
NEWS U-Pillar
patent awarded &
exclusive Insulect
distribution deal

Bowthorpe[®]

Sieyuan

EFEN 

 **GRIDKEY**

Langmatz 

PFISTERER

POLARIS

 **Lucy** Electric

NKT

 **insulect**
VERSATILITY VIA COLLABORATION

Providing quality connection solutions alongside these leading global brands.

Aegis^{Plus} Ring Main Unit

Designed to integrate seamlessly into industrial, utility, and commercial networks, ensuring secure and efficient operation.

Many electrical networks must accommodate diverse environments, from industrial plants to urban substations, without compromising reliability. We know our clients need equipment that can integrate smoothly into their existing infrastructure.

Our solution is the Aegis^{Plus} RMU, which is engineered for secondary power distribution, meaning it is built to handle mid-voltage networks that supply power to industries, utilities, and commercial facilities. Its compatibility with different network types reduces installation complexity and ensures consistent, reliable operation.

We also know that internal arc faults are one of the most dangerous failures in electrical switchgear, leading to catastrophic damage, prolonged outages, and severe safety risks for operators.

The enhanced internal arc classification (IAC) means the Aegis^{Plus} RMU is designed to contain and mitigate the effects of an internal arc. This protects personnel and equipment from high-energy faults, ensuring compliance with strict safety regulations and reducing downtime from accidents.

The Aegis^{Plus} RMU also has a hermetically sealed stainless steel tank. This is designed to overcome environmental factors such as moisture, dust, pollution, and extreme temperatures which can degrade switchgear over time, leading to insulation failure, corrosion, and unexpected faults.

The hermetically sealed stainless steel tank ensures that the critical components remain isolated from external contaminants. This extends the operational life of the RMU, reduces maintenance requirements, and enhances overall network reliability.



Lucy Aegis³⁶ Ring Main Unit



Lucy Aegis^{Plus} Ring Main Unit

LV Wallmount Frames

Delivering safe, reliable, and future-ready LV switchgear solutions.

We know electrical network operators demand infrastructure that is not only robust and reliable but also designed for safety, efficiency, and long-term performance. We love demonstrating how our low voltage switchgear frames provide a smart, engineered solution for transformer and distribution applications. With fully insulated busbars, high-temperature polycarbonate covers, and EFEN vertical fuse-switch disconnects, these frames are built to mitigate arc flash risks. Hiko engineers designed these frames in line with AS/NZS 61439.5. We also apply mechanical, electrical, and thermal modelling and testing, ensuring they meet the highest standards for safe operation.

All of our modular wallmount frames are precision-built using laser-cut stainless steel components. We do this to enable a lightweight yet structurally strong solution

for a variety of sizes and configurations. The flexibility of the system means operators can select pre-wired service panels with analogue or digital metering, MDIs, street-lighting, and LV network monitoring systems, streamlining installation and maintenance.

Wallmount frames come in a range of configurations including multiple supplies, incomers, feeders and/or circuit breakers and are typically used in new or refurbished substation and basement installations.



Outdated existing fuse rack system upgrade



...new Hiko wallmount frame delivers reliability and safety by design.

NKT SMPGB Transition Joints

SMPGB 145 kV– reliable, high-performance cable jointing for extra high voltage networks.

The electrical network operators Hiko works with in New Zealand demand ultra-reliable, high-performance solutions to ensure the integrity of extra high voltage (EHV) power transmission. The SMPGB 145 kV Pre-moulded Cable Joint is engineered to provide exceptional reliability, ease of installation, and long-term operational stability, even in the most demanding environments.

Seamless Jointing of EHV Cables

The SMPGB kV 145 is designed to connect XLPE and EPR-insulated cables with aluminium or copper conductors, ensuring low resistance, high durability, and long-term network performance.

Adapting to Different Cable Designs

Available in standard and screen-interrupted (SMPGB-C) versions, the joint accommodates various cable sheath and screen types, including aluminium laminated (APL) and metal-sheathed cables (lead, copper, or stainless steel).

Reduced Installation Complexity

The pre-moulded rubber tube and bolt connector simplify assembly, minimising installation time and the risk of errors.

Integrated Safety & Condition Monitoring

With an optional Partial Discharge (PD) measurement kit, operators can detect insulation degradation early, preventing costly failures and enhancing network reliability.

Meets International Standards

Fully compliant with IEC 62067 and IEEE 404, ensuring compatibility with modern grid infrastructure.

The SMPGB 145 is a trusted solution for high-voltage transmission, providing robust performance, ease of installation, and long-term stability, reducing network downtime and ensuring power continuity.

Benefits

- Straight-through and transition jointing
- For single-core and three-core cables
- Operating voltages up to 145 kV/170 kV depending on product
- Connect different cable cross sections with the stop joint

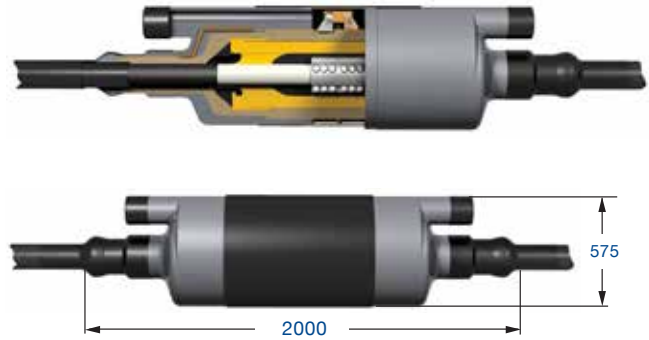
Working with Our High Voltage Joints

Our HV cable jointing products share the same premium qualities of best-in-class engineering and ease of installation as everything in our large range of high voltage accessories. Allow us to advise you as you select the products you need to complete your particular project. We have more than 100 years of experience in the cable industry to draw on.

SMPGB-C 420



SMPGB 420



Hiko Secures Patent for Innovative U-Pillar

Hiko Power Engineering is proud to announce the successful granting of a patent for its groundbreaking U-Pillar Underground Service Connection Box.

This achievement marks a significant milestone in the company's commitment to delivering safer, more efficient, and network-approved underground electrical distribution solutions.

The patent (No. 813092) was officially granted on 4th March 2025 and recognises the innovative design and functionality of the U-Pillar, a plug-and-play, factory-tested solution that enhances the safety and efficiency of underground electrical service connections.

"A great result for Hiko Power and thanks to James & Wells for steering us through the process and helping to protect Hiko Power's investment in a world-class product." says Geoffrey Sullivan, General Manager.

A Game-Changer for Underground Electrical Distribution

The U-Pillar sets a new industry benchmark by replacing traditional above-ground boundary boxes with a fully enclosed, underground system that is safer, more reliable, and ultimately more economical when considering the full cost of installation and configuration. While the unit itself may have a higher upfront cost compared to some alternatives, its simplified installation process results in significant overall savings. Additionally, the design ensures easy maintenance and long-term durability, making it a cost-effective choice over time. The patented design offers several key benefits:

Enhanced Safety

Unlike conventional boundary boxes that expose electrical terminations to environmental risks, the U-Pillar keeps critical connections securely underground, reducing potential hazards to the public and technicians.

Improved Network Efficiency

The factory-tested plug-and-play design simplifies installation, reduces on-site labour, and ensures consistent quality control.

Resilience Against Water Ingress

The patented enclosure design includes a sloped mounting area and an air-filled protective bell to prevent water damage, even in flood conditions.

Simplified Maintenance & Accessibility

The stand inside the enclosure can be raised above ground level for servicing, allowing network and authorised contracting staff to work safely and efficiently without excavation.

John Spence, Design Manager at Hiko adds: "The U-Pillar removes the need for above-ground boundary boxes and unnecessary exposure or risk to the public while allowing network and authorised contracting staff to work safely above ground when they need to."

Addressing New Zealand's Electrical Distribution Challenges

With a strong focus on innovation, the U-Pillar was developed to address key challenges faced by New Zealand's electrical distribution networks. Underground power infrastructure is essential for enhancing urban aesthetics, improving reliability, and minimising weather-related outages. The U-Pillar's unique, patented design makes it an ideal solution for new developments and infrastructure upgrades, ensuring long-term performance and safety.

Protecting Hiko Power's Innovation

This patent reinforces the Hiko's commitment to research and development, and investment in future-ready electrical infrastructure solutions.

Call us today to see how we can support your network to develop cutting-edge solutions - **0800 473 999**



Insulect Cable Link Boxes

Hiko Power Engineering Ltd and Insulect Australia are delighted to announce an exclusive agreement for the distribution of all Insulect manufactured switchgear products in Aotearoa/New Zealand.

As a leading design, manufacturer and distributor of energy infrastructure solutions, Hiko is committed to safely connecting communities to power the future with international brands, like Insulect, who share our commitment to providing high-quality, environmentally sustainable, and safe products and services.

Insulect is a diversified high voltage equipment manufacturer and engineering services provider in the Australasian market. With a manufacturing base across the Tasman, Hiko can deliver high-quality switchgear with short lead times.

Insulect, like Hiko, is certified to ISO 9001, ISO 14001, and ISO 45001 so for customers these certifications provide critical assurances of reliability, safety and credibility that is crucial for network infrastructure solutions.

Hiko Power offers a comprehensive solution to power losses and overheating with our Insulect Cable Link Boxes. These units facilitate effective cross-bonding and earthing, mitigating sheath currents and associated power losses. Incorporating Sheath Voltage Limiters (SVLs), they adeptly divert excess voltage, safeguarding cable sheaths from potential damage. Constructed with IP68-rated stainless steel enclosures, these link boxes provide robust protection against water ingress and corrosion, ensuring the longevity of underground cable links. Their durable, fully sealed designs not only reduce failure rates but also align with industry safety standards, offering a reliable and cost-effective solution for New Zealand's electrical infrastructure.

Durable, fully sealed designs reduce failure rates and long term maintenance costs.



Insulect Cable Link Box



Insulect Cable Link Box Deconstructed

Hiko is proud to be certified to the following ISO standards:



Environment
ISO 14001



Health &
Safety
ISO 45001



Quality
ISO 9001



ISO 9001
ISO 14001
ISO 45001

Hiko UDP In-Ground Distribution Boxes

New Zealand's electrical network operators face the dual challenges of ensuring reliable power distribution while adapting to the increasing demands of urban expansion and the transition to renewable energy sources.

Traditional above-ground distribution systems are susceptible to accidental damage, graffiti, or vandalism and can detract from urban aesthetics. Moreover, the need for infrastructure that can withstand New Zealand's diverse climatic conditions is paramount.

Hiko Power Engineering addresses these challenges with its UDP In-Ground Distribution Boxes. These secure, watertight underground distribution link switches are designed to handle services up to 400 A, providing a robust solution for urban power distribution. The modular design accommodates various configurations, including 1, 2, 3, and 6-way distribution and customer connection applications, offering flexibility to meet diverse network requirements. By relocating critical components underground, the UDP system enhances the resilience of the power network and reduces the visual impact on urban landscapes. This approach not only improves the reliability of electricity supply but also aligns with the aesthetic and environmental considerations crucial to modern urban planning.

The UDP system incorporates Langmatz structural pits, engineered in Germany. Constructed from structural foamed polycarbonate in a honeycomb modular design, these pits offer exceptional strength and resistance to heat, flames, and solvents such as petrol and diesel. Independent testing has confirmed that the materials used are non-toxic to groundwater, ensuring environmental safety. The lids are available in various load classes, from Class B (8 tonnes) suitable for footpaths and driveways to Class E (40 tonnes) for carriageways, ensuring durability under different load conditions. Installation is streamlined through easily separable pit elements, tool-free conduit knock-outs, and adjustable lid heights, reducing on-site time and costs. By integrating industry-standard fusegear and switchgear housed under a watertight composite bell, the UDP system ensures continuous operation even in flood conditions, thereby enhancing the resilience and reliability of New Zealand's electrical distribution networks.

A sleek underground solution that maximises land use, enhances safety, and reduces maintenance, all without compromising aesthetics.



Lucy Electric Rapier GX SF6 Load Break Switch

Rapier GX – reliable, safe, and smart load break switching for overhead networks.

The Rapier GX SF6 Enclosed Load Break Switch is designed to provide safe, reliable, and efficient solutions to manage overhead power distribution with enhanced safety, robust reliability, and smart-grid compatibility.

Solving the Real-World Challenges of Network Operators:

Minimising Downtime & Ensuring Reliability

With SF6 puffer switching technology and a stainless steel, maintenance-free tank, the Rapier GX ensures high-performance load breaking up to 630A and short-circuit making capability up to 41.6kA, reducing failure risks and extending service life.

Operator Safety First

Internal arc classification, a low gas pressure lockout device, and a bursting disc protect personnel by ensuring that failure events are safely contained. A lock-off mechanism provides additional security during maintenance.

Adaptability & Ease of Operation

Operators can switch manually using a hookstick, locally via a control cabinet, or remotely through network automation—ensuring flexibility in operation.

Seamless Grid Integration

When connected to the Gemini 3 RTU, the Rapier GX becomes a fully automated sectionaliser, enabling remote monitoring, fault detection, and rapid network reconfiguration.

Reduced Operational Costs

Smart automation features, including real-time voltage, current, and power monitoring, help network operators diagnose faults faster and optimise network performance, reducing manual intervention and maintenance costs.

Engineered for efficiency, built for longevity, designed for safety



Disconnect Covers

Hiko provides a range of accessories to make the latest generation of EFEN E3 vertical fuse switch disconnectors even more versatile.

Connection Plates

Connection plates have been specially designed to enable the connection of large cross section cables and multiple cables. These are typically ordered with the EFEN E3 disconnecter as a complete assembly. The “compact single” connection is available as a retrofit kit.

Side entry tags are available for either the left or the right-hand side of the EFEN E3 disconnecter.

Hiko also engineers bespoke connection solutions for individual customer requirements.

Spare Covers

Connection plates are provided complete with covers; spare covers are available if required.

Current Transformers

The EFEN E3 disconnecter product line includes a specially designed range of Class 1 CT's that fit neatly onto the busbar connection tags, without increasing external dimensions.

Other Accessories

The range of accessories available also includes: V-clamps, for cable connection without compression crimping; mounting brackets to provide attachment points on the side of the EFEN E3 disconnecter; handle clips to identify a particular circuit such as the incomer; and CT cable covers, to protect the special CT wiring behind the disconnecter.



Disconnect Covers

LV Protective Boot Caps



LV Protective Boot Caps deliver bushing protection.

The Hiko low voltage protective caps provide a cost effective and convenient way to protect LV transformer bushings and other live metalwork applications from accidental contact.

In addition, as a factory made moulding, with defined wall thickness and materials characteristics, they provide greater assurance of safety than adhoc methods. The caps are supplied as a set of four, in standard colours, to provide a clear visual indication to phase identification.

They are designed so that one size fits most New Zealand bushing types and sizes. LV Protective Caps can also be modified to fit different cable entry positions.



Pfisterer ISICOMPACT LV Branch Joint

For safe and secure tap connections with one single shear bolt. Tapping off low voltage electricity supplies to premises has become safer, faster and easier with Pfisterer ISICOMPACT connectors.

With just one shear bolt in the Pfisterer ISICOMPACT connector it's now possible to clamp and connect all conductors with the right torque for a guaranteed connection. Pfisterer developed the ISICOMPACT L30 and L40 single bolt connectors which are ideally suited to New Zealand cables. Unlike ring connectors the ISICOMPACT units do not require insulation to be stripped from the branch conductors.

Once the ISICOMPACT moulded plastic body is assembled around the main cables and the four cores are locked in position, the service cable cores are simply aligned and inserted into their clamping apertures fully sheathed. There are no exposed live parts.

With a plastic body encasing the metal clamping system and no cores having to be stripped of their insulation, the ISICOMPACT connectors take risk out of live work and speed up installation times.



Complete LV Branch Joint Kits

Hiko Code	Connector Type	Shells Size	Resin Type	Container	Main	Branch
KP8033	ISICOMPACT L30	140/420	PUR	Bag	50 - 240	10 - 70
KP8053		160/500				
KP8034	ISICOMPACT L40	140/420			95 - 240	70 - 150
KP8054		160/500				



Hiko 2024 in Review

January

We started back on 8th of January after a good 2-week break with a full team including our newest member Peter Pouw who is Account Manager for the networks and their service providers in the Lower North Island. Your feedback, including numerous 100% DIFOT reports, has been invaluable, reaffirming that our product solutions and aftercare service make a real difference to your teams in the field.

February

Our new Purpose and Values artwork was installed at both our Auckland and Christchurch sites communicating our commitment to health and safety, quality and our environment.

March

Hiko's U-Pillar appears in Powerco Asset Management Plan.

We delivered CPI inner cone termination training for Transpower contractors. The 2-day training course covers the theory and the practical side of installing NKT cable accessories.

April

Hiko announced its distributorship of the Lucy Electric ring main units including non-SF6 units in NZ.

May

We achieved ISO certification for ISO 9001, ISO 14001, ISO 45001 certifications across all our sites achieving top marks. This success is a direct result of our team's dedication to continuous improvement.

June

The design team completed thermal testing of our new looping and conduit U-Pillars.

Congratulations to Silena Kirkconnell-Kawana, our Quality & Compliance Manager who achieved her Certificate in Te Reo Māori Level 2 with Merit.

July

We completed our first full year of internal carbon emissions reporting.

Jeff Horn and Reza Scholes reached milestones with Hiko celebrating 15 years and 10 years respectively with us.

August

Several networks visited our Christchurch manufacturing and distribution operations during the year to gain a better understanding of how Hiko manufactures high-quality equipment that meets industry standards. If you are yet to visit our site, it really is worth the investment of a couple of hours.

September

Hiko sponsored and exhibited at the EEA Conference this year in our hometown of Ōtāutahi/Christchurch with key brand partners.

Congratulations to Reza Scholes, our Production Team Leader, who successfully completed another paper in his Diploma in Business Management.

October

Sales of the Hiko U-Pillar increased by 250%! To support this demand, we took on additional staff and began working overtime hours to keep up with product demand.

Our Hiko website went 'live' with a new look and better searchability.

Hitesh Bhikabhai celebrated 5 years with Hiko.

November

Hiko released our new 400x400 UDP underground distribution box model and LV Top Hat frames range in response to network demand management plans.

We launched our new fortnightly LinkedIn ad campaign showcasing Hiko products and targeted at existing and new customers.

John Spence celebrated a milestone of 10 years with us.

December

We ended 2024 on a high note—with zero workplace accidents. This achievement is a testament to the team's commitment to health, safety, and quality, ensuring that we 'safely connect communities (including our own) to power the future'.

We welcomed Douglas Hilson to the Hiko Board. Doug brings fresh, youthful energy and a wealth of knowledge in AI. By day, he is the After Sales Manager at Taska Prosthetics in Ōtāutahi/Christchurch.

Our Partners

We are proud to partner with specialist international electrical equipment suppliers, to deliver solutions, peace of mind and long-term reliability for electricity distribution companies

Bowthorpe®

The safe and reliable operation of electricity distribution lines depends on the quality of overhead line fittings. Since 1952, The Made in New Zealand BOWTHORPE HD Series Line Taps have earned an enviable record for robustness and reliability.

EFEN

EFEN makes energy distribution systems safe, whether you are active in the field of infrastructure or in the power supply sector, EFEN offers optimised safety systems and components for power distribution – tailored to the respective field of application.

GRIDKEY

GridKey provides increased insight of the low voltage network data via real time warnings, status alerts and loading information helps improve network planning, reduce network maintenance costs and prevent unplanned outages.

insulect VERSATILITY VIA COLLABORATION

Insulect manufactures overhead switchgear for the needs of operators across Australia and New Zealand. Insulect Air Break Switches (ABS) are widely installed throughout distribution networks for isolation or switching applications.

Langmatz

Langmatz develops and manufactures innovative, high quality cabinets and modular, structural pits that employ extremely durable and environmentally benign polycarbonate.

NKT

NKT develops and manufactures high quality cables, accessories and solutions for electricity transmission and distribution, construction and railway applications. NKT's manufacturing plants are among the most modern, flexible and cost-effective in the world.

PFISTERER

Pfisterer manufactures high-quality products, which find reliable, long-term and virtually maintenance-free service in the sensitive interfaces of energy supply networks.

POLARIS®

Polaris Electrical Connectors is well known among those in the electrical industry for its unique design and high quality, cutting-edge technology in manufacturing insulated products.

Sieyuan

Sieyuan Electric Co., Ltd. is a globally recognised leader in designing, developing, and manufacturing high-quality power transmission and distribution equipment. The company's extensive product portfolio includes switchgear, transformers, circuit breakers, reactors, and other essential components that enable efficient and reliable energy transmission.