

THIEME

THIEME 500 H



3/4-automatic, flatbed, clamshell

screen printing machine

THIEME 500 H

Details of the THIEME 500 H

The 500 H boasts a welded, torsion-resistant chassis from heavy-gauge steel profiles. Sound-absorbing side paneling is standard for lower-noise levels (<74 DbA)

Printing Table

The printing table consists of a sandwiched construction with a wear-resistant, oxide layer of anodized aluminum. Off-contact distance can be infinitely adjusted up to 40 mm (1½"). Calibration spindles provide fine register adjustment in three axis with a +/- 10mm (2/5") range of adjustment.

Vacuum System

A silent running vacuum blower with high-volume air flow holds the substrate reliably in position by means of 1 mm (1/26") holes, on the print table surface, on 20 mm (4/5") centers.

Blow-Back Device

The blow-back device allows easy positioning for registration and take-off of heavy substrates, using an air cushion between the printing table and the stock. A separate blower is mounted within the press, and works independently of the vacuum blower. Optional compressed air blow-back is available for extremely heavy stocks.

THIEME Squeegee unit (pat.)

Pneumatic "inversion" cylinders are made responsible for the changeover from printing to flooding. The squeegee pressure is controlled pneumatically, with automatic adjustment of parallelism to the plane of the printing table. The angles of the squeegee and flood-coater are infinitely adjustable, where contact with the screen is never lost. The inser-



tion and removal of the squeegee takes place in a matter of seconds with integrated, quick-action camlocks, using no tools or separate clamping devices.

Squeegee control

Squeegee and flood-coater speeds are infinitely adjustable. The squeegee stroke length is infinitely adjustable.

Head and screen frame mounting

In order to minimize the amount

of the ink running to the rear of the screen-frame well, the print head is designed to open at a lower angle than other clamshell-style presses. The opening and closing of the printing head is mechanically controlled for a smooth, non-hesitating motion. A quiet-running machine with the lowest possible air movement is a result of this specialized design. Cleaning is optimized by the print head opening to a wide, accessible opening angle.

Technical Data

Type of machine	510 H	520 H	530 H
print size (mm inch)	550 x 750 22 x 30	750 x 1050 30 x 41	1000 x 1400 39 x 55
frame size max. (mm inch)	1000 x 1100 39 x 43	1200 x 1400 47 x 55	1450 x 1750 57 x 69
frame height max. (mm inch)	40 1,6	40 1,6	40 1,6
print table – external dimension (mm inch)	800 x 950 31 x 37	1000 x 1250 39 x 49	1250 x 1600 49 x 63
size of vacuum field (mm inch)	585 x 765 23 x 30	780 x 1065 31 x 42	1035 x 1410 41 x 56
table height adjustm. (mm inch)	0–40 0–1,6	0–40 0–1,6	0–40 0–1,6
squeegee path max. (mm inch)	680 27	880 35	1130 44
squeegee length max. (mm inch)	900 35	1200 47	1550 61
squeegee speed (m/sec inch/sec)	0,1–1,0 4–40	0,1–1,0 4–40	0,1–1,0 4–40
max. speed* (cycl/h)	850	750	650
overall machine dimensions l x w x h (mm inch)	2000 x 1390 x 1365 79 x 55 x 54	2400 x 1690 x 1365 94 x 67 x 54	2900 x 2040 x 1365 114 x 80 x 54
weight (kg lb)	700 1543	760 1675	850 1874
floor dimensions w x d (mm inch)	1257 x 1130 49 x 44	1557 x 1330 61 x 52	1907 x 1580 75 x 62
working height print table (mm inch)	1015 x 1085 40 x 43	1015 x 1085 40 x 43	1015 x 1085 40 x 43
table adjustment in 3 axes (mm inch)		+/- 10 0,4	
power supply (V)		230/400	
circuit connection (kW)		5,5	
consumption (A)		13 A 230 V / 8 A 400 V	
compressed air consumption (l/min.)		83	
operation pressure (bar)		6	
noise level (dBA)		70	
min. sheet length (mm inch)		200 7,9	
take-off speed (m/sec inch/sec)		0,3–2,0 12–80	
belt speed (m/sec inch/sec)		0,3–1,0 12–40	

* Calculated max. machine output

All technical information are not binding and subject to be changed

The screen frame mounting is accomplished by easily inserting the frame, cassette style, from the front of the machine. The screen frame support bars are easily moved to accommodate different frame sizes. For screen frame positioning the machine is equipped with a three-point positioning device.

Peel-off device

The peel-off height is infinitely adjustable from 0 to 5 mm per 200 mm (0 to 1/5" per 8") of stroke length, or, a maximum rate of peel lift of 2.5mm/linear cm (1/4"/linear inch). The peel-off datum or starting point is infinitely adjustable across the squeegee stroke length. The zero-degree flood action is designed to lower the screen to its beginning position of being parallel to the substrate before the flood stroke initiates, and results in a more uniform ink coating on the screen.

Automatic Take-Off

A gripper bar using vacuum suction valves, which can be individually turned on or off, takes and holds the printed sheet, and transports it from the printing table to the take-off conveyor belt. This belt delivers the sheet to the dryer conveyor belt. The gripper speed is infinitely adjustable for different material weights.

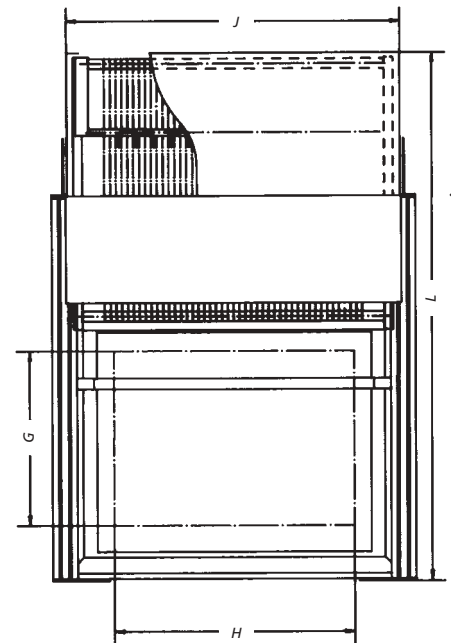
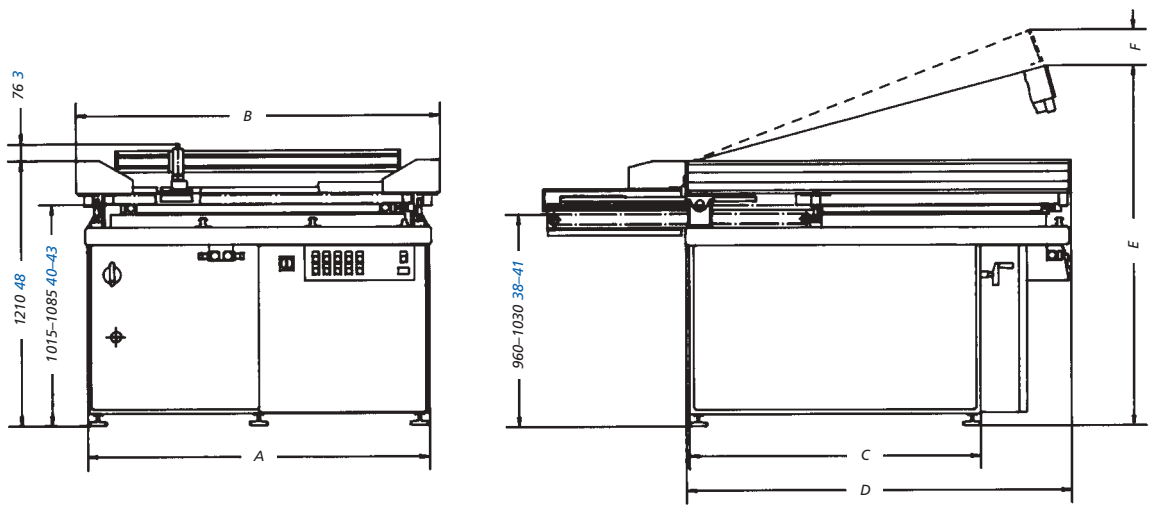
THIEME Control

The THIEME 500 H is equipped with easy to use dial switches, with three operation types: "Set-up", "Print-cycle" or "Automatic" operation. Each entire print cycle is initiated either by foot-pedal or simultaneously pressing the two mushroom switches. This method of cycle initiation allows for less working fatigue by allowing a more comfortable stance.



THIEME screen printing machines can be used for a variety of applications. Machine features are based on the requirements of each individual customer and are governed by the type and composition of substrates and inks used. Please note that the use of substrates and inks that differ from those defined at the time of purchase may influence the performance of the machine.

Shell screen printing machine



Dimensions (mm inch)

Type	510 H	520 H	530 H
A	1257 49	1557 61	1907 75
B	1390 55	1690 67	2040 80
C	1130 44	1330 52	1580 62
D	1558 61	1758 69	2008 79
E	1519-1589 60-63	1560-1630 61-64	1636-1706 64-67
F	142 5,6	162 6,4	186 7,3
G	585 23	780 31	1035 41
H	765 30	1065 42	1410 56
J	1270 50	1570 62	1920 76
L	2000 79	2400 94	2900 114



THIEME 500 H
3/4-automatic, flatbed, clamshell
screen printing machine.

The THIEME 500 H combines new
technology with a traditional, space-
saving design.

The result:

- Compact formats
- Low profile print head rise
- User friendly operation
- Faster production speeds
- 3/4-automatic function with
automatic sheet take-off
- Shorter set-up times due to
an easily-accessed screen-frame
mounting system
- Superior work results using the
patented THIEME Hi-Tech Squeegee
Unit
- Flexible operation by means of
adjustable drive systems

Signage, decals and displays – a small cross-selection of the large variety
you can print economically fast on the THIEME 500 H.

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