



**THERE'S TOUGH.  
THEN THERE'S FULL-TORQUE TOUGH.**

GET A HANDLE ON HYDRAULIC LEAKS WITH  
GATES FULL-TORQUE NUT™ COUPLINGS

## Increase Productivity and Equipment Uptime.

Now available on Gates MegaCrimp® and GlobalSpiral™ couplings, Gates innovative Full-Torque Nut™ technology delivers fittings and assemblies that are stronger and more durable than ever.

- > **REVOLUTIONARY, PATENTED DESIGN**
- > **MAXIMUM TORQUE TOLERANCE**
- > **UP TO 32,000 PSI BURST PRESSURE PROTECTION**
- > **STRONGER AND MORE DURABLE THAN TRADITIONAL STAKED-NUT FITTINGS**

On the assembly line or in the field, the unmatched performance and endurance of our couplings and assemblies help keep your operations running at optimal speed and efficiency.



Extensive red rust corrosion damage shows on competing coupling tested under SAE J516 and ASTM B117 salt-spray conditions.

Gates couplings, featuring proprietary TuffCoat™ plating, show no red rust corrosion after undergoing identical testing conditions.

## Gates TuffCoat™ Plating.

In addition to offering unmatched resistance to damage from over torquing, Gates couplings have the added feature benefit of TuffCoat™ plating, with the ability to stand up to the toughest conditions.



## For When the Going Gets Tough.

TuffCoat™ plating is now rated at over 500 hours of protection against red rust corrosion—over 500 percent better than the 72-hour SAE standard.



## ELIMINATE DAMAGED COUPLINGS AND COSTLY LEAKS



Hydraulic leaks in fluid power create production and safety headaches throughout your operation. Fortunately, Gates has engineered a solution to one of the most common causes for hydraulic leaks: coupling nuts or seats cracked from over torquing.

Robust swivel joint allows for maximum torque



Up to 24,000 psi burst pressure (-16 size G6K)



**Gates new Full-Torque Nut™ technology** employs a large, smooth holding shoulder for consistent transfer of input torque to clamping force, evenly distributing stress forces at the nut for maximum resistance against cracking—even when over torqued.



# MEGACRIMP® COUPLINGS

## Starts round, stays round.

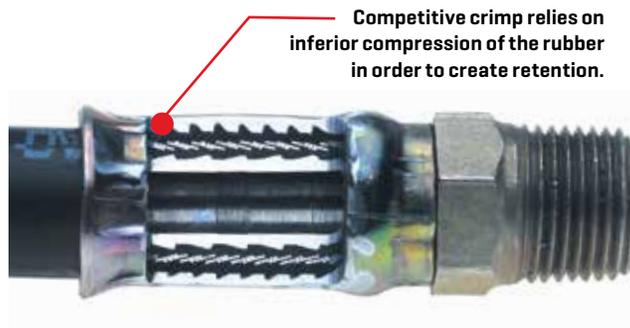
Crimping often results in hose tube distortion that actually promotes leaking. You can avoid this problem completely with a leak-proof seal that surpassed one million impulse cycles in grueling design tests. With MegaCrimp®, there's no "polygon effect" during crimping. Gates patented "C" insert stays round—like the hose—for a perfect fit.



A comparison of cross sections with other one-piece couplings show how crimping can distort the hose tube, which often contributes to the formation of leak paths, while MegaCrimp® couplings stay round.

## Once inserted, stays inserted.

MegaCrimp® couplings feature a "bite-the-wire" design that prevents coupling blow off once the assembly is pressurized because of an advanced tooth profile design, offering far better coupling retention than the competition.

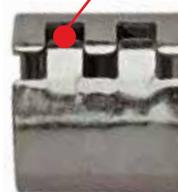


MegaCrimp® design employs wire-biting tooth design for solid grip and unmatched retention.



## Simplify inventory, save resources.

One MegaCrimp® coupling can accommodate many different hose ODs for both one and two-wire constructions. In addition to setting the new standard for hydraulic couplings and helping keep equipment leak free, MegaCrimp® helps gain efficiencies that save you money and lessen your operation's inventory costs.



Because the "C" insert ensures an even distribution of crimping forces to form a concentric seal, the same size MegaCrimp® coupling can be used on hoses with different constructions and wall thicknesses.

# GLOBALSPIRAL™ COUPLINGS

## No-skive coupling for high-pressure, high-impulse, spiral-wire applications.



Extreme high-pressure, high-impulse hydraulic applications call for high performance technology specifically designed for optimal results. Gates GlobalSpiral™ couplings boast a two-piece, no-skive design ideal for the task and can be used with all Gates four- and six-spiral wire hydraulic hoses.

The two-piece design makes it possible to pull the ferrule away from the hose end and check that the stem is fully and securely inserted into the hose. GlobalSpiral™ couplings eliminate the need for skiving, thereby reducing assembly time, labor, fabrication errors and contamination of the fluid power system.

## Superior performance.



In performance tests, GlobalSpiral™ couplings surpassed one million impulse cycles at +250°F [121°C] without causing stress cracks in the hose tubing. Eliminating premature failures caused by lead stringers in leaded steel bar stock, both the stem and ferrule are machined from unleaded steel bar stock for maximum strength at working pressures up to 8,000 psi [551.6 bar].

## Fewer part numbers.

GlobalSpiral™ couplings are available in more than 30 thread configurations and designed to work with a wide variety of Gates spiral hoses and crimpers, helping you minimize inventory requirements. The replacement of existing coupling inventories with the GlobalSpiral™ stem and ferrules can result in one-third fewer part numbers. This estimate is based on the fact that other companies require at least two, or sometimes three, different types of couplings to handle their four- and six-spiral wire hose lines.



## GATES SUPPORT — SECOND TO NONE

**Learn how Gates solutions and support can help you keep your operation running strong.**

For more information about Gates innovative coupling technologies and how they can help improve the performance of your operation, visit [www.gates.com/FluidPower](http://www.gates.com/FluidPower).



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34070 06/13