JACKETING SYSTEMS



Venture Tape®

Venture Clad™

About Venture Quality

ISO 9001:2000 Status

Venture Tape is committed to providing the highest level of customer service. We strive to keep our customers up to date on order status, product availability, quotations, new products, quality, and other relevant issues. Honesty and the cornerstones of our permanent customer satisfaction commitment.

This commitment to our customers has allowed Venture Tape to achieve ISO 9001:2000 status at its global facilities and insures product consistency worldwide. Beginning with product development, carrying through materials procurement, manufacturing, and delivery, we match our products exactly to customer needs and meet our customers expectations every time. Our goal is always clear: Supply products which help solve problems.

In addition to our extensive internal capabilities, Venture welcomes customer input. Providing samples, application specific testing, and onsite consultation allows us to see our products in use and gives us an understanding of field performance, assuring that our products meet the most important specification of all: they work.

Consult Venture Tape specialists for recommendations on product selection, specialized development and testing, and innovative answers to engineering, packaging, marking, or material handling challenges.

About VentureClad...

VentureClad™ is a revolutionary way of weatherproofing insulation as it is the only completely self-adhesive product not requiring additional adhesive or mastics to create a seal. The materials bonds 100% to the surface of the insulation providing a zero-permeability barrier that moisture cannot penetrate, providing a neat, clean, and dependable weather barrier.

The unique adhesive system offers excellent resistance to moisture, UV exposure, and allows application in all weather conditions including cold temperatures. Additionally, VentureClad™ is easily cut with a pair of standard scissors, eliminating the need for expensive off site fabrication and allowing a fast, on-site tailored installation which requires no special tools to install and dramatically reduces labour expenses.

All Venture Tape products are manufactured to the highest quality standards. From material sourcing through product and shipment, all products are manufactured with the same degree of care and diligence. Our stringent quality standards result in VentureClad™ carrying a 10-year warranty.

Whether the application is interior or exterior, duct or pipe insulation, VentureClad™ has a product to meet the requirements, today as well as tomorrow. Venture Tape.....Delivering Solutions Every Day.

About Venture Adhesives...

Cold Weather (CW®) Acrylic Adhesives
Venture Tape products featuring Cold Weather
(CW®) Acrylic Adhesives are constructed
specifically for use in extreme environments.
Field proven for applications in temperatures as
low as -10°F (-23°C), Venture CW® adhesives
are also stable up to 300°F (121°C) ensuring
secure, reliable bonding in all conditions.
Additionally, as with other Venture Acrylic
Adhesives, CW® adhesives continue to self
cross-link after application, meaning that bond
strength increases over time and ensuring
secure, reliable performance.

Rubber-Based Adhesives

Venture Tape rubber-based adhesives are aggressive pressure sensitive adhesives with high peel, tack, and shear performance. Rubber based adhesives perform well over a broad range of temperatures and environmental conditions. Typically, rubber based adhesives have a maximum application temperature of 200°F (93°C). For higher temperature applications, Venture Tape recommends its line of acrylic adhesives.

Acrylic Adhesives

Venture Tape acrylic adhesives are high performance pressure sensitive adhesives with high peel, shear, and temperature performance. Acrylic adhesives are not initially as aggressive as rubber adhesives, but bond strength increases over time ensuring maximum reliability for demanding applications. Typically acrylic adhesives have a maximum application temperature of 280°F (138°C); some Venture Tape acrylics withstand temperatures up to 400°F (204°C). Acrylic adhesives bond to a broad range of substrates and insulation materials.

Custom Products

Venture Tape has dedicated engineering resources to develop application specific products for the most demanding applications. Venture's fully staffed, on-site laboratory and manufacturing engineering resources ensure that products are developed for manufacturability and transition smoothly from prototypes to production.

















What is VentureClad®?

VentureClad® is a zero permeability, self adhesive jacketing product which delivers significant advantages over traditional jacketing techniques.





The above application shows a chiller that was insulated in a mechanical room with rubber insulation and covered with VentureClad® - White (1577CW-W). VentureClad® was chosen due to:

- Application Temperature as low as -30° F
- Zero Permeability
- UL 723/ASTM-E-84 Flame and Smoke
- No Primers, Activators, or Heat Guns Required
- · Ideal Internal or External Use
- Neat, Clean, and Dependable Material



Venture Clad™ Products

VentureClad[™] is an innovative, cost effective series of products designed with architects, mechanical engineers, and contractors in mind. In addition to exceeding most building code requirements, VentureClad[™] installs quickly and easily on pipe or duct board with no special tools required, delivering significant time, labor, and cost savings. VentureClad[™] is the highest performing, highest value insulation jacketing product on the market today.



VentureClad™ 1577CW®

A 5-ply laminate for interior and exterior use, available in Natural Aluminum (1577CW®), White (1577CW®-W), Black (1577CW®-B), NEW Black Stucco Embossed (1577CW®-B) Stucco Embossed (1577CW®-E), White Stucco Embossed (1577CW®-WE) and also NEW Tedlar (1577CW®-T).



VentureClad™ Plus 1579CW®

A 13-ply laminate for interior and exterior use, available in Natural Aluminum (1579CW®), White (1579CW®-W), both with and without adhesive, and Stucco Embossed (1579CW®-E). VentureClad™ 1579CW® is as tough as metal but installs easily with no off-site fabrication required.



VentureGuard™-H 1574CW®

Chemical resistant Hypalon for use in corrosive environments. VentureGuard[™]-H 1574CW[®] is more durable and versatile than stainless steel but installs on-site for a fraction of the cost.



VentureClad™ 1577CW®-Tedlar

Venture 1577CW-Tedlar is a four-ply white laminate, made with 2 layers of aluminum foil, a layer of polyester film, and an outer layer of Tedlar, coated with a special cold weather acrylic pressure sensitive adhesive system which combines superior quick stick at normal temperatures with superior low temperature performance below freezing.

Venture Clad™ 1577CW®

Venture Tape VentureClad™ 1577CW® is a patented, zero permeability, absolute vapor barrier for insulation cladding and jacketing applications. A 5-ply, self adhesive material installs quickly and easily with no special tools required, resulting in significant time, labor, and cost savings. VentureClad™ 1577CW® exceeds most building code requirements and can be used for new construction as well as repair on existing structures. Available in natural aluminum, white, black, and stucco embossed texture.









FEATURES & BENEFITS

- High performance jacketing product performs well over a wide temperature range; -30°F to +300°F (-34°C to +149°C) service temperature
- Venture CW® cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- · Zero permeability, absolute vapor barrier
- · High puncture and tear resistance
- · Contains tested and approved mold inhibiting agents
- · Self adhesive material installs easily with no off-site fabrication required
- Exceeds standard building design requirements (UL 723 10/20 Flame Spread/Smoke Rating)
- Meets requirements of FSIS Directive 5000.1, 9 CFR, Part 416 for USDA and FDA facilities and Department of Health and Human Services Construction Guide for Food Facilities



ICAL PRODUCT SPECIFICATIONS		Typical Value	
Specification	Typical Value	(Metric)	Test Method
Material Thickness	6.0 mils	152.4 μ m	PSTC-133
Adhesive Peel Strength	55 oz/in	15.6 N/25mm	PSTC-101
Adhesive Shear Strength	>168 hours	>168 hours	PSTC-107
Tensile Strength	68 lb/in width	306 N/25mm	PSTC-131
Elongation	166%	166%	PSTC-131
Puncture Resistance	35.4 lb	159.3 N	ASTM D 1000
Tear Strength	8.5 lb	38.3 N	ASTM D 624
Application Temperature Range	-10°F to 248°F	-23°C to 120°C	
Minimum Continuous Use Temperature	-30°F	-34°C	
Maximum Continuous Use Temperature	300°F	149°C	
Flame Spread/Smoke Developed	10/20	10/20	UL 723
Surface Flammability Using Radiant Heat	0	0	ASTM E 162
Specific Optical Density of Smoke	0	0	ASTM E 662
Water Vapor Permeability	0.0000 perms	0.0000 perms	ASTM E 96

PRODUCT & SPECIFICATION APPROVALS

- UL Classified
- Coast Guard 164.112/63/0
- British Standards BS 476, Parts 6 & 7, Class O
- Lloyds of London
- SOLAS
- Australian Standards AS 1530, Part 3
- New York City MEA
- ROHS

- IMO A653
- UK Ministry of Defense
- NORSOK
- CINI
- GSA
- DIN 4102, B1
- M1 Certified

- Esso (ExxonMobil) Site Standard Installation
- Corps of Engineers Unified Specification
- Singapore Standards
- Prison Services Authority
- Meets requirements of FSIS Directive 5000.1, 9CFR, Part 416 for USDA and FDA facilities and Department of Health and Human Services

enture Clad Plus 1579cw®

VentureClad™ Plus (VentureClad™ 1579CW®) is a patented, zero permeability, absolute weather and vapor barrier for insulation cladding and jacketing applications. A 13-ply, self adhesive material is as tough as metal jacketing materials but installs quickly and easily with no special tools required. Venture Clad™ Plus exceeds most building code requirements and can be used for new construction as well as repair on existing structures. Available in natural aluminum, white, and stucco embossed texture, both with and without adhesive.







Typical Value



FEATURES & BENEFITS

- Flexible, strong, fabric reinforced insulation cladding product combines vapor barrier function with heavy-duty all weather mechanical protection
- Ultra high performance jacketing product performs well over a wide temperature range; -30°F to +300°F (-34°C to +149°C) service temperature
- Venture CW® cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- High puncture and tear resistance
- · Contains tested and approved mold inhibiting agents
- · Self adhesive material installs easily with no off-site fabrication required
- Ideal for use over all types of insulation materials including fiberglass, mineral wool, calcium silicate, perlite, urethane and polystyrene
- Exceeds standard exterior building design requirements

TECHNICAL PRODUCT SPECIFICATIONS

Specification	Typical Value	(Metric)	Test Method
Material Thickness	15.5 mils	393.7 μ m	PSTC-133
Adhesive Peel Strength	100 oz/in	28.4 N/25mm	PSTC-101
Adhesive Shear Strength	>168 hours	>168 hours	PSTC-107
Tensile Strength	160 lb/in width	720 N/25mm	PSTC-131
Elongation	35%	35%	PSTC-131
Puncture Resistance	80 lb	360 N	ASTM D 1000
Tear Strength	16 lb	71.2 N	ASTM D 624
Burst Strength - Inside/Outside	522 psi	3599 kPa	ASTM D 774
Burst Strength - Outside/Inside	539 psi	3716 kPa	ASTM D 774
Application Temperature Range	-10°F to 248°F	-23°C to 120°C	
Minimum Continuous Use Temperature	-30°F	-34°C	
Maximum Continuous Use Temperature	300°F	149°C	
Flame Spread/Smoke Developed	50/75	50/75	UL 723
Water Vapor Permeability	0.0000 perms	0.0000 perms	ASTM E 96

PRODUCT & SPECIFICATION APPROVALS

- UL Classified (UL)
- Lloyds of London (1579NA)
- IMO 61
- Corps of Engineers Unified Specification
- Esso (ExxonMobil) Site Standard Installation Procedure QCP11
- Singapore Standards
- ROHS

VentureGuard"-H 1574cw°

VentureGuard[™]-H (VentureGuard[™] 1574CW[®]-H) is a chemical resistant vapor retarder for insulation cladding and jacketing applications. Self adhesive material installs quickly and easily with no special tools required, resulting in significant time, labor, and cost savings. VentureGuard [™]-H exceeds most building code requirements and can be used for new construction as well as repair on existing structures. As the only real performance alternative to stainless steel, VentureGuard [™]-H is the highest performing, highest value product on the market today.





Timical Value



FEATURES & BENEFITS

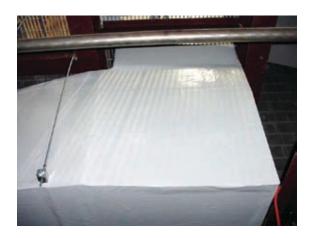
- VentureGuard™-H features Hypalon® and is resistant to a wide variety of organic and inorganic chemicals (reference Chemical Resistance chart)
- Designed as an alternative to stainless steel jacketing, VentureGuard™-H is ideal for use on piping, duct, and insulation in chemical processing, oil and gas refining, and transportation industries
- High performance jacketing product performs well over a wide temperature range; -30°F to +300°F (-34°C to +149°C) service temperature
- Contains tested and approved mold inhibiting agents
- · Self adhesive material installs easily with no off-site fabrication required
- Venture CW® cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- Self adhesive material installs easily with no off-site fabrication required
- Exceeds standard exterior building design requirements

TECHNICAL PRODUCT SPECIFICATIONS

Specification	Typical Value	lypical Value (Metric)	Test Method
Material Thickness	26.25 mils	666.8 μ m	PSTC-133
Adhesive Peel Strength	50 oz/in	14.3 N/25mm	PSTC-101
Adhesive Shear Strength	>168 hours	>168 hours	PSTC-107
Tensile Strength	1075 lb/in width	7247 N/25mm	PSTC-131
Elongation	1000%	1000%	PSTC-131
Application Temperature Range	-10°F to 248°F	-34°C to 120°C	
Minimum Continuous Use Temperature	-30°F	-34°C	
Maximum Continuous Use Temperature	300°F	149°C	
Flame Spread/Smoke Developed	35/60	35/60	UL 723
Water Vapor Permeability	0.053 perms	0.053 perms	ASTM E 96



Venture 1577CW-Tedlar is a four-ply white laminate, made with 2 layers of aluminum foil, a layer of polyester film, and an outer layer of Tedlar, coated with a special cold weather acrylic pressure sensitive adhesive system which combines superior quick stick at normal temperatures with superior low temperature performance below freezing.







FEATURES & BENEFITS

- High performance jacketing product performs well over a wide temperature range; -30°F to +300°F (-34°C to +149°C) service temperature
- Venture CW® cold weather acrylic adhesive applies easily at temperatures as cold as -10°F (-23°C)
- Zero permeability, absolute vapor barrier
- · Facing for insulation in food plants and chemical plants
- High chemical resistance
- Contains tested and approved mold inhibiting agents
- Self adhesive material installs easily with no off-site fabrication required
- Exceeds standard building design requirements (ASTM E84 15/5 Flame Spread/Smoke Rating)
- Meets requirements of FSIS Directive 5000.1, 9 CFR, Part 416 for USDA and FDA facilities and Department of Health and Human Services Construction Guide for Food Facilities

TECHNICAL PRODUCT SPECIFICATIONS

		Typical Value	
Specification	Typical Value	(Metric)	Test Method
Material Thickness	5.6 mils	142 μ m	PSTC-133
Adhesive Peel Strength	55 oz/in	15.6 N/25mm	PSTC-101
Adhesive Shear Strength	>168 hours	>168 hours	PSTC-107
Tensile Strength	55 lb/in width	247.5 N/25mm	PSTC-131
Elongation	60%	60%	PSTC-131
Application Temperature Range	-10°F to 248°F	-23°C to 120°C	
Minimum Continuous Use Temperature	-30°F	-34°C	
Maximum Continuous Use Temperature	300°F	149°C	
Flame Spread/Smoke Developed	15/5	15/5	UL 723
Surface Flammability Using Radiant Heat	0	0	ASTM E 162
Specific Optical Density of Smoke	0	0	ASTM E 662
Water Vapor Permeability	0.0000 perms	0.0000 perms	ASTM E 96

Pipe jacketing made easy!

Pre-cut VentureClad™ Jacketing Sheets applied in your shop, quickly and efficiently wrapped and sealed on the job.

Nothing less than revolutionary.





VentureClad™

- Pre-cut jacketing sheets with 3" scored liner for ease of application
- Available for all types and sizes of pipe insulation
- Zero Permeability
- UL Classified
- Indoor/Outdoor jacketing in one step
- CW[®] Adhesive can be applied as low as -10°F (-23°C)
- Matching Butt Strip Tape for sealing joints
- Major Labor Savings

EMBOSSED NATURAL ALUMINUM SHEETS

1577CW®-ES VentureClad™Attractive, Tough, Easy Application

EMBOSSED WHITE ALUMINUM SHEETS

1577CW[®] -WES VentureClad™ High Aesthetic Appeal Meets FSIS for USDA, FDA and Food Facilities



800-343-1076 www.venturetape.com

VentureClad Jacketing



Patented laminated foil/film facing for interior and exterior applications

Installation Instructions

Surface Preparation

Ensure that all surfaces are dry and clean, free from dust, oil and grease/silicone. All insulation should be taped securely, giving an even surface for the VentureClad application. All adhesives work best when firmly "wetted out" to the substrate surfaces.

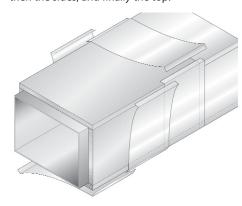
When applying, partly peel back and crease the liner so enough adhesive is available to attach the VentureClad in the correct position. Then, with a spreader, progressively remove the liner while smoothing, until the entire sheet has been applied.

When applying VentureClad sheet onto a continuous surface until it meets itself, a 3 inch (75 mm) overlap is recommended to give a strong, weatherproof seal. Plan the wrap so that the edge of the sealing flap faces down.

Application to Rectangular Ductwork

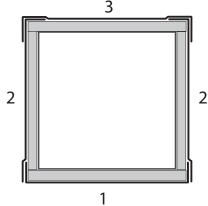
On ductwork over 32 inches (80 cm) wide, it is recommended that the top be crowned (pitched), to allow water runoff, preventing pooling.

For fast, easy application, VentureClad should be applied to each of the sides separately, starting with the bottom surface, then the sides, and finally the top.



Pre-cut the VentureClad to the required size, plus an additional overlap of 3 inches (75 mm) for each adjoining surface.

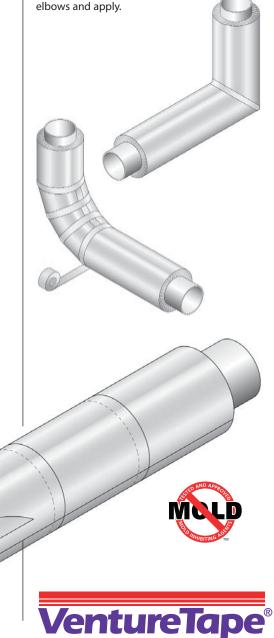
When applying to rectangular ductwork, apply to the bottom surface first, bringing the 3 inch (75 mm) overlap up, onto the sides. Next apply VentureClad to the vertical surface, bringing the 3 inch (75 mm) overlap over onto the top surface. Finally, apply VentureClad to the top of the duct, bringing a 3 inch (75 mm) overlap down onto each side vertical surface.





On straight pipe, cut VentureClad to the desired length (pipe circumference), plus an additional overlap of 3 inches (75 mm).

Apply the next piece allowing a 3 inch (75 mm) overlap onto the previous section.



On bends and elbow configurations, pre-

Cut out the required shapes to cover the

segments of the bends and

cover the pipe insulation with VentureClad.

Application to Ductwork Reducer

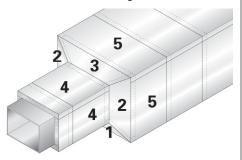
Starting from the bottom, work upwards allowing an overlap of 3 inches (75 mm) onto adjacent surfaces.

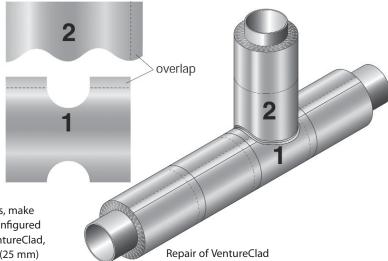
First apply VentureClad to surface No.1, and overlap onto each adjoining surface.

Apply VentureClad to surface No.2, and overlap onto surfaces no. 3, 4, and 5, sealing onto the overlap and trimming flush at surface No.1, to achieve a neat, secure finish.

Apply VentureClad to surface No.3 in the same manner as to surface No.2, but seal onto the overlap and trim at surface No.2.

Finally, apply VentureClad to surfaces No.4 and 5 as with other rectangular ductwork.





On "tee" sections, make appropriately configured templates of VentureClad, leaving a 1 inch (25 mm) overlap.

Should damage occur, simply ensure that the surface is clean, and apply a new section of VentureClad over the damaged area, to a minimum of 3 inches (75 mm)

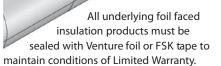




On reduced pipe, apply VentureClad first to surface No.1, overlapping onto surface No.2. Cut shape No. 2, allowing for 3 inch (75 mm) overlap, and apply to surface No.2, overlapping onto section No.1.

Apply VentureClad to surface No.3 overlapping and sealing onto section No.2.

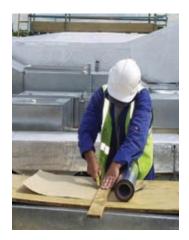
Finally, apply to surface No.4, overlapping and sealing onto section No.1.



Please contact Venture Tape for additional seaming requirements for VentureClad 1579CW.

Please contact Venture Tape for additional high traffic area and indigenous wildlife installation instructions.

Venture Tape®









VentureWrap™ 1555U

A three ply laminate constructed of a 1-mil ($25\mu m$) aluminum foil with 0.5 ($12\mu m$) mil polyester film on both sides. Primarily used as a low temperature vapor barrier in cryogenic applications, VentureWrapTM provides a zero permeability vapor barrier for extreme jacketing applications.





FEATURES & BENEFITS

- Low temperature vapor barrier on cold/chilled water lines
- Polyester film on both sides of the laminate prevents formation of pinholes
- May be applied to all types of foam insulation
- Exceeds standard building requirements (ASTM E 84 10/20 Flame/Smoke Rating)
- This product must be covered by cladding material on all exterior applications
- Tape available for seams

TECHNICAL PRODUCT SPECIFICATIONS

Specification	Typical Value	Typical Value (Metric)	Test Method
Material Thickness	2.4 mils	1.5 μ m	PSTC-133
Adhesive Peel Strength	- oz/in	- N/25mm	-
Adhesive Shear Strength	- hours	- hours	-
Tensile Strength	12,500 psi	86 MPa	PSTC-131
Elongation	49%	49%	PSTC-131
Application Temperature Range	-76°F to 302°F	-60°C to 150°C	
Minimum Continuous Use Temperature	-40°F	<i>-34</i> °C	
Maximum Continuous Use Temperature	240°F	149°C	
Flame Spread/Smoke Developed	10/20	10/20	ASTM E 84
Water Vapor Permeability	0.00 perms	0.00 perms	ASTM E 96

Venture Clad M

Major Projects List

- Bristol Meyer Squibb
- Kraft Foods
- Rahway Hospital
- Abbott Northwest Hospital
- Cima Labs
- Mayo Clinic
- Coca Cola
- Trunk Line (LNG)
- Turning Stone Casino
- Glaxo Smith Kline
- Barr Labs
- Riverside Hospital
- Boeing
- North Side Hospital
- Midstate Correction Center
- ConocoPhillips
- Turkey Valley Farms
- Esterville Foods
- Exxon Mobile Chemical
- Broadmore Power
- American Electric Power
- John Hopkins University
- Charleton Memorial Hospital
- MTSU
- Vanderbilt University
- Georgia Southern University
- Hendricks Motor Sports
- University of Minnesota
- St. Joseph Hospital
- Honeywell
- Louisiana State University
- Air Products
- Akron General Hospital
- Whittfield Court house
- Barnett Hospital
- Seton Medical Center
- Hyatt Regency

- Derektor Shipyards
- Mayne Pharmaceutical
- NASA
- University of Buffalo
- Schering Plough
- Angola State Prison
- University of Maryland
- West Side Regional Hospital
- Rice University
- Eisenhower Building
- Alabama Power
- BP Oil
- McCain Foods
- Barilla Foods
- Merck
- Nestles
- IBM
- FBI
- University of Texas Medical Building
- Morton Foods
- Ann Richards Girls Academy
- Koch foods
- McKinney Regional hospital
- Channelview High School
- Channelview Middle School
- Lewis & Clark Navel Ship
- UCSB
- Church Street Station
- Venice Hospital.
- Johnson & Wales University
- Southern Illinois University
- Duke University
- Wake Medical Center
- Proctor & Gamble
- Motts Food
- Kelloggs
- Goodrich

Venture Glad TM

Diverse Applications



Large Diameter Pipe Applications



Marine Applications



Condensate Drip Pan Applications



Industrial Applications



Pharmaceutical Applications



Elbow Applications

Delivering Solutions Every Day

R&D Customer-responsive product development keeps Venture Tape at the forefront in solutions to sealing, mounting and assembly problems. At Venture we strive for continuous improvement through process control and technical innovation.

Coating State-of-the-art coating lines provide substantially increased capacity, through both speed and web width, with precise response to our computer control systems.

Control Advanced process control systems at Venture Tape are unrivaled in the industry. Computer-control from start to finish ensures the highest levels of quality and customer satisfaction.

Converting Fully automated systems provide flexibility, speed and improved consistency to the conversion process, facilitating custom cuts, reducing waste and providing better value.

QA To better serve your needs, we maintain a program of continuous in-house testing and batch-tracking; Venture Tape's quality assurance system is aimed at providing consistent, reliable performance.

Service Special order-handling capabilities, fast reaction service, and global warehouse locations ensure Venture products are available to meet your most challenging schedules.













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