

## WEIDMULLER SOLUTION TICKED ALL THE BOXES FOR TATUA DAIRY COMPANY //

Formed in 1914, 'The Tatua Co-Operative Dairy Company', is a small independent co-operative situated 35km east of Hamilton, deep in the heart of NZ's richest dairy pastures at Tatuani near Morrinsville.

Tatua Dairy has built a solid reputation as a stable and reliable source of premium specialised dairy ingredients and food products.



The PDL "Push In" series was used for 24Vdc distribution of digital and analogue circuits.

2011 has seen the expansion of the manufacturing operation with a plant upgrade including a new UHT (Ultra Heat Treatment) plant and a new powder packing facility.

Intelectric, which is owned by Mike Coyne, are a Waikato based design and installation company specialising in Dairy and have been specifying and using Weidmuller products for over a decade.

Intelectric's Electrical Design Engineer, Danny Vellenoweth, had a requirement for high density multi-level terminals for marshalling of analogue and digital signals and as in past installations turned to the Weidmuller Z Series "tension clamp" terminal offerings.

The Initiator/Actuator family is a compact integral connector concept designed for the connection of multi-cores feeding sensors like proximity switches, photo electrics and actuators for motorised valves and directional solenoids.

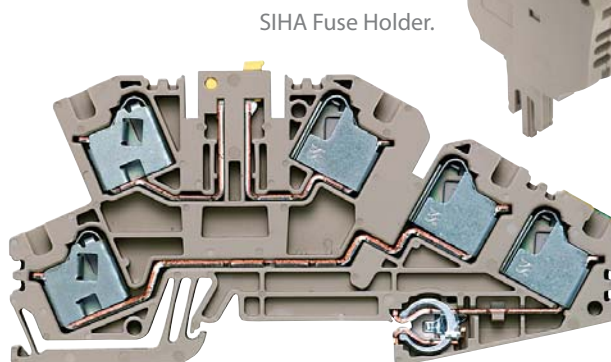
Features include 'Internal Potential Commoning' for positive and negative supply along with an integral feed through connection for return, indication or drive on/drive off signals.

For 24Vdc distribution of digital and analogue loops, Danny utilised the 5mm wide multi-level PDL "Push In" series which come with fuse or disconnect options in the top level and feed through and earth/screen facility in the lower levels.

For marshalling of the analogue loops, an identically shaped 2 level and earth version was used. These terminals have the option to mount adjacent to the fuse/disconnect terminals to achieve up to 6 potential connections in 10mm of terminal width.

For Danny, the Weidmuller solution ticked all of the boxes when it came to project evaluation.

"As with prior projects dealing with CSL, from design concept to delivery was seamless.



5mm Wide Multi-level PDL "Push In" Series.



Initiator/Actuator terminals for interconnection of field devices to PLC I/O.

Good communication ensured application requirements were understood, options discussed, alternatives investigated and the correct terminals identified especially where cabinet real estate was at a premium.

Project pricing and quick delivery ensured project time frames were easily met."

Geoff Thomson - CSL Technical Manager has been involved in Dairy projects throughout NZ for nearly 20 years and has seen a gradual transition from standard screw terminal to multi-level cage clamp solutions especially over the last 5 years.

"We are also seeing historically conservative industries such as the Power Generation and Distribution sector, adopting similar connection technology and multi-level concepts and CSL is committed to bringing latest advances in this area to the NZ market."

**Weidmüller**

Refer page 4 for the latest multilevel PPV Range.



## TERMINAL RAIL OUTLET RANGE FOR SYSTEM CONNECTIVITY //

With an ever increasing number of Industrial Ethernet networks being installed or enlarged, Weidmuller's terminal rail outlet range for RJ45, fibre optic and USB connections is fast becoming an industry standard.

The Weidmuller 'IE TO RJ45 FJ A' unit in particular has been successfully installed in hundreds across various dairy and food processing industries within NZ.

The direct connect RJ45 unit is designed specifically for simple Ethernet system connectivity and it effectively handles communication access, termination and patching requirements.

The Modular RJ45 is constructed using gold plating and features a large contact surface area to ensure a secure connection.



STEADYTEC technology cable termination is achieved using 'toolless' IDC technology.

The mounting DIN rail outlet measures 17.5mm in width and is approved for copper Ethernet cables rated Cat6A and is IEC60603-7 wiring standard compliant.

Other models include fibre-optic couplings for SC, SCRJ, LC duplex and ST Simplex in the single-mode and multi-mode versions and USB coupling for type-A plugs.

**Weidmüller**

## When Safety is a Priority use IDEC Emergency Stops //



### Eliminate the chance of an accidental resetting

- 16mm, 22mm and 30mm E-Stops featuring the highest safety standards
- Short depth behind panel
- Safe break mechanism maintains NO contact position in unforeseen circumstance
- Direct opening action even if the contacts are welded
- Safety Interlock Mechanism (IEC60947-5-5;6.2)
- Unique model allowing up to 12 padlocks to be used for lockout





## CR SERIES BARRIER GLANDS FOR HAZARDOUS AREAS //

Following the successful development of the universal gland featuring CROCKLOCK® (single orientation clamping), Peppers Cable Glands have announced a completely new range of Barrier Glands including a version featuring CROCKLOCK® for use in potentially explosive atmospheres.

The four new Barrier Glands have been developed for both un-armoured and armoured cables or for use with conduit and they are certified for use in group I (mining) or group IIA, IIB & IIC applications. The compound filled barrier glands are certified EExd by SIRA and fully comply with CENELEC and ATEX requirements in Europe. The glands have also been tested and certified to meet International Standards by appropriate notifying bodies.

The new Barrier Glands were the result of extensive development and represented a significant advancement in barrier gland design and usage. All the new glands provide several features and benefits which combine to make the glands efficient, cost effective and easier to use.

Peppers range of glands incorporate some special engineering features: The CR



gland for armoured cable features a single orientation clamping system, allowing the clamping of all armour types with no mistakes being possible in the installation process. The advertising slogan; **No reversible Components – No Mistakes**, sums up this benefit. Deluge is achieved without the use of additional sealing devices due to ingenious engineering.

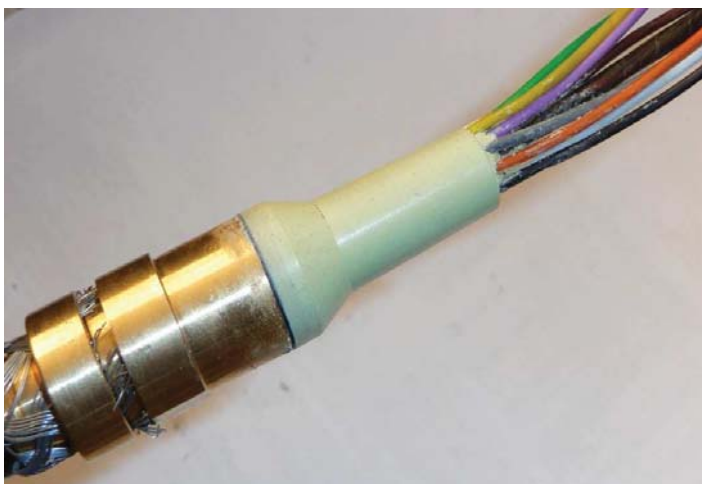
Peppers barrier glands have other advantageous features including reduced installation times due to a filling compound, which enables the conductors to be disturbed and terminated within the equipment after only one hour. And after

only four hours, the equipment can be energised and the compound chamber may be inspected. A chamber construction provides a cable acceptance that is on average 18% larger than existing barrier gland designs allowing the use of smaller glands, significantly reducing cost.

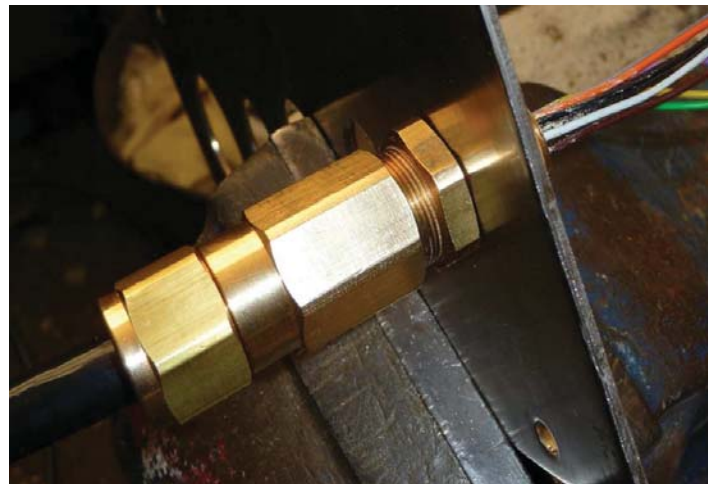
The product has been very successful since its launch and has won industry awards including the HazardEx Technical Innovation of the Year.

Glands can be supplied in various different materials including brass, aluminium, polyamide and stainless steel. They offer various plating options for corrosion protection, including nickel, tin and zinc.

Peppers are always working to develop new and innovative products within the market. At present there are new products being developed by Peppers' able engineers, who constantly strive to improve the quality of Peppers products in accordance with industry standards. The whole ethos of Peppers Cable Glands is excellent customer service and everything the company does strives to uphold this philosophy.



Showing Correct Compound Form



Completed Gland Assembled





# HIGH DENSITY MARSHALLING AND POWER DISTRIBUTION TERMINALS //

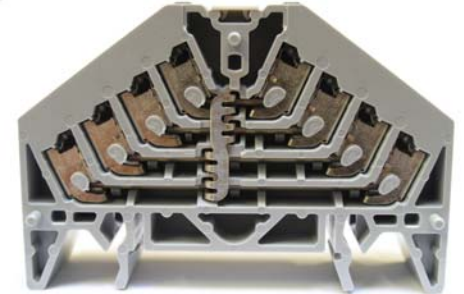
Today's automation processes are increasingly more complex with higher and higher demands for the monitoring and capturing of operational data.

These demands result in an increasingly large number of field measuring devices posing new challenges to engineers.

The additional signals for plant automation need to be connected and processed necessitating extra cabinet or junction box space.

These demands are met with the new Weidmüller marshalling and distribution terminals. The PRV range with its "PUSH IN" wire connection is the most compact routing terminal worldwide.

The Black\* PRV 250V 5 amp Signal Marshalling terminal offerings include



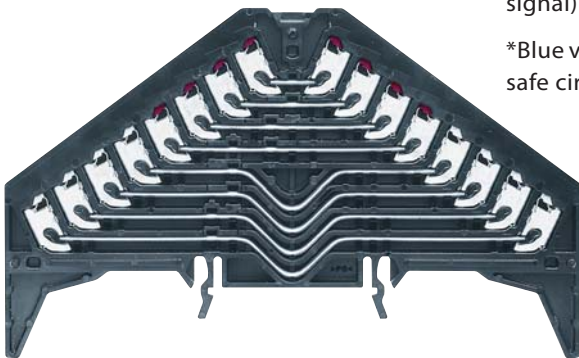
4 Level Grey PPV Power Terminal

The Grey PPV 250V 17.5 amp Power Distribution blocks include four level (16 connection points) and eight level (32 connection points).

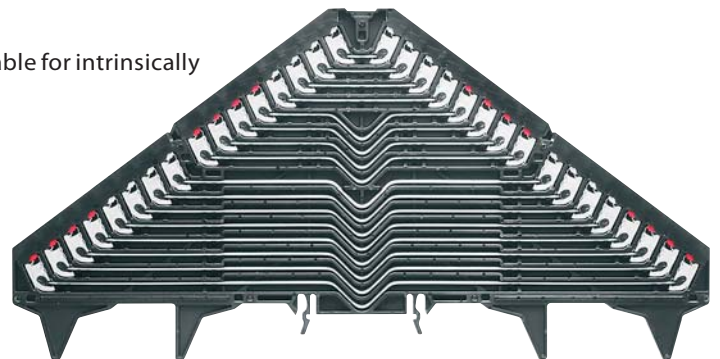
Red, white and grey operating elements provide visual segregation of potentials along with "PUSH IN" connection technology for fast connection and even faster release by simply pushing on the operating element.

four, eight and the impressive 16 level terminals with 4 connection points per feed through. The 16 level module equates to 64 distribution points in a 9.2mm width terminal, more than 1700 signals per metre and nearly 7000 distribution points (4 per signal) per metre.

\*Blue versions are available for intrinsically safe circuits.



8 Level Black PRV Signal Marshalling Terminal



16 Level Black PRV Signal Marshalling Terminal

## KEY CONTACTS //

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