



Grinnell

Solutions at every turn.



GROOVED PIPING SYSTEMS

HVAC INDUSTRY

*tyco*

## PROS TURN TO GRINNELL PRODUCTS

GRINNELL Mechanical Products, a premier brand of Tyco International, represents a complete suite of mechanical products for HVAC. With more than 160 years of experience, GRINNELL Mechanical Products has a reputation for offering solutions that allow contractors, engineers, and distributors faster, more effective tools for joining pipe over traditional methods. GRINNELL Mechanical Products is synonymous with great service, offering professional engineering and planning support services. In addition, its knowledgeable sales support and timely technical services ensure quality customer care to all global customers. Best of all, GRINNELL Mechanical Products are backed by a 10-year Limited Warranty\* – the industry’s longest and strongest.

**GRINNELL Mechanical Products has a solution for your mechanical needs.**



WHY GRINNELL?

## GREAT REASONS TO JOIN WITH GRINNELL

### Universal Rigid Coupling

- The GRINNELL Rigid Coupling has a universal tongue-and-groove design, which grips the entire circumference of the pipe grooves and ensures trouble free installation.

### The Best Warranty in the Industry

- GRINNELL Mechanical Products offers a unique 10-year Limited Warranty on all of its products\*.

### GRINNELL Mechanical Services

- The GRINNELL Mechanical Services group works seamlessly with engineers and contractors to create the most cost-effective and time-efficient piping solutions from design to build.
- Our experts specialize in CAD blocks, cost comparisons, thermal movement analysis and BIM.

### Green Solutions

- Products cast in our Anniston, Alabama, foundry are manufactured with **90% recycled metal** that would otherwise have been part of our solid waste.
- All waste paper, used cardboard, scrap wood and EPDM waste from our plants is recycled.

### Industry Pioneer

- Founded in 1850, GRINNELL Mechanical Products has earned a reputation as a reliable, respected and trusted brand over the last 160 years.

### Global Presence

- GRINNELL Mechanical Products provides global solutions that flexibly address challenges our customers face, including design in one country for construction in another.

\*Except for the G-MINE line of products which has a six-month Limited Warranty.

# THE GRINNELL EDGE

## Reduces Installation Time and Cost

Grooved products help reduce installation cost by up to 30% by shortening overall completion time.

## Accommodates Pipe Expansion

GRINNELL Flexible Couplings are able to absorb linear movements of pipework due to temperature changes, eliminating or minimizing the use of expansion joints.

The GRINNELL Mechanical Services team offers customers assistance with designing flexible couplings into thermal expansion projects.

## No Special Equipment Needed

Grooved products are assembled onto a standard groove and do not require special tools or additional training to complete the job.

## Health and Safety Benefits

Compared to traditional pipe joining methods like welding and soldering, grooved products provide a safer and better working environment.

## GRINNELL Grooved Systems are:

- **Fast** - Install easily
- **Easy** - Require only minimal training to complete the job
- **Safe** - Eliminate flames and fumes that exist during welding

## Product Characteristics

- **Gasket Types:** GRINNELL Mechanical Products offers a variety of gasket types for most applications, including Grade "E" and "EN" EPDM, Grade "T" Nitrile, Grade "L" Silicone, and Grade "O" Fluoroelastomer gaskets on many of its couplings.
- **Approvals:** Most of the HVAC products in the GRINNELL Mechanical Products Line are UL, FM, ULC, VDS, LPCB, WRAS, NSF, and DVGW listed and approved.
- **Size Ranges:** No matter the job size, GRINNELL Mechanical Products has a solution, offering couplings and fittings that are sized up through DN600 (24 inches).
- **Finishes:** GRINNELL Mechanical Products offers both painted and galvanized finishes.

## Couplings



### Rigid Couplings

- GRINNELL Rigid Couplings, with tongue-and-groove design, are easy to install and form a strong, rigid connection.



### Flexible Couplings

- GRINNELL Flexible Couplings allow for angular and linear deflection, thermal expansion and contraction, and misalignments of pipe.



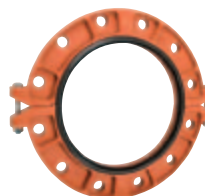
### Grooved Mechanical Tees

- GRINNELL Mechanical Tees are ideal for use in retrofit or equipment hookup installations. They can be positioned along the pipe at the proper location in the field, ensuring exact lineup of the branch outlet connection. They can be used in place of a tee, a cross connection, or a welded outlet where a threaded or grooved outlet is needed.



### Mechanical Outlet Couplings

- GRINNELL Mechanical Outlet Couplings combine the features of a pipe-joining coupling and an integral reducing outlet. This design eliminates the need for mechanical or reducing tees and associated couplings. Outlet Couplings are available with grooved, male-threaded, or female-threaded outlets.



### Flange Adapters

- GRINNELL Flange Adapters allow a direct transition from flanged connections to GRINNELL Grooved Components. Flange bolt patterns conform to ANSI (125/150), DIN2532/BS4504 (PN10/PN16), and AS2129/BS10 (Table E) Standards.

Products may only be available in select regions. For information on availability, contact GRINNELL Mechanical Products



## Fittings

### Cast and Fabricated Fittings

- GRINNELL Ductile Iron and Fabricated Steel Grooved Fittings provide an economical and efficient method of changing direction, adding an outlet, and reducing or capping piping systems.



## Valves

### Balancing Valves

- GRINNELL Circuit Balancing Valves are designed to achieve accurate and efficient balancing of hydronic heating or cooling systems. One valve serves five functions: throttling, measuring pressure and temperature, positive shutoff, draining and filling.



### Butterfly Valves

- GRINNELL Butterfly Valves provide dependable, long-term service and superior control of fluid flow in piping systems. Flow can be from either direction, and the valves can be positioned in any orientation.



### Triple Duty Valves

- GRINNELL Triple Duty Valves are designed for installation in pump discharge piping and function as spring-loaded silent check valves, flow control, and shut-off valves.



## Accessories

### Check Valves

- By allowing water to flow in only one direction, GRINNELL Check Valves minimize water hammer caused by flow reversal.



### “Y” Strainers

- GRINNELL “Y” Strainers use a perforated stainless steel screen to keep debris from damaging piping equipment such as pumps, meters, valves, compressors, and traps.



### Tee Strainers

- GRINNELL Tee Strainers are designed to remove particles from pipelines where a compact, accessible strainer is needed to protect pumps, meters, valves, and similar mechanical equipment.



### Suction Diffusers

- GRINNELL Suction Diffusers remove foreign particles and provide proper flow conditions to the pump. Where space is limited, diffusers can replace the straight pipe normally required to reduce turbulence.



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## UNILIFE MEDICAL SOLUTIONS | Harrisburg, PA, USA



GRINNELL Mechanical Services (GMS) helped SSMI meet a very tight deadline on this project. GMS designed a comprehensive drawing package to enable SSMI to install the entire piping system while waiting for the system's pumps to arrive, helping SSMI shave 6-10 weeks off its installation time.

Using GRINNELL products, SSMI was able to stay within a tight projected budget while providing a robust piping system that accommodates almost 16,000 square metres of offices and assembly lines.

***"GRINNELL Mechanical Products saved us a lot of money, significantly cut labor time, and even eliminated the need for piping system extensions."***

Ken Lintelman, Project Manager for SSMI Inc.

## AUGUSTINE HOUSE | Canterbury, UK

Contractor Denne Mechanical Ltd. partnered with GRINNELL Mechanical Products to develop a unique heating and cooling system for the Augustine House – a new library and office building for the prestigious Canterbury University.

The use of a grooved system proved to be economical, efficient and environmentally-responsible by eliminating the need to weld pipe and reducing the use of flanged components. It increased the speed of installation, reduced the overall project time and lowered costs.



***"Exceptional service, we will definitely use GRINNELL Mechanical Products again in the future."***

Richard Plain, Project Manager for Denne Mechanical Ltd.

## GRINNELL SOLUTIONS AT WORK

GRINNELL Mechanical Products capability spans the full spectrum of applications in the HVAC industry, from residential, education and health care projects to the largest municipal, infrastructure and public works installations. Architects, engineers, construction pros and facilities managers worldwide have learned to trust GRINNELL Mechanical Products for partnership strength and ease in implementation.



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