

## CONTROL SOLUTIONS OVERVIEW

Innovators, Manufacturers and Distributors of Electrical Products





### **ABOUT US**

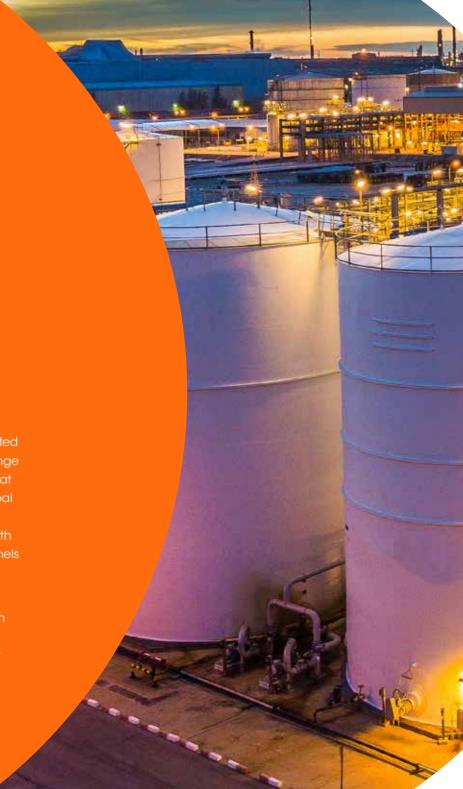
The **MATelec** business, founded in the early 1970s in South Africa as a manufacturer and distributor of electrical products, has always operated on three fundamental and guiding principles:

- An unswerving commitment to integrity at every level
- Doing business with tangible energy and passion
- Ensuring an exceptional customer experience at every touchpoint.

For almost 50 years, the brand has evolved, becoming a highly reputed name in the electrical industry across many countries.

In 2002, building on the well-proven sustainable business model of three decades, **MATelec Australia**, 100% Australian-owned and operated, was established. Now, over twenty years on, MATelec Australia is a significant player in the industry, sourcing, designing, manufacturing and distributing an exceptional range of electrical products throughout the Oceania region. In addition to the comprehensive range of electrical commodity products, marketed and distributed through the Electrical Wholesaler network, MATelec Australia manufactures 'in-house', a vast range of high-quality and cutting-edge pump and motor control and system automation products that perform strategic functionality in infrastructure assets across many industries, including Municipal Water Reticulation - Supply and Treatment, Mining, Agriculture, Military, Health and HVAC. The manufacturing facility, located in Victoria, has further distinguished the company and brand with the capability to design, engineer, manufacture and deliver 'site/application ready' control panels for thousands of strategic installations, both locally and abroad.

MATelec Australia has invested heavily in the 'Australia Manufacturing Community', with a significant commitment to growth in local employment as it executes its year-on-year expansion plans. The Team at MATelec Australia reflect the truly unique and dynamic 'customer-focused' culture, that drives the continuous development of valuable products and services, that will not only meet, but exceed, the expectations of the market for the now and beyond!







## **OUR MISSION**

To passionately pursue the development of products, services and solutions, that represent 'exceptional value' and reflect the inspirational and dynamic culture of the company, while enriching the community of clients, staff, suppliers and stakeholders involved in the process.

## **OUR VISION**

To be the 'No.1 choice' and 'most trusted source', for all products and services we offer the market, through an enduring commitment by our entire team, to consistently deliver 'service excellence', 'superior quality', 'functional innovation' and 'tangible value'.

# NOT SIMPLY AN EVOLUTION, BUT RATHER A REVOLUTION

The HydroSTART Control Panel has been purposefully designed and engineered, from the ground-up.

Advancements in social awareness, driven by technology, in areas such as remote monitoring/control, energy efficiencies, environmental impact, whole-of-life system cost, and functional reliability, have all guided the HydroSTART development.

The advanced new features of HydroSTART are sure to impress, and will exceed the wishes of hydraulic engineers, specifiers, OEMs, installers, maintenance technicians, and asset owners, alike.







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## THE PRINCIPLE OF PUMP, VALVE & MOTOR CONTROL

### **POWER SUPPLY**

Single Phase | Three Phase | 12 Volt 24 Volt | 240 Volt 415 Volt | 1000 Volt



## INPUTS

Level Pressure Temperature Conductivity Radar Ultrasonic Analogue Digital

### **OUTPUTS**

Motors | Pumps Blowers | Compressors

### **AUX OUTPUTS**

Alarms | Light Indicators Communicators | Dialers

## BENEFITS OF MATelec AUSTRALIA CONTROL PANELS

- Each Panel is Australian designed, manufactured, tested, and compliant
- Comprehensive Support Material including Manuals and circuit diagrams
- Colour coded cabling and terminal connection labels for simple identification and connections
- Lifetime support with Qualified technical engineers and Serial No. traceability
- Proprietary packaging, dedicated for controller 'in-transit' protection
- Diverse controller enclosure range available to meet all application requirements
- Customised and bespoke control panels from concept to completion
- Over two hundred thousand+ MATelec Australia controllers performing essential functions in strategic installations



Certified by leading industry bodies



200,000+ panels active in field



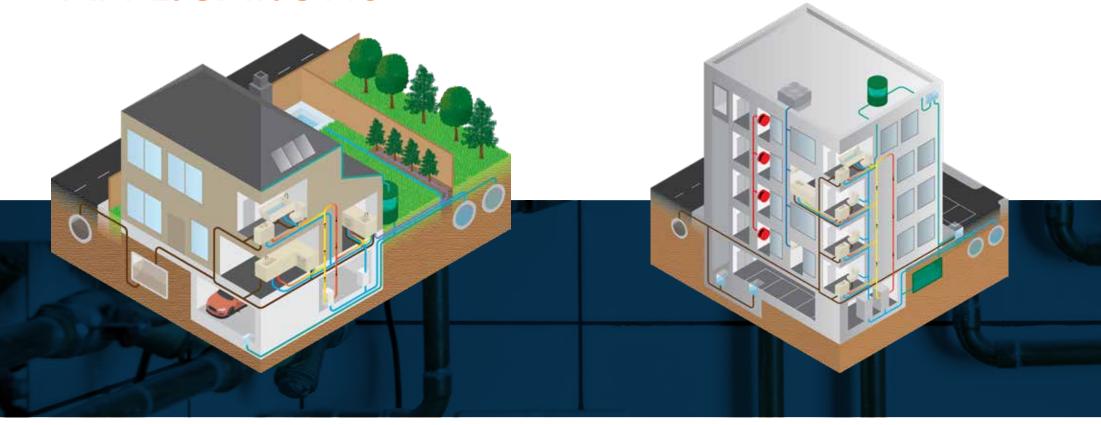
Industry leading turnaround times



Manufactured to your requirements



## **APPLICATIONS**



### **RESIDENTIAL**

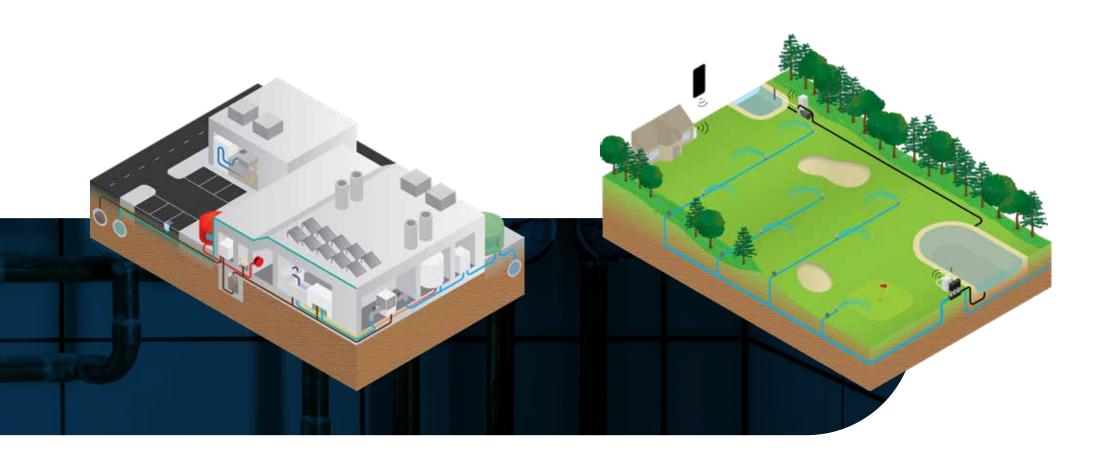
- Sewage
- Swimming pool
- Irrigation
- Rainwater harvesting
- Grey water

- Pressure boosting
- Hot water circulation
- Stormwater
- Undersink/sullage interlock

### **BUILDING SERVICES**

- Fire systems jacking pump
- Condensation catchment
- Emergency storage tank fill
- Stormwater
- First flush diversion system
- Rainwater harvesting

- Hot water circulation
- Pressure boosting
- Undersink/sullage interlock
- Lift well sump/seepage
- Sewage lift



### INDUSTRIAL/COMMERCIAL

- Fire systems jacking pump
- · Chiller/cooling
- Temperature control
- Constant pressure
- Flow control
- Level control

- Pressure boosting
- Hot water circulation
- Filtration
- Dosing systems
- Tradewaste management
- Stormwater

### **IRRIGATION**

- Rainwater harvesting
- Storage balancing
- Water transfer
- Constant pressure

- Local weather interface
- Remote monitoring & control
- Fertiliser dosing
- Filtration

### **ENGINEERED SOLUTIONS**



In the dynamic landscape of industrial automation and control systems, MATelec Australia stands as a leader in innovation and excellence. With a credible and proven track record, spanning more than two decades and more than 150,000 control panels, MATelec Australia is qualified to be your trusted partner for designing and building customised engineered solutions, tailored to the unique and diverse needs of your control/automation system.

#### **OUR EXPERTISE**

MATelec Australia has in-house, a team of highly skilled engineers, both electrical and mechanical, as well as a team of qualified electricians, all of whom have a deep understanding of the most sophisticated of control systems. Given their indepth knowledge and understanding of proven control functionality, you can rest assured, the most innovative solution will be offered, every time.

### **STATE-OF-THE-ART TECHNOLOGY**

Staying at the forefront of technological advancements is our commitment. MATelec Australia continues to invest in embracing new technology through networking and training, to ensure our control systems, that incorporate

both our own proprietary control modules as well as highly reputed industrial PLC & HMI software solutions, provide a robust, smart, and best-practice system control.

### **CUSTOMISED SOLUTIONS**

We understand the diversity of electrical control systems, and that very few applications are the same. We take a personalised approach to every project. Whether your requirements relate to water treatment, pumping, ventilation, heating & cooling, manufacturing process, mining and civil infrastructure, agriculture, or any other industry requiring electrical system control or automation, we work closely with you to design and build solutions that align with your specific needs, ensuring maximum efficiency and cost-effectiveness.

### Your trusted partner for custom Pump and Motor Control Automation Systems!

#### **CUSTOMER-CENTRIC APPROACH**

Our success is rooted in our dedication to customer satisfaction. We work closely with you at every step, providing transparent communication and timely updates. Your feedback and requirements are at the forefront of our design and implementation process.

### GLOBAL REACH, LOCAL PRESENCE

With a global footprint, MATelec Australia has the capacity to serve clients both nationally and internationally. Our local presence ensures quick response times and on-site support, while our global network allows us to tap into a diverse range of expertise and resources.

At MATelec Australia, we are not just in the business of creating control and automation solutions; we are in the business of building lasting partnerships. Our aim is to empower your business with the electrical controls required, to enhance the system you offer in the market, giving you the competitive edge that will ensure your product, is the product of choice.

We remain dedicated to the success of our clients. Reach out to us today, and let's embark on a mutually beneficial partnership that ensures the control solution that drives your system, is the best in the industry.

#### **SCALE AND EFFICIENCY**

One of MATelec Australia's distinctive features is the scale of our manufacturing facility, which is capable of producing more than two thousand control panels per month. This capacity speaks to our efficiency and readiness to meet the demands of large-scale projects, ensuring timely delivery without compromising quality.

#### **TURNKEY SOLUTIONS**

From concept to commissioning, MATelec Australia offers turnkey solutions that encompass the entire project lifecycle. Our services include design, engineering, fabrication, installation, testing, and ongoing technical support. This holistic approach ensures a smooth and hassle-free experience for our clients.





## HydroSTART PUMP CONTROLLERS

- · Capacitive Touch HMI
- Fast Action Electronic Overload Protection
- Input Status/Level Indication
- Additional Control Inputs and Function Flexibility
- Current Sensing by Pump Single & Three Phase
- 8 x digital inputs for greater control, including remote enable/disable

- Dual Overload range (LR & HR) 0.1 to 16amp
- Modbus RTU Serial RS-485 Connection
- Under/Zero current protection c/w alarm/ fault feature
- Short circuit isolation protection providing individual pump isolation benefit
- 8 x Mode selector switches increased functionality
- Data logging functionality



SUBMERSIBLE SEWAGE | SUBMERSIBLE STORMWATER WATER TRANSFER | PRESSURE BOOSTING

SUBMERSIBLE SEWAGE | SUBMERSIBLE STORMWATER WATER TRANSFER | HOT WATER CIRCULATION PRESSURE BOOSTING | CHILLER SUPPLY





- Single or three phase, 1-6 pump control
- DOL, Soft Start and VSD options
- HydroWHIZ control module and touch screen HMI
- Provision for 1x analogue and up to 8x digital inputs
- Volt free BMS outputs and Modbus RS485 SCADA connection
- Level, pressure, flow or temperature control modes

- PID control directions seamless increase or decrease of level, pressure, flow or temperature
- Advanced functionality and protection features
- Streamlined, user friendly system setup wizard
- Time and date stamped alarms, logged data and trend graph
- Highly flexible to suit almost any application



## Y G TO TO UCH ON THE PUMP CONTROLLER

## HydroTOUCH PUMP CONTROLLERS

- Single or three phase, 1-12 pump control
- DOL, Soft Start and VSD options
- HydroTOUCH control module and large touch screen HMI
- Provision for 2x analogue, 6x digital and 1x pulse inputs
- Volt free BMS outputs and Modbus RS485 SCADA connection
- Level, pressure, temperature or flow control modes

- PID control directions seamless increase or decrease of level, pressure, flow or temperature
- Advanced functionality and protection features
- Streamlined, user friendly system setup wizard
- Time and date stamped alarms, logged data and trend graphs
- Advanced parameter adjustment
- Highly flexible to suit almost any application



SUBMERSIBLE SEWAGE | SUBMERSIBLE STORMWATER | WATER TRANSFER PRESSURE BOOSTING | HOT WATER CIRCULATION | CHILLER SUPPLY PROCESS WATER CONTROL

### SUBMERSIBLE SEWAGE | SUBMERSIBLE STORMWATER PRESSURE BOOSTING | HOT WATER CIRCULATION



- Single or three phase, single or dual pump control
- Electronic or thermal overload protection of pumps, soft start option
- Electronic keypad interface with status indicator lights, pump auto/off/manual control and alarm mute/reset button
- · Visual and audible alarms

- Control module with dipswitches for adjusting configuration
- Provision for up to 4 digital inputs, volt free outputs for BMS
- Ideal for pump out, tank fill, pressure boosting or hot water circulation applications
- Function features include automatic duty alternation, staggered start, anti-seize protection and maximum idle timer

SUBMERSIBLE SEWAGE | SUBMERSIBLE STORMWATER WATER TRANSFER | IRRIGATION | PRESSURE BOOSTING



## ECONO PUMP CONTROLLERS

- Single or three phase, single pump control
- DOL, Soft Start and VSD options
- · Two digital inputs for cut off and working level
- Selector switch for pump auto/off/manual control, potentiometer for manual speed adjustment on VSD version
- Ideal for non-complex applications





## RAIN/MAINS PUMP CONTROLLERS

- Single or three phase, single or dual pump control
- Thermal overload protection of pumps
- · Electronic keypad interface with valve, pump and system status, system test button
- Provision for low level float and pressure switch inputs
- Pulse latching solenoid valve No continuous energisation
- Ideal for pressure pumping applications with rain/mains changeover
- Switches to rain water when available to maximise rain water usage
- · Switches to mains water on low tank level, power failure or pump fault
- · Quick plug version available for simple DIY applications



## LEVEL ALARM & UNDERSINK CONTROLLERS

#### LIQUID LEVEL ALARMS

- Electronic keypad interface with power and alarm status, mute button
- Digital input for high or low level float switch
- Visual and smart auto silencing / chirp mode for audible alarm
- · Provides power indication and alarm when a storage tank is either full or empty



## UNDERSINK ALARM & SHUT-OFF CONTROLLERS

- Electronic keypad interface with power and alarm status, mute button
- Smart auto silencing / chirp mode for audible alarm
- Pulse latching solenoid valve No continuous energisation
- Shuts off water supply and/or dishwasher on high level or power failure, preventing any further inflow into the undersink chamber
- · Options available include moisture sensing, additional valve/dishwasher outputs.control

### POWER DISTRIBUTION & MANAGEMENT



### **POWER DISTRIBUTION BOARDS**

- Provides constant power supply to pumps with integral VSDs
- · Individual pump indication and control

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### **POWER MANAGEMENT SYSTEMS**

- Battery backup or automatic generator changeover options
- Provides constant power to a control panel, switching over to battery or generator power on mains failure

## TANK LEVEL CONTROL & INDICATION



## TANK FILL DIVERSION VALVE CONTROLLERS

- Weatherproof GPO for air compressor, supplying air actuated valve
- Standard option closes valve when tank is full to divert further rainwater to stormwater
- First flush option allows set amount of rain fall to flush collection areas before diverting flow to fill tank



### **GREY WATER PUMP CONTROLLER**

- · Monitors level of grey water in a tank
- Pumps out grey water when start float switches, until pump stop float switches
- Runs pump if water level is above stop float and pump has not run for 24 hours, to maintain minimum tank level

## TANK LEVEL INDICATORS

- 4 float switch or 4-20mA hydrostatic level transducer options
- Provides an extremely accurate and informative indication of water level in a tank
- Wireless options for applications with long distance between tank and indicator location

## FIRE PUMP CONTROLLERS



## REMOTE START/STOP PUMP CONTROLLER

Provides remote status indication and start/stop control for 1 or 2 fire pumps

## FIRE HOSE REEL PUMP CONTROLLER

- Pump control and status indication for a fire hose reel pump
- Compliant with AS 2941-2013: Section 6



## JOCKEY/JACKING PUMP CONTROLLER

- Pump control and status indication for a jockey/jacking pump
- Compliant with AS 2941-2013: Section 5

## RESIDENTIAL SPRINKLER PUMP CONTROLLER

- Pump control and status indication for a residential sprinkler pump
- Compliant with AS 2941-2013:
   Section 7

## REMOTE MONITORING & CONTROL EQUIPMENT

Power On

Pairma Fault

## REMOTE STATUS INDICATORS

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 Provides status indication and alarms from a Standard Single/Dual Pump Controller in a convenient location

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## REMOTE ALARM INDICATORS

 Provides visual and audible alarm indication from a remote source

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## REMOTE SIGNAL COMMUNICATORS

REMOTE ALARM INDICATOR

- Radio or SMS communication options
- Enables remote switching of a controller in applications where cables are impractical
- Option for applications where two way communication between control panels is required

## SMS ALARM/STATUS COMMUNICATORS

- Features the ME-Link IoT/SMS module
- SMS messaging of up to 8x digital/1x analogue and modbus inputs including power/battery status
- Easy programming with SMS commands
- Remote control via 2x relay outputs
- Advanced features include notification repeat modes and reminder messages

## LEVEL SWITCHES & SENSORS







**CABLE ACCESSORIES** 

## FLOAT SWITCHES & MULTI LEVEL FLOAT TREES

- 9004, 9006, 9010 series
- 9011 High Heat
- Poly and stainless steel magnetic
- 3 or 4 float trees

## CONDUCTIVITY SENSING PROBES

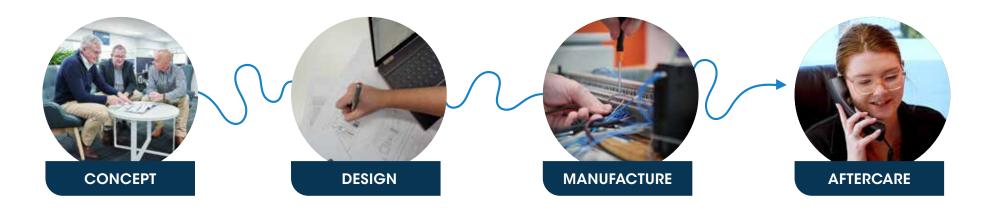
- Single point, 4 point & 10 point options
- Various probe lengths available

## HYDROSTATIC LEVEL TRANSDUCERS

- Potable water or sewage/ wastewater options
- Multiple depth ranges & cable lengths available

### END TO END SOLUTIONS

### WITH YOU FROM CONCEPT TO COMPLETION



Our control panels can be modified in a multitude of ways to suit specific requirements, including:

- 304 or 316 Grade Stainless Steel enclosures
- Mine spec enclosures
- · Free standing enclosures with integral plinth
- Intrinsically safe input barrier relays
- Conductivity relays and probe inputs
- Generator input socket c/w manual or automatic changeover
- ME-Link module for SMS status/alarm messaging
- Battery backup high level alarm
- Individual pump RCD protection

In addition to modifications to the standard range of controllers, customised/bespoke control solutions for complex projects in a wide range of industries are available. Our team will oversee the entire process from the initial concept through to design, manufacturing and testing, application ready control systems.













**Australian Owned** & Operated



**5 Star Customer** Service



**Qualified Technical** Support



Pump Control & Monitoring Specialists

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