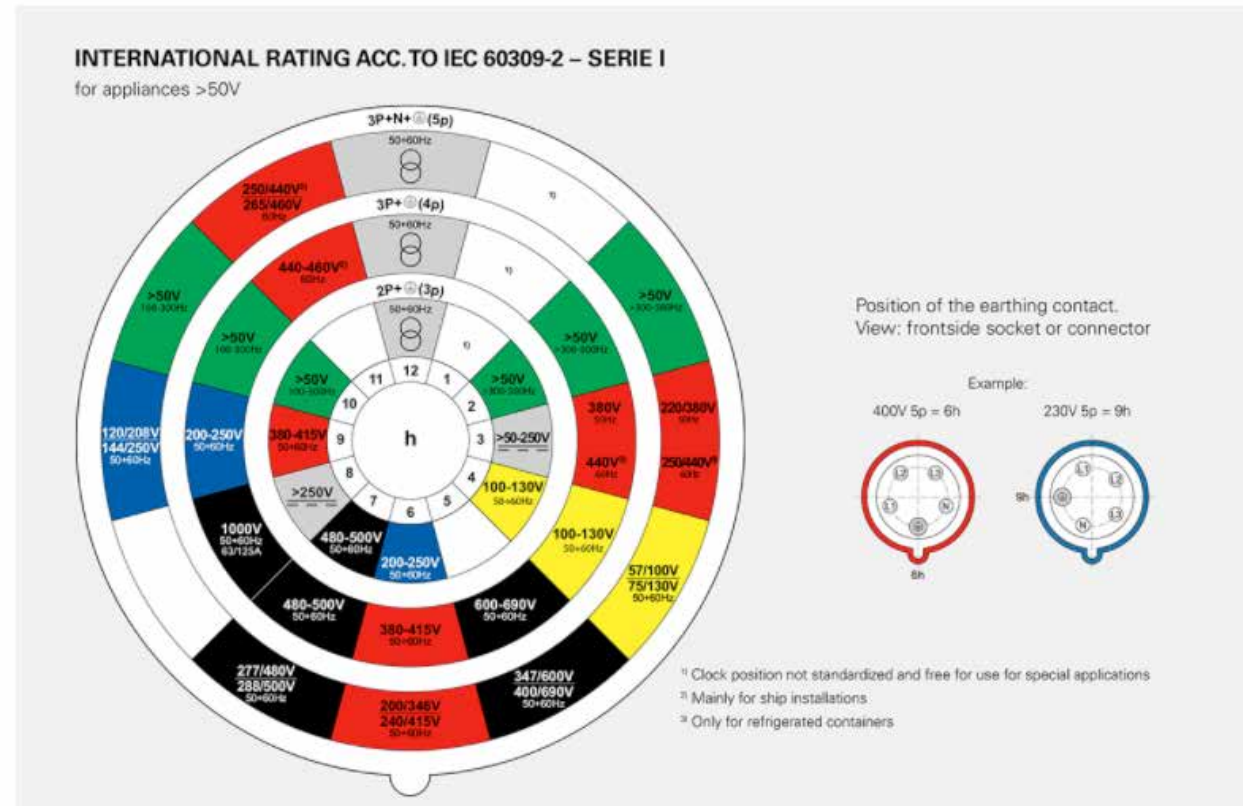


**PCE is a world leader in the development and production of industrial plugs and sockets with an export share of more than 80%.**

PCE offers a wide range of high quality products for various applications in the electrical installation sector which includes more than 22,000 items which are produced according to ISO 9001:2008 quality standards.

PCE's world class products include connectors, inlets, plugs and receptacles for industrial switchgear installations where quality matters. Solutions from 50V – 1000V available.

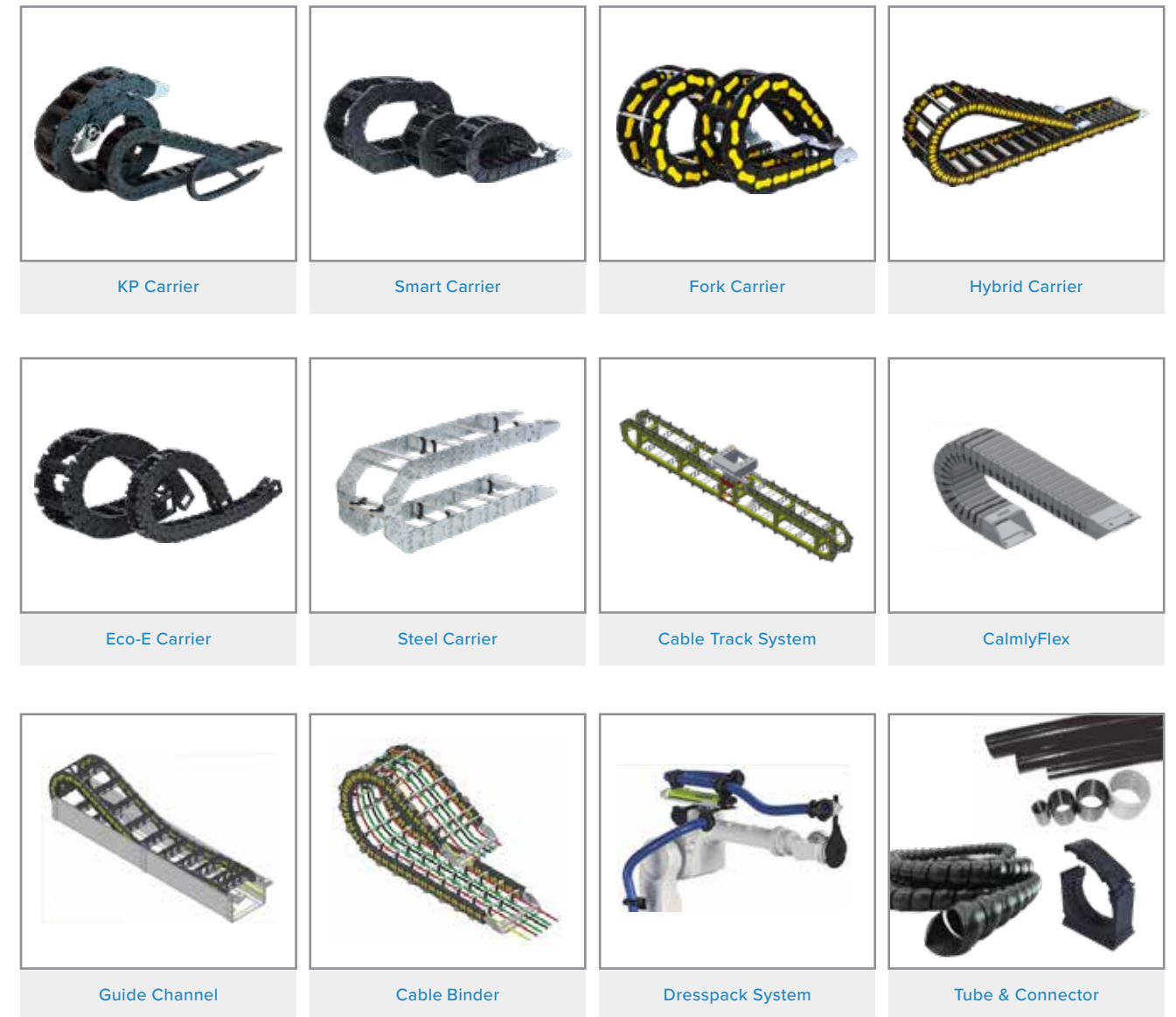
- **16A:** from 2.5mm<sup>2</sup> flexible to 4mm<sup>2</sup> solid stripped wires
- **32A:** from 6mm<sup>2</sup> flexible to 10mm<sup>2</sup> solid stripped wires
- **63A:** from 16mm<sup>2</sup> flexible to 25mm<sup>2</sup> solid stripped wires
- **125A:** from 50mm<sup>2</sup> flexible to 70mm<sup>2</sup> solid stripped wires



**Koduct is a world leading cable protection system and cable carrier manufacturer. They manufacture more than 1500 sizes of cable carriers including plastic cable carriers, hybrid cable carriers and steel cable carriers.**

Made from specialised engineered plastic material, they offer a lightweight, smooth moving solution with easy installation and maintenance. They are designed for the application of machine tools, woodworking equipment, plastic injection machine, medical equipment, automation machine and general industrial equipment.

Leveltec supplies turn key solutions with cables and hoses pre installed to customised requirements.







Leveltec offer bespoke solutions under the brand BSH for industries stretching from mining to renewables. We work with you in the engineering process of development to delivery.

BSH is our in-house brand and construction of custom enclosures for electrical switching components. We also work with customers from electrical wiring design to factory acceptance testing and delivery. Our electrical enclosures and control stations are constructed from high quality and Australian materials and are constructed on site in our Australian manufacturing warehouse.

## WE DESIGN AND CUSTOM BUILD:

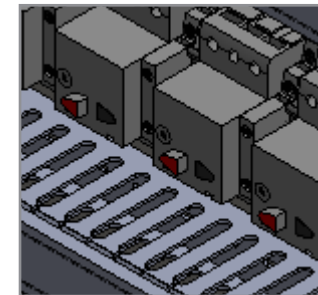
- Control boxes
- Switch boxes
- Load break switch enclosures
- UPS Bypass switch enclosures
- Industrial fuse and circuit breaker boxes or panels
- Electrical control panel design
- Custom control panel



PLC Safety Switching



Safety Relay Enclosures



Design Drafting



In House Assembly



Estop & LCSs



Enclosed Rooms & Cabins

In combination with our industrial electrical control panel design and construction, we utilise our range of world class distributed and locally manufactured products. As a combination of Leveltec and BSH we can incorporate:

- Local control stations with cam switch selector
- Load break switches enclosures
- PV Solar farm combiners with DC Switches
- Motor control starters with wireless controls
- Operator consoles

Our design and engineering capacity incorporates electrical wiring, schematics and testing, mechanical fabrication and fitting, we offer concept modelling and are your OEM build partner for bespoke and large volume projects.



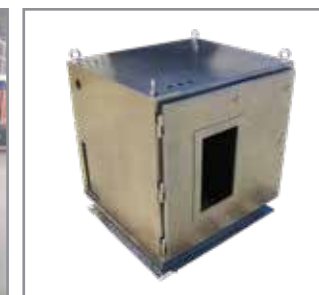
Isolators



Solar Combiner



Motor Starters



Stainless Steel Enclosures



OEM Manufacturing



**The extremely robust SIH swing pedals are manufactured in Australia and exclusively distributed by Leveltec. SIH swing pedals are used to safely operate the swing function of large mining machines such as draglines and Electric rope shovels.**

The Slimline design and operator console slide rotation brackets make the perfect combination of adjustment to ergonomically satisfy long periods of use and multi shift operators.

SIH swing pedals are built to withstand the task of harsh mining environments offering years of service. Extend the service life and maintain your equipment with our through life support overhaul package

- Slimline design providing high levels of operator comfort
- Anti slip treads for increased safety
- Slide Rotation brackets for ultimate heel rotation and leg length adjustment
- Retrofit existing machines and consoles with resolver, encoder and ethernet outputs
- Guaranteed reliability with full life overhaul support

With their self-contained design and plug and play interface, Swing Invent Holdings (SIH) Pedal Assemblies can be retrofitted seamlessly with your existing equipment.

## CONSOLE MOUNTED APPLICATIONS

The Swing Invent Holdings Slide Bracket is applied directly to the console. Once it is in place, operators can make multi-directional adjustments to the position of the pedals to achieve a customised, comfortable and ergonomic fit.

## FLOOR MOUNTED APPLICATIONS - FLOOR FRAME

Once the older pedal assembly is removed, the whole Swing Invent Holdings Floor Frame is simply applied to the floor of the cabin. This can be performed accurately with minimal planning, thanks to a temporary spacer bar, which is removed after installation to minimise clutter in the cabin.

## FLOOR MOUNTED APPLICATIONS - BE ADAPTER MOUNT

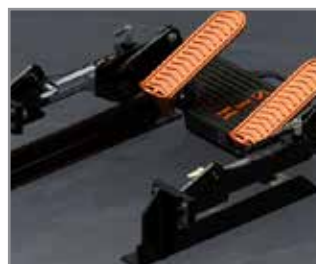
A quick and simple retrofit means minimal downtime for BE pedal users. With drill holes positioned to match the original BE floor plate, the units are easily swapped. Your Swing Invent Holdings Pedal Assembly can be up and running immediately.



Console Mounted Applications



Floor Mounted Adapter



Floor Mounted Frame





# LEVELTEC

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Leading Manufacturers  
Quality Products**

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**ENGINEERED AUSTRALIAN QUALITY**