

For Aerospace, Automotive, and General Industrial

3M Application Profile: Composite Bonding Process (Holding Tapes)







3M™ Polyester Tape 875 can be used to hold bagging layers during the composite bonding process.

Application Description:

To create a composite part, specially engineered fabrics and adhesives are layered together then subjected to elevated pressure and autoclave temperatures of up to 204°C (400°F), cycling up to 24 hours.

Application Benefit:

 Composite materials can improve the strength and durability of parts, as well as provide overall light weighting of finished product

Key Application Requirements:

- Provide strong hold to a variety of bagging materials and tool/mold surfaces
- Hold throughout high temperature and pressure cycles
- Remove cleanly after use



Uncured parts are put into special chambers called autoclaves. Autoclaves subject parts to pressure and heat to create finished composite parts.

Engineered Industrial Tapes

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Tape Benefits:

- Fast, clean removal: Reduces time required to remove and/or clean tools/molds after use
- One piece removal: Less time or challenge to remove from a surface, with fewest pieces
- Easy to apply/immediate use: Simply apply manually or with a tabletop dispenser
- Reduces contamination:
 3M tapes with a rubber adhesive can help reduce silicone contamination of parts

| Products | |
|-------------------------------------|--------------------------------------|
| 3M™ High Temperature Nylon Tape 855 | |
| 3M™ Polyester Tape 8402 | |
| 3M™ Polyester Tape 8403 | |
| 3M™ Polyester Tape 875 | |
| 3M™ Polyester Tape 876 | |
| Additional Applications | |
| Aerospace | Pressure Bulkhead, Radome, Wing, etc |
| Automotive | Seat Base, Trunklid, etc |
| General Industrial | Bicycle Frame |
| Power | Wind Turbine |



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