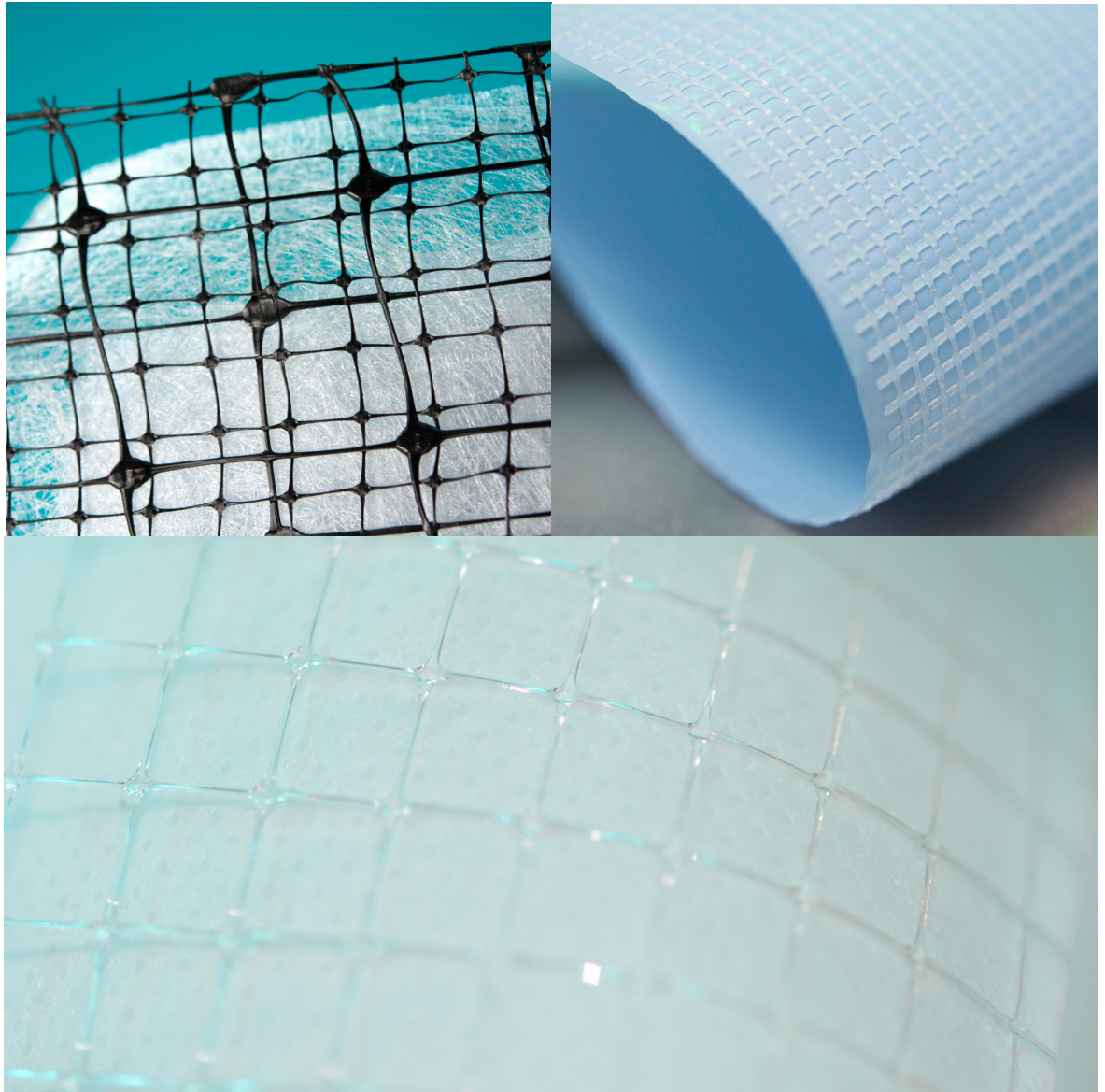


Conwed
Square Netting

Delstar
Composite Media



Advanced Materials for Adhesive Solutions

SWM International – Your Materials Partner

As experts in highly engineered parts made from resins and polymers, we provide solutions to make products stronger, more durable and with increased performance. Our [Conwed™ Square Netting](#) and [Delstar™ Composite Media](#) are designed to meet aggressive requirements related to temperature, chemicals, moisture and other extremes. We pride ourselves in our ability to offer unmatched products and services to demanding industries. Learn more at swmintl.com or contact us at ams@swmintl.com today to learn how you can partner with SWM to start innovating essential solutions.

Manufacturing Excellence

Our fundamental expertise is our ability to consistently produce high quality, advanced engineering-grade resins, stainless steel, polyurethane film and sheet. What can we manufacture for you?

Custom Engineering

We work with our customers to understand your requirements, anticipate your needs and create tailor-made solutions.

Innovation

Our global team works together to develop cutting edge solutions to solve our customers' toughest challenges.

Global Manufacturing

ISO 9001:2015, ISO 14001, ISO 50001 and OHSAS 18001 certified manufacturing facilities in the Americas, Europe and Asia supply customers' global needs.

Advanced Materials for Adhesive Solutions

Create Exceptional Composites Powered by SWM

From industrial and consumer wipes, to hygiene, medical, cleaning and automotive products, our netting delivers diverse performance capabilities in composite form.

Co-Extrusion Netting

Conwed Square Netting can reinforce film, foil, paper, bubble wrap, foam, nonwoven and other types of fabrics. Our co-extrusion technology helps our customers design the most advanced, flexible and strong composites.

Co-extrusion is a multi-layer extruded netting that can be subsequently oriented where different polymers can form different layers on the same netting configuration. Conwed Square Netting has the ability to build composite netting with multi-layer combinations. (Figure 1)

By using co-extrusion netting with adhesive layers, manufacturers and converters may eliminate adhesive steps in their manufacturing and converting processes.

SWM CO-EXTUSION NETTING

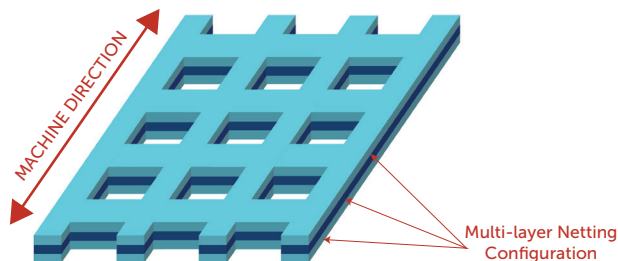


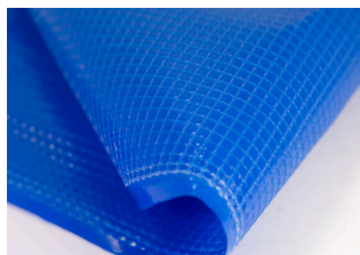
Figure 1. Co-extrusion netting configuration



Insulation Reinforcement



Pleated Filtration Media

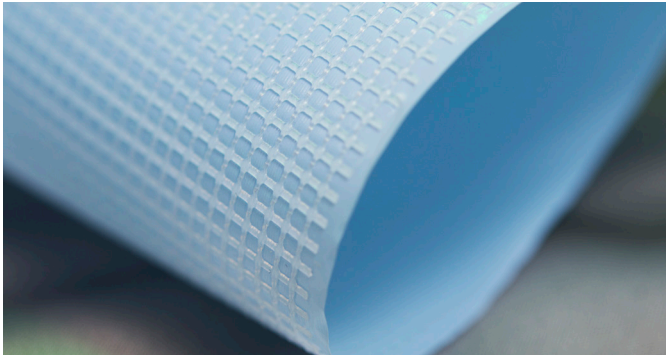


Surface Protection

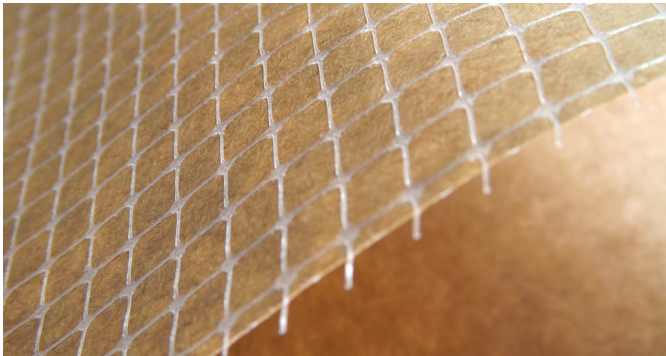


Cleaning Products

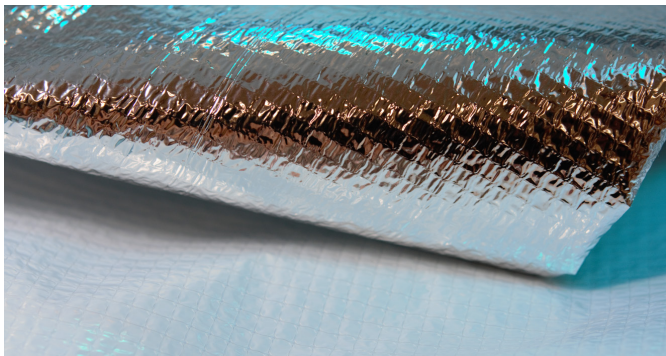
Advanced Materials for Adhesive Solutions



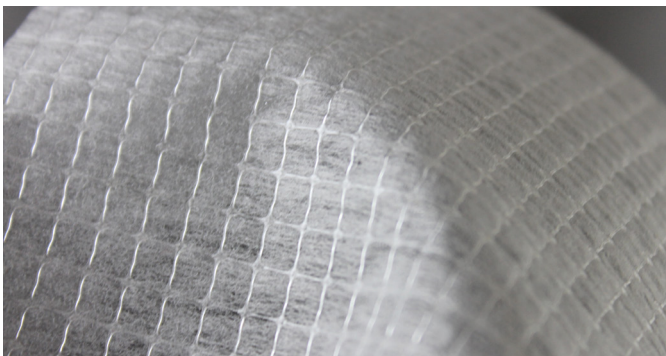
Film Reinforcement



Kraft Paper Reinforcement



Foil Reinforcement



Nonwoven Reinforcement

Heat Activated Reinforcement Netting

Our Conwed™ Heat Activated Netting (formerly Thermanet® Heat-Activated Reinforcement Netting), brings together two or more substrates into a single, improved composite structure. It is a co-extruded plastic netting with one or more layers of adhesive components. The adhesive properties are actually built into the netting to bond and strengthen a diverse range of materials.

Features & Benefits:

- Adds high-strength characteristics at low cost
- Integral joint structure provides improved dimensional stability for better product processing & handling
- Adhesive layer is an integral component to the net itself, providing both the bonding agent & the reinforcement strength in one product
- Low activation temperature, resulting in reduced energy costs & faster line speeds
- Superior bond with minimal blocking, allowing for maximum porosity, absorption & breathability of the composite
- Wide range of product configurations, providing design versatility to match strict performance requirements
- Lamination capabilities with a diverse variety of materials
- Netting material is chemically inert which provides adaptability to a large number of market applications

Delstar Lamination Composite

Delstar™ Lamination Composite (formerly Laminet®) is a finished composite of a thermally-activated adhesive net and a nonwoven. It is Conwed Square Netting that adds strength to the nonwoven while it minimizes stretch and instability. The resulting Delstar Lamination Composite offers the performance of much heavier nonwovens and ensures consistency, appearance and strength to meet strict product requirements.

Our product portfolio is available in various netting, adhesive and nonwoven configurations to provide different and specific performance capabilities including:

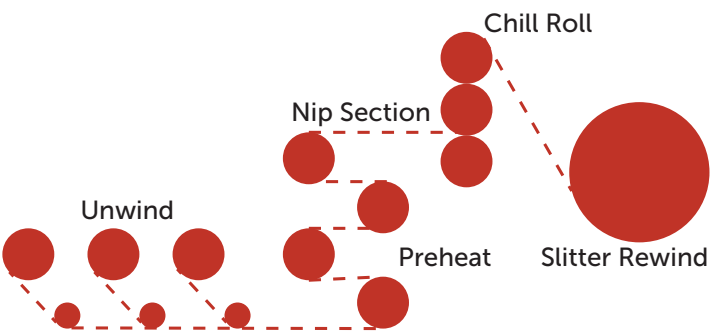
- Superior breathability
- Highly absorbent
- Printable properties
- Strong & consistent
- Minimum stretch
- Excellent recovery
- Penetration resistant
- Greater staple/stitch holding power
- Tear resistant
- Improved appearance
- Light-weight composite
- Equal strength to heavier nonwovens

Advanced Materials for Adhesive Solutions

Laminating conditions are dependent on the type of laminating equipment, materials and composites produced and subsequent production processes. We illustrate two general lamination systems that could be used to incorporate SWM products with other materials or substrates.

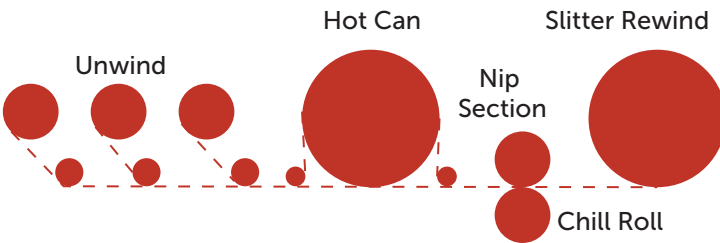
Pre-heat System

This laminating system favors longer dwell times and can typically be run at faster speeds. Chill rolls are recommended to create a “set” and prevent migration of the substrate after lamination.



Hot Can System

Higher temperatures are used to compensate for the shorter dwell time. Under these conditions the line speed should be adjusted to provide for approximately 1.5 seconds of dwell time. The nip pressure should be as hard as possible without causing “strike-through” of the adhesive.



Under either system, optimizing the dwell time of the netting is critical. After establishing the nip pressure and dwell time, the temperature should be adjusted until the desired bond is achieved.

General Laminating Conditions		
Variable	General	Specific
Nip Pressure	Hard as possible	300 PLI (520 N/cm)
Line Speed	Dwell time most important	1.5 seconds.
Temperature	Minimize temperature but reach activation level	300°F (149°C) increase gradually

Technical Product Information		
Variable	Adhesive	Netting (Polypropylene)
Tack Temperature	180°F - 212°F (82°C - 100°C)	305°F (152°C)
Melt Temperature	200°F - 284°F (93°C - 140°C)	325°F (163°C)



Industrial & Consumer Wipes

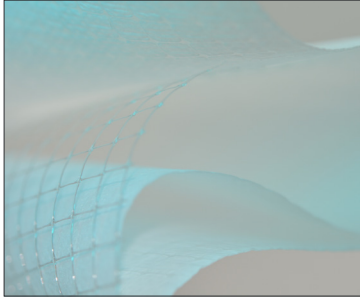


Disposable Cleaning Pads

Heat Activated Reinforcement Conwed Square Netting							
SWM Product	Strands per Inch (Strands per 10 cm)	Adhesive Layers	Weight	Tensile lb/3" (N/10 cm)			
			lb/ft ² (g/m ²)	MD	CD	(MD)	(CD)
R03434	5 x 5 (19.7 x 19.7)	1 sided	3.30 (16.11)	28	34	163	198
R03436	5 x 5 (19.7 x 19.7)	1 sided	2.70 (13.18)	17	20	99	117
R03470	6 x 7 (23.6 x 27.5)	1 sided	6.10 (29.78)	45	36	263	210
R03475	5.3 x 6.3 (22 x 24.8)	1 sided	5.00 (24.41)	44	33	257	193
R03490	1 x 1 (3.9 x 3.9)	1 sided	1.50 (7.32)	15	12	85	70
R05058	3 x 3 (11.8 x 11.8)	2 sided	1.55 (7.57)	12	10	70	58
R05060	3 x 2 (11.8 x 7.9)	2 sided	1.50 (7.32)	12	9	70	52
R05065	2 x 1 (7.9 x 3.9)	2 sided	1.40 (6.83)	10	10	58	58
R05070	4 x 2 (15.7 x 7.9)	2 sided	1.55 (7.57)	12	9	70	52
R05080	4 x 4 (15.7 x 15.7)	2 sided	1.70 (8.30)	12	12	70	70
R05095	4 x 4 (15.7 x 15.7)	1 sided	4.40 (21.48)	40	35	233	204

Nonwoven Reinforced with Conwed Square Netting								
SWM Product (Conwed Component)	Strands per Inch (Strands per 10 cm)	Nonwoven Type	Nonwoven Weight	Weight	Tensile lb/3" (N/10 cm)			
			lb/ft ² (g/m ²)	lb/ft ² (g/m ²)	MD	CD	(MD)	(CD)
L03434 (R03434)	5 x 5 (19.7 x 19.7)	Spunbond PP	4.50 (21.97)	7.80 (38.08)	39	33	228	193
L03436 (R03436)	5 x 5 (19.7 x 19.7)	Spunbond PP	3.57 (16.94)	6.17 (30.12)	30.9	32.1	180	187
L05095 (R05095)	4 x 4 (15.7 x 15.7)	Carded PET	4.50 (21.97)	8.90 (43.45)	49.5	50.4	289	294

Advanced Materials for Adhesive Solutions



SWM recognizes the value of providing customized solutions to our partners. We build relationships with both our customers and our suppliers to ensure that we offer the best quality and service. We stay current on high-performance material issues to aid in product selection. We offer same day shipments, drop shipments and stocking agreements, as well as product customization per application. We strive to maintain high quality and achieve customer satisfaction with every order.

Our Facilities



SWM locations shown
Gilberdyke, UK (top) and
Richland, PA, USA (bottom)

SWM is focused on advanced materials and technologies in our ISO 9001, ISO 14001, ISO 50001 and OHSAS 18001 certified facilities. Our diverse product lines are recognized worldwide for their superior performance in a variety of applications. For more than 70 years, SWM has served its customers through a wide global manufacturing network with diverse processing capabilities developing solutions tailored to meet our customers unique requirements.



SWM INTL
100 North Point Center East
Suite 600
Alpharetta, GA 30022
USA

swmintl.com
ams@swmintl.com

AMS_CON_AS_ 092021 A

About SWM

SWM is a leading global performance materials company. We use natural fibers, resins, and polymers to provide essential solutions that enhance product performance and help our customers win in a variety of industries and applications. For further information, please visit our web site at www.swmintl.com.

Copyright © Schweitzer-Mauduit International, Inc. (2021). All Rights Reserved. SWM™, CONWED™ and Delstar™ are trademarks of Schweitzer-Mauduit International, Inc. ("SWM") or an affiliated company of SWM.



All statements, product characteristics, and performance data contained herein are believed to be reliable based on observation and testing, but no representations, guarantees, or warranties of any kind are made as to accuracy, suitability for particular applications, or the results to be obtained. Nothing contained herein is to be considered to be permission or a recommendation to use any proprietary process or technology without permission of the owner. No warranty of any kind, expressed or implied, is made or intended.