

3M

VHB[™]
Tape Since 1980

A bond beyond.

The 3M[™] On Demand Bonding System
featuring 3M[™] VHB[™] Extrudable Tape





In Collaboration with



Manufacturers of appliances, specialty vehicles, and other products have long been limited by the adhesives crucial to their product designs. Until now, available bonding products have added time to production lines, required specialized storage and usage conditions, and generated excessive waste.

Introducing a new, automated bonding solution that launches your process into the future.

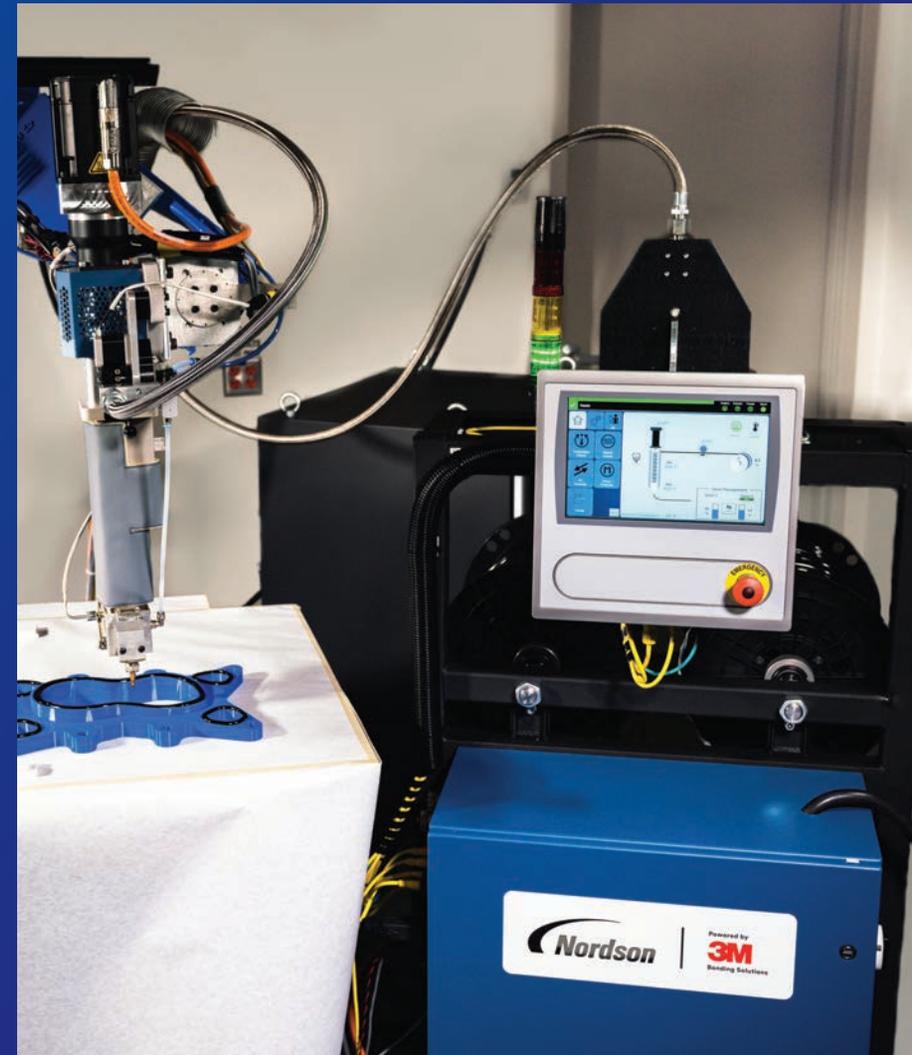
The 3M™ On Demand Bonding System featuring 3M™ VHB™ Extrudable Tape:

- Simple, automated solution
- Easily integrates into your assembly line

It will bring your operation what it needs to maintain a competitive edge:

- Efficiency
- Versatility
- Simplicity
- Sustainability

Deliver your customers the next generation of product innovation with the 3M™ On Demand Bonding System.





Beyond efficiency.

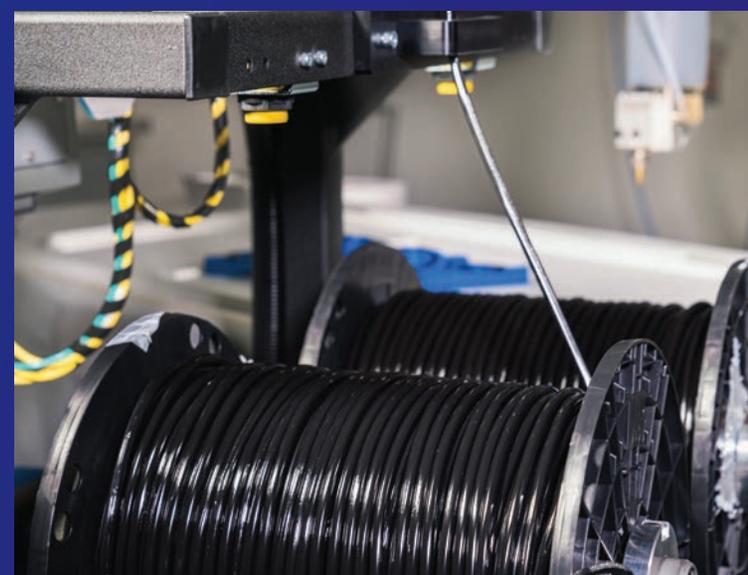
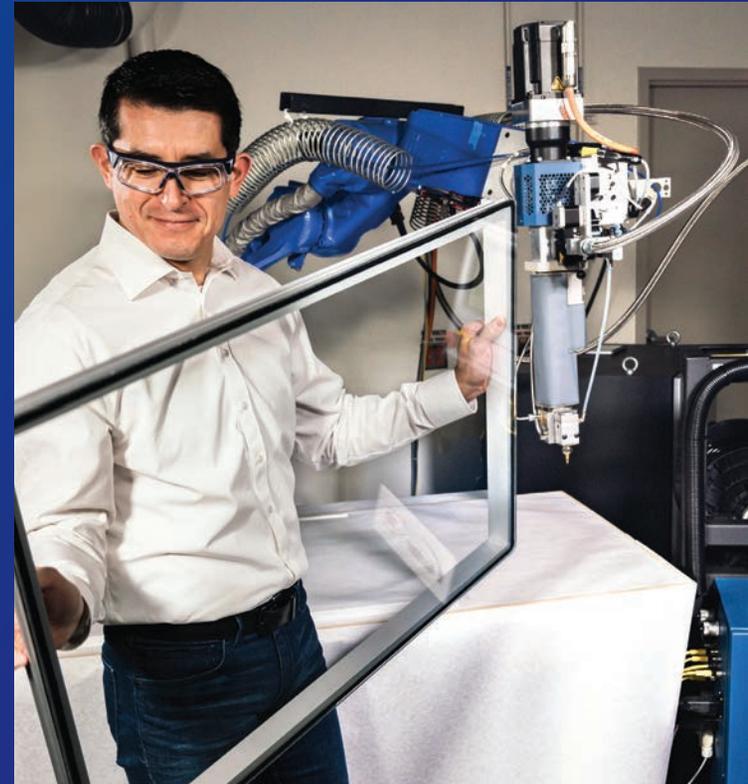
The 3M™ On Demand Bonding System featuring 3M™ VHB™ Extrudable Tape can improve your manufacturing process efficiency—and your bottom line.

- Parts can be handled immediately
- Requires little to no surface preparation
- Easy to use and store
- Stretch release allows for clean removal

How much waiting time is built into your production process? If your bonding solution requires pre-treatment or clamping, it can be anywhere from minutes to days. And on an assembly line, every second costs money.

- Minimal, if any, pre-processing is required. 3M™ VHB™ Extrudable Tape bonds to many substrates with no primers or surface modification
- Minimal, if any, clamping is required. You get immediate handling strength
- Reduced need to purge equipment or replace disposable components, so you have less downtime and less waste
- Stretch release technology allows you to remove the adhesive quickly and easily, so you can rework or recycle parts
- Stretch release technology also makes component repair easier, and saves service and warranty costs

All of this leads to improved assembly line efficiency, increased throughput, and long-term value. Work faster with fewer steps, less downtime, and less work-in-process (WIP). Less process variability and increased productivity through automation make your work leaner. And with less waste and rework, you'll work smarter.





Beyond versatility.

Curved surfaces, bonded with a single material. Dissimilar shapes and materials, permanently joined without unsightly fasteners. If you can dream it, you can design it with the 3M™ On Demand Bonding System.

With the ability to adapt to a variety of processes, designs, and substrates, this system gives you unmatched versatility. Fill in gaps and turn corners without wrinkles, voids, or additional materials. Apply in various widths and thicknesses. All with the durability and performance you expect from 3M™ VHB™ Tape.

3M™ VHB™ Extrudable Tape has excellent adhesion performance on:

- Metals
- Glass
- Rubber
- Low surface energy (LSE) plastics
- Hard-to-bond materials
- Woven and non-woven textiles
- Even slightly oily surfaces

And the 3M™ On Demand Bonding System can be deployed for inline or offline assembly. It has a smooth, clean appearance that fasteners can't match, delivering aesthetically superior results.

So no matter what you're building, this process and material versatility frees your operation from the limitations of other bonding solutions. Eliminate entire steps from your process, adapt to a quickly changing marketplace, and stay on the leading edge of product design with the 3M™ On Demand Bonding System.



Metal



Painted Surface



Plastic



Cardboard



Roof Stiffener



Fabric



Beyond simplicity.

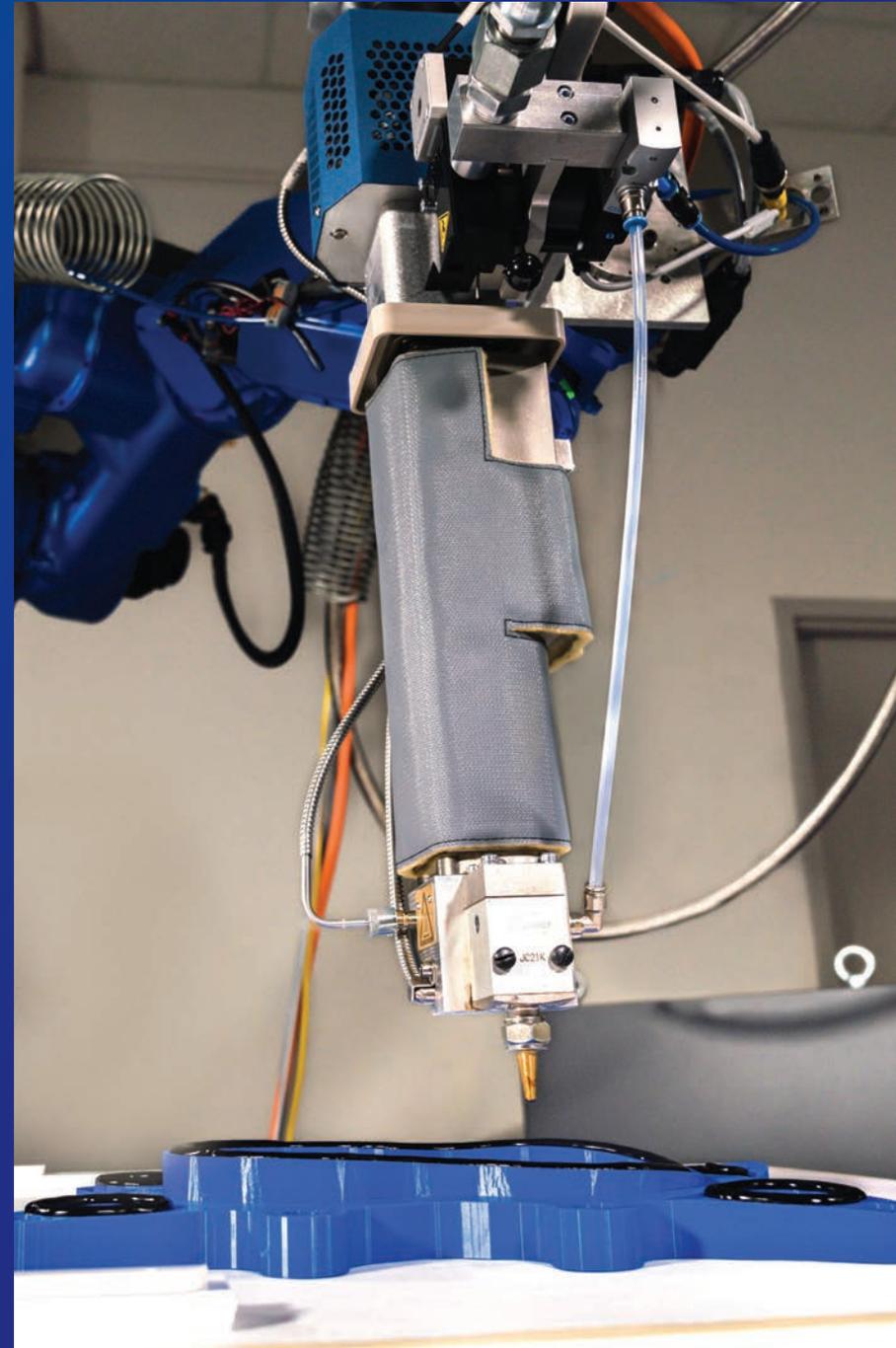
The 3M™ On Demand Bonding System is a fully automated solution that easily integrates into your assembly line. It's a small system that doesn't require a long list of replacement parts. It's a beyond simple way to add all the benefits of automation into your process without compromising your bonding specifications.

Why automate?

There's never been a better time to add automation into your workflow.

- Automation reduces your dependence on skilled or specialized labor
- Automation ensures the most consistent product
- Reduces complexity in your processes and workflow
- Standardize your materials by replacing multiple adhesives
- Smaller space compared to other systems

If you're just beginning to automate your assembly line, the 3M™ On Demand Bonding System can help you confidently get from design to scale-up quickly.



Benefit vs. other adhesive systems

Features	3M™ On Demand Bonding System	Other adhesive systems and fastening methods
Heated equipment requirement for dispensing	All-in-one system warms tape for extrusion	May need several pumps, hoses, and/or tanks
Storage requirements	No special requirements	May have short shelf life and require special storage conditions
Temperature/humidity requirements for curing	No special requirements	May need to maintain climate-controlled environment
Resources required for handling	Minimal, if any—immediate handling strength	Up to six hours—requires clamping and space to store work in process, as well as additional process steps
System purge between cycles	Little to none needed	Required purging can lead to up to 20% adhesive waste
Substrate preparation	Little to none needed	Time, materials, and labor required to prepare
Reworkability	Can disassemble and rework	Time-consuming rework; may even need to scrap products and start over
Product design requires bonding of various shapes and dissimilar substrates	One adhesive can do it all	Requires different adhesives and/or fasteners for different geometries or substrates
Sealing	Air- and watertight seal	May not have sealing capabilities



Beyond sustainability.

3M™ VHB™ Extrudable Tape has stretch release technology that allows for easy and clean removal, reducing scrap, waste, and rework. It also helps you manufacture more sustainable goods by allowing the components to be separated into appropriate waste streams.

The 3M™ On Demand Bonding System conserves energy and materials in several ways:

- Enables recycling, reuse, and repairability
- Stretch release means less waste, faster rework, and easier component recycling
- Reduces the need to purge the dispenser and discard purged adhesive
- No liner waste or die cut waste, as with tape
- No residual waste

As you adapt to regulatory and consumer demands for environmental responsibility, the 3M™ On Demand Bonding System featuring 3M™ VHB™ Extrudable Tape can help you meet your company's sustainability goals. And when you commit to conservation, you improve your reputation and build trust with your customers.



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