

HMA



SINCE 1966

Introduction	4
Oil & Gas	6
INSTRUMENTATION	8



Formed in 1966, The HMA Group represents an impressive list of internationally respected companies and manufactures under licence to a number of these companies. We also manufacture a range of products and equipment developed and designed by our own engineers.

Employee group owned, these shareholders span a diverse section of the company and underwrite the efficient function of the HMA Group.

The HMA Group of Companies manufactures, services and sells a wide range of capital plant and equipment to a diverse range of industries. This includes mining, processing, materials handling, water management, power generation and, oil and gas.

We can provide state-of-the-art industrial equipment and also offer customers sound advice, consultation and technical back-up. A team of qualified engineers, who have extensive product training and experience can offer a complete service, from equipment selection through to installation, commissioning and maintenance.

Offices and service facilities are strategically located in Sydney, Wyong & Singleton in NSW, Morwell & Melbourne in VIC, Brisbane & Mackay, in QLD, Perth in WA, Hamilton in New Zealand, Jakarta in Indonesia and Johannesburg in South Africa. With these locations we stand ready to assist you from the project inception stage through contract engineering to installation, commissioning and full maintenance support.

As we recognise industry works 24 hours around the clock, so do we. We are on call to promptly supply essential parts from our local stock and provide technical back up to ensure maximum availability and efficient operation of customer's equipment.

SERVICES:

- ABRASION RESISTANT EQUIPMENT
- BOILER CLEANING & DIAGNOSTICS
- GEOTECHNICAL INSTRUMENTATION
- MATERIALS HANDLING
- MEASUREMENT INSTRUMENTATION
- MECHANICAL, STRUCTURAL & ELECTRICAL ENGINEERING
- NUCLEAR INSTRUMENTATION
- OPTIMISED ENERGY SOLUTIONS
- PIPE SYSTEMS
- SENSOR TECHNOLOGY
- TRANSMISSION & MOTORS
- VALVES & CONTROLS

MATERIALS HANDLING

Solutions designed for efficiency when materials require movement in a processing environment.

WEAR SOLUTIONS

Abrasion, impact and erosion resistant materials and piping systems.

FLOW & INDUSTRIAL

Complete range of valves, controls, motors and gear boxes for industrial applications.

INSTRUMENTATION

Measurement & analytical instrumentation and controls for process industries.

POWER GENERATION

Integrated solutions for boiler diagnostics, boiler cleaning, ash handling and sootblower controls.

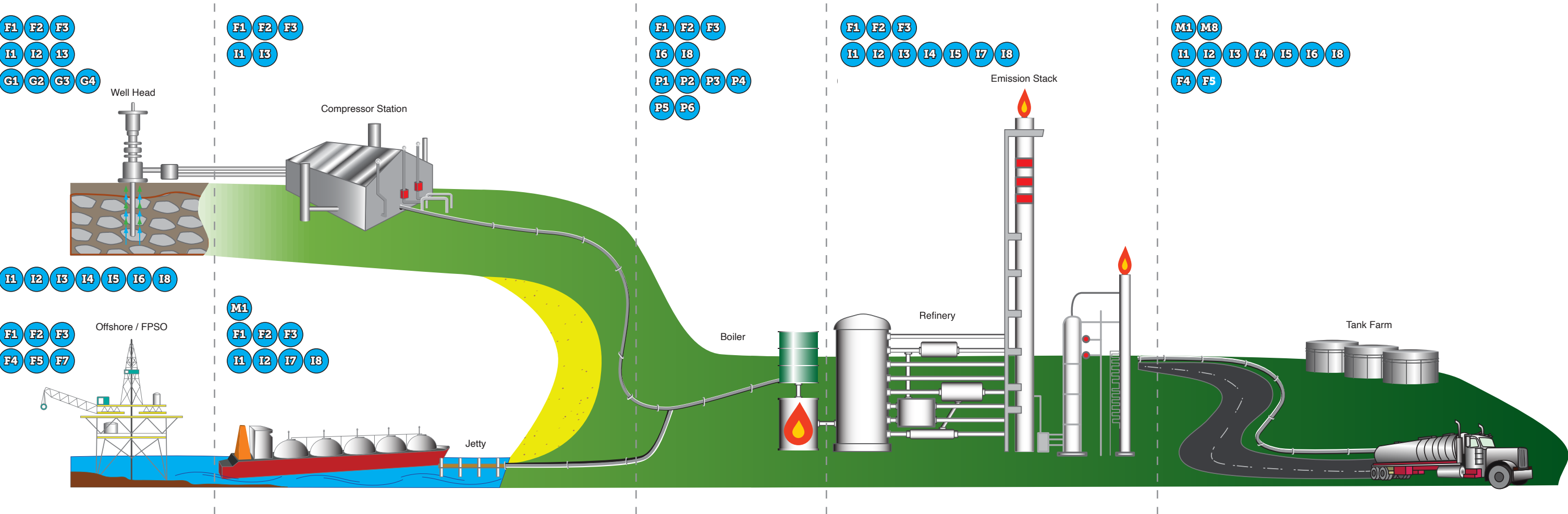
GEOTECHNICAL

A range of Geotechnical Instruments used to measure insitu pressure, displacement, inclination and stress.

INDUSTRIES:

- WATER & WASTE
- CEMENT & QUARRY
- POWER GENERATION
- OIL & GAS
- PROCESS INDUSTRY
- PULP & PAPER
- MINING & MINERALS
- PHARMACEUTICAL, FOOD & BEVERAGE
- RAIL & TRANSPORT
- CIVIL & INFRASTRUCTURE
- MARINE & OFFSHORE
- ENVIRONMENTAL





MATERIALS HANDLING

- M1** Material Loading Systems
- M2** Chutes, Gates & Slingers
- M3** Stockpile Reclaim & Conveying
- M4** Process Equipment
- M5** Overhead Access Equipment
- M6** Hi Rail Equipment
- M7** Rail Fixing & Resurficing Equipment
- M8** Engineered Products *

* Includes: Weighing Systems, Safety Guarding, Wheel Washing Systems, Specialised Products & Prototypes

WEAR SOLUTIONS

- W1** Wear Resistant Pipe
- W2** Sump, Chutes & Gates
- W3** Specialised Lining Systems
- W4** Ancillary Products **
- W5** Impact Panels
- W6** Polyurethane Products
- W7** Process Equipment *
- W8** Site Services

* Includes: Cyclones, Erietz
** Abrasion & Corrosion Compound

FLOW & INDUSTRIAL

- F1** Valves
- F2** Valve Actuation & Controls
- F3** Engineered Products *
- F4** Gearboxes
- F5** Electric Motors
- F6** Conveyor Products
- F7** Screw Jack & Power Transmission

* Includes: Couplings, Expansion, Condenser Tube, Filters, Water Treatment

INSTRUMENTATION

- I1** Fire & Gas
- I2** Analytics
- I3** Pressure & Temperature
- I4** Level
- I5** Flow
- I6** Boiler Management
- I7** Nucleonics
- I8** Engineered Products *

* Includes: Expansion Joints, Sodium Hypochlorite Generation, Offshore & Marine Sewage Treatment, Hydrogen Generation, Belt Conveyor Protection & Automation

POWER GENERATION

- P1** Online Boiler Cleaning
- P2** Sootblower Enhancements
- P3** Boiler Diagnostic Tools
- P4** Boiler Optimisation
- P5** Boiler Services
- P6** Offline Boiler Cleaning

GEOTECHNICAL

- G1** Water Monitoring
- G2** Inclination Monitoring
- G3** Displacement Monitoring
- G4** Stress & Strength Monitoring
- G5** Field & Workshop Services

Flame Detection

Specifically designed for areas where the risk to personnel is high and where fire might result in a catastrophic loss of assets.

Det-Tronics are the market leader when it comes to Flame Detection. Possessing industry leading false alarm rejection, fast response times and a wider cone of vision, the X Series provides a reduced cost of coverage.



Ancillary Warning Devices

Extensive range of manual, visual and audible alarms, as well as loudspeakers have been developed in close collaboration with customers to deliver the best combination of performance and safety. Manual Alarm Call Points, Status Lights, Beacons/ Strobes and Speakers.



Fire Protection

High quality fire fighting equipment and systems for high-value asset protection that can be relied upon whenever danger strikes. Foam Proportioners, Monitors, Hydrant Valves, Mobile & Fixed Foam Skids, Deluge Valves.



Fixed Gas Detection

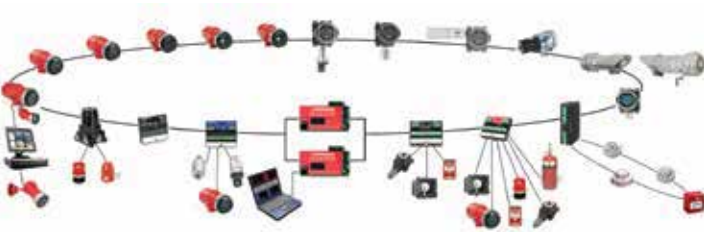
Hazardous area flammable Gas Detection, with multiple layers of protection. Point, Line of Sight (Open Path) & Acoustic Gas Detectors; offering multiple detection technologies from Catalytic to Infrared for Hydrocarbons and Electrochemical for measuring Toxic Gases.

With a range of Transmitter options, from a simple faceplate display, to a Gas Control Panel.



Certified Fire & Gas Detection Systems

Addressable and point-to-point systems allow complete design and configuration to meet your safety system requirements. Approved by Exida as a SIL 2 certified Safety Instrumented System (SIS), the Eagle Quantum Premier (EQP) network meets both NFPA & FM standards as a Fire & Gas Control system.



Fire and gas detection systems

Autronica provide interactive fire and gas detection systems for onshore and offshore applications in the oil & gas, chemical and petrochemical industries.

Autronica Fire and Security launched AutoSafe in 1999. From day one, AutoSafe has proven its unique stability and reliability in more than 15 000 of installations worldwide, both on- and offshore.



Rupture Discs

BS&B, since inventing the first rupture disc in 1931, has been at the forefront of the industry. With over 70 registered patents covering reverse buckling, tension loaded, graphite, sanitary and custom engineered rupture disc devices you can be assured BS&B has the right rupture disc to suit your application.

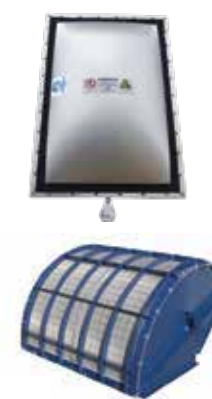
Each of BS&B's 6 global manufacturing locations operate and test according to all relevant international codes & standards including ASME VIII, EN ISO 4126-2 and AS1358.

The range covers sizes from 1/8" (3mm) to 72" (1,828mm) and pressures from 4" WC (10 mBarg) to 100,000 psi (6,900 Barg).



Explosion Vents

BS&B's range of explosion vents offer an economic solution for protecting your plant from dust explosions. BS&B's VSP vent has been tested to over 1,000,000 pressure cycles from vacuum to light positive pressure, while retaining its burst accuracy.



Explosion Suppression

BS&B's chemical explosion suppression systems are the best way to protect your plant and equipment by suppressing a dust explosion before it happens. We can offer a complete protection and prevention solution consisting of chemical suppression, chemical and mechanical isolation, venting and flameless venting.



Flame Arrestors & Tank Vents

BS&B FlameSaf (formerly RMG) manufacture inline and end of line flame arresters for detonation, deflagration, and endurance burning applications, as well as pressure / vacuum breather vents with and without flame arrester elements.



Relief Valves

Nacional BS&B offer a comprehensive range of Pressure Relief Valves for the petrochemical, chemical and refining, oil and gas, and water industries. The valves are designed and manufactured according to most recognised international standards: ASME, API, ASTM and the European directives 97/23 & 94/9 CE.



Buckling Pin Valves

BS&B's buckling pin valves categorised are a fast acting, non-reclosing pressure relief device, but unlike a rupture disc, buckling pin valves can be reset in minutes without needing to break the line saving critical time. Available as an inline, API526 angle, and common inlet/outlet angle configurations and sizes from 2" up to 76".



Pressure and Temperature Instruments

A range of pressure and temperature instruments for process monitor and control application. Whether your application is for gauges, switches, transmitter, recorders, and calibrators we have the right solutions from our extensive range. Thermowell and Isolating diaphragm seals supply and fit services and be offered.

HMA Pressure lab is NATA certified and pressure calibration services can be offered.



Flame Scanners

UV and IR flame scanners for detecting the presence or absence of a flame in a combustion chamber. Scanners include advanced sensors and algorithms for discrimination of the target burner in multi-burner applications. Used with all fuel types and burner configurations.

Integrated Scanners

Detection and amplification in one compact unit. Models: Insight II, Insight S4, Phoenix & Simplicity.

Discrete Scanners

Used with flame safeguard controls or separate amplifier. Models: 45UV5, 55UV5, UV90L, UV1A & 48PT2.



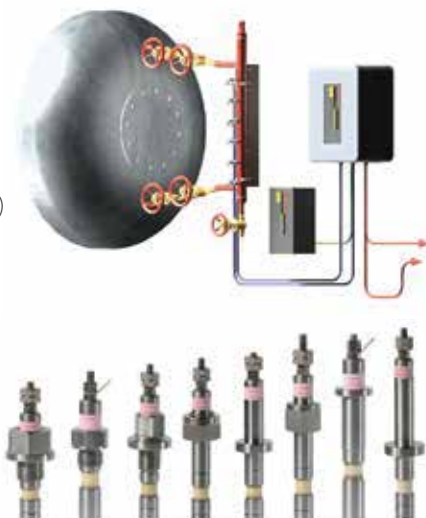
Ignition & Pilot Equipment

- Surefire Igniter - High Energy Spark Igniters (HESI) for direct spark ignition of oil or gas burners.
- Surefire Igniter - High Tension Spark and Sense Igniters (HTSS) for pilots and small burners. After ignition it serves as continuous flame sensing.
- Surefire Gas Pilot - Gas pilot with 15KW to 30KW capacity available in natural draught or force draught.

Boiler Drum Level & Replacement OEM Probes

A range of products to meet regulatory, safety and boiler control requirements offering complete redundancy and fault tolerance.

- Electronic Drum Level Indicators (EDLI)
- Electronic Level Switches
- Gauge Glasses
- Magnetic Level Gauges
- Bypass Gauges
- Replacement electrodes/conductivity probes. 100% compatible with Hydrastep, Clark Reliance, Narvik, Yarway, Fossil, Bonetti, Levelstate, Diamond Power, Emerson/Solartron.



Thermal Expansion Joints

Bespoke fabric and metal joints for boilers, turbines and ducts on gas fired plants and coal fired plants.



Burner Controls & Flame SafeGuard

- BurnerPRO - LFL backward compatible replacement
- BurnerLogix - Latest Flame Monitor
- Nexus - Parallel positioning system for liquid or gas fuel fired combustion
- NXM2G - Non-intrusive prevention of boiler dry cycling.



Ultrasonic Flow Meters

Panametrics are the pioneers of Ultrasonic flow meters and offer a wide range of flow measurement instruments from in-line, wetted, and clamp-on, to portable and insertion flow meter solutions.

Panametrics Flare Gas Flow Meters use a proprietary algorithm that immediately determines the molecular weight and mass flow rate of the flare and sweep gas providing you with critical flow data.

Our Process Flow Meters, which come in both ultrasonic and vortex varieties, are excellent solutions for the accurate measurement of various fluids in your pipeline.

When you're transferring ownership of high-value raw and refined assets like petroleum and crude oil, our Custody Transfer Meters are designed to give you accurate, reliable figures you can trust.



Flow Switches, Meters & Indicators

A range of different flow metering technologies to measure flow and switching function for Gases, Liquids and Slurries are available. Includes Variable area, Positive displacement Oval & Turbine, Vortex and Coriolis Mass meters.

Flow Switch products include Paddle, Thermal or Doppler.



Magnetic Flow Meters (Includes Slurries)

HMA Specialises in the manufacture and supply of magnetic flowmeter tubes with ceramic/basalt liners for simple integration into our Wear Solutions piping solutions. In addition we can manufacture tubes with custom ID's and lay lengths using traditional rubber and PFA liners. Flexibility in our design allows flowtubes to be supplied so that they are compatible with the majority of electronics on the market.



Thermal Mass Flow

Kurz thermal mass flowmeters incorporate advanced microprocessor electronics technology and constant delta T mode of operation to provide accurate and real time flow measurement. Response time is critical with this type of device with Kurz offering one of the fastest response times available, especially when compared against Constant Power technologies. Ideally suited to aeration, combustion air, flare gas and digester gas applications the following solutions are available to meet your needs:

- Single Point insertion flowmeters
- Multipoint insertion flowmeters
- Chlorine Meter
- World First Patented WGF (Wet Gas Flow meter) is the first thermal mass flow meter offering accurate and reliable measurements for wet, condensing and biogas applications.



Primary Flow Elements

We supply industry leading complete range of differential producing flow elements, pressure reducing device including Badger Lo-Loss Venturi meters. All products are independently verified to accuracies or better than ISO standards.

Key solutions are;

- Orifice Meter Runs
- Venturi's
- Insertion Venturis
- Flow Nozzles
- Pitot Tubes.



Gas Analysers

Panametrics multi-technology safe and hazardous area process analysers to measure common gases such as oxygen, hydrogen, methane, CO, CO₂, H₂S and natural gas composition.



Moisture/Dew Point Analysers

Single/multi-channel and portable measurements in gas/liquid applications in industrial, petrochemical and natural gas industries. Proven technologies include aluminium oxide and tunable diode laser (TDL).



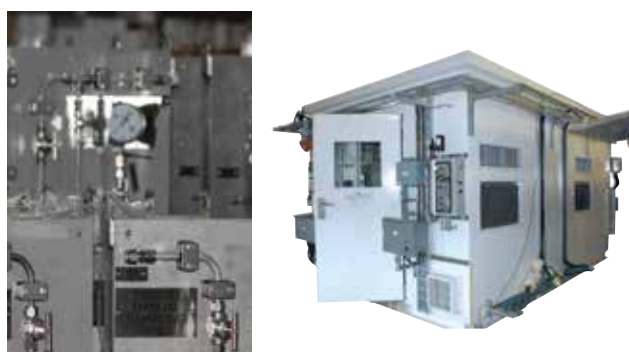
Physical Property Analysers

Physical property analysers typically used in refineries and gas/condensate processing facilities. Parameters include vapour pressure, cloud/freeze/flash/pour points, distillation, viscosity and colour.



System Integration

Customised sample handling systems (probe/transport line/ sample conditioning/recovery) can be designed and supplied along with stands/shelters to meet specific environmental requirements.



Fuel gas & flare gas combustion measuring

The WIM COMPAS™ adds to Hobra's portfolio of process analyzers for (Fuel and flare gas combustion measuring) measuring the Wobbe Index, heating value (BTU) and the Combustion Air Requirement Index (CARI). It builds on hobra's 20+ years of success and experience with residual oxygen type analyzers. The WIM COMPAS™ is used to control the thermal input and air:fuel ratio in such a way that disturbances caused by fuel gas quality fluctuations are minimized, the combustion process occurs with maximum efficiency and emissions are reduced to a minimum.



Mine Ventilation Systems

Underground mine air quality monitoring station designed with a communication platform. The single point IP address makes this system quick, simple and economical to match to any Ethernet based network. Simply plug the Vigilante AQS™ into a network switch, configure the settings via the built-in web pages and start measuring. The register maps can easily be paired to most current or legacy monitoring platforms.

- Modular design provides ultimate user flexibility.
- Make informed ventilation decisions with real time data.
- Save time with Maestro EZ Upgrades
- Easy as PI – integration into historians
- Direct integration in Ventsim™ LiveVIEW and VUMA3D ventilation modeling software
- Improve your mine ventilation simulation models
- EZ Cal gas sensors increase sensor reliability and accuracy.



Oil in Water Detection

Oil in Water Detection Hydrocarbon analysers for oil detection monitoring using fluorescence technology when sensitivity and reliability counts. Complete range includes Portable Grab Sample Analyser, Laboratory Fluorometer and Online Oil in Water Monitor.



Oil on Water Detection

Floating oil on water detectors provide an easy to install, low maintenance solution to the detection of oil and hydrocarbon pollutants in retention pits and ponds.



Water in Oil Detection

Providing an accurate measurement to reduce the loss of product to Slops. Agar's patented energy absorption technology can measure in Oil-Continuous or Water-Continuous phases, including multi-phase where your process has a mixture of Oil/Water/Gas. These measurements are provided through Interface Detectors, Watercut Meters, Wet Gas Meters and Multi-Phase Flow Meters.



Emission Monitoring

A wide range of instrumentation from low cost dust monitors through to fully automated and integrated emissions monitoring systems for all industries.



Density & Viscosity

Complete range of density and viscosity instruments for Process monitor and control for both continuous and batch process application. Whether your application is for liquid or gases; inline or extractive we have the right solutions from our extensive range. This are reliable maintenance free instruments with laboratory standards.



Level Gauges

Local and remote tank gauging solutions via Hydrostatic, Float, Magnetic Bypass or Glass level gauge technologies. Self Powered Contents Gauges manufactured locally in Australia. Level solutions for hazardous areas, marine environments and safety or pressure related approvals. Self-Powered Level Gauges are 100% Australian made and Marine approved.



Level Switches

Solutions for both liquids and solids, we have the following technologies for pump control, alarm duties, and overflow prevention;

- Float Level Switches (Vertical & Horizontal)
- Capacitance Level Switches
- Conductivity Level for conductive fluids
- Vibrating fork and rod
- Rotary paddle and tilt switches for solids.



Bulk Material Level Measurement

Solid Material Level Measurement Radar Level Transmitter designed for medium/long range measurement of powders, particles and bulk solids including applications such as flyash and cement.

This can be integrated into an IMS that can profile usage and send alerts when product levels reach set points.



3D Inventory Measurement

3D scanners provide continuous, non-contact level measurement using dust-penetrating technology for unsurpassed bin volume accuracy. Unlike single point devices, BinMaster's 3DLevel Scanners measure multiple points to detect irregular material surfaces, cone up/down conditions, or sidewall buildup. Advanced acoustics-based technology is proven to perform in powders and bulk solids contained in tanks, silos, domes, warehouses, open bins, and piles.



Liquid Level Transmitters

Whether your application is for a mobile tank, marine tanks, has foaming, high temperature or even interface level, we have the right solution from our extensive suite of level technologies.

- Hydrostatic
- Float Level
- Ultrasonic
- Radar
- Capacitance
- Magnetostrictive.



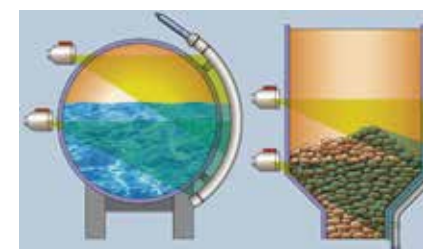
Level Measurement for Harsh Environments

Radiometric solutions for continuous or point level control solids and liquids applications. Ideally suited to the most difficult of applications and not affected by;

- Internal obstructions such as agitators
- Extreme process temperatures
- Highly Alkaline or Acidic processes
- Sticky applications.

In addition the microprocessor based technology provides automatic compensation for;

- Vapour density changes
- Foam and Gases
- Process Buildup.



Process Density Measurement

Suited for liquid processes where traditional contact technologies cannot be used.

Density measurement solutions for use in;

- Extreme process temperatures
- Highly Alkaline or Acidic processes
- Abrasive applications such as slurries
- Violent and/or erratic product flow



Non-Contact Material Weighing

Externally mounting to the conveyor with no modifications required. Works on flat or trough belt, bucket and screw. Can be mounted to inclined conveyors and suitable for variable or fixed speed conveyors.



Service, Commissioning, and Disposal

Nucleonic source life calculations, start-up commissioning, troubleshooting and documentation service. End of life source disposal back to approved facilities in USA or Europe.



HPump™

Baker Hughes HPump™ Horizontal Surface Pump System. These are long lasting, highly reliable, environmentally friendly, and modular design pumping solutions. Whether your application is for On-shore and Off-shore production, mine water management, hydrocarbon processing or pipelines we have the right solutions from our extensive range. This are reliable, maintenance free and designed for years of trouble-free operation backed by local support.



Engineered Products

Sodium Hypochlorite Generation

SEACLO® & SANILEC® - On-site generation of sodium hypochlorite from seawater via electrolysis. Combining three common consumables, salt, water and electricity to generate a disinfecting agent for industrial bio-fouling control.



Offshore & Marine Sewage Treatment Systems

Omnipure offers effective electrolytic treatment of both black and gray water. Omnipure treatment systems produce effluent quality that easily meets IMO 64 requirements.





NEW SOUTH WALES

Wyong - HMA Group Head Office

Email: info@hmagrp.com

Phone: +61 (0)2 4389 6191

Sydney - Instrumentation

Email: sydney@hmagrp.com

Phone: +61 (0)2 9428 7300

Singleton

Email: singleton@hmagrp.com

Phone: +61 (0)2 6571 8200

WESTERN AUSTRALIA

Perth

Email: perth@hmagrp.com

Phone: +61 (0)8 6254 9500

VICTORIA

Melbourne - Geotechnical

Email: melbourne@hmagrp.com

Phone: +61 (0)3 8720 6700

Bayswater - Industrial

Email: bayswater@hmagrp.com

Phone: +61 (0)3 8720 6770

Morwell - Power Generation

Email: morwell@hmagrp.com

Phone: +61 (0)3 5136 8400

QUEENSLAND

Brisbane - Rail

Email: brisbane@hmagrp.com

Phone: +61 (0)7 3859 6800

Mackay

Email: mackay@hmagrp.com

Phone: +61 (0)7 4998 6900

NEW ZEALAND

Hamilton

Email: hamilton@hmagrp.com

Phone: +64 (0)7 850 2610

INDONESIA

Jakarta

Email: jakarta@hmagrp.com

Phone: +62 21 2278 3377

SOUTH AFRICA

Johannesburg

Email: johannesburg@hmagrp.com

Phone: +27 (0)10 900 2055

HMA GROUP

MATERIALS HANDLING

WEAR SOLUTIONS

FLOW & INDUSTRIAL

INSTRUMENTATION

POWER GENERATION

GEOTECHNICAL

AUSTRALIA - NEW ZEALAND - INDONESIA - SOUTH AFRICA

www.hmagrp.com