

HV JUICE



**RAYSULATE
WILDLIFE
& ASSET
PROTECTION**

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**ECOPillar
Distribution
Pillars**
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PROTECT THE POWER.

TE Wildlife & Asset Protection Products

Bus Insulation & Clearance Reduction

Busbar insulating tubing, Busbar insulating tape, Busbar insulating sheet, Busbar insulation connection covers

Substation

Bus isolation wildlife guard, Bushing connection wildlife covers,

Bushing connection inspection covers, Bus connection insulating covers, MV fusion tape, MV conductor cover

Overhead

MV line covers, Birdcap protection covers, Deadend & suspension clamp covers, Distribution covers for wildlife protection, Avian flight diverters

Low Voltage

LV insulation tubing, Modular busbar insulation connection covers, LV insulating covers, LV bushing covers

Contamination/ Flashover Prevention

Creepage extenders, Booster sheds, Polymeric & porcelain rigid red guano shields



“TE estimates that **damage** to electrical substations could be **reduced** by as much as 80% simply by **applying insulation**”.



“**Damage** to electrical substations could be **eliminated** and a **reduction** in **outages** achieved by proactively applying **TE’s Wildlife & Asset Protection products.**”

... AND THE WILDLIFE!

Features

- Easy to install
- Flame retardant materials
- Consistent, reliable installation
- High resistance to arcing & tracking
- Perfect for new or retrofit situations
- Can offer clearance reductions in many applications
- Perfect for enclosed & exposed bus work, switchgear connections, substations, & other electrical apparatus
- Excellent electrical & thermal performance
- Made from high dielectric strength, radiation crosslinked, heatshrinkable & cold applied materials
- Compatible with other insulating materials - not affected by common plasticisers used in conventional switchgear insulating materials



Solution available for **95%** of market needs.

For more information on available products please contact your local TransNet or TE representative.

Raychem
from TE Connectivity



All Specials and Products featured in TRANSNET JUICE are available from all good electrical wholesalers.



ECOPILLAR DISTRIBUTION SERVICE PILLARS

FROM THIS



TO THIS



MADE
IN NEW
ZEALAND &
TAILORED
TO SUIT OUR
CONDITIONS
AN ECOPILLAR FOR EVERY
SITUATION

From slim and unobtrusive to robust and powerful, the ECOPillar range is broad enough to accommodate residential, commercial & control applications, while flexible enough to handle customised hardware configurations.

The ECOPillar range is an integrated system, designed by people in the industry for people in the industry.



EP0

EP1

EP2S

EP2

EP3

EP3.5

EP4

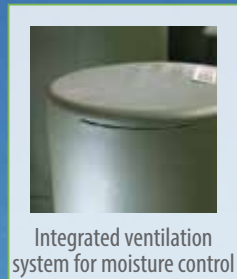
EP6

*Other models available include the EP3EXT, EP3.5EXT, EP4TALL, EP4EXTTALL & EP6TALL. For more information please contact us.

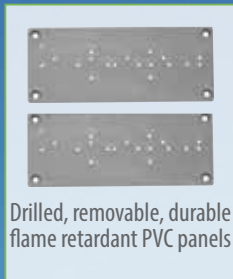


SAFER SIMPLER STRONGER ECOPILLAR

DISTRIBUTION SERVICE
PILLARS FOR LV NETWORKS



Integrated ventilation system for moisture control



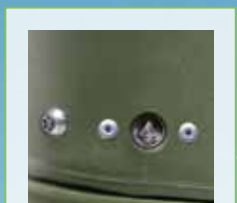
Drilled, removable, durable flame retardant PVC panels



Removable mounting bracket



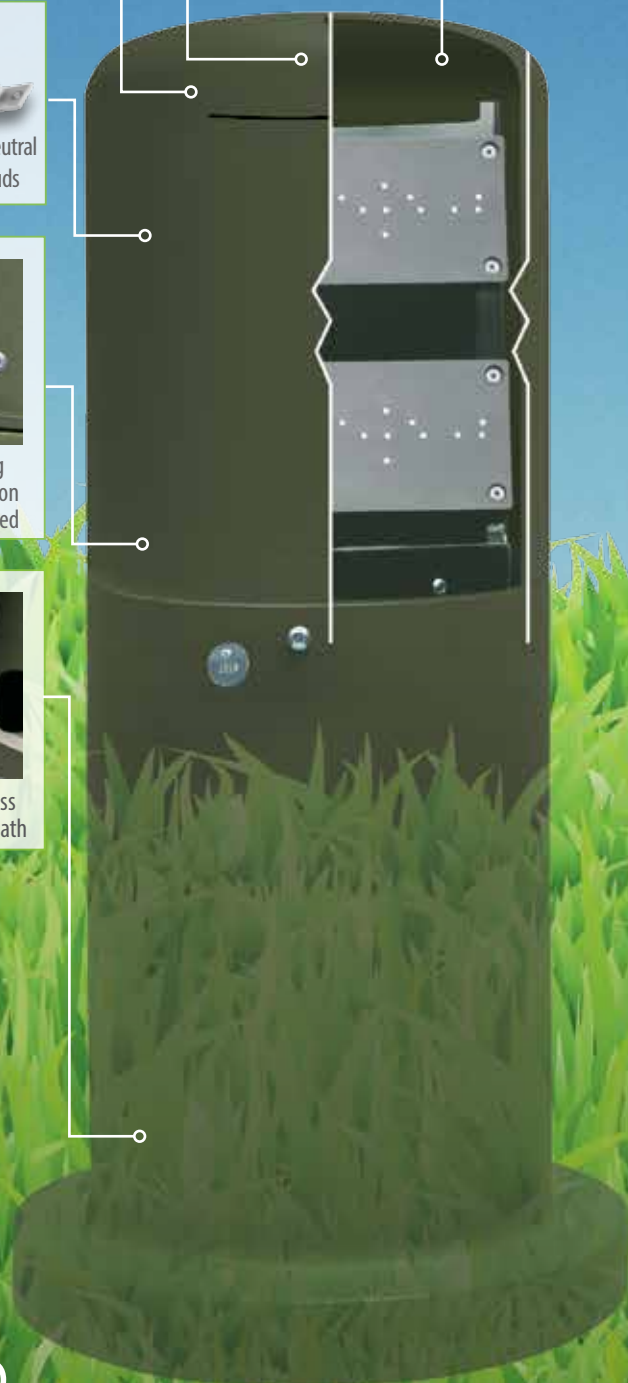
Tinned 250A Copper neutral bar with stainless studs



Multiple fastening options depending on security level required



Two side cable access holes & one underneath



- A **fully modular system** to meet all network requirements
- Accommodates **multiple** switchgear combinations
- Recyclable
- Mechanically **robust**
- **Unique** serial number
- Made of **excellent UV stability** Rotathene 6329 repurposed plastic
- Domestic, commercial & control applications



Built from Rotathene 6329 UV stable plastic, the ECOPIllar will take the knocks and come back for more. It's designed specifically for customers who demand safety, performance and unobtrusive good looks from their electrical reticulation systems.

A unique range of fastening systems ensures protection from less civic-minded elements of the public whilst giving the technician easy access.

Internally, all components are specifically designed for the ECOPIllar.

Externally, ECOPIllar has a compact installation footprint. The corrosion free, environmentally friendly outer housing has a contoured design with no sharp edges. Their aesthetics make them perfect for use in new subdivisions, and with a modular design they are easy to retrofit into existing installations.



ECO
PILLAR



VSCAN FEATURES

- Compass (line direction indicator)
- Self-test and calibration verification
- Data logging & data management software
- Configuration utility - personalise your vScan
- Bluetooth & GPS options
- Metal detection (TNVSCANM-KIT only)

Removable loudspeaker - output limited to HSE safety levels

Peak level indicator

Compass (line direction indicator)

High contrast display with backlight

Push buttons on/off and menu activation



TRANSMITTER

Output status lights

Speaker volume control



Switch - pulse/continuous output

Output level select

RECEIVER

Vibrate alert

Internal loudspeaker

Rotary gain/sensitivity control

Paddle - navigation/select

Rugged ABS housing with protective bumpers

Battery housing for alkaline or Lithium ion battery packs

USB socket - programming/data transfer

MODES

Power mode

Radio mode

Active modes 33Hz & 131kHz

Sonde mode (33Hz)

Metal locate mode (vScanM only)



CAT NO. #TNVSCANS-KIT

Standard Pipe & Cable Locator Kit

CAT NO. #TNVSCANM-KIT

Pipe & Cable Locator Kit with Metal Detector



In electricity networks, as in every single device that uses electricity, electrical connectors are ubiquitous. The failure of a single electrical connection can mean failure of the entire feeder. They are used to provide electrical continuity and tapped power flow. The service performance of connectors on Electricity networks must satisfy the dual requirements of long service life and high cost-effectiveness in the delivery of electrical energy. Because electrical connectors can fail they represent the weakest link in the power delivery chain.



Connections on Electricity networks are exposed to moisture, mechanical vibrations, pollutants and operational variables such as temperature excursions due to abrupt changes in operating load. If an improper or inferior connector is used or it's installed poorly these environmental and operational factors foster the breakup of contact spots and allow the ingress of electrically insulating contaminants into the electrical interfaces. This leads to corrosion, impeded current flow and increases in energy loss, this leads to increased connector temperatures ultimately leading to catastrophic failure.

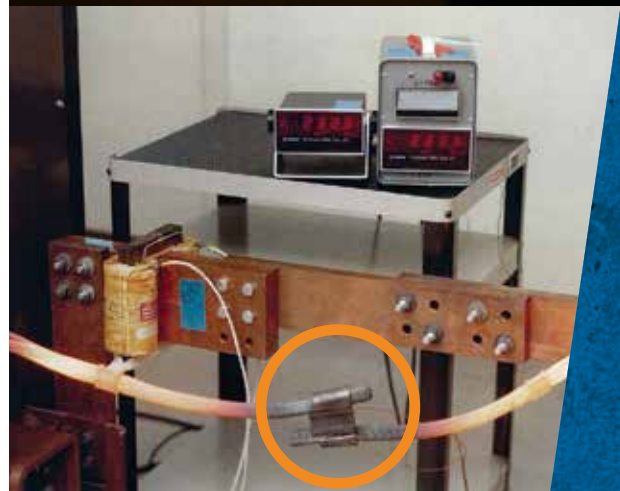
There are basically three main connector technologies used in the electricity industry:

- Bolted
- Compression
- Fired Wedge (AMPACT)

The proven AMPACT tap “C-spring” and wedge design provides a stored energy system that prevents connector degradation and achieves significantly lower resistance than any competitive product over the “in service” life of the connector. As thermal cycling causes the conductors to expand and contract, the AMPACT tap spring member flexes and maintains constant contact pressure.

BENEFITS OF THE AMPACT SYSTEM

- Non damaging to the conductors – the wedge connector can be removed without any degradation to the conductors.
- The Design maintains lower resistance throughout connector service life
- AMPACT tap spring member flexes with heat cycling reducing resistance
- Inhibitor with abrasive particles cleans contact surfaces to reduce corrosion and line loss
- Reduction in connector failures – leads major reductions in maintenance costs over time



The AMPACT Connector's unique spring ability reduces resistance, helping the connector and connection remain cooler.

AMP

TE
connectivity

Connector Type	Resistance to Heat Cycling	Ease of Installation	Removable
BOLTED	AVERAGE	EASY	YES
COMPRESSION	POOR	AVERAGE	NO
FIRED WEDGE (AMPACT)	EXCEPTIONAL	AVERAGE	YES

TURN UP THE HEAT

Exothermic Welded Connections



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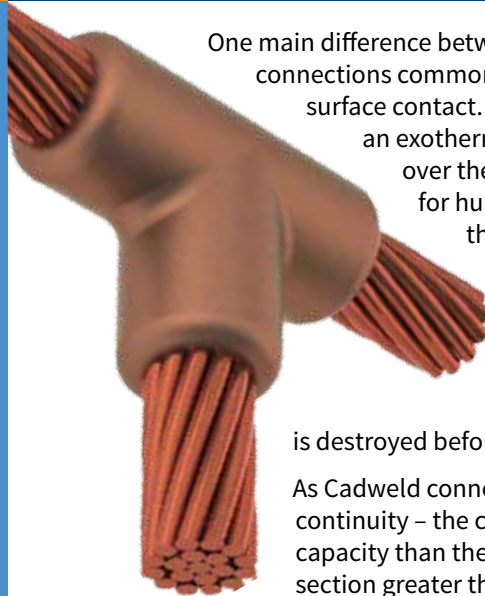
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One main difference between exothermic welded connections and other types of connections commonly used is that the molecular bond eliminates the concept of surface contact. An electrolyte cannot penetrate between the conductors of an exothermic welded connection and cause oxidation and deterioration over the course of time. Such a molecular bond is of particular benefit for humid or chemical environments and for bonds directly buried in the ground, as is often the case here in New Zealand.

Cadweld exothermic connections have an innate ability to withstand high current. The melting temperature of Cadweld filler material is higher than the melting temperature of copper (1082°C). For this reason, in the event of abnormal heating due to a high fault current the conductor is destroyed before the connection.

As Cadweld connections form a solid bond around the conductors – assuring continuity – the cross-sectional area of the weld has greater current carrying capacity than the conductors. Standard Cadweld connections have a cross section greater than that of the conductors to be joined, which compensates for the difference in resistivity between the conductor and the welding material. Consequently, under fault conditions the weld will always remain cooler than the conductor.

With a full range of standard connection molds and one shots available ex stock, we also have facility to produce custom molds for special connections. Rental kits are available for those one-off jobs.

BENEFITS OF CADWELD EXOTHERMIC WELDED CONNECTIONS

Current – A Cadweld connection will carry more current than the conductor is capable of ensuring the connection is never the weak point

Age – A Cadweld connection will not deteriorate over time, the connection remains stable as it ages

Bond – A Cadweld connection is a molecular bond that eliminates any risk of loosening or corroding

Resistance – A Cadweld connection will repeatedly resist fault currents all the while maintaining its integrity

Reliability – A Cadweld connection can be inspected visually for quality assurance

For more information on what we have to offer, contact your local rep or our customer service team.



ERICO

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NEW ZEALAND OWNED