THERMOFLAN

equipments &products

Pad Printing

Performance, innovation, evolution : Automatic Pad Printing Machine

Pad printing has become so widespread in industrial applications that some markings cannot be imagined without pad printing. Either with our current equipment or with specific solutions, we will meet all your printing requirements.

Applications :

Promotional items,
Medical industry,
Car industry,
Electronics,
Domestic,
Toys…

TTN

Pad Printing equipments & products

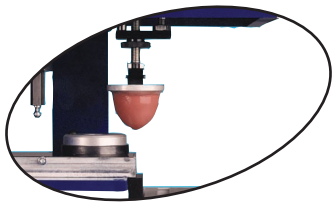
Since 1980, TTN has been manufacturing a large range of pad printing equipment from simple one-colour machines to big six-colour machines.
With JUNIOR & TE series, Thermoflan offers a complete range of standard equipment for an extended array of applications : printing on plastics, metal, leather, glass, wood...

In partnership with TTN, Thermoflan can develop special equipment for specific needs : printing in medical industry, glass industry, plastic industry, food industry....
And supply machines integrable into production lines.

Several solutions are offered :

SEALED INK-CUP TECHNOLOGY

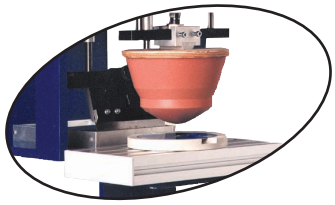
With ink cups from 40 to 120 mm.
Our closed ink-cup systems provide perfect scraping and ink coating, as well as ease of use avoiding ink wastage.



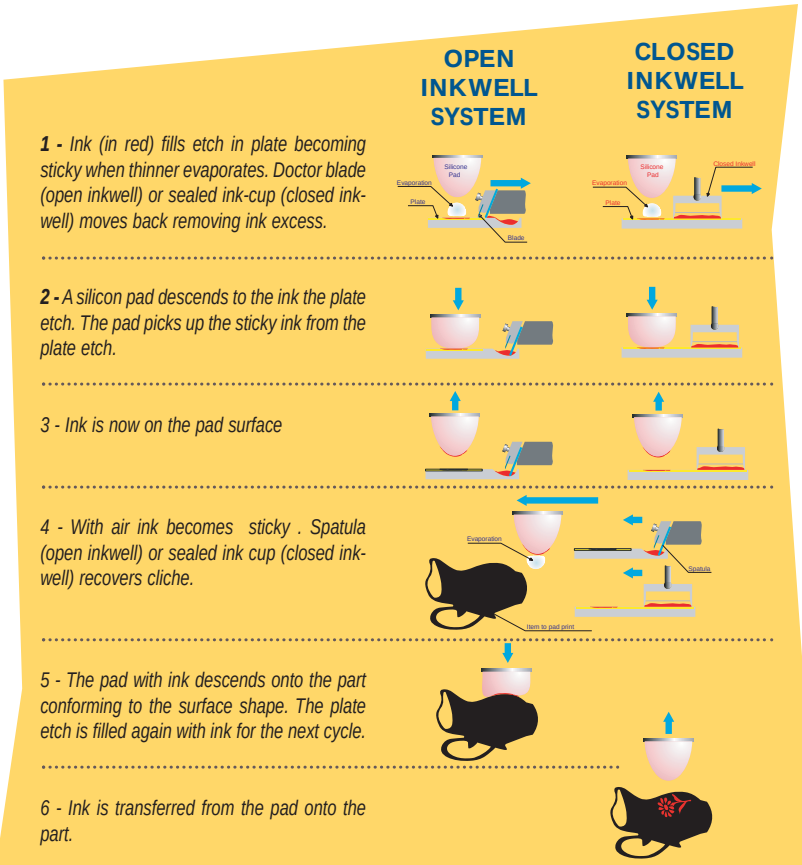
Advantages of closed ink-cup system :
-no smell annoyance of solvents or inks
-ink keeps its qualities for a longer period.

OPEN INK-CUP TECHNOLOGY

For one or several color prints from 40 x 40 to 580 x 110 mm.



Main advantages of this system are
-larger prints (not limited to the size of the ink-cup)
-ink can be quickly adapted to the print quality (thinner, hardener..)



Machine model	Colors numbers	Maximum cliche size(mm)	Sealed Inkwell (mm)	Maximum printing size (mm)
TTN 65 Eko Junior Electropneumatic	1	75 x 175	1 x Ø 65	1 x Ø 55 Square of 40
TTN 40 Eko TE (Stell ring inkpot)	1	120 x 60	1 x Ø 40	1 x Ø 35 Square of 24
TTN 90 Eko TE Ceramic	1	100 x 200	1 x Ø 90	1 x Ø 80 Square of 55
TTN 120 Eko 2 TC Ceramic	2	140 x 175	2 x Ø 65	2 x Ø 55 2 squares of 40
TTN 200 Eko TE Oval	1	200 x 200	1x oval 90x190	1x 80x180 rectangle 55x130
TTN 200 Eko 2 TC Ceramic	2	200 x 200	2 x Ø 90	2 x Ø 80 2 squares of 55
TTN 300 Eko 3 TC Ceramic	3	200 x 300	3 x Ø 90	3 x Ø 80 3 squares of 55
TTN 250 Eko 3 TC Ceramic	3	200 x 250	3 x Ø 65	3 x Ø 55 3 squares of 40
TTN 300 Eko 4 TC Ceramic	4	200 x 300	4xØ 65	4 x Ø 55 4 squares of 40
TTN 400 Eko 2 TC Oval	2	200 x 400	2x oval 90x190	2 x Oval 90x190
TTN 450 Eko 3 TC Ceramic	3	250 x 450	3 x Ø 120	3 x Ø 110 3 squares of 78
TTN 400 Eko 4 TC Ceramic	4	200 x 400	4 x Ø 90	4 x Ø 80 4 squares of 55
TTN 500 Eko 5 TC Ceramic	5	200 x 500	5 x Ø 90	5 x Ø 80 5 squares of 55
TTN 600 Eko 6 TC Ceramic	6	200 x 600	6 x Ø 90	6 x Ø 80 6 carrés de 55
TTN 600 Eko 4 TC Ceramic	4	250 x 500	4 x Ø 120	4 x Ø 110 4 squares of 78
TTN 100 Junior Elec.	1	100 x 100		80 x 80
TTN 200 Junior Elec.	1	250 x 150		220 x 130
TTN 200 Junior Elec.	2	250 x 150		2 x 80x130
TTN 60-80 TE 90º (rotary print head)	1	60 x 80		40 x 40
TTN 60-80 TE	1	60 x 80		40 x 40
TTN 100-100 TE	1	100 x 100		75 x 75
TTN 120-100 TE	1	120 x 100		75 x 95
TTN 120-100 2 TC	2	120 x 100		2 x 40x75
TTN 200-100 TE	1	100 x 200		65 x 175
TTN 250-100 TE	1	100 x 250		65 x 220
TTN 200-100 2 TC	2	100 x 200		2 x 75x65
TTN 250-100 3 TC	3	100 x 250		3 x 60x75
TTN 350-160 4 TC	4	350 x 160		4 x 55x130
TTN 350-200 4 TC	4	350 x 200		4 x 55x160
TTN 530-160 5 TC	5	530 x 160		5 x 75x120
TTN 600-150 6 TC	6	600 x 150		6 x 75x120

All our machines are provided with all required equipment for right working : pedal
All our pad pinting machines meet CE requirement. Thermoflan can also provide a

NEW

PRINT CONTROLER

See on reverse side.

CLOSED INKWELL OPEN INKWELL

Maximum Printing speed (tr/min)	Pad Pressure	Air consumption	Equipment Size depth. x larg. x long. (mm)	Weight (kgs)
2200	300 N/6bars	40 liters/min at 6 bars	500 x 250 x 200	27
3600	120 N/6bars	15 liters/min at 6 bars	400 x 83 x 330	17
2200	450 N/6bars	50 liters/min at 6 bars	535 x 160 x 410	40
1600	450 N/6bars	50 liters/min at 6 bars	535 x 160 x 410	40
2200	750 N/6bars	70 liters/min at 6 bars	550 x 300 x 475	67
1600	750 N/6bars	70 liters/min at 6 bars	550 x 300 x 475	67
1200	750 N/6bars	70 liters/min at 6 bars	550 x 300 x 475	67
1200	750 N/6bars	70 liters/min at 6 bars	550 x 300 x 475	67
1000	750 N/6bars	70 liters/min at 6 bars	550 x 300 x 475	67
1200	1800 N/6bars	190 liters/min at 6 bars	870 x 420 x 600	110
1000	1800 N/6bars	190 liters/min at 6 bars	870 x 420 x 600	110
1000	1800 N/6bars	190 liters/min at 6 bars	870 x 420 x 600	110
800	3000 N/6bars	300 liters/min at 6 bars	870 x 610 x 600	140
700	3000 N/6bars	300 liters/min at 6 bars	870 x 610 x 600	140
1000	3000 N/6bars	300 liters/min at 6 bars	870 x 610 x 600	140
2000	300 N/6bars	40 liters/min at 6 bars	450 x 170 x 430	25
1400	1200 N/6bars	110 liters/min at 6 bars	600 x 310 x 480	50
1400	1200 N/6bars	110 liters/min at 6 bars	600 x 310 x 480	50
2600	120 N/6bars	15 liters/min at 6 bars	400 x 83 x 330	17
3600	120 N/6bars	15 liters/min at 6 bars	400 x 83 x 330	17
2200	450 N/6bars	45 liters/min at 6 bars	535 x 160 x 410	39
2200	450 N/6bars	45 liters/min at 6 bars	535 x 160 x 410	39
1600	450 N/6bars	45 liters/min at 6 bars	535 x 160 x 410	39
2200	750 N/6bars	70 liters/min at 6 bars	550 x 300 x 465	67
1600	750 N/6bars	70 liters/min at 6 bars	550 x 300 x 465	67
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1200	750 N/6bars	70 liters/min at 6 bars	550 x 300 x 465	67
1000	1800 N/6bars	190 liters/min at 6 bars	870 x 420 x 600	110
1000	1800 N/6bars	190 liters/min at 6 bars	870 x 420 x 600	110
800	3000 N/6bars	300 liters/min at 6 bars	870 x 610 x 600	140
700	3000 N/6bars	300 liters/min at 6 bars	870 x 610 x 600	140

,inkpot, spatula, pad, pad holder, tools, and power cable.
a large air compressor range.

MACHINES

JUNIOR Models

TTN Junior are user-friendly and easy operated MECHANICAL PNEUMATIC pad printing machine with proven reliability. Their design allows attractive price.
The cliche surface and printed surface should be at the same level.
TTN JUNIOR models combine increased output, easy use and high quality prints
Inkwell is easily installed, printing speed and pad pressing force can be adjusted.
Running can be manually controlled pressing a pedal or automatic printing cycle can be selected.

TTN 65 JUNIOR

TTN 250 JUNIOR

TE/TC Models

TE / TC models are designed from frames in different widths.
Each frame is available in several configurations
- 1, 2 ,3, 4, 5 or 6 colors
- several printing widths
- closed or open inkwell technology

Contrarily to JUNIOR models, it is not necessary for printed surface and cliche surface to be at the same level as up-down movements of the printing head can be different.

TE/TC models are equipped with the **latest print controler** really innovative thanks to unique functions :

- icons keys
- large display
- front adjustement of pressures and speeds
- menu and setting keys"
- front emergency stop

TTN 90 EKO

TTN 120 EKO 2

TTN 250 EKO 3

Independent Cylinder Models

With these models, the pad cylinders can be controlled separately for large sized part printing. Available in 2 to 6 colors.

TTN 400 EKO 4

Spécific Equipment

From specifications, finish product, printing speed, we can determine the best machine meeting your requirements and combine it with your production facilities or conceive a complete automatism.

TTN 600 EKO 6

Pad Printing equiments & products

NEW

PRINT CONTROLLER

USER-FRIENDLY

- Large illuminated LCD display
- All available functions are continuously displayed
- Real-time help : for each selected function, a menu mentions what you have to do or which buttons you should press to control the machine in the proper way.
- 4 keys in the upper part of the keyboard allow to directly reach requested function.
- Continuous display of the working mode (automatic or single cycle…) in the lower part of the screen.
- Product data base : You have the possibility to program about 25 different settings. This is easy if you want to print the same product after a while again. Pad stroke front and back, shuttle positions, tape cleaning parameters (number of cycles between each cleaning, tape length) are automatically remembered. Also you are able to give the program your own name and you can store the name of the pad with which you have been printing.
- The control of the machine (speed, pressure) can be done while the machine is running
- Add up / Count down programmable counter : when reaching the programmed value, the machine will stop automatically.
- Pause function : When this function is activated, the machine will automatically scrape the cliché clean at regular time intervals to prevent ink from drying.

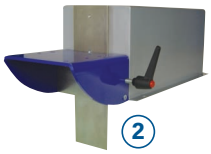
EVOLUTIVE

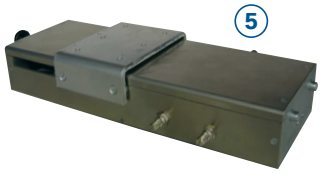
- Automatic detection of connected peripherics and display of corresponding options : Tape cleaner, shuttle…
- Several inputs / outputs, built into the control, can be free programmed into a cycle. Connecting for example pre treatment devices can be done very easily.
- Possibility of evolution (to specify when ordering the machine) from 1 to 2 colors, from 3 to 4 colors…..

HIGH PERFORMANCE

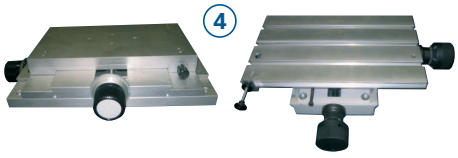
- Many printing options :1 x ink picking up/1 x printing, 2 x ink picking up/1 x printing, 1 x ink picking up/2 x printing, 2 x ink picking up/2x printing.
- Connected shuttle(s) can be programmed (number and stop positions, pause time..) and controlled from the control panel of the padprinting machine.
- Offset function allowing to print several objects in a same cycle.
- An optional tape cleaning device can be connected to the pad printing machine and programmed (number of cycles between each cleaning, tape length…) from the control panel.
- Possibility to connect 2 shuttles to the machine for X and Y direction prints. With this you are able to print a tablet with products with for example 100 positions.
- Roll printing : special setting to print cylindrical parts while the shuttle is moving under the pad.
- The control includes an electronic retarder so that ink on the pad is drying for a few seconds for better transfer.
- A very sophisticated diagnostic program is installed to test keyboard, input/outputs, reduction valves, position sensors.
- Possibility to work with separate pad-cylinders : with this option, It is possible to set the pad depth separately for each pad cylinder.

OPTIONS

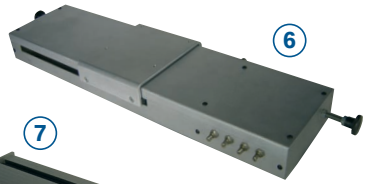


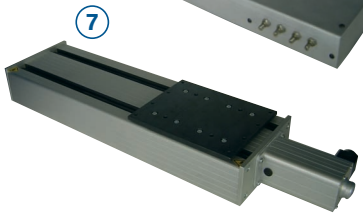


1. **High pedestal** for pad printing machine. Allows micometric adjustment of the table height. Includes a large lockable compartment
2. **Low pedestal :** To be screwed on a table. Allows rapid adjustement of table height.
3. **Rotary YX table** (diameter 100 or 170 mm) : Used to accurately position printed objects. X and Y adjustement + rotation
4. **Table for shuttle** Used to position the shuttle : X and Y adjustement + rotation.
5. **2 positions shuttle** used to move objects from the first printing head to the 2nd head printing the 2nd color.
6. **3 positions pneumatic shuttle :** used to move objects for 3 color prints.
7. **Electronic shuttle :** Used to move objects to several positions for multi color prints. Controlled by the print controller of the pad printing machine.
8. **Linear or circular conveyor :** 22 or 33 position conveyor for automatic printing lines.



Only o n TTN 120





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