

CAN HAUL 208 TONS.

THE TRAIN IS PRETTY STRONG TOO.

Introducing Limitless Bonding.

How tough are the new LOCTITE
Universal Structural Bonders?

LOCTITE[®]

Tough Enough to Haul a Freight Train with 3 Grams & 1 Hour of Cure.

The Challenge:

Prove the speed, strength and durability of LOCTITE® Universal Structural Bonders by pulling a 208-ton freight train.



The Method:

A connecting rig was designed by Henkel engineers. After cleaning and sanding the plates, 3 grams of LOCTITE® Universal Structural Bonder were applied to the plate, and allowed to cure for 60 minutes. The coupler was connected between the engine and the first car.

For the rest of this incredible story, watch the results at www.limitless-bonding.com

If LOCTITE® Universal Structural Bonders can handle this, imagine how it can handle your toughest repair challenges.

The possibilities are limitless.

LEARN MORE

Contact us to learn more about LOCTITE® HY 4070™ and LOCTITE® HY 4060™ GY and Henkel's broad array of maintenance and repair solutions – visit www.limitless-bonding.com



Introducing Limitless Bonding*. For Limitless Repair.

LOCTITE® Universal* Structural Bonders—so strong, versatile and durable, the possibilities are limitless.

Nothing creates a feeling of pride more than a plant running smoothly. So when something goes down, time is of the essence. And every minute spent chasing down parts or rigging a fix is not just a mechanical challenge, but a personal one.

Powered by innovative hybrid technology, LOCTITE® Universal Structural Bonders can help keep your plant running with repairs that are fast, easy and durable. **For Limitless Repair. When time is anything but.**



Essential in Any Toolbox.

LOCTITE® Universal Structural Bonders are the newest additions to the portfolio of LOCTITE® adhesives, sealants and protective coatings, helping industries around the world reduce maintenance costs, increase reliability, and improve the safety and efficiency of their plants and equipment.

LOCTITE® HY 4070™

Ultra-Fast, Universal Repair Adhesive.



With a powerful combination of speed and strength, LOCTITE® HY 4070™ solves virtually any repair challenge, when time is limited. Able to rapidly bond a variety of substrates with high strength performance, LOCTITE® HY 4070™ makes versatile repairs that are fast and easy. It's an essential repair adhesive.

Your Benefits:

- Ultra-fast fixture—reduces maintenance down time
- High gap filling capability—excellent for universal repairs
- Rapid bond strength on many materials such as metal, plastics, rubber, wood, paper, leather—opens repair possibilities
- A non-drip formula gel product—stays where applied
- Good moisture, temperature, UV and chemical resistance—long lasting reliable repairs
- Ready to use syringe package with nozzle—convenient

| Product | Item Number | Pack | Color/Viscosity | Mix Ratio | Fixture Time (GBMS) | Working Time | Lap Shear Strength† (N/mm²) | | | | Gap Fill | Temperature Resistance |
|-------------------|-------------|------|-------------------------------------|-----------|---------------------|--------------|-----------------------------|-------------------|---------------|---------|--------------------------------------|------------------------|
| | | | | | | | Steel (Grit Blasted) | Aluminum (etched) | Polycarbonate | Nitrile | | |
| LOCTITE® HY 4070™ | 2264448 | 11 g | Slightly cloudy to light yellow gel | 10:1 | <1 minute | 3-4 minutes | 24-26 | 22-24 | †† | †† | Up to 5mm depending on bond geometry | 120°C |

†ISO 4587, After 24 hours, 22°C | ††Bond exceeded strength of substrate | Contact your Henkel Representative for a Technical Data Sheet

LOCTITE® HY 4060™ GY

Durable, 5-Minute Structural Repair Adhesive.



The go-to adhesive for general-purpose repair, offering both performance and durability. LOCTITE® HY 4060™ GY provides fast fixture, and excellent bond strength, regardless of temperature and moisture conditions. LOCTITE® HY 4060™ GY is an ideal replacement for traditional two-part, 5-minute epoxies.

Your Benefits:

- Fast fixture time even at low temperatures—reduces maintenance costs
- High gap filling capability—excellent for universal repairs
- Excellent bond strength on many materials such as metal, plastics, rubber, wood, paper, leather—opens repair possibilities
- Machinable on metals—reduces replacement costs
- Very good chemical and solvent resistance—increases repair reliability
- Color indication to ensure consistent, proper mix

| Product | Item Number | Pack | Color/ Viscosity | Mix Ratio | Fixture Time (GBMS) | Working Time | Lap Shear Strength† (N/mm ²) | | | | Gap Fill | Temperature Resistance |
|----------------------------|-------------|-------|------------------------|--------------|---------------------------|-----------------|--|----------------------|---------------|---------|---|---------------------------|
| | | | | | | | Steel (Grit Blasted) | Aluminum (etched) | Polycarbonate | Nitrile | | |
| LOCTITE® HY 4060™ GY | 2267079 | 25 ml | Grey (mixed) Gel | 1:1 | 4-6 minutes | 3-5 minutes | 16-18 | 11-14 | 5-7 | †† | Up to 5mm depending on bond geometry | -40°C to 150°C |

†ISO 4587, After 24 hours, 22°C | ††Bond exceeded strength of substrate | Contact your Henkel Representative for a Technical Data Sheet



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As used herein, "Limitless" and "universal" refer to the number of applications in which LOCTITE® HY 4060™ GY and LOCTITE® HY 4070™ may be used. It is not intended to mean that LOCTITE® HY 4060™ GY and LOCTITE® HY 4070™ bond all substrates under all conditions of use, nor should such usage be implied by any statement made in this brochure. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. We recommend that each prospective user test their proposed application before use. This product may be covered by one or more United States or foreign patents or patent applications.*

