

Customized innovative machine options



APC Advanced-Print-Control

- Detection & correction of register deviations during setup
- Cyclic checking/readjustment



Anti-Drip

- Anti-drip for printing and/or flood squeegees



Barcode Handscanner

- For documentation of material batches (film, paint)
- To call the print program



Integrated Barcode System

- Barcode imprint on first print
- Documentation (traceability)



Screen stretch compensation

- Effects of screen stretch compensation can be minimized



Humidity control

- Automatically humidify the printing environment
- Reduces drying of the screen



Screen clean

- Automatic screen humidification (screen clean)
- Removes dried paint without manual cleaning

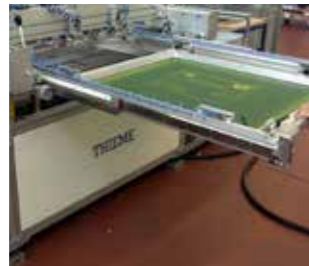


Process air dosing

- Filtered



Intermediate paper printing



Screen pull-out system

- Screen cleaning outside the printing station



Integrated substrate cleaning

- Automatic foil cleaning before printing



Paste dosing

- Pastes are supplied cyclically

THIEME

+ Printing solutions - a class of its own

THIEME 3000 Vision AL



THIEME 3000 Vision AL (AutoLoader)

Latest screen printing machine generation specifically designed for film, sheet metal, and electronics applications

+ THIEME GmbH & Co. KG

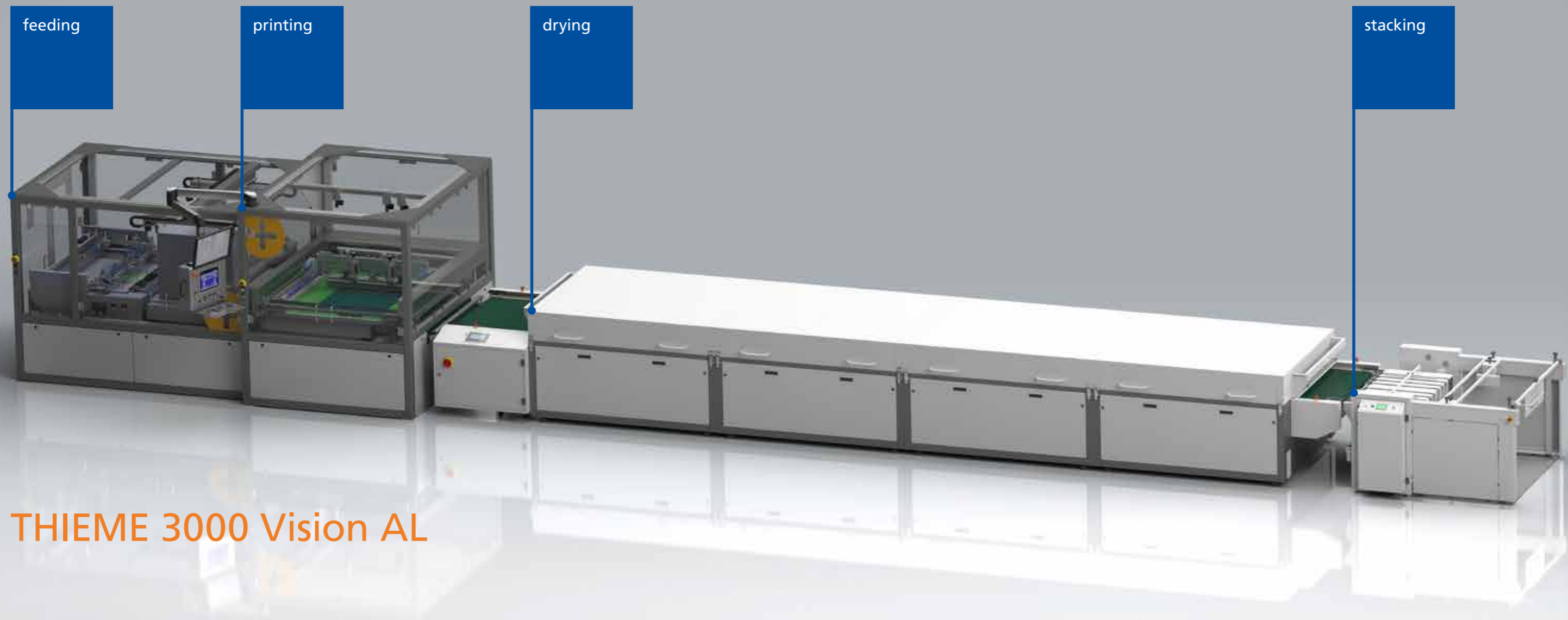
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THIEME 3000 Vision AL

Why THIEME ?



- + Thieme Quality „Made in Germany“
- + Individually configured and manufactured according to customer requirements
- + Over 60 years of experience in screen printing and automation
- + Over 10,000 installed machines
- + Long life expectancy of a Thieme machine (over 20 years)
- + Global service
- + Process support during production start-up optionally available
- + Network with leading ink, screen, and substrate manufacturers
- + Testing and development possibilities at the Thieme Technology Center

Specifics



- + Highest precision through camera-assisted substrate alignment
- + Material-friendly transport due to pick & place handling
- + System enables processing of films below 100µm
- + Also suitable for rigid materials
- + Proven Thieme Vision-System for screen and substrate alignment
- + Optional Advanced Print Control (APC) for setup time optimization
- + Customizable with extensive machine options
- + Intuitive machine operation

High-precision automatic screen alignment with camera system

Programmable Servo screen lift

Gentle material transportation thanks to pick & place handling. The material is not pulled over surfaces = low-scratch material handling, even for rigid materials



Squeegee drive with servo - Highly precise and customizable

Safe and high-quality glass machine enclosure



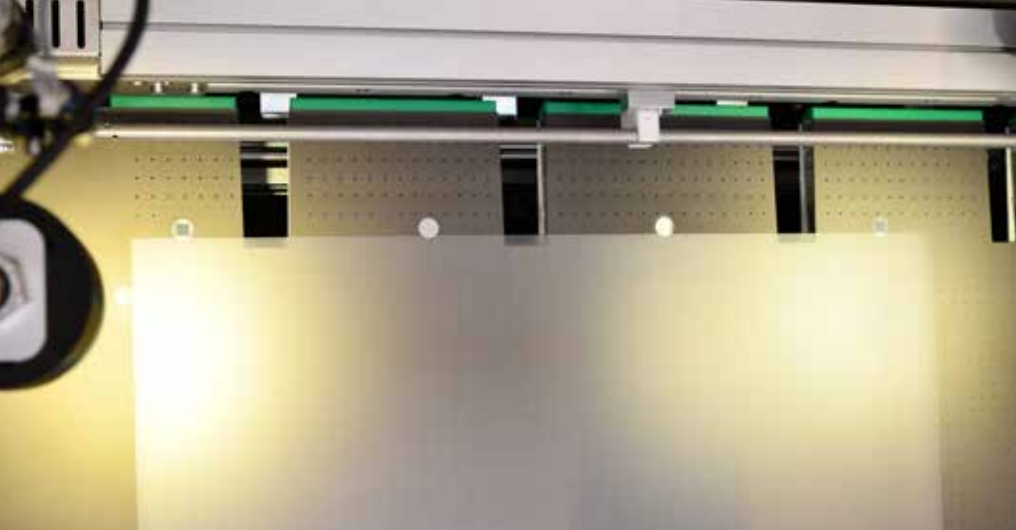
Recipe memory in the HMI
Reproducible, reliable results for different material combinations -
Quickly selectable

Prepared for the integration of optional cleaning units

Table drive with servomotors -
Precise and infinitely variable

Highest precision by substrate alignment with live targeting





The THIEME 3000 Vision AL comes standard with the THIEME Vision-System.

THIEME Vision-System

The THIEME Vision-System essentially consists of two independent camera systems and the associated control software. One of the camera systems is used for automatic screen positioning and one for automatic substrate alignment.

THIEME Vision - Screen positioning

The days of manual adjustment of screen position belong to the past. Set up your Thieme screen printing machine in less time and gain valuable production time. The Thieme Vision screen positioning system works with a very high accuracy, minimizing set up prints.

- Screen positioning**
→

 - + Automatic Setup
 - + Reduce set-up times
 - + High-precision screen alignment
 - + Minimum make ready prints

	Screen positioning
Number of cameras	2 / expandable
Mechanical repeatability [µm]	+/- 40
Alignment mark [mm]	round, white, ø3
Screen adjustment	motorized

THIEME Vision - Substrate positioning

Reduction of set up prints and an improvement in accuracy? Increase your productivity and quality. The Thieme Vision-System allows a new level of quality.

- Substrate positioning**
→

 - + High-precision printing-material alignment
 - + Reduction of make ready prints
 - + Eliminates placement errors
 - + High reproducibility

	Substrate positioning
Number of cameras	2 / expandable
Mechanical repeatability [µm]	+/- 30
Alignment mark	flexible
Table alignment	servomotor, air bearing

Technical data



Type of machine	3010	3020	3030
Print size [mm]	550 x 750	750 x 1050	1000 x 1400
Sheet size max. [mm]	580 x 780	780 x 1080	1030 x 1420
Sheet size min. [mm]		30x 20 quer	
Frame size [mm]	1180 x 1380	1380 x 1680	1630 x 2020
Screen rest at max. format [mm]	300		
Printing table [mm]	800 x 1050	1000 x 1350	1250 x 1700
Vacuum field size [mm]	565 x 765	765 x 1065	1015 x 1405
Substrate thickness max. [mm]	up to 16		
Substrate thickness*1min. [mm]	50 µm		
Screen adjustment [mm]	+/- 6		
Alignment accuracy [mm]	+/- 50 µm at cmk 1,67; absolute +/- 30 µm		
Squeegee speed [m/sec]	0,1 - 1,4		
Weight [kg]	2300	2600	2900
Print speed*2 [cycl/h]	420	400	390
Power supply [V]	400		
Power supply [kW]	4,2		
Power supply [A]	6		
Material feeding	Right / Left / Center		
Position Camera marks Table orientation	Complete sheet area freely selectable		
Position Camera marks Screen direction	Position selectable by arrangement		
Print direction	90° to the transport direction		
Max. Stacking height [mm]	500		
Max. Stacking weight [kg]	1000		

All technical information is not binding and subject to change.

*1 Depending on material

*2 at squeegee speed 1m/sec