



# Galvin Specialised Healthcare Solutions



Specialised taps and fixtures for better health and safer communities.

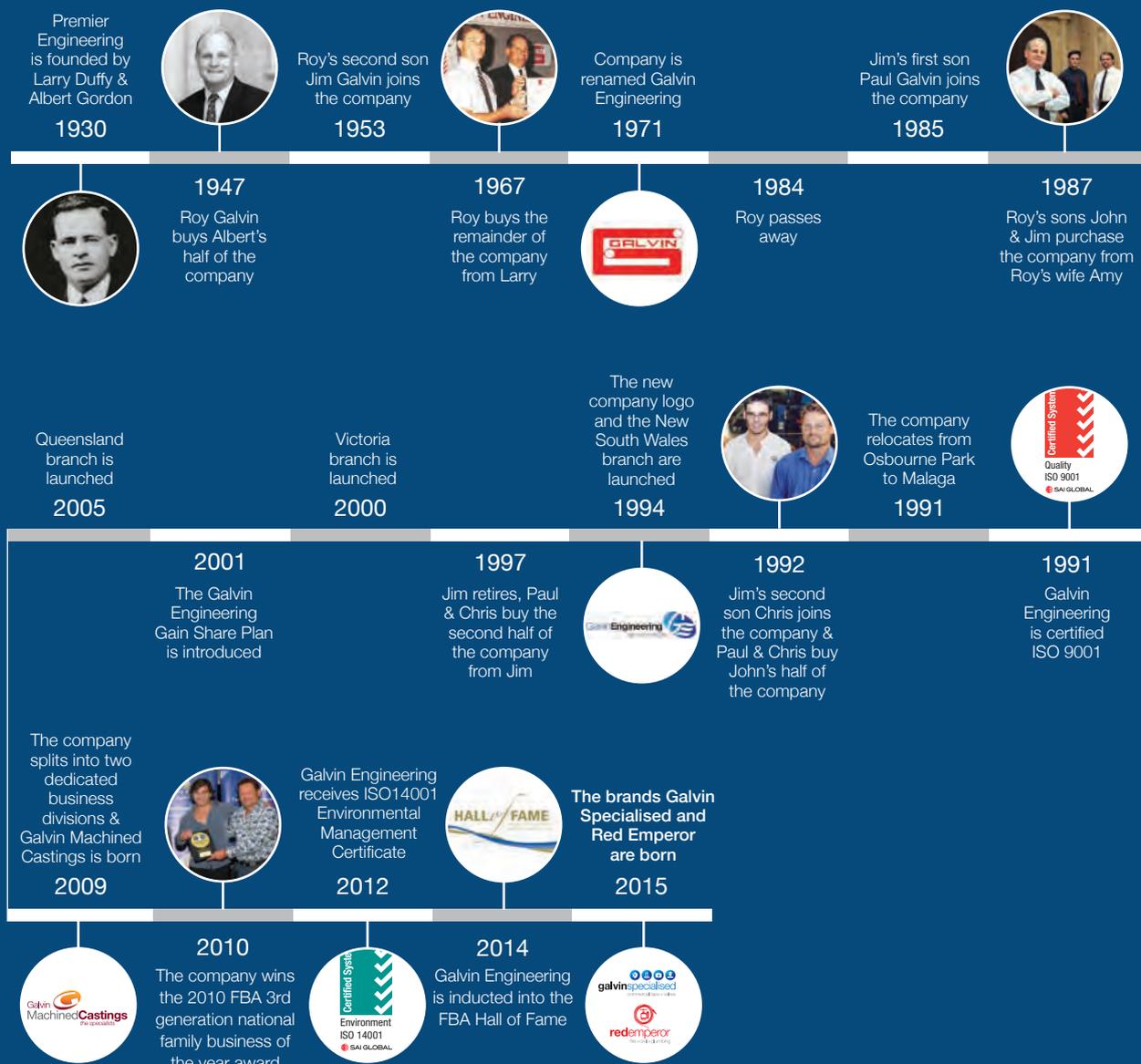


**galvinspecialised**  
commercial taps + fixtures

# Who We Are

With a history spanning 85 years, our family-owned business has thrived on long-term relationships built on our core values of pride, accountability and a will-do attitude.

We design and supply specialised commercial taps and fixtures for better health and safer communities.



# Legionella and Pseudomonas

Legionnaires' disease is one of a group of diseases known as legionellosis and can be a risk in healthcare facilities.

It is especially a risk in hospitals or care facilities due to the presence of complex water systems and people who are immune deficient.

Legionnaires' disease or Pontiac fever is contracted when a person inhales in mist or vapor that has been contaminated with Legionella bacteria.

Keeping Legionella bacteria out of buildings' water supplies and cooling towers, as well as pools, hot tubs, and fountains, is key to preventing the spread of legionellosis.

Most people with Legionnaires' disease will have pneumonia since the Legionella bacteria grow and thrive in the lungs.

It is of acute importance that Legionella bacteria is kept out of healthcare environments.

## Key Facts:

- + Legionella are found naturally in the environment, usually in warm water.
- + Typically inhaled in a mist or vapour (small droplets of water in the air)
- + Legionellosis is not spread from person to person.
- + The bacteria was named after an outbreak in 1976, when people who went to a Philadelphia convention of the American Legion got sick with pneumonia (lung infection).

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# Infection Control

Given legionella and pseudomonas' ability to spread quickly and become multi-drug resistant, a multi-pronged attack is needed covering the following four areas: keeping hot water hot, keeping cold water cold, keeping water moving and keeping water clean.

Control has to be specific and based on risk assessments to prevent the occurrence of infections. For *Legionella* bacteria the highest risks in a healthcare environment are devices that disperse aerosols such as showers and taps.

The levels of *Pseudomonas aeruginosa* in water should be assessed on a regular basis and control measures put in place accordingly. Biofilms cannot be eradicated, but it is important that control measures are appropriate to protect vulnerable patients in a healthcare environment.

There are a wide range of control measures that can be used but those responsible for their implementation must be aware of the methods' limitations and know that they should be reviewed regularly to ensure that they are still appropriate and effective.

## Pathogen Risks

Complex water systems represent a prime contamination risk for *Legionella bacteria* and *Pseudomonas aeruginosa*.

*Pseudomonas aeruginosa* is a leading cause of nosocomial infections and is responsible for 10% of all hospital-acquired infections.

Any water-based system, which has the right environmental conditions, has the potential to be a source for *Legionella* bacteria growth. Aerosols can be generated from any water outlet, for example, when a bath or basin is filled.

The following non-exhaustive list identifies potential sources of aerosols which may contain *Legionella* bacteria in healthcare settings such as:

- + Showers, taps and toilets;
- + Clinical humidifiers, respiratory and other therapy equipment;
- + Cooling towers and evaporative condensers;
- + Spray washing equipment and high pressure hoses;

- + Ornamental fountains and water features, particularly indoors;
- + Spa pools, whirlpool baths or therapy pools;
- + Ice machines;
- + Firefighting systems such as sprinklers and hose reels;
- + Dental chair unit water lines (fixed and portable); and
- + Portable ultrasonic scalers.



THE RISK FROM EXPOSURE  
WILL NORMALLY BE  
CONTROLLED BY MEASURES  
WHICH PREVENT GROWTH  
OF LEGIONELLA BACTERIA  
AND REDUCE EXPOSURE  
TO WATER DROPLETS  
AND AEROSOLS.



### Controlling the Risk

The risk from exposure will normally be controlled by measures which prevent growth of *Legionella* bacteria and reduce exposure to water droplets and aerosols.

Control methods rely on:

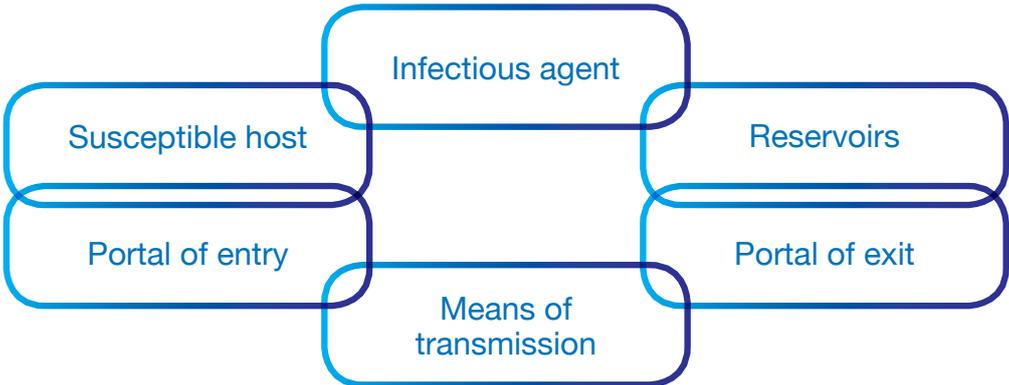
- + Prevention of favourable temperatures and conditions for bacterial growth;
- + Prevention of water stagnation;
- + Control of water spray release; and
- + Maintenance and safe operation.

### Temperature Control

Temperature control is the preferred method for reducing the risk of Legionella in water systems. By keeping the temperatures in the water system outside of the 20 – 50°C range, the bacteria are less likely to grow.

- + Cold water systems should be maintained at a temperature < 20°C.
- + Hot water should be stored at 60°C and distributed so that it reaches a temperature of 50°C within one minute at the water outlets.

- + At 50°C the risk of scalding is usually low for most people, however, the risk to young children, disabled or elderly people will be greater. So where a significant scalding risk is identified, the use of Thermostatic Mixing Valves (TMVs) should be considered to control water temperature to ensure patient safety.



# Solutions for Impacting HAIs

The following are the recognised means for reducing the risk of Hospital Acquired Infections (HAIs), and are seen as part of any infection control program:

1

Hand hygiene —  
the five critical moments

2

Decontamination of the  
environment & shared  
equipment;

3

Contact precautions for  
infected & colonised  
patients;

4

Active surveillance  
& screening;

5

Effective programs  
that prevent common  
infections (eg, intravascular  
catheter sepsis, surgical  
site infections);

6

Good antibiotic  
stewardship; and

7

Better hospital design to  
include more single rooms  
for patients.

## Design of our healthcare facilities

This is seen as critical, as the best way to stop HAI is to eliminate the infectious agent or deny it a reservoir in which to grow.

### Single-room design

In the UK, the NHS Confederation has gone even further; it suggests single rooms with en-suite facilities as a way of optimising infection control.

Studies suggest single rooms with convenient sink access improve hand hygiene compliance. The cost of such a design should be viewed in the long term.

The financial savings from efficient control are, according to a Philadelphia study, three times the cost of control measures. Studies have shown for the Prevention and Control of HAIs, hydraulic and architectural design must ensure adequate access of suitable hand

wash facilities. Basins should be sited, in addition to washroom applications, in all patient areas, treatment rooms, sluices and kitchens. In clinical areas they should be fitted with wrist or elbow operated mixer taps or ideally a mixer with automatic 'no touch' operation.

Beyond building design and hand washing facilities, specifying products designed to break the infection chain, will produce a safer environment, and better patient outcomes.



THE FINANCIAL SAVINGS  
FROM EFFICIENT CONTROL  
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THREE TIMES THE COST OF  
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# CliniMix®

## Thermostatic Wall and Basin Mixers

Today's healthcare market is changing faster than ever before. New government initiatives, guidelines and regulations, and increased public awareness about issues such as MRSA and legionella, demand higher levels of performance from healthcare professionals and the equipment they rely on.

### Progressive Wall and Basin Mixers

Nobody understands these problems better than Galvin Engineering. Our ongoing communication with healthcare professionals ensures we have a thorough understanding of the requirements.

We are always looking for new and better ways of supporting the healthcare sector, which is evident in our latest range of thermostatic mixer taps.

State-of-the-art design and global trends bring new levels of performance and functionality, ensuring our CliniMix® thermostatic taps fully meet the demands of an ever more sophisticated healthcare market.

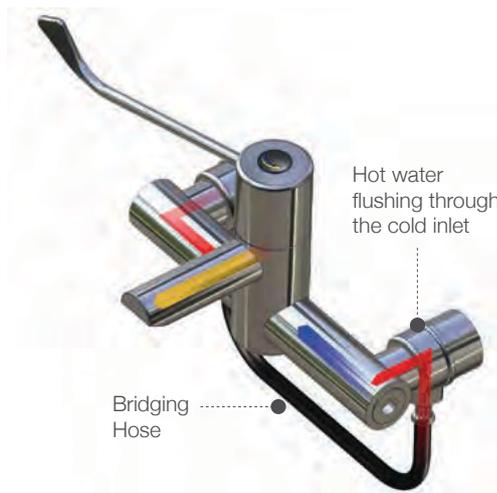
All our taps and mixers have been specifically designed to address current concerns on issues such as infection control, hand hygiene and scald protection.

The CliniMix® Progressive mixer thermostat enables water to be mixed closer to the point of discharge. Therefore 'dead legs' of cold water are eliminated or minimised and the volume of mixed water is reduced. As a result legionella bacteria has less of an opportunity to grow.

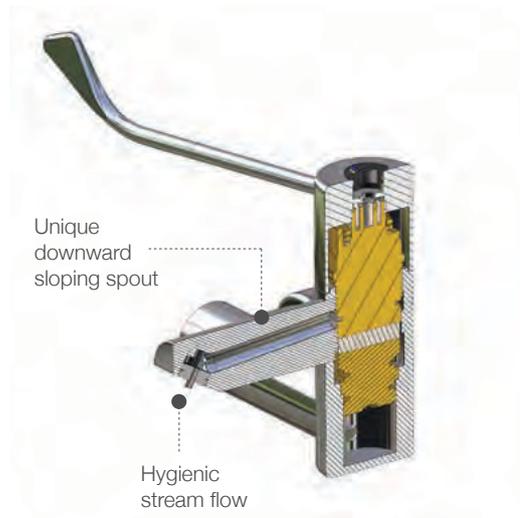
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## Infection Control



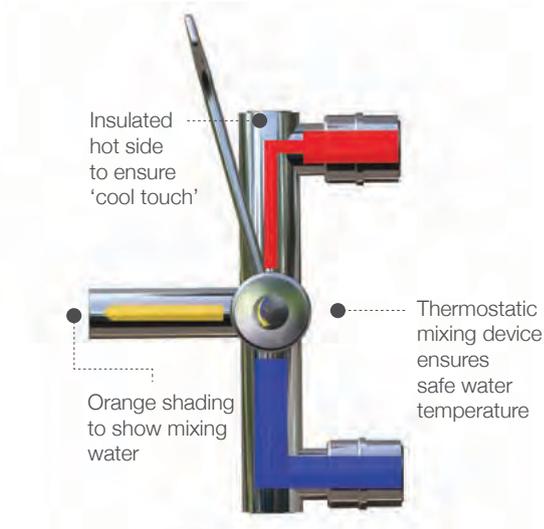
The Clinimix® range features an inbuilt thermal disinfection facility whereby the mixer can be thoroughly cleaned using a unique bridging tube. A manual thermal flush allows you to minimise the build-up of bacteria by re-directing hot water through the cold side of the tap, and bypassing the thermostat.



The Clinimix® Progressive Mixer has completely smooth internal components and body, limiting bacterial development\*. This combined with the unique design of the angled spout and hygienic flow straightener ensures bacteria harbouring water drains through the tap and reduces the build up of scale.

\*A study undertaken in June 2010 by the BioPI Laboratory and the Biological Department of the Jules Verne University, Amiens, shows that in constant conditions, the contamination of tapware with smooth interiors by *Pseudomonas aeruginosa* is 14 times slower than for tapware with rough interiors.

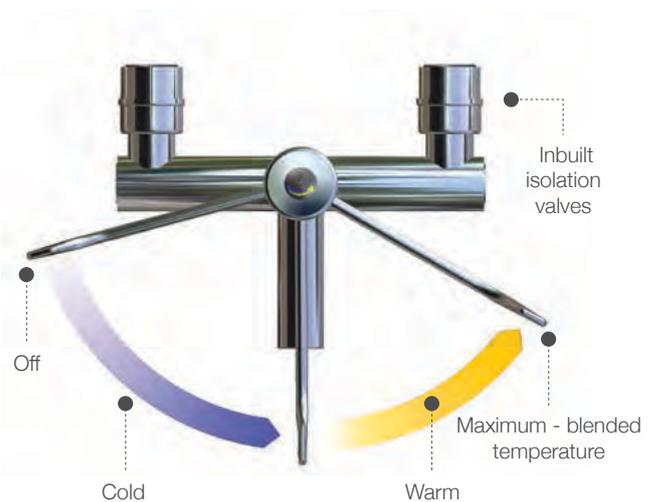
## Scald Protection



At the point of water discharge there is a tendency for the body to become hot during prolonged use and flow. The body of each Clinimix® Wall Progressive Mixer is specifically designed with an insulated internal fitting that keeps its exterior cooler to the touch.

Clinimix® thermostatic mixing valves are fitted with a maximum temperature limiter which ensures the user cannot override the set safe temperature, and therefore reduces the risk of scalding. The thermostatic mixing device will shut off in order to prevent hot water scalding or cold water thermal shock.

## Easy to Use



The longer lever sequential control handle is designed to encourage use by being easily accessed and reached, and the sequential lever provides more precise control of flow and temperature.

Isolation valves are easily accessed at the point of use and all servicing and commissioning can be done without removing the device. This helps minimise the time of commissioning and maintenance.

# CliniLever®

## Lever Action Taps

Sustainability or whole-of-life costs are now recognised as important in the design and development of our healthcare facilities.

### Lever Action Tapware

Galvin Engineering has worked closely with healthcare users, architects and hydraulic engineers to develop the functional requirements of the new range of CliniLever® range of lever action tapware.

By continually reviewing healthcare guidelines, Galvin Engineering is able to provide an innovative design to support evidence-based healthcare design to help beat HAls.

Galvin's design and installation team have based the style and operation of the CliniLever® Healthcare range on infection control, which is at the forefront of our mind.

Best practise has recognised that hobs and benchtops should be free of equipment to reduce the build up of scum and bacteria, and to improve the effectiveness of cleaning. Hence the increased move towards wall mounted taps in healthcare facility design.

There is also a continued move to using equipment that has smooth lines and curves, as any hard edges or ridges increase cleaning time.



INNOVATION TO SUPPORT

EVIDENCE-BASED

HEALTHCARE DESIGN



## Smooth and Resilient Design

The new range reduces contact transmission by eliminating the places where bacteria hide. Inevitably, product selection will have an impact on cleaning regimes. Obviously, a smoothly contoured assembly is much easier and faster to clean effectively. Fitting a wall-mounted tap unit instead of the traditional hob-mounted type will facilitate faster, and more economic cleaning.

While a plethora of finishes can be found on modern taps, the classic chrome-plated finish cannot be surpassed. The chemical bond between the body of the tap and the finish make its durability superior to other surface treatments on the market.

## Fast Easy Maintenance

Featuring patented inline isolators and screen filters, CliniLever® taps can be quickly isolated and removed for cleaning and maintenance using the inline ball valve. The inline filter also reduces the risk of debris fouling the tap valve and internals.



# Conti+®

## Sensor Taps



Equipment for washing stations in hygienically sensitive buildings is a demanding challenge. Conti+® offers exceptional solutions including touch-free taps that set a benchmark when it comes to fulfilling the highest hygiene and drinking water standards.

## Sensor Taps

Touch-free operation and clear forms ensure better hygiene for washing hands and easy cleaning of the washing station. Germ-inhibiting and antibacterial materials combined with hygienic rinsing help to minimise the spread of germs. Conti+® not only pass Australian Standard for potable water (AS4020), they also have a range that complies with s1417 of the Safe Drinking Water Act in the USA (and they comply to NSF61 | NSF372). Therefore, in the USA these Conti+® taps can be labelled as 'lead free'.

Especially designed for the healthcare sector, the high-discharge spout enables hygienic hand washing up to the elbows. The specially developed hygiene mode is ideal for hospitals, medical practices, and other sectors where hand hygiene is particularly important, as it encourages the observance of specified hand-washing intervals via a countdown feature.

SPECIALLY DEVELOPED  
HYGIENE MODE FOR HOSPITALS,  
MEDICAL PRACTICES, AND  
OTHER SECTORS WHERE HAND  
HYGIENE IS PARTICULARLY  
IMPORTANT



## Hygiene



**Hygienic operation**  
Touch-free, safe operation



**Potable-water hygiene**  
Anti bacterial materials  
suitable for drinking water



**Hygienic rinsing**  
Individually adjustable rinse  
durations, intervals, and times



**Thermal disinfection**  
Disinfection without chemical  
water contamination

## Health



There is a direct relationship between health and the availability of clean, fresh water. To ensure that the consistent quality of drinking water is maintained, only materials that comply with the requirements for potable-water installations are used in the manufacture of Conti+® taps. Conti+® only uses metallic materials that are listed on the European Standard (4MS common approach) which ensures they meet the strict German Drinking Water Regulation.

## Prevention



With thermal disinfection, Conti+® taps eliminate dangerous Legionella bacteria without chemical contamination of the water. In this procedure, the entire faucet is thermally treated with a flow of hot water at 70°C for five minutes. Thermal disinfection is made possible by a bypass valve to circumvent the thermostat, which would normally cut off the flow at 43.5°C.

## Monitoring



Trust is good, but records provided by the Conti+® service monitor reassure and improve safety. Usage data is stored in the taps and can be read out using a PC and a wireless connection for evaluation or convenient parameter setting. In this way, hygiene changes from an incalculable risk to a manageable task that the latest technology makes easy to carry out.



# CliniMix®

## Thermostatic Shower Mixers

A thermostatic mixer valve is an essential part of a well-designed shower. Safe, convenient and economical, it ensures maximum showering enjoyment for the users while protecting them from the risk of scalding.

### Progressive Shower Mixers

Regular shower mixers use manual control for both temperature and flow. Thermostatic mixers maintain your desired temperature, using clever technology that monitors and continually regulates the temperature level.

The Clinimix Thermostatic Mixing Technology provides safer and more convenient temperature control and has been designed with both safety and convenience in mind.

### Features include



- + Hot water runs all the way to the mixer eliminating a potential bacterial threat found in dead legs present with conventional inwall thermostatic mixing valves.
- + Water flow starts from cold ensuring safe usage.
- + Designed to provide stable mixed temperature with rapid shut down in the event of cold or hot water supply failure.
- + Maximum temperature limiter fitted for protection from accidental scalding
- + All servicing and commissioning can be done without removing the device. Easy-access isolators help minimise time spent on commissioning and maintenance.
- + Clean smooth lines facilitate fast and easy cleaning and coordinate well with our current ranges of healthcare taps.
- + Water shut down to prevent hot water scalding or cold water thermal shock.

The progressive control lever is designed to encourage use by being easily accessed and to give a more precise control of flow and temperature.

It enables water to be mixed closer to the point of discharge, minimising stagnant warm water which provides ideal conditions for legionella bacteria to grow.

# Antimicrobial Products

Multi-resistant germs are a problem, especially in hospitals and facilities for the elderly. People with weakened immune systems should be offered particular protection against these germs through comprehensive hygiene protocols. Regular cleaning and disinfection reduce the infection risk substantially.

## Antimicrobial Products

HEWI® active+ products provide additional protection. Due to the antimicrobial effect of the HEWI® active+ products, the number of germs on the product surface between the cleaning and disinfection cycles is reduced significantly. This reduces the risk of transfer of pathogens substantially and sustains hygiene effectively.

HEWI® active + reduces the growth of bacteria on the product surface by at least 99.9 percent within 24 hours (3 log reduction). Silver is one of the oldest known antimicrobially active substances. It restricts the metabolism and reproducibility of bacteria, so that the microorganisms die off.

Due to the multiple mechanisms of action, development of resistance to the microsilver used is virtually excluded. On the contrary, its effectiveness against multi-resistant microorganisms, for example, MRSA and MRSE, has been verified by independent test institutes.

The active ingredient microsilver is incorporated in the polyamide during production in a complicated manufacturing process, so that both constituents are securely bonded with each other. HEWI® active+ products have a depot effect. The incorporated microsilver continuously discharges silver ions, so that the antimicrobial effect is retained long-term. As it is not a surface coating, external effects such as cleaning products or UV light do not impair the effect of HEWI® active+.



# GalvinCare®

## Accessible Solutions

Buildings which are accessible to the public set particular requirements for the design. They must be representative, but at the same time they must also be functional, sustainable and economical.

### Accessible Solutions

Public buildings are designed for high visitor frequency. They should be accessible to as many people as possible, regardless of their physical capabilities. Products used in public buildings have to be easy-care, robust, functional and intuitive,

as well as safely operable. Tailor-made products make it easier for architects and designers to implement a coherent over-all concept, which is matched to individual needs, right down to the smallest detail.

#### Retractable Grab Rails

- + Flexible hold
- + Ergonomic design
- + Available with comfort elements such as an armpad or a toilet-flushing mechanism
- + Integrated toilet-flushing mechanism and toilet-roll holder can be also reached in the sitting position
- + Available in different lengths

#### Toilet Pans

- + Height adjustable WC Modules offer accessible comfort and conveniences at the press of a button





**Grab Rails**

- + Pleasant to touch
- + Supports movement sequences and provides a secure hold
- + Easy to grip
- + Space-saving alternative to the hinged support rail
- + Available in different lengths

**Accessories**

- + High quality and functional accessories for the wash basin, toilet and showers are available

# Our Values

One team with long term relationships built on:



# Our Credentials



Environment  
ISO 14001  
SAI GLOBAL

(Certificate # CEM21755)



Quality  
ISO 9001  
SAI GLOBAL

(Certificate # QEC0133)



A family  
owned  
Australian  
business

**2009** ISO 9001 Recognition of  
15 Years of Certification

**2010** National FBA Best 3rd Generation  
Family Business

**2014** WA FBA Family Business  
Hall of Fame

**2016** UK Mental Health Design Award

# Our Commitment

Galvin Engineering is a third generation family business established in 1930 and has been built on long term relationships and a strong company culture of Pride, Accountability and a Will Do Attitude. We are located across Australia with offices in Perth, Melbourne, Brisbane, Hobart and Sydney and distributors in New Zealand, the UK and the USA. The company is accredited to ISO9001 Quality System and ISO14001 Environmental System.

Our business unit Galvin Specialised® is totally focussed on designing, and supplying specialised taps and fixtures for better health and safer communities. Our vision is to be a leader in innovative taps and fixtures for health and custodial facilities.

We strive to be mindful of the unique challenges of modern-day commercial environments. Our goal is to provide your project with tapware solutions that are specific to your requirements and are contemporary in design. By specifying Galvin Specialised commercial taps and fixtures, and other Galvin Engineering product ranges, your project team can be assured of:

## Reliability

As a proud Australian family owned manufacturer, Galvin Engineering has provided commercial tapware and fixtures to thousands of commercial projects for over 80 years. Our ethos depends on delivering consistently high-quality products to project sites: in-full and on-time. By having local staff and warehouses to support the client through the life of the building, customers have been able to rely on us to meet their business critical challenges.

## Technical Expertise

Our dedicated team of new product designers and R&D specialists are able to provide our clients with innovative designs and technical support for the various product issues that may arise over the lifetime of commercial premises. Our team has over 200 years of experience in design, manufacturing and in-field sales expertise in the area of commercial plumbing. This experience and knowledge comes from being the provider of choice for many public and private facilities across Australia and New Zealand, and it ensures you have the best current products for your project.

## Manufacturer's Warranty

Galvin Engineering offers long warranty periods suitable for the requirements of commercial projects.

## Product Quality

Galvin Engineering is an ISO 9001 certified company. Our products are manufactured and certified to all relevant Australian Standards or Watermarks, and relevant local government approvals.

Coupled with a culture of superior after-sales support, we provide our clients with total confidence that the products we supply and install can be relied upon to fulfil their purpose and withstand the significant workloads that arise in commercial environments.

## Focus on the Community

Galvin Engineering is a strong advocate for looking after the earth and preserving Australia and New Zealand's lands, coasts, wildlife, vegetation & climate. As an ISO 14001 certified company, we measure how effectively we are managing our responsibilities and we actively focus on minimising the environmental impact of our business processes. Charitable endeavours are also important to our team and with this in mind we undertake a number of team activities each year, including donating blood, providing garden care for the elderly, supporting the homeless, and raising funds for breast and prostate cancer.

## Customer Service

Our aim is to provide total room product solutions to make it easier for our clients in building their projects. We value input into our designs and are happy to customise products to suit our client's needs. We will also provide product samples, demonstrations and mock-up installations, to ensure the end users are satisfied with the final choice of product.



# galvinspecialised

commercial taps + fixtures

We design and supply specialised commercial taps and fixtures for better health and safer communities.

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- Australia
- New Zealand
- UK
- USA



**A family  
owned  
Australian  
business**

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