



**FULLY-AUTOMATIC CYLINDRICAL SCREEN PRINTING
MACHINE,**

SAKURAI MAESTRO MS-102AII.

FROM THE YEAR 2008 (Rebuilt in the year 2017)



MACHINE CHARACTERISTICS:

Maximum sheet printing format:	1050 x 750 mm.
Minimum sheet printing format:	420 x 297 mm.
Maximum printing format:	1050 x 730 mm.
Sheet thickness:	0,075-0,8 mm.
Maximum Feeder height:	675 mm.
Maximum capacity feeder:	600 Kg
Running speed (feeder):	400 - 3.000 prints/hour.
Screen frame outer dimension:	1300 x 1170 mm.
Length:	3.816 mm.
Width:	3.080 mm.
Height:	1.199 mm.
Weight:	4.300 Kg
Total power consumption:	9,5 KW.

Feeder

- Automatic feeder with center separation similar to that of an offset press. Therefore, the handling of this feeder is easy for an operator who has experience in offset presses.
- Depending on the type of printing and the type of material, the feeding mode can be easily changed, from stream feeder to single sheet feeder.
- An optional front single sheet feeder can be installed.

Feed Board

- 6 belts of 38 mm. wide with a quick adjustment of pulleys and brushes that allow a stable feeding of the sheet. Convertible push/pull side guides ensure a high level of registration at high speeds. The stainless-steel board protects delicate substrates like plastic film from scratches and static electricity.
- Includes a no-sheet sensor on the marker that makes the machine stop automatically when there is no sheet.
- Front and side guide sensor on the cylinder that facilitates the arrival of the sheet with precision.

Stop Cylinder

- The vacuum cylinder (291 mm diameter with 1.2 mm diameter holes) determines the performance of the press. Maestro 72A/102A models have +/- 0.01mm accuracy in their cylinder roundness. This ensures stable printing even at high speeds.

Screen Frame Pneumatic Lock Clamp

- Through a simple switch operation, the air cylinder clamps fitted on the master iron frame fixes the screen-printing frame in position instantly and firmly. Fine registering can be obtained with the micro-adjustment knob.
- X and Y + 10mm adjustment can be done through an adjusting handle.
- Master frame runs on linear bearings for stable operation and increased durability.

Blade

- The angle of the blade is adjustable in a range of 5-30 degrees.
- Adjusting the pressure of the blade up to 15 mm. by a manual handle.
- The pressure of the blade is controlled by a pneumatic cylinder.

Delivery Board

- Two wide mesh belts (de 280 mm. de ancho) make sure of the smooth and stable delivery of various kinds of substrates without rolling-in.
- Plate cleaning or squeegee/flo-coater mounting or dismantling becomes easier as the delivery board can be pushed down by 90 degrees.

Operations Panel

- The main engine is controlled by the inverter control system which helps an operator set a printing speed with ease.
- The printing speed is indicated on the digital panel.
- Settings are made on an LCD touch panel.

Platforms

- Platforms on both the maneuvering side and the motor side are standard.

INCLUDED OPTIONAL EQUIPMENT

- Stream feeder
- Mechanical double sheet detector
- Set of spare blades
- Set of spare squeegees
- Motorized control of the pressure of the blade with digital indicator
- Palletizable feeder
 - 2 antistatic bars

UV CURATING UNIT NATGRAPH MODEL 110



Curating unit equipped with 110 cm wide fiberglass mesh belt, with PTFE coating, inverter controlled and variable speed.

TECHNICAL SPECIFICATION OF THE UV CURATING UNIT

Input module

Up to 2.50 meters long, with a 500mm long pneumatically operated stainless steel vacuum board with conveyor belts driven by the main belt of the UV unit.

The main electrical cabinet of the curating unit is connected to this module, with all functions operated via a large touch screen (HMI), including:

- Start/stop of the belt
- Speed of the belt (3 - 50m/min, resolution of 0.1m, through the press connector)
- Vacuum pull-down feed board system
- Forced air on / off
- Control of the hot air temperature through the press connector (resolution of 0.1 ° C)
- Activation/deactivation of forced cold air
- The control of any curating unit installed in the dryer is also achieved through this panel

A fault diagnosis system is included with an audible warning of conditions recorded by date/time, including air pressure, temperature sensors, and belt speed. Also included are a service indicator and a main hour counting meter.

Combined air module UV/Cold

The 2 meters with Natgraph's electronic UV system *** is a highly efficient and economical alternative to standard transformer operated systems.

Equipped with 2 curating with selectable power between 120 watts per cm (300 watts per inch) and 100 watts per cm (250 watts per inch) with continuous control. A fiber optic substrate sensor detects when no sheet has entered the UV unit within an adjustable period of 20 seconds and instantly reduces the power level to 25% on hold, resulting in substantial electrical energy savings.

The curating units are contained in aluminum housings, with sectional anodized aluminum reflectors and a flat quartz infrared heat filter system. The units are mounted in the first half of a lifting hood with quick-release latches, supported by two integral, gas-filled lift arms. The maximum curing width is 110cm

The second half of the lifted hood consists of a high-pressure air and cold air substrate cooling section with a high-efficiency fan system, connected to a large air intake grill.

This inlet should ideally be connected to clean, free air through rigid ducts to allow the cooler section to operate at its optimum efficiency.

This module contains Natgraph electronic power supply units, extraction fans, control circuit, and vacuum retention system. The cooling air passes between the lamps and the quartz infrared filter to ensure a low substrate temperature. A minimum speed cutting device is built into the belt speed circuit.

Output section

0.5 meters containing the main drive motor, drive mechanism, automatic chain tensioning device, driven roller, etc.

A Natgraph dryer power supply system allows for the connection of a printing machine and stacker to the main curating power source. This internal power distribution system includes all wiring, 2 x 3 phase electrical outlets, and circuit breakers that allow the entire print line to be operated from a single electrical power supply.

Additional information

This UV unit is 5 m long and operates at 400 volts 50Hz. AC.

Each module is equipped with wheels for positioning and a support base for final positioning, the height adjustment of the belt can be between 80 and 92 cm.

The curating unit is equipped with the Natgraph power system to allow the Press and Stacker to connect to the unit's main power source. This internal power distribution system includes all cables, 2 x 3 phase electrical plugs, and circuit breakers that allow the entire print line to operate from a single electrical power source.

Sakurai Powe Transformer

The optional Sakurai printer/stacker electrical transformer allows the Sakurai Cylinder Press and/or Stacker to be connected directly to the Natgraph curating unit, which allows the entire printing line to run from a single electrical power supply. Manufactured by Natgraph, this transformer (400 to 200 V, 3 phase 12 kW) is installed inside the dryer and includes mechanical and electrical overload protection.

AUTOMATIC SAKURAI SHEET STACKER
MODEL NST 102



Sakurai

NST-102/80
Automatic Pile Stacker

Versatile substrate from thin to thick and soft to rigid not only paper subject but also film materials are applied increasingly on recent screen printing industry. Such variety of printed object must be stacked precisely without any damage on surface of printed sheet.

Based on over 40 years production experience and know how of screen printing press and related product, Sakurai has developed a new type automatic pile stacker, NST series., which is designed for accessible against those modern screen printing demand.

Especially, the particular character of screen printing has been highlighted and utilized in the industrial field which is essential to print on variety of plastic, and metal foiled materials. To stack neatly even on any kind of printed sheet at high speed is the most important factor and NST series has capability to achieve this proposition.