

YZFM-1080 SG

Automatic high speed thermal film laminating machine



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Brief introduction:

YZFM-1080 SG Automatic high speed thermal film laminating machine, is controlled by Delta PLC.

One person operates easily. This Highly automated equipment can shorten the time of procedure and enhance efficiency.

diameter of main pressing steel roller is $\phi 380\text{mm}$.

heating method : This steel roller is heated by heat transfer oil (by Mold Temperature Controller).

Optional heating method: electromagnetic heating (same price).

YZFM-1080SG develops and designs according to the market demand by absorbing the merits of similar products from both abroad and home.

It has compact structure, small floor coverage, convenience in operation, and simple maintenance. It has optical, electric, pneumatic, mechanic integrated control, and this model of laminating machine is environmental protective, saves energy, and has high efficiency and humanized design.

According to need, it can use thermal film to give surface protection to printed matter. It is widely used in outer packing of teaching material, book, periodical, picture album, manual, wall map, geographic map and audiovisual products, and handbags.

This model can stand as a powerful guarantee to improve the laminating quality of printed matter for insiders of the trade, and reduce cost, and create high profit, and it is the ideal post-print processing model for printing houses to eliminate traditional high energy-consumption heavy-pollution paper-plastic laminate equipment.

This model adopts speed control by frequency variation, PLC centralized control, and man-machine interface display. It consists of automatic paper feeder, front-ruler, pull-ruler, film supply, film slitting and punching device, thermocompression lamination and laminating on-off control system, curl-removing device, splitting machine, paper collecting bench etc.

It realizes lamination between printed matter of different widths and different thicknesses, BOPP thermal film, and the printed matter after lamination will go through a curl-removal device, and splitting device, to cut into single sheet of laminated printed matter. After stacker collects them into piles, they proceed to the next work process.

Machine features:

High speed feeder

Laminating unit

The diameter of main pressing steel roller is $\varnothing 380\text{mm}$. This steel roller is heated by oil (Mold Temperature Controller). So temperature can reach $85\text{-}125^{\circ}\text{C}$. This machine is equipped with film separating and punching devices. Paper overlap adopts servo technology, so the precision is high.

Separating unit

Cutting method: rotary disc fly cutter, and Sandpaper wheel.

The products passed the punching devices were separated easily. There are pressing roller and pulling roller to separate sheets. Separating unit adopts pneumatic device, it is automatic, operated easily.

Delivery unit

Automatic stacker

Primary structure consists of:

paper feeder,

front limiter,

pulling limiter,

thermal film supply,

film slitting and punching device,

heat pressing lamination,

magnetic powder controlled tension wind-up roller,

curl-removing device,

laminated paper belt cutting device,

paper stacker, etc.

Laminating temperature and pressure:

BOPP thermal film: for ordinary sheet, set the roller heating temperature at $115^{\circ}\text{C} \sim 120^{\circ}\text{C}$, for sheet of relatively dark color, set at about 125°C .

Pressing Pressure: normally 4 MPa, and for deep color sheet , you can set 6 MPa.

Machine Technical parameter:

Maximal sheet size: $W1080\text{mm}\times L880\text{mm}$

Minimal sheet size: $320\times 290\text{mm}$

Suitable paper thickness: 105~ 500gsm

Suitable Film Supply: BOPP Thermal Film only

Maximal laminating film width: 1080 mm

Maximal film roll diameter: 450 mm

Film roll mandrel diameter: 3 inches

Film type: thermal film

Max. working speed: 130 m/ min

Laminating temperature: about $85^{\circ}\text{C} \sim 125^{\circ}\text{C}$

Working pressure: 5-9 MPa

Power supply: AC380V, 50 Hz, 3 phase

Rated power: 37.47 KW

Air compressor requirement: 3 KW

Main machine weight: 4500 kg (Net weight)

External dimension: 8100×2100×2000mm

Electrical element configuration:

Main motor	Variable-frequency motor
Photoelectric detection	Baumer
Feeder/stacker brake motor	WANSHSIN
Encoder	Hengslter
overlap feeding servo motor	inovance
Transmission belt	habasit
Bearing	UBC.NSK
Heat conduction oil	Great Wall L-QB300
Pneumatic components	airtac
Hydraulic oil	made in China
Full machine chain	choho
Solenoid valve	SMC
Vacuum pump	becker
Button	siemens
Contactora	schneider
Automatic constant pressure hydraulic station	made in China
Touch screen	delta
Frequency converter	delta
Programmable controller	delta
PLC	delta