

Ultra™ Link

Modular High Performance Applicator Platform

The Ultra™ Link platform is the latest in a series of hot melt adhesive and fluid applicators from ITW Dynatec. Designed to provide the greatest level of pattern accuracy in the industry, Ultra™ Link supports the fastest line speeds, while providing superior cycle times, highest efficiency and improved reliability.

Its universal, long-life module technology, with common nozzle mounting, offers unparalleled flexibility, modularity and a rapid change-over design for quicker maintenance. This applicator technology also provides uniform parts enabling spare part inventory reduction up to 50%. Ultra's™ modular design allows a quick conversion from slot, to spray, to strand coating.

Offering exceptional speed, reliability and performance, the Ultra™ Link platform is an ideal solution for all applications common to baby diaper, feminine pad and adult incontinence lines.

THE ONE THAT DOES IT ALL.

FAST

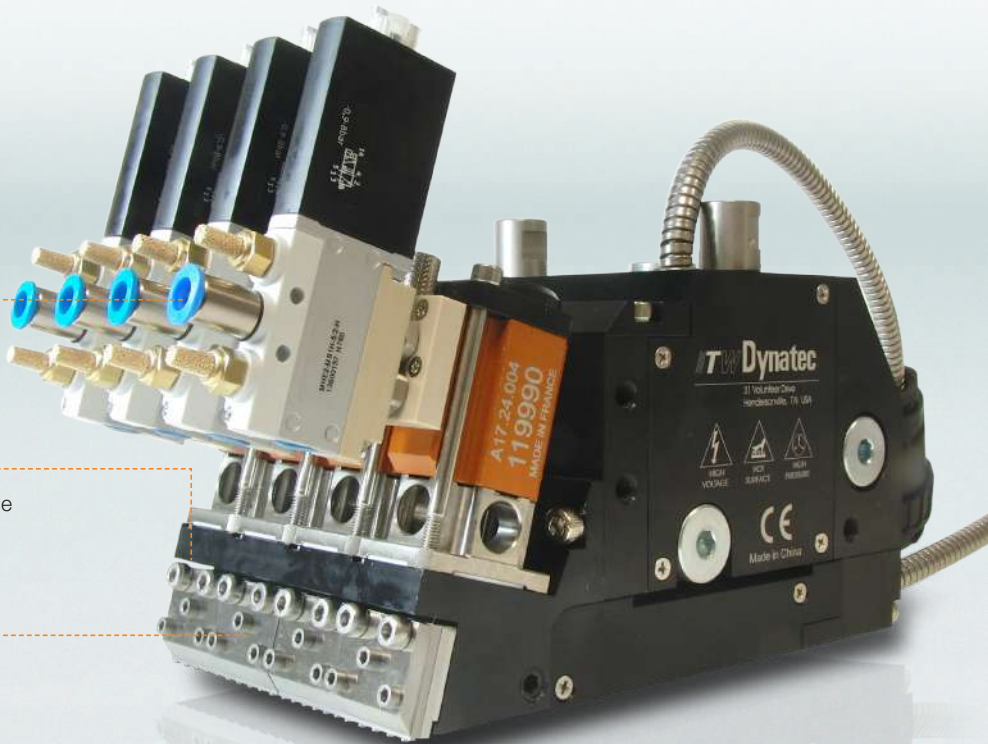
Quickest cycle times and highest production line speeds – up to 700m/min – results in maximum performance and efficiency

VERSATILE

A universal platform design that utilizes a single module for multiple applications and rapid change-over (RCO) construction for fast maintenance solutions

PRECISE

A 15° shaped air heater for the perfect strand/web path and the DHP industry's best-in-class creep values – as low as 1%



ULTRA™ LINK APPLICATOR

This modular applicator is available with multi-module configuration for flexible application width setup. The Ultra™ module, as a key component, has an universal design that allows using the same module for all required application patterns like slot, spray and strand coating with appropriate nozzles. The nozzles compatible with Ultra™ Link applicator are:

- SCS strand coating system, Ultra™ Stitch (with air support) & Ultra™ Touch (without air support)
- UFD® HS Elite (Omega & Random pattern)
- HSI high speed intermittent
- Slot nozzles



The optional roller guide and unload cylinder will ensure proper position and stabilization of the strands for optimal coating.

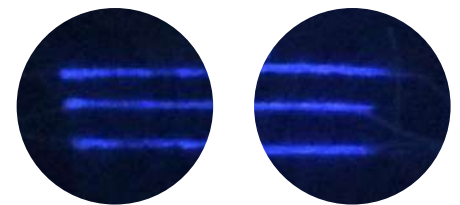
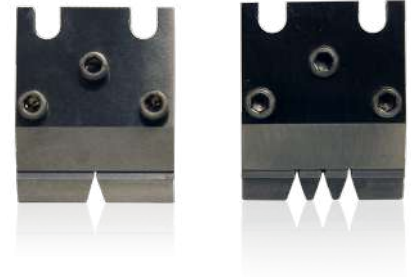
Ultra™ Link applicator without nozzles

ULTRA™ LINK APPLICATOR	1-port	2-port	3-port	4-port	6-port	8-port	10-port	12-port
Number of Modules	1	2	3	4	6	8	10	12
Mounting interface	2 x M8-1.25 tapped holes	2 x M8-1.25 tapped holes	2 x M8-1.25 tapped holes	2 x M8-1.25 tapped holes	4 x M8-1.25 tapped holes	4 x M8-1.25 tapped holes	4 x M8-1.25 tapped holes	4 x M8-1.25 tapped holes
Height	146 mm (5.75 in)							
Depth	235 mm (9.25 in)							
Width	50 mm (1.97 in)	50 mm (1.97 in)	75 mm (2.95 in)	100 mm (3.94 in)	150 mm (5.91 in)	200 mm (7.87 in)	250 mm (9.84 in)	300 mm (11.81 in)
Wattage module manifold	450 W	450 W	625 W	800 W	1200 W	1600 W	2000 W	2400 W
Wattage service block	450 W	450 W	525 W	600 W	900 W	600 W	1200 W	1200 W
Weight	2.1 kg	2.2 kg	3.2 kg	4.2 kg	6.1 kg	8.4 kg	9.8 kg	11.2 kg
Supply voltage setup	200 - 240 V, 1 Phase, 50 - 60 Hz							
Operating temperature range	25° to 200°C (77° to 392°F)							
Warm-Up time	15 minutes for cold start, or 5 minutes for module change							
Pneumatic pressure range to solenoid	4.5 – 6 bar (65 - 88 psi)							
Adhesive pressure maximum	68 bar (1000 psi)							

ULTRA™ SCS STRAND COATING SYSTEM

Ultra™ SCS is an advanced nozzle technology, designed for precise adhesive deposition at highest line speeds. Ultra™ SCS applies hot melt adhesives to elasticized legs, leg cuffs and waistbands with exceptionally low variability resulting in increased line speed, reduced adhesive consumption and better consistency in patterns. Ultra™ Stitch and Ultra™ Touch nozzles not only offer a wide operating window within a range of process conditions, but also support applications using a broad variety of elastic and adhesive materials. With the lowest adhesive usage available, the Ultra™ SCS also provides a total creep strength as low as 1 percent.

- Designed for high speed applications up to 700 m/min
- Rapid Change-Over (RCO) design for quicker maintenance
- Larger adhesive orifices for less plugging
- Lowest adhesive usage for improved strand elasticity
- Outstanding creep performance less than 1%
- 20 % to 40 % adhesive savings



Pattern Start

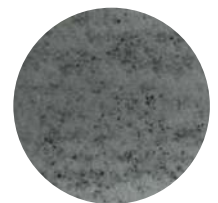
Pattern Stop

Strands per nozzle	up to 8 for 25 mm nozzles. Other options available.
Nozzle orifice sizes	0.012 to 0.040 in (0.31 to 1 mm)
Typical adhesive flow	15 to 100 mg/lm/s
Min. Off cycle time	3ms
Min. On cycle time	3ms
Adhesive viscosity range	up to 30,000 mPas (cps)
Operating air pressure range Ultra stitch nozzle	0.3 - 1.7 bar (5-25 psi)

ULTRA™ HS ELITE HIGH SPEED SPRAY NOZZLE

The Ultra™ HS Elite Series nozzle is a premium, high-performance nozzle technology offering an improved sprayability of higher viscosity adhesives, less plugging and excellent pattern consistency. With orifices increased in size up to 50% and fewer, thicker plates, flow paths are significantly improved for more even adhesive distribution across the nozzle.

- Significantly improved line efficiency
- Minimized handling, cleaning and maintenance
- Increased nozzle life time for reduced total cost of ownership



Spray Pattern

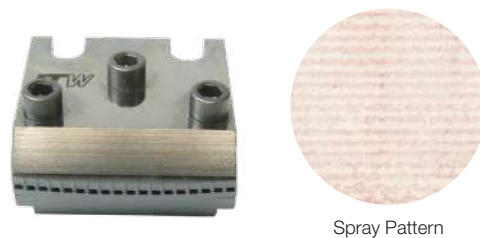
Active Fluid Streams	1 to 7
Fluid Orifice Size	0.012 to 0.024 in (0.31 to 0.61 mm)
Center-to-Center Spacing	3mm, 4mm, 4.2mm, 5mm and others
Adhesive Viscosity Range	up to 6.000 mPas (cps)
Operating Air Pressure	0.15 to 1.4 bar (2 to 20 psi)*
Recommended distance to substrate	10 - 25 mm
Side edge definition	Within 1 mm
Adhesive Application Width per Nozzle	3 - 25 mm
Typical Adhesive Flow	0.5 - 20 g/min per orifice
Production speed capability	up to 700 m/min

*Depending on adhesive type and application parameter

ULTRA™ HSI HIGH SPEED INTERMITTENT SPRAY NOZZLE

The Ultra™ HSI nozzle is optimized for high speed intermittent patterns and provides the most precise start/stop and side definition available in the market. Its nozzle design perfectly fits for high speed intermittent spray applications, typically used for e. g. positioning glue and waistband applications. Its patent pending barrier orifice design features an air knife function for more precise cut-off performance. Requiring a reduced amount of adhesive per product, due to the Ultra™ HSI nozzle's ability to run shorter intermittent patterns, results in greater line efficiency and improved end product quality.

- Precise cut-off performance
- Improved side edge definition
- Minimized dot at the start



Adhesive Viscosity Range	up to 6.000 mPas (cps)
Air pressure range	1 - 3bar*
Recommended distance to substrate	5 - 7 mm
Side edge definition	Within 1 mm
Start and Stop area	Within 3 to 6mm**
Coating Width per Nozzle	10 -25 mm
Nozzle Orifice Size	0.010* (0.25 mm)

ULTRA™ SLOT HIGH PERFORMANCE SLOT NOZZLE

This new applicator coating technology addresses slot applications, utilizing the universal Ultra™ manifold, module, solenoid, filter and service block. Capable of running at higher line speeds up to 700m/min Ultra™ Slot is designed to minimize maintenance time and reduce the number of spare parts required to lower cost of ownership as high as 50%, making it a highly efficient addition to the Ultra™ Link family. Rapid Change Over die mounting for fast pattern conversions, simpler maintenance and less downtime reduces operating costs while increasing ROI. Ultra™ Slot is the ideal solution for high-speed intermittent slot applications or applications requiring both continuous & intermittent adhesive patterns.

- Precise adhesive cut-off at highest line speed
- Optimal cross-web accuracy $\pm 10\%$
- Rapid Change Over die mounting



Ultra™ Slot Nozzle with Pattern Shim

Minimum off cycle time	3 ms
Minimum on cycle time	3 ms
Coat weight minimum	5 gsm
Cross-web distribution	+/- 10%
Coating Width Range	25 - 300 mm

*Depending on adhesive type and application parameter

**Depending on line speed and application parameter

LOCATIONS

Americas

ITW Dynatec
31 Volunteers Drive
Hendersonville, TN 37075
USA
Phone: +1.615.824.3634
info@itwdynatec.com
www.itwdynatec.com

China

ITW Dynatec Suzhou
No. 2, Anzhi Street,
SIP, Suzhou, 215122 China
Phone +86.512.6289.0620
Fax +86.512.6289.0621
info@itwdynatec.cn
www.itwdynatec.cn

Japan

ITW Dynatec K.K.
Flos Kamata
26-11, Nishikamata 7-chome
Ota-ku, Tokyo 144-0051, Japan
Phone: +81.3.5703.5501
Fax: +81.3.5703.5505
info@itwdynatec.co.jp
www.jp.itwdynatec.com

Europe, Middle East and Africa

ITW Dynatec GmbH
Industriestraße 28
40822 Mettmann, Germany
Phone: +49.2104.915.0
Fax: +49.2104.915.111
info@itwdynatec.de
www.itwdynatec.de

