

#### **EOUIPMENT SERVICES**

A full range of equipment services including factory repairs, field service of LOCTITE brand and other Henkel equipment, rental equipment, and unique engineering services.

#### **DISPENSE SYSTEMS**

A comprehensive offering of dispensing systems ranging from manual to automated, and suited for an array of adhesive package sizes.

#### **AUTOMATED ROBOTIC SYSTEMS**

Automated robotic dispensing systems are offered in multiple configurations to meet all your process needs.

#### **LIGHT-CURING SYSTEMS**

A wide range of LED light-curing systems that provide high power, portability, continuous duty, and long life.

#### **CONSUMABLES FOR DISPENSING SYSTEMS**

A comprehensive line of LOCTITE dispensing tips and static mix nozzles.

## **COMPATIBLE ADHESIVE TECHNOLOGIES**

LOCTITE equipment is specifically designed to work with our broad range of adhesive solutions.



Anaerobics



Cyanoacrylates



Light-Cures





Silicones



I

Acrylics





Two Components





As a total solutions provider, Henkel's exceptional support network will ensure that all your LOCTITE equipment service needs are met from start to finish. Experienced technical experts are readily available to provide the following and more:

- Product recommendations to ensure the correct equipment is always installed.
- On-site integration and start-up services to support new users.
- · Customisation services to ensure LOCTITE equipment solutions fit seamlessly into your process.
- · On-site or remote training programs to make sure you have all the information you need to be successful.

Properly maintaining your equipment after installation is critical to achieving top performance. Our equipment experts are also here to offer everything you need to sustain that ongoing performance. The following services are offered to ensure you have all the after-sales support needed:

#### **WARRANTY SUPPORT**

Henkel offers a full one-year warranty on all of our equipment. We will ensure you are up and running as soon as possible if there is any issue.

#### **FACTORY REPAIR**

If you have LOCTITE equipment in need of repair, Henkel can restore it by using original factory parts, and testing to original quality specifications. All repairs will be handled by our service and repair department in Düsseldorf, Germany.

#### **CALIBRATIONS**

Henkel provides calibration services for all of its light meters. All units are also inspected during calibration for any potential repairs. In addition, you can sign up with Henkel for calibration reminders.

#### FIELD SERVICE

Henkel technicians are available to travel to your location for repair services, preventative maintenance, training, or assistance in setting up a new system.

#### **CUSTOM SPARE PARTS**

Custom-order spare parts and accessories are available through the Henkel Equipment Services team. (Standard spare parts are available through traditional purchasing channels.)



LOCTITE equipment offers high-quality dispensing systems to the marketplace. Henkel's experience and partnerships between customers, application engineering, and equipment engineering means when you purchase LOCTITE equipment, you get the highest level of expertise, backed by technical service and support unmatched in the industry. The broad range of LOCTITE dispensing systems offers you solutions for an array of adhesive package sizes for various market applications.

Selecting a compatible Dispensing Solution is critical to achieve optimum performance. The primary considerations for selecting a Dispensing Solution include:

Adhesive Chemistry	Adhesive chemistries cure with specific mechanisms or exposure to certain environments.
Package Size and Type	Adhesives are typically offered in various package sizes, depending on shelf life or environmental stability.
Process Requirements (Manual, Semi-Automated, Automated)	Manufacturing process requirements vary in production rate, accuracy/repeatability, part size/geometry, and dispense pattern.

**Typical Dispensing Solutions include:** 

#### **CONTROLLERS & DISPENSE RESERVOIRS**

LOCTITE Controllers and Dispense Reservoirs are designed to quickly and easily integrate with each other to deliver a cost-effective solution, as well as improve performance over manual dispensing methods. Compatible with adhesive packs from 50 ml to 2 kg.

#### DISPENSE VALVES

LOCTITE Dispense Valves for adhesive or fluid delivery are uniquely designed to meet different manufacturing needs, and should be combined with a LOCTITE reservoir and/or a controller.

#### **BOTTLE DISPENSE SYSTEMS**

LOCTITE Bottle Dispense Systems are designed to meet demanding manufacturing needs for dispensing adhesives, packaged in a LOCTITE or any other brand bottle.

#### **SYRINGE DISPENSE SYSTEMS**

LOCTITE Pneumatic Syringe Dispense Systems can accommodate multiple adhesive package sizes and conveniently dispense with precision and ease.

#### **CARTRIDGE DISPENSE SYSTEMS**

LOCTITE Cartridge Dispense Systems are designed to support both handheld or benchtop operations, and allow you to dispense directly from the package with ease.

#### **ANAEROBIC DISPENSE SYSTEMS**

LOCTITE Anaerobic Dispense Systems are designed to apply LOCTITE anaerobic products for threadlocking, retaining, and sealing in a wide range of applications – from ID bore coating to gasket making.

#### **VOLUMETRIC DISPENSE SYSTEMS**

LOCTITE Volumetric Dispense Systems work with positive displacement technology, as opposed to conventional pressure/time systems, to deliver a high level of precision and accuracy.

## **Controllers & Dispense Reservoirs**

## **RC30 Manual Reservoir**

IDH: 2814022

The LOCTITE RC30 Manual Reservoir is suitable for the application of LOCTITE adhesives with a manual applicator at workstations such as in workshops, laboratories, and industrial installations. The reservoir is equipped with a low-level sensor that sends an electronic signal to a LOCTITE controller and is typically integrated into a dispensing system that consists of a dispensing valve and any LOCTITE dispense controller. The reservoir can accommodate most standard LOCTITE adhesive bottles.



#### **FEATURES:**

- Cost-effective manual dispensing reservoir for a variety of LOCTITE adhesives.
- · Low-level sensor.
- Integrates directly with LOCTITE valves and controllers.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**



Scan OR code to check out our new how-to-use video.



## RC32/RC34 **Automatic Reservoirs**

IDH: 2814023 (RC32), 2830690 (RC34)

The LOCTITE RC32 and RC34 Automatic Reservoirs are suitable for the application of LOCTITE adhesives in semi- or fully-automated assembly processes where a LOCTITE controller is already in use. They allow for pressure adjustment and/or management directly from the LOCTITE controller, and include a low-level sensor. The reservoirs can accommodate most standard LOCTITE adhesive bottles.



#### **FEATURES:**

- Cost-effective dispensing reservoir for a variety of LOCTITE adhesives.
- RC32 includes single-point, low-level sensor.
- RC34 includes dual-point, low-level sensor.
- Integrates directly with high-functioning LOCTITE controllers.
- Allows for reservoir pressure to be managed by external controller.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**











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## **RC40 Integrated Semi-Automatic Dispenser**

IDH: 2814025

The LOCTITE RC40 Integrated Semi-Automatic Dispenser combines a dual-channel dispense controller and a reservoir into a single unit. The controller provides two independent digital timing channels that provide control of two pneumatic outputs. These outputs can be used to control dispense valves or any other pneumatic device. The reservoir can accommodate most standard LOCTITE adhesive bottles



#### **FEATURES:**

- Integrated reservoir and controller solution in one system.
- Two independent digital timing channels.
- Easy-to-use keypad with LCD display screen for entering values.
- Simple menu-driven commands.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**







## **RC50 Integrated Dispenser**

IDH: 2814024

The LOCTITE Pulse RC50 Integrated Dispenser, I4.0, is an enhanced version of the RC40 Integrated Dispenser and offers a digital touch screen for operation, as well as a precision regulator for low-viscosity dispensing. The dispenser is industry 4.0 compatible, providing enhanced communication / connectivity via ethernet or Wi-Fi. The reservoir can accommodate most standard LOCTITE adhesive bottles.



#### **FEATURES:**

- Integrated reservoir and controller solution in one system.
- Two independent digital timing channels.
- Easy-to-use, full-colour touch screen.
- The dispenser is industry 4.0 compatible, providing enhanced communication / connectivity via ethernet or Wi-Fi.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**











Scan QR code to check out our new how-to-use video.



#### **Controllers & Dispense Reservoirs**

#### **Dual-Channel Controller**

IDH: 1275665

The LOCTITE Dual-Channel Controller is a versatile, multi-function controller for actuating one or two dispensing valves, as well as appropriate peripheral equipment, such as an advancing slide, rotorspray, an in-line flow monitor or reservoir. Reservoir pressure is regulated by means of a precision regulator and measured by a digital transducer. This controller can be integrated into fully-automated assembly line operations by means of the PLC interface.



#### **FEATURES:**

- Two-channel multi-function controller.
- Digital readout for reservoir pressure, program step number, status of dispense, and dispense time in seconds.
- Four independent dispense programs can be stored in memory.
- Full integration capability into highly-automated production systems.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**















## **Industrial Hand Tool Manufacturer Increases Throughput &** Quality with a Semi-Automated Adhesive Process.

#### **CUSTOMER CHALLENGE:**

An industrial hand tool manufacturer was challenged with the assembly of handle grips onto various tools. The manual process was slow, complex, and not always reliable or repeatable.

#### **HENKEL SOLUTION / BENEFITS:**

The use of the LOCTITE RC40 Integrated Dispenser along with the LOCTITE Cyanoacrylate Valve to apply a toughened LOCTITE Instant Adhesive was the solution. The LOCTITE equipment feeds two workstations from one dispense system and applies the adhesive to the tool handles with the following benefits:

- Consistent/repeatable application (scrap rate reduction)
- Automated process (increased productivity)
- Dual application (manual labour reduction)



Photo representative only, not actual application.

## **Cyanoacrylate Dispense Valve**

IDH: 318654

The LOCTITE Cyanoacrylate Dispense Valve is designed for cyanoacrylates, retaining compounds, and threadlockers. It has a small profile and its simple design facilitates field repair. The Cyanoacrylate Dispense Valve can be used with integrated dispense reservoirs to form a complete dispensing system.



#### **FEATURES:**

- Specifically designed for the dispensing of LOCTITE cyanoacrylate adhesives.
- Compact size and weight.
- Simple design which facilitates field repair.
- Easy integration with LOCTITE reservoirs and controllers.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**





## CA

## **Light-Cure Dispense Valve**

IDH: 218280

The LOCTITE Light-Cure Dispense Valve is designed for low- to medium-viscosity light-cure acrylics, retaining compounds, and threadlockers. It has a small profile and its simple design facilitates field repair. It can be used with integrated dispense reservoirs to form a complete dispensing system.



#### **FEATURES:**

- Specifically designed for the dispensing of LOCTITE light-cure adhesives.
- Compact size and weight.
- Simple design which facilitates field repair.
- Easy integration with LOCTITE reservoirs and controllers.





#### **Dispense Valves**

## **Stationary Applicator Valves**

IDH: 88644 (1/4"), 88645 (3/8")

The LOCTITE Stationary Applicator Valves with a 1/4" or 3/8" feed line are slim, lightweight, patented, no-seal dispense valves. These stationary applicators require a controller and product reservoir and can be used with an integrated dispense reservoir to form a complete dispensing system.



#### **FEATURES:**

- Specifically designed for precision dispensing of LOCTITE adhesives.
- Slim, lightweight, no-seal design.
- Adjustable opening and closing speeds for increased dispensing control.
- Easy integration with LOCTITE reservoirs and controllers.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**













## **VA40 CA Volumetric Valve**

IDH: 2333708

The LOCTITE VA40 CA Volumetric Valve is a positive displacement metering valve which dispenses a precise volumetric drop of adhesive with each cycle. The LOCTITE VA40 is specifically designed to dispense drops of cyanoacrylate with precise dosing in the range of 1,5 to 6 microlitres.



#### **FEATURES:**

- Specifically designed for volumetric dot dispensing of LOCTITE cyanoacrylate adhesives.
- Quick and reliable priming.
- Long-life seal design minimises maintenance requirements.
- Easy integration with LOCTITE reservoirs and controllers.





## **Low-Viscosity Handheld Valve**

IDH: 444643

The LOCTITE Low-Viscosity Handheld Valve is a pneumatically-operated, adjustable seat valve designed to be used in conjunction with pressure/time dispense systems. This valve is capable of delivering very small drop sizes, even with low-viscosity products. It can be used especially for cyanoacrylates and other low-pressure applications.



#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**





#### **FEATURES:**

- Specifically designed for the dispensing of low-viscosity cyanoacrylate and anaerobic adhesives.
- Slim, ergonomic design.
- Ideal for dispensing very small drop sizes.
- Easy integration with LOCTITE reservoirs.

## Vari-Drop® Applicator (w/o Tubing and Guards)

IDH: 215996

The LOCTITE Vari-Drop® Applicator is suitable for manually dispensing low- to medium-viscosity LOCTITE products that can be dispensed using pressure/time dispensing. The adjusting screw allows repeatable dispense from light to heavy beads or drops.



#### **FEATURES:**

- Specifically designed for the manual dispensing of low- to medium-viscosity LOCTITE adhesives.
- Cost-effective solution for handheld dispensing needs.
- Field-serviceable.
- Easy integration with LOCTITE reservoirs.











#### **Bottle Dispense Systems**

## **PU20 Digital Peristaltic Dispenser**

IDH: 2265279

The LOCTITE PU20 Digital Peristaltic Dispenser is a reliable and effective volumetric dispenser for 1K, low-viscosity adhesives. This dispenser is electro-mechanically operated and does not require the use of an air source. Recommended for use with adhesives packaged in 50 ml or smaller bottles.



#### **FEATURES:**

- Precise volumetric dispensing of LOCTITE adhesives from small bottles.
- Air-free dispensing eliminates air in product.
- Digital speed adjustment with vacuum suck-back.
- "Teach In" and program memory-saving function.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**







## **Pro Pump Handheld Dispenser**

IDH: 2564842

The LOCTITE Pro Pump Handheld Dispenser is a bottle-mounted adhesive dispenser that can be used with 50 ml or 250 ml bottles of LOCTITE anaerobic adhesives, creating a complete dispensing system. The ergonomic design allows the user to deliver a drop of adhesive with a single pull of the trigger. The Pro Pump Handheld Dispenser enables more accurate and consistent application while eliminating waste and mess.



#### **FEATURES:**

- Turns a bottle of adhesive into a dispensing system.
- Easy to set up and easy to use.
- Compatible with most LOCTITE anaerobic threadlockers and retaining compounds.
- Eliminates spills, waste, and mess.



## Medical Device Designer Selects Adhesive & Semi-Automated Equipment for a Consistent, High-Quality Process.

#### **CUSTOMER CHALLENGE:**

A designer of a new medical testing device was seeking an assembly solution and process that would be simple to implement, accurate, and reliable. Several assembly methods were under consideration including ultrasonic welding, mechanical fastening, and adhesives.

#### **HENKEL SOLUTION / BENEFITS:**

A **LOCTITE Medical Device Grade Instant Adhesive** applied using the **LOCTITE PU20 Digital Peristaltic Dispenser** was selected. The combination equipment and adhesive solution met the designer's requirements with the following benefits:

- Simple, easy to implement (minimal worker training)
- Consistent and repeatable process (accurate for every part)
- Increased reliability (volumetric dispensing of adhesive)



Photo representative only, not actual application.

## Telecommunication Manufacturer Improves Field Reliability with a Simple Adhesive Application Solution.

#### **CUSTOMER CHALLENGE:**

A manufacturer of exterior telecommunication boxes was experiencing field failures due to corrosion of the fasteners used to assemble the boxes. The boxes needed to be sealed from the elements, but also repairable in the field.

#### **HENKEL SOLUTION / BENEFITS:**

The use of the **LOCTITE Pro Pump** to apply **LOCTITE Thread Sealant** was the solution. The combination equipment and adhesive solution was quick and easy to implement and yielded the following benefits:

- Ease of use (simple, manual application)
- Consistent/repeatable application (reliability improvements)
- Neat appearance (no excess sealant)



Photo representative only, not actual application.

#### Syringe Dispense Systems

### **All Purpose Syringe Dispenser**

IDH: 883976

The LOCTITE All Purpose Syringe Dispenser is a semi-automatic dispensing system designed to dispense LOCTITE adhesives and fluids packaged in 10 and 30 ml syringes, and 300 ml cartridges. The unit has digital timing control for increased precision over typical pressure/time systems.



#### **FEATURES:**

- Cost-effective for dispensing LOCTITE adhesives in syringes.
- Simple, easy operation.
- Vacuum suck-back can effectively control product dripping or stringing.
- Easily integrates with other LOCTITE equipment.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**













## Medical Device Manufacturer Reduces Scrap & Increases Throughput with a Fast & Effective Light-Cure Process.

#### **CUSTOMER CHALLENGE:**

A manufacturer of a medical monitoring device was experiencing numerous challenges with their manual, room-temperature curing assembly process, ranging from worker fatigue due to the manual process, to variable quality of the end device due to inconsistencies in adhesive application.

#### **HENKEL SOLUTION / BENEFITS:**

A LOCTITE Medical Device Grade Light-Cure Acrylic Adhesive packaged in a 30 ml syringe, applied using the LOCTITE Digital Syringe System, and cured using the LOCTITE CL40 LED **Spot-Curing System**, was the solution. The combination equipment and adhesive resolved the manufacturer's challenges with the following benefits:

- Rapid light-cure (reduced work-in-process and increased throughput)
- Improved worker satisfaction (semi-automated application reduced fatigue)
- Reduced scrap rate (improved reliability and reduced cost)



Photo representative only, not actual application.

## HD14 Handheld Manual Dual-Cartridge Dispensers

IDH: 2693822 (200 ml), 2693823 (400 ml)

The LOCTITE HD14 Handheld Manual Dual-Cartridge Dispensers are designed for the manual dispensing of 2K adhesive products packaged in 200 ml or 400 ml cartridges. The dispensers are compatible with all standard product ratios.



#### **FEATURES:**

- Cost-effective, handheld manual dispensing of LOCTITE 200 ml and 400 ml 2K adhesives.
- Compatible with various mix ratio LOCTITE adhesives.
- Conversion kit for 1:1, 2:1, 4:1, and 10:1 is included with each dispenser.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**



## **HD14 Handheld Pneumatic Dual-Cartridge Dispensers**

IDH: 2693824 (200 ml), 2693825 (400 ml)

The LOCTITE HD14 Handheld Pneumatic Dual-Cartridge Dispensers are designed for the pneumatic dispensing of 2K adhesive products packaged in 200 ml or 400 ml cartridges. The dispenser is compatible with all standard product ratios and offers improved consistency over manual options.



#### **FEATURES:**

- Cost-effective, handheld pneumatic dispensing of LOCTITE 200 ml and 400 ml 2K adhesives.
- Compatible with various mix ratio LOCTITE adhesives.
- Conversion kit for 1:1, 2:1, 4:1, and 10:1 is included with each dispenser.



#### **Cartridge Dispense Systems**

## **50 ml Handheld Manual Dispenser**

IDH: 267452

The LOCTITE 50 ml Dual-Cartridge Manual Applicator is a handheld, manually operated meter mix dispenser. The dispenser provides a convenient, cost-effective method to apply adhesives and sealants with minimal waste. The dispensers are compatible with 1:1 and 2:1 mix ratio products, as well as products packaged in 10:1 B-Style cartridges.



#### **FEATURES:**

- Cost-effective, handheld manual dispensing of LOCTITE 50 ml 2K adhesives.
- Compatible with various mix ratio LOCTITE adhesives.
- Kit includes 1:1, 2:1, and 10:1 plungers.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**



## 300 ml Handheld Pneumatic Dispenser

IDH: 88632

The LOCTITE 97002 Handheld Pneumatic Dispenser is designed for the pneumatic dispensing of 1K adhesive products in 250 ml tubes and 300 ml cartridges. It is a manually controlled, pneumatically operated unit. The amount and rate is controlled by the operator.



#### **FEATURES:**

- Rapid-loading system to make cartridge changes clean and easy.
- Ergonomically designed.
- Simple and clean dispensing.



## **LOCTITE Electric Rotorspray**

IDH: 135557

LOCTITE Rotorspray Systems are designed to apply adhesives and sealants to the interior cylindrical surfaces of workpieces. The special design of the drive assembly and rotor housing ensures that the Rotorspray is completely sealed to prevent contamination with adhesive.



#### **FEATURES:**

- Application of LOCTITE adhesives to interior cylindrical surfaces.
- Integrates directly with LOCTITE valves and controllers.
- Multiple size spinners available for a variety of applications.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**



## Commercial Appliance Electric Motor Improved with Adhesive Sealing Solution.

#### **CUSTOMER CHALLENGE:**

A commercial appliance manufacturer was challenged with the assembly of electric motors where complete sealing, a neat appearance, and a high throughput were required.

#### **HENKEL SOLUTION / BENEFITS:**

The use of a **LOCTITE Anaerobic Adhesive/Sealant** in combination with the **LOCTITE Rotorspray Applicator** was the solution. The **LOCTITE Rotorspray Applicator** applies the adhesive/sealant to the interior diameter of the rotor with the following benefits:

- Uniform application (complete seal)
- Neat appearance (no excess adhesive/sealant)
- Automated process (increased productivity and improved reliability)



Photo representative only, not actual application.

#### **Volumetric Dispense Systems**

## **Pro Pump Handheld Dispenser**

IDH: 2564842

The LOCTITE Pro Pump Handheld Dispenser is a bottle-mounted adhesive dispenser that can be used with 50 ml or 250 ml bottles of LOCTITE anaerobic adhesives, creating a complete dispensing system. The ergonomic design allows the user to deliver a drop of adhesive with a single pull of the trigger. The Pro Pump Handheld Dispenser enables more accurate and consistent application while eliminating waste



#### **FEATURES:**

- Turns a bottle of adhesive into a dispensing system.
- Easy to set up and easy to use.
- Compatible with all LOCTITE anaerobic threadlockers and retaining compounds.
- Eliminates spills, waste, and mess.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**



#### **Volumetric Dispense Systems**

## **PU20 Digital Peristaltic Dispenser**

IDH: 2265279

The LOCTITE PU20 Digital Peristaltic Dispenser is a reliable and effective volumetric dispenser for 1K, low-viscosity adhesives. This dispenser is electro-mechanically operated and does not require the use of an air source. Recommended for use with adhesives packaged in 50 ml or smaller bottles.



#### **FEATURES:**

- Precise volumetric dispensing of LOCTITE adhesives from small bottles.
- Air-free dispensing eliminates air in product.
- Digital speed adjustment with vacuum suck-back.
- "Teach In" and program memory-saving function.









### **RC15 Compact Rotor Pump System**

The LOCTITE Rotor Pump System is a volumetric displacement system that provides a high level of repeatability and accuracy for bead, drop, or potting applications. The system can also be used with the LOCTITE Electric Rotorspray.

### **RC15 Compact Rotor Pump Controller**

IDH: 1880232

The LOCTITE RC15 Pump Controller is designed for the precise control of the Compact Micro Rotor Pump Dispenser 1.0 and the Compact Rotor Pump Dispenser 4.0. Three programs can be stored in the RC15 Pump Controller for different dispensing applications. There are three different modes of operation (Quantity, Time, Start/Stop), which can be set up easily using the touch screen.



### **Compact Micro Rotor Pump 1.0**

IDH: 1741601

The LOCTITE Compact Micro Rotor Pump Dispenser 1.0 applies LOCTITE adhesives out of a reservoir with high repeatability. Ideal for small drop and bead dispensing, delivering a flow rate of up to 1,5 ml/min. This volumetric dispenser is a rotating displacement system and consists of a rotor and stator. This Rotor Pump requires the RC15 Rotor Pump Controller to form a complete dispensing system.



## **Compact Rotor Pump 4.0**

IDH: 1196160

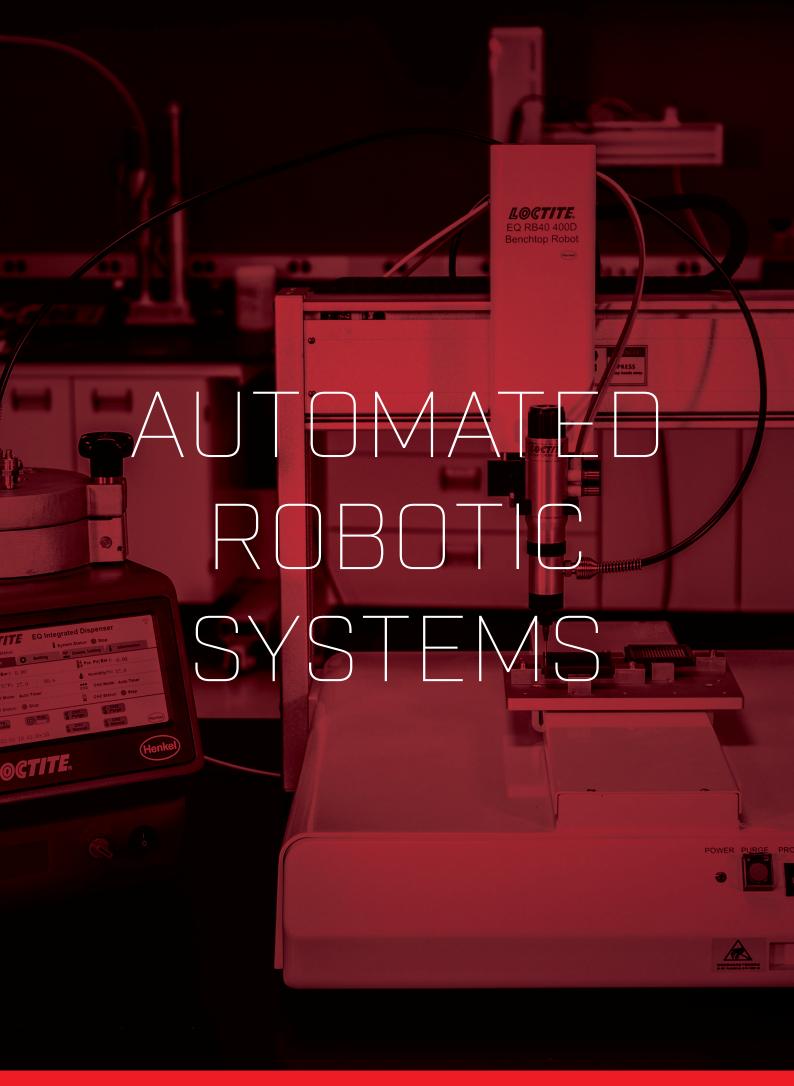
The LOCTITE Compact Rotor Pump Dispenser 4.0 applies LOCTITE adhesives out of a reservoir with high repeatability. Ideal for small to medium drop and bead dispensing, delivering a flow rate of up to 6 ml/min. This volumetric dispenser is a rotating displacement system and consists of a rotor and stator. This Rotor Pump requires the RC15 Rotor Pump Controller to form a complete dispensing system.



#### **FEATURES:**

- Specifically designed for volumetric dispensing of dots and beads of LOCTITE adhesives.
- Capable of dispensing low- to high-viscosity adhesives.
- Multiple pump sizes available dependent on flow rate requirements.
- Easy integration with LOCTITE reservoirs and controllers.





LOCTITE Automated Robotic Dispensing Systems are cost-effective solutions designed to simplify the dispensing of adhesives and sealants onto various surface configurations, ranging from simple to complex. Dispensing Robots allow manufacturers to repeatedly and reliably dispense patterns of liquid materials on a programmed basis, resulting in improved process efficiencies, minimal material waste, and reduced manufacturing costs. Automated dispensing systems are offered in multiple configurations to meet all your process needs.

WHY USE A ROBOTIC DISPENSING SYSTEM?	BENEFITS OF ROBOTIC DISPENSING
Precision Application	Robotic Dispensing ensures that adhesive is applied in the correct location on the part.
Repeatability	Dispensing Robots will dispense in the same location every time, reducing part-to-part variation typically seen in manual processes.
Complexity	Robots are capable of consistently applying beads of adhesive in difficult shapes and patterns, which may not be possible via manual application.
Speed	High-speed dispensing can be achieved while still maintaining performance requirements.
Quality	A properly-controlled dispensing process will minimise waste/scrap, while ensuring performance, aesthetics, and the overall quality of the assembled part.
Ease of Installation	Dispensing Robots are suitable for all production environments, integrate directly with other LOCTITE equipment, require minimal operator dependency, and are offered in multiple configurations to meet different process needs.

## **RB40 Dispensing Robots**

The LOCTITE RB40 Benchtop Dispensing Robots are available in four ranges of operation from 200 x 200 x 500 mm up to 500 x 500 x 100 mm (X,Y,Z) and have features and accessories that are custom-tailored for adhesive dispensing processes. These benchtop robots have 3-axis control, and each robot has an integral I/O connector for external light curtain (sold separately) or external E-stop integration. The Teach Pendant, dispensing equipment, cables, and mounting hardware must also be purchased separately.

## **RB40 200 D-Series Benchtop Robot**

#### IDH: 2104801

The LOCTITE RB40 200 D-Series Dispensing Robot has a 200 x 200 x 50 mm range of operation (X,Y,Z), and has features and accessories that are custom-tailored for adhesive dispensing processes.



### **RB40 300 D-Series Benchtop Robot**

#### IDH: 2104799

The LOCTITE RB40 300 D-Series Dispensing Robot has a 300 x 300 x 100 mm range of operation (X,Y,Z), and has features and accessories that are custom-tailored for adhesive dispensing processes.

## **RB40 400 D-Series Benchtop Robot**

#### IDH: 2104795

The LOCTITE RB40 400 D-Series Dispensing Robot has a 400 x 400 x 100 mm range of operation (X,Y,Z), and has features and accessories that are custom-tailored for adhesive dispensing processes.



## **RB40 500 D-Series Benchtop Robot**

#### IDH: 2103369

The LOCTITE RB40 500 D-Series Dispensing Robot has a **500 x 500 x 100 mm** range of operation (X,Y,Z), and has features and accessories that are custom-tailored for adhesive dispensing processes.

#### **FEATURES:**

- · Designed for adhesive dispensing within a working area up to 500 mm x 500 mm x 100 mm.
- Integrated solution plug-and-play with LOCTITE equipment solutions and accessories.
- Easy to program via Teach Pendant, and stores up to 100 programs.
- A wide variety of mounting hardware is available.

















## Sensor Manufacturer Implements Semi-Automated Adhesive Application Process to Improve Quality & Reliability.

#### **CUSTOMER CHALLENGE:**

A sensor manufacturer was manually applying LOCTITE Instant Adhesives onto small sensors for attachment to an aluminium plate. The process was challenged with consistency, accuracy, and contamination issues.

#### **HENKEL SOLUTION / BENEFITS:**

A combination assembly automation solution, including a **LOCTITE RC50 Integrated Dispenser**, **VA40 CA Valve**, and **RB40 300 D-Series Robot**, was developed to meet the assembly requirements and deliver the following benefits:

- Reduced adhesive and manual labour usage (cost savings)
- Improved quality and reliability (accurate, repeatable dispense)
- Increased throughput (fast application process)



Photo representative only, not actual application.

## LED Lighting Manufacturer Selects Adhesive & Automated Equipment for Rapid Process Time & High-Quality.

#### **CUSTOMER CHALLENGE:**

An LED manufacturer was designing a new LED light fixture. The assembly solution needed to provide a complete seal of the components, as well as allow for rapid manufacturing in order to keep up with market demand.

#### **HENKEL SOLUTION / BENEFITS:**

A semi-automated adhesive application and curing station was the solution. A LOCTITE Light-Cure Acrylic Adhesive is dispensed using the LOCTITE RC50 Integrated Dispenser, Light-Cure Valve and RB40 500 D-Series Robot. This system enables rapid and accurate adhesive application to the various complex geometries, which are then cured using the LOCTITE CL42 LED Flood-Curing System. This total solution delivers the following benefits:

- Improved quality and reliability (accurate, repeatable dispense)
- Increased throughput (fast application and cure process)
- Cost savings (labour and failure rate reduction)



Photo representative only, not actual application.



Henkel offers innovative LOCTITE LED Light-Curing Systems that provide high power, portability, continuous duty, and long life. A wide range of systems are available – handheld point, spot wand, and flood systems – offering maximum flexibility for any application. These light sources are optimised for curing our extensive line of UV/Visible light-curing adhesive products, to provide optimal solutions for nearly every process need.

#### Key benefits of LED-curing systems versus traditional bulb technology include:



Long life – Up to 20.000 hours of operation (10x longer than typical UV bulbs) with minimal decay over time.



Environmental benefit (no mercury).



Instant on/off – No warm-up like traditional UV systems.



Low maintenance cost (no replacement bulbs).



Zero infrared emissions, reducing part heating (warping) to an absolute minimum.



Low energy consumption.



100% of LED light output is within the usable curing spectrum.



Low cost of ownership.

## Process Control and Monitoring Systems for Light-Curing Systems

Henkel offers a full range of radiometers that can be used with all of our light-curing systems, to ensure the proper intensities are delivered consistently during your production process. These tools are used in conjunction with light-curing equipment to ensure a consistent process and the highest level of quality.



#### **LED Light-Curing Systems**

## **CL30 LED Flood-Curing System**

The LOCTITE CL30 System is a high intensity LED flood system specifically designed to cure LOCTITE light-cure adhesives. The large area flood allows for easy curing of large part assemblies and the LED heads can be stacked in both the X and Y directions, further expanding the curing area if needed. The system can be easily integrated into either benchtop or fully-automated processes.

### **CL30 LED Flood Quad Controller**

#### IDH: 2257357

The LOCTITE CL30 LED Quad Controller operates up to four LED flood heads. It has three different control modes: 1) Timer Mode: Adjustable from 0 to 999 seconds; 2) Level Mode: To set up intensity percentage for each channel; and 3) Advance Mode: Operator needs to define Step, Intensity, and Time.



## **CL30 LED Flood Single Controller**

#### IDH: 1359255

This LOCTITE CL30 LED Flood-Curing Single Controller supplies electrical power to one LOCTITE CL30 LED Flood Array Light Source. It controls the time that the LED is kept on during the cure cycle.



## **CL30 LED Flood Array Light Sources**

#### IDH: 2139182 (365 nm), 2139180 (405 nm)

The LOCTITE CL30 LED Flood Array Light Sources are offered in 365 and 405 nm wavelengths. Each CL30 head is equipped with 144 high-power LEDs and integrated reflectors, providing uniform curing across a wide area (100 mm x 100 mm). The Light Sources can also be stacked side-by-side in two directions, further expanding the curing area for maximum flexibility.



#### **FEATURES:**

- LED flood-curing system offering long-life, energy-efficient, instant on/off performance.
- Simple and easy control of one to four LED flood heads.
- Large cure area (100 mm x 100 mm).
- Resistive colour touch screen for ease of operation.
- LED heads stackable in both X and Y directions.



## **CL42 LED Flood-Curing System**

The LOCTITE CL42 System is a high intensity LED flood system specifically designed to cure LOCTITE light-cure adhesives. The large area flood allows for easy curing of large part assemblies and the LED heads can be stacked side-by-side, further expanding the curing area if needed. The system can be easily integrated into either benchtop or fully-automated processes.

### **CL42 Dual LED Controller**

#### IDH: 2804957

The LOCTITE CL42 Dual LED Controller operates up to two LED flood heads. It can be operated in a continuous light output mode, or up to a 7-step, programmed output mode, where the light output intensity and time can be programmed for each separate LED head.



## **CL42 LED Flood Array Light Sources**

IDH: 2804955 (365 nm), 2804956 (405 nm)

The LOCTITE CL42 LED Flood Array Light Sources are offered in either 365 or 405 nm wavelengths. Each CL42 head is equipped with 120 high-power LEDs and integrated reflectors, providing uniform curing across a wide area (100 mm x 100 mm).



## **CL42 LED Flood Chamber**

IDH: 2804959

The LOCTITE CL42 LED Flood-Curing Chamber has been designed especially for use with the LOCTITE CL42 LED Flood-Curing System to cure UV and Visible Light-Cure Adhesives. It consists of a chamber with an adapter for one or two LED light sources, workpiece holder, door safety system, ESD safe door with window, and a controller connection.



Scan QR code to check out our new how-to-use video.



#### **FEATURES:**

- LED flood-curing system offering long-life, energy-efficient, instant on/off performance.
- Connect up to two LED flood heads.
- Intensity adjustment for each channel.
- Large cure area (100 mm x 100 mm).
- LED heads side-by-side stackable.



#### **LED Light-Curing Systems**

## **CL40 LED Spot-Curing System**

The LOCTITE CL40 LED Spot-Cure System offers a cost-effective, high-output solution for all your light-curing needs. Its compact size and multi-channel design offer a high level of flexibility for integrating into most manufacturing processes. The system provides all the benefits of LED technology while maintaining one of the highest intensity outputs available.

## **CL40 LED Spot Quad Controller**

#### IDH: 2804936

The LOCTITE CL40 LED Spot-Curing Quad Controller operates up to four CL40 LED Light Sources. It can be operated in a continuous light output mode, or up to a 10-step, programmed output mode, where the light output intensity and time can be programmed for each separate LED head.



## **CL40 LED Spot Light Sources**

IDH: 2804938 (365 nm), 2804937 (405 nm)

The LOCTITE CL40 LED Spot-Curing Light Sources are used to cure UV and Visible Light-Cure Adhesives. They are available in 365 nm and 405 nm wavelengths.



Scan QR code to check out our new how-to-use video.



#### **FEATURES:**

- LED spot-curing system offering long-life, energy-efficient, instant on/off performance.
- Operates up to four LED heads.
- Compact LED head design.
- Intensity adjustment for each channel.
- Resistive colour touch screen for ease of operation.



## **CL32 LED Spot Handheld Light Sources**

IDH: 2182210 (365 nm), 2182207 (405 nm)

The LOCTITE CL32 LED Spot-Curing Light Sources are cost-effective, high-powered, portable LED light sources that offer a high level of flexibility for UV or Visible light-curing needs. The lightweight, compact design helps minimise operator fatigue, while its small size and long focus length make it perfect for applications in hard-to-reach bond areas. Usable as a handheld or stationary mount, this system is perfect for prototyping, scale-up, or full production environments.



#### **FEATURES:**

- LED handheld spot-curing system offering long-life, energy-efficient, instant on/off performance.
- · High intensity.
- Battery-powered with long battery life.
- Small, compact, ergonomic design.

#### **COMPATIBLE ADHESIVE TECHNOLOGIES:**



#### **Process Control & Monitoring Systems**

### PM20 UV VIS and UV A/B Radiometers

IDH: 2436352 (UV VIS), 2436353 (UV A/B)

The LOCTITE PM20 UV VIS Radiometer and LOCTITE PM20 UV A/B Radiometer are an industry-first for measurement of LED light-curing devices. The PM20 UV VIS Radiometer is used to measure LED light-curing devices that emit primarily in the Visible wavelengths, while the PM20 UV A/B Radiometer is used to measure LED light-curing devices that emit in the UVA and UVB wavelengths. These radiometers can also be used with curing chambers, conveyors, and flood lamps. Each of the radiometers combines all-in-one exposure, intensity measurement, and profile memory capability into one device.



#### **FEATURES:**

- Specifically designed for use with LOCTITE LED and bulb-based curing systems.
- Digital display of peak intensity and total exposure.
- Graphical display of intensity vs. time.
- Exportable data file.



## Protective Equipment Manufacturer Speeds Output & Quality of Face Shields with Adhesive Assembly Process.

#### **CUSTOMER CHALLENGE:**

A personal protective equipment manufacturer needed to increase throughput of its high-demand face shields. The previous assembly method was slow and required parts to sit to cure sufficiently. The manual process also resulted in variable quality and failure rates.

#### **HENKEL SOLUTION / BENEFITS:**

A LOCTITE Light-Curing Instant Adhesive in conjunction with LOCTITE dispensing and LED curing equipment provided the design and manufacturing flexibility that was needed. The adhesive is dispensed using a simple, easy-to-use LOCTITE RC30 Reservoir and Vari-Drop® Valve. The face shields are then cured using the LOCTITE CL30 Flood System with Quad Controller. This total solution delivered the following benefits:

- Increased throughput (very rapid cure process)
- High reliability and repeatability (adhesive and equipment performance)
- Improved quality (accuracy in adhesive placement and cure)



Photo representative only, not actual application.

# Plastic Water Pitcher Manufacturer Implements Adhesive Assembly Process for Design & Manufacturing Flexibility.

#### **CUSTOMER CHALLENGE:**

A manufacturer of plastic water pitchers had previously used ultrasonic welding for their assemblies. As new designs came on-line, the manufacturer was required to adapt the welding equipment to accommodate. In addition, to keep up with production requirements, multiple assembly lines and personnel were required.

#### **HENKEL SOLUTION / BENEFITS:**

A LOCTITE Light-Curing Acrylic Adhesive is dispensed in the varying patterns required using a LOCTITE RC40 Integrated Dispenser, Light-Cure Dispense Valve and RB40 200-D Series Automated Dispensing Robot, and then cured with the LOCTITE CL40 LED Spot-Curing System. Four LED Spot Light Sources are positioned around the part and controlled simultaneously using the LED Spot Quad Controller. This total solution delivered the following benefits:

- Flexibility in design (the adhesive and equipment can be quickly adapted to changes in design)
- Increased production (rapid cure and semi-automated process)
- Improved quality and reliability (accurate, repeatable dispense)



Photo representative only, not actual application.

CONSUMABLES
FOR
DISPENSING
SYSTEMS

Henkel offers a comprehensive line of LOCTITE dispense tips and static mix nozzles. All are uniquely tailored to LOCTITE equipment and adhesive technologies, so you have a reliable and complete process in place. A wide variety of tips and mix nozzles are available to meet all of your adhesive dispensing needs.





#### NEEDLE TIPS

Our high-precision stainless steel, tapered polyethylene and flexible polypropylene dispensing needles/dispensing tips all feature a positive locking, helical thread design to ensure the tip will stay intact during the toughest applications.

#### MIX NOZZLES

Choosing the correct mix nozzle is a critical step in ensuring your 2K adhesive is properly mixed during the dispense cycle. LOCTITE consumables offer a wide variety of static mix nozzles that have been carefully tested to provide the best performance with our LOCTITE adhesive products. These are offered in many configurations for compatibility with the wide range of cartridge sizes and styles that are available.

## **CONSUMABLES FOR DISPENSING SYSTEMS**

FLEXIBLE DISPENSING TIPS: DISPENSING NEEDLE, POLYPROPYLENE (PPF), HELICAL THREAD						
Illustration/Example	Item No.	Order No.	Pack Size	Colour	Gauge	Inner Ø, mm
	97229	142640	50 pcs	Amber	15	1.37
	97230	142641	50 pcs	Green	18	0.84
	97231	142642	50 pcs	Pink	20	0.61
	97232	142643	50 pcs	Red	25	0.25

TAPERED DISPENSING TIPS: DISPENSING NEEDLE, POLYETHYLENE – CONICAL (PPC), LUER-LOCK						
Illustration/Example	Item No.	Order No.	Pack Size	Colour	Gauge	Inner Ø, mm
	97221	88660	50 pcs	Grey	16	1.19
	97222	88661	50 pcs	Green	18	0.84
	97223	88662	50 pcs	Pink	20	0.61
	97224	88663	50 pcs	Blue	22	0.41

HIGH PRECISION DISPENSING TIPS: DISPENSING NEEDLE, STAINLESS STEEL STANDARD (SSS), LUER-LOCK						
Illustration/Example	Item No.	Order No.	Pack Size	Colour	Gauge	Inner Ø, mm
	97225	88664	50 pcs	Amber	15	1.37
	97226	88665	50 pcs	Green	18	0.84
	97227	88666	50 pcs	Pink	20	0.61
	97228	88667	50 pcs	Red	25	0.25

ADDITIONAL DISPENSING TIPS AND MIXER NOZZLES						
Illustration	Item No.	Order No.	Pack Size	Description		
	98741	1146079	50 pcs	Dispensing needle, stainless steel – PTFE-lined (SSTL), 25 gauge		
	97262	218288	2 each	Needle selection pack: 2 each of a variety of dispensing needles		
<b>4</b>	97248	218275	50 pcs	Luer-Lock® tip caps		
<b>4</b>	97233	88672	20 + 5 pcs	Luer-Lock® adapter kit: 20 Luer-Locks® and 5 adapters		
	97207	88656	40 pcs	10 ml clear syringe barrel kit		

Deviations in form and colour are possible without impact on the performance.

ADDITIONAL DISPENSING TIP	S AND MIXER NO	IZZLES		
Illustration	Item No.	Order No.	Pack Size	Description
) to	97263	218287	40 pcs	10 ml black syringe barrel kit, for UV and light cure adhesives
P	97208	88657	2 pcs	10 ml syringe airline adapter
	97244	88677	20 pcs	30 ml clear syringe barrel kit
0	97264	218286	20 pcs	30 ml black syringe barrel kit, for UV and light cure adhesives
P	97245	88678	2 pcs	30 ml syringe airline adapter
	97290	397462	50 pcs	All plastic precision dispensing tip, 20 gauge
зининини	n.a.	2900614	12 pcs	Static mixer for epoxy and PU in 50 ml, SQ 24
	984570	1487439	10 pcs	Static mixer for epoxy in 200 / 400 ml, SQ 7.5-24
MANANGNANANANAN -	1034575	1034575	10 pcs	Static mixer MBX 6.5-20-S 10:1 for LOCTITE AA 3038
	n.a.	2447734	10 pcs	Spray mix nozzle for LOCTITE PC 7255 MFQ-08-24C-13
The second second second	8953186	1104046	10 pcs	Static mixer 4:1/10:1 for 400/490 ml, MCX 08-18
WARO AND YOR	n.a.	1646832	10 pcs	Static mixer 1:1 for acrylics in 50 ml, MAH 05-07 (i.e. LOCTITE AA 3295)
	98457	720174	10 pcs	Static mixer 1:1/2:1 in 200/400 ml, MC 8-24
	863585	367545	10 pcs	Static mixer 1:1 for MS polymers in 410 ml, MC 13-18
	8953187	1104047	10 pcs	Static mixer 4:1/10:1 in 400/490 ml, MCX 08-24
**************************************	8955989	1453183	10 pcs	Static mixer for LOCTITE 3090 and LOCTITE 4070, MLX 2.5-16-5
Forest 18 (2) (2) (2) (2) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3	n.a.	1826921	10 pcs	Static mixer 1:1/2:1 in 50 ml, MBH 3.2-16 S
	n.a.	1573153	10 pcs	Static mixer 1:1/2:1 in 50 ml, MBQ 5.0-24 L
Z MMMMMMMM	n.a.	1573135	10 pcs	Static mixer 1:1/2:1 in 400 ml, MFH 6.0-34 T

## **Notes**

## Notes



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