

THIEME

THIEME 5000



3/4-automatic, flatbed, multiple rotating gripper

screen printing machine

THIEME 5000

Details of the THIEME 5000

Ultra strong, torsion resistant chassis construction.

Grippers and Gripper Drive

The grippers hold the sheet precisely throughout the printing function. The holding force is created by individually working pressure springs, and increases in a linear fashion when printing thicker substrates. The gripper speed can be adjusted electronically. Smaller formats or printing lengths are automatically taken into consideration by the servo driving force, increasing printing capacity.

Printing Table

The printing table consists of a sandwiched construction with a wear-resistant oxide layer of anodized aluminum. The lowering and lifting of the printing table is precisely controlled by a lift curve. For a better sheet tension, the vacuum area is sectioned and timed.

Vacuum System

A high-volume fan provides fast vacuum set-up. Vacuum and blow-back are controlled in volume and time via a solenoid valve and are infinitely adjustable.

Screen Frame Guidance System

The screen can easily be inserted into the machine from both sides. The pneumatic frame clamping allows quick and safe insertion of the screen frame. The pneumatic clamping of the master frame avoids unnecessary walking around of the machine. Fine pitch screen frame registration is performed via 3 micro spindles within an adjusting range of +/- 5 mm (1/5") (option: motorized). The 3-point centering device allows exact positioning of the frame.



THIEME Squeegee Unit (pat.)

Inversion from print to flood is by pneumatic cylinders. 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 insertion and removal of the squeegee takes place in a matter of seconds with integrated, quick-action camlocks, using no tools or separate clamping

devices (option: pneumatic squeegee clamping).

Squeegee Control

Squeegee and flood-coater parameters (speed, front and end stop point, timing) are programmable.

Off-Contact Adjustment

For different screen tensions and material thickness, the off-contact can be precisely adjusted from 6 to 20 mm (1/4" to 4/5") via the operation panel.

3/4-automatic flatbed, multiple rotating gripper screen

Technical Data

Type of machine	5020	5030	5040	5050	5060
print size (mm inch)	750 x 1050 30 x 41	1000 x 1400 39 x 55	1200 x 1600 47 x 63	1400 x 1800 55 x 71	1550 x 2100 61 x 83
sheet size max. (mm inch)	800 x 1100 31 x 43	1050 x 1450 41 x 57	1250 x 1650 49 x 65	1450 x 1850 57 x 73	1600 x 2150 63 x 85
frame size max. (mm inch)	1200 x 1400 47,2 x 55,1	1450 x 1750 57,0 x 68,8	1700 x 2000 66,9 x 78,7	1900 x 2200 74,8 x 86,6	2055 x 2500 80,9 x 98,4
printing table – external dimensions (mm inch)	869 x 1214 34 x 48	1098 x 1564 43 x 62	1288 x 1814 51 x 71	1479 x 2014 58 x 79	1669 x 2314 66 x 91
size of vacuum area (mm inch)	780 x 1080 31 x 43	1020 x 1440 40 x 57	1220 x 1640 48 x 65	1420 x 1840 56 x 72	1580 x 2140 62 x 84
speed* (cycl/h)	1400	1200	1100	1000	900
squeegee speed (m/sec inch/sec)	0,3 – 1,5 12 – 59	0,3 – 1,5 12 – 59	0,3 – 1,5 12 – 59	0,3 – 1,5 12 – 59	0,3 – 1,5 12 – 59
range of substrate thickness (mm inch)	0,1 – 6 0,004 – 0,2	0,1 – 6 0,004 – 0,2	0,1 – 6 0,004 – 0,2	0,1 – 6 0,004 – 0,2	0,1 – 6 0,004 – 0,2
range of substrate weight (g/m ²)	120 – 3000	120 – 3000	120 – 3000	120 – 3000	120 – 3000
gripper margin approx. (mm inch)	8 0,31	8 0,31	8 0,31	8 0,31	8 0,31
screen frame registration X-X-Y (mm inch)	+/- 5 +/- 0,2	+/- 5 +/- 0,2	+/- 5 +/- 0,2	+/- 5 +/- 0,2	+/- 5 +/- 0,2
control	SPS / PLC-automat. progr.				
power supply (V)	230 V 60 Hz / 400 V 50 Hz				
circuit connection (kW)	8,4	8,4	8,4	8,4	8,4
consumption (A)	12 at 400 V / 21 at 230 V				
compressed air required (bar)	6				

* Mechanical machine speed w/o feeding operation

All technical information is not binding and is subject to change



Peel-off Device

The peel-off height is infinitely adjustable from 0 to 4mm per 200mm (0 to 5/32" per 8") of stroke length. The peel-off datum or starting point is infinitely adjustable across the squeegee stroke length.

Take-off System

The transport system is directly integrated into the machine. Timed vacuum hold down ensures a correct exit position of each sheet as it is released from the gripper.

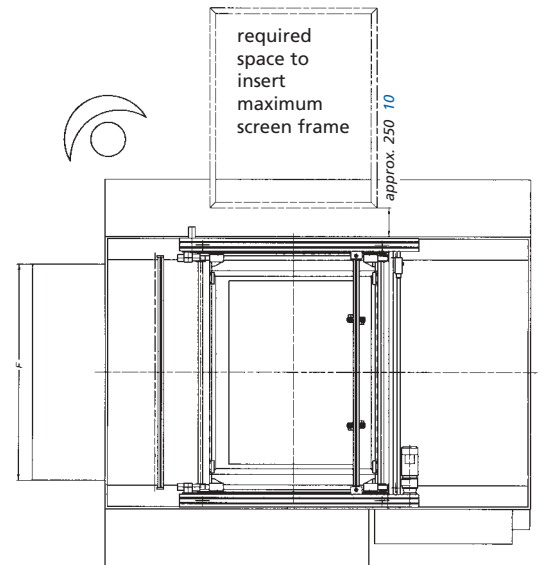
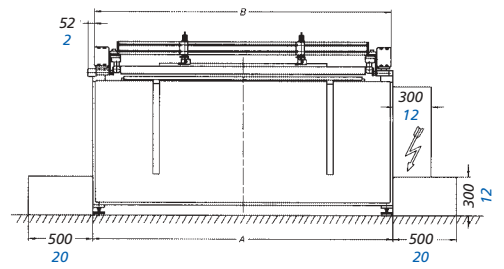
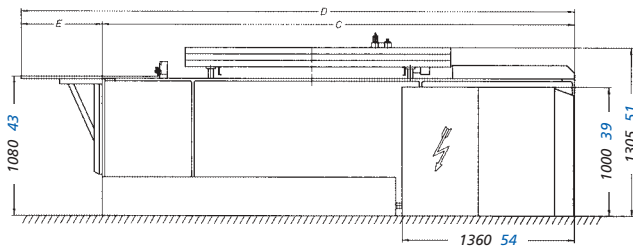
THIEME Control

Using the programmable, electronic control, set-up times can be reduced enormously. Print jobs are reproducible and the working procedures are safe.

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. Please also note that options and special features of the machines may influence the performance and might change dimensions, cycle times and application possibilities compared to the standard version.

Screen printing machine

5070
1600 x 2600 63 x 102
1660 x 2660 65 x 105
2200 x 3200 86,6 x 125,9
1779 x 2814 70 x 111
1640 x 2640 65 x 104
800
0,3 – 1,5 12 – 59
0,1 – 6 0,004 – 0,2
120 – 3000
8 0,31
+/- 5 +/- 0,2
8,4



Dimensions (mm inch)

Type	5020	5030	5040	5050	5060	5070
A	2010 79	2360 93	2610 103	2810 111	3110 122	3610 142
B	1980 78	2330 92	2580 102	2780 109	3080 121	3580 141
C	3245 128	3705 146	4080 161	4465 176	4845 191	5000 197
D	3330 131	4040 159	4615 182	5100 201	5380 212	5585 220
E	85 3	335 13	535 21	635 25	535 21	585 23
F	1520 60	1870 74	2120 83	2320 91	2620 103	3120 123

Measure "B" plus 52 mm (2 inches) spindle plus 20 mm (0,79 inches) transport beams. Height take-off conveyor from floor on all sizes 1028 mm (40,5 inches).



THIEME 5000
3/4-automatic flatbed, multiple rotating gripper screen printing machine.

The THIEME 5000 is a high speed, robust, long range printing machine.

Reliability for multi-shift operation.

- Precision built
- Maximum volume output, also for different formats and materials
- Short set-up times
- High precision and speed through servo driving force
- Machine job data storage memory
- Complete machine programmability

Printing jobs with highest demands for quality and speed, like city-light-posters, billboard posters or displays, are perfect for the THIEME 5000.

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