

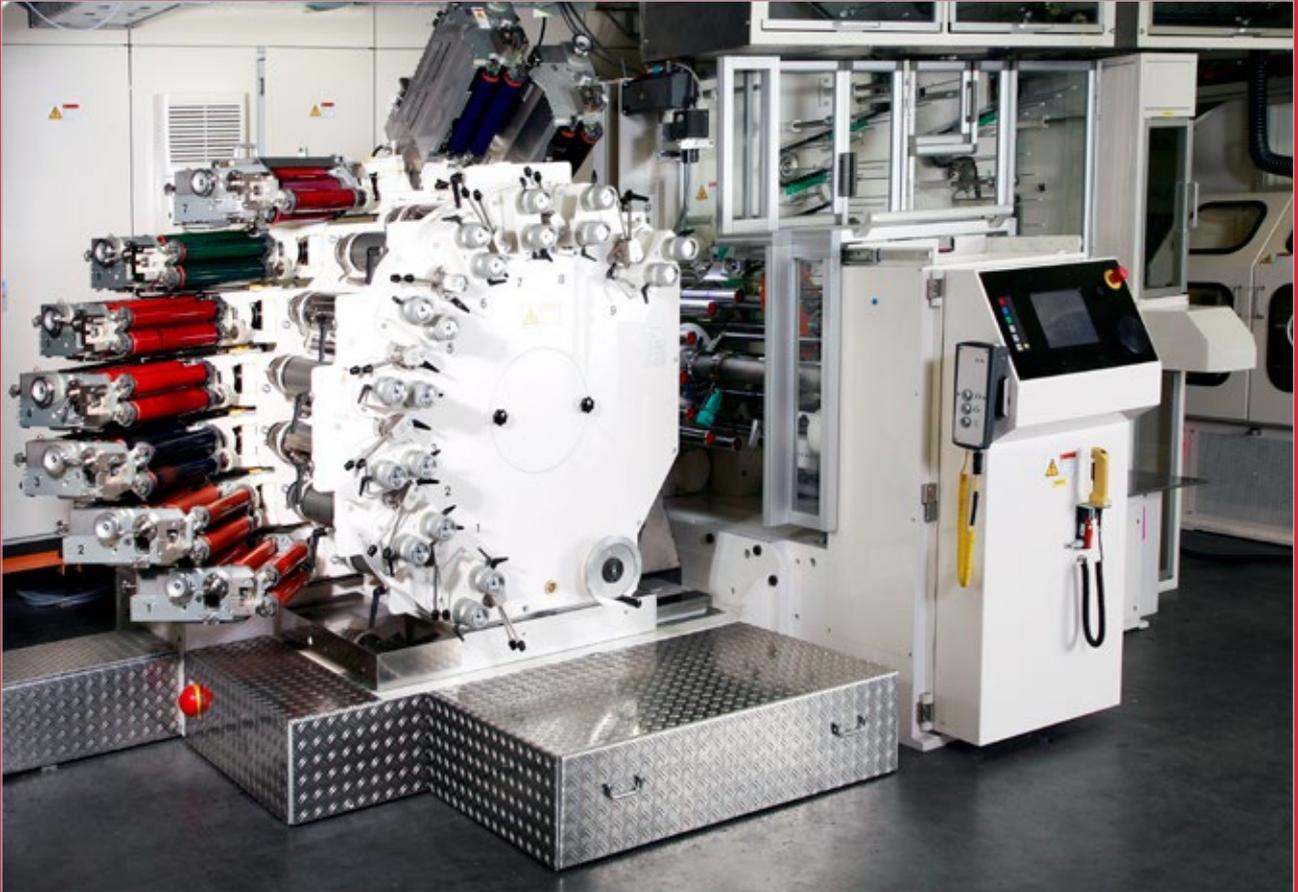


H200

Production Line
Printing Machine
Lacquering Machine

H200

DECORATION PLANT



The HINTERKOPF H200 range of can and tube printing and coating machines are of the highest technological standard. Our considerable engineering ability, advanced production techniques and many years of experience in the construction of such specialized equipment have led to a new generation of machines that meet the most demanding requirements in all respects. The use of electronic equipment and a

programmable control system has made it possible to offer machines that are self-adjusting and that monitor their own operations. These machines have a maximum capacity of around 200 cycles per minute and the use of new gear units and the most modern technology ensures that they run quietly and are extremely reliable in operation.

// Design features

The machines are built on the unit construction principle in which a single basic machine serves to carry either a coating unit or an HDW 12 sixcolour printing unit. The fact that the basic machine is similar in either case simplifies operation and maintenance and reduces the number of spare parts that need to be held. The basic machine comprises three major components: the transfer mechanism with the turret head housing, the gear housing at the front of the machine and the supporting table. The turret head housing carries the 12-spindle turret head that indexes step-by-step, the gear housing at the front of the machine carries the control cams that effect the loading of the cans or tubes onto the spindles and their subsequent removal and the table supports the continuously running inclined conveyor.

// Mode of operation

The cans or tubes to be printed or coated are pulled from the rods of a chain conveyor and held by a revolving vacuum head that transports them to the point at which they are loaded onto the spindles of a turret head that in turn carries them through the printing or coating processes. The cans or tubes are then removed from the spindles

by suction or by grippers and are transferred to a further chain conveyor which comes to a stop as each transfer operation is effected so that containers of even the smallest diameter can be transferred precisely and without any risk of damage. The position of the chain pins is set quickly and precisely by a special gear. The machines are equipped with quickchanging mandrels and star-wheels.

// Simple operation

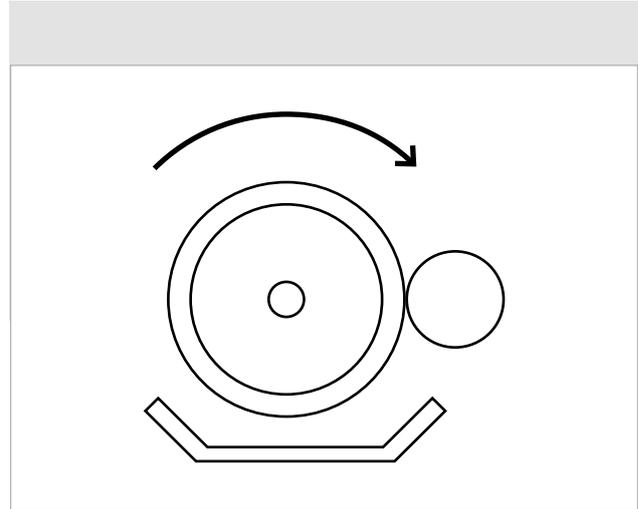
Considerable attention has been paid to providing for easy accessibility, simple operation and safety. The uncomplicated setting-up operations are easily learned and all functions can be controlled from a modern control panel on which any faults that may arise are also indicated by means of LEDs on an easily understandable mimic diagram. The machines are virtually maintenance-free since they are equipped with a central lubrication system to feed the necessary lubricant. The oil is continuously filtered and the flow is constantly monitored. The various contactors and auxiliary devices are contained, so as to be easily accessible, in the control cabinet at the rear of the machine. The walls of the control cabinet are sound insulated to increase the comfort of the operating staff. If required, the printing and coating plant can be installed in a soundproof booth.



H200

COATING MACHINE

HINTERKOPF coating units make it possible to apply such finishing lacquers as polyester varnish, 2-component varnishes or acrylic varnish, by the roll-on process. The coating unit is so mounted on the supporting table as to be capable of being moved sideways or swung aside. Our unit-construction system makes it possible to offer machines with various types of coating unit.



The quantity of lacquer that is applied can be adjusted and one or two coats can be applied to suit requirements.





COATING UNIT

// HLM 1

The HLM 1 coating unit is a roll type coater in which a small quantity of the lacquer to be applied is held in the nip between two counter-rotating rollers. The amount of material to be applied is determined by the pressure exerted between the two rollers.

// HLM 4

In the HLM 4 coating unit a dip roll draws the lacquer from a pan and transfers it to the application roller.

// HLM 10

The HLM 10 coating unit is also a dip coater. Its lacquer pan holds only a very small quantity of the material to be applied and the quantity of lacquer that is fed to the pan can be adjusted while the machine is in operation. Any excess of material is removed from the coater

roll by a doctor blade. The quantity of lacquer that is applied can be adjusted and one or two coats can be applied to suit requirements.

All coating units are driven by their own infinitely variable-speed motor. As an option the number of revolutions is shown with digital meters. Where necessary, coating units can be fitted with a cooling system. This is of particular value when coating plastic collapsible tubes with a 2-component lacquer.

The lacquer feed on all coating units can be automatically controlled by a level control system in which an inductive sensor detects the lacquer level and causes more to be added as often as necessary.

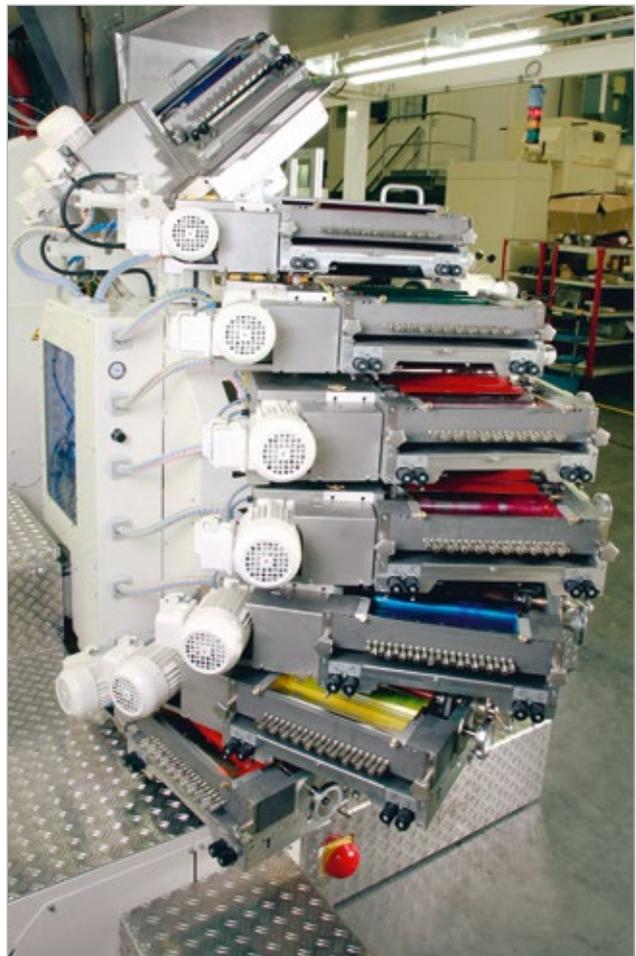
Solvent vapour is continuously exhausted and filtered. This may be by means of a simple exhaust hood or the entire coating machine may be completely enclosed in a separate booth.

H200

6-COLOUR PRINTING MACHINE

The use of the most modern technology makes the HINTERKOPF H200-D fully-automatic six-colour printing machine capable of meeting the most stringent production requirements for the printing

of cans, monoblock containers and collapsible tubes. Short setting-up times and the very little maintenance required ensures your achieving economic production.





6-COLOUR PRINTER HDW12

The entire printing unit can be moved back by 150 mm for setting up and maintenance tasks. This makes the fitting and cleaning of the rubber blankets appreciably easier.

The printing unit can also be moved in an axial direction to facilitate locating the printed image in exactly the right position on the objects to be printed.

To provide easier access, each inker unit can also be swung aside. This makes it easier to install the printing plates and the inking rollers. If ever a tube or container should be missing from one of the turret spindles, the control causes the printing unit to be moved back and, at the same time, it stops ink being applied to the plate cylinder by the inking rollers in order to ensure that the amount of ink applied will not vary in the event of interruptions. The gears that drive the plate and impression cylinders run in a gearcase that is isolated from the printing area. All lubricating points are fed with oil from a central lubrication system.

Each of the plate cylinders can be moved separately while the machine is running if it should be necessary to correct axial or radial registration and all six printing units can be moved together to adjust the position of the printed image on the tubes or containers being printed.



PROCESSOR CONTROLLED INKING

With processor controlled inking, the quantity of ink is adjusted to suit the machine speed and the quantity of tubes or containers to be printed while any interruptions in production are detected by a monitor and are duly allowed for. Inking adjustments are simply made from the keyset of the processor and the ideal settings for a particular application can be stored to be called up again when a similar operation is called for.

Printing plates can be mounted on the plate cylinders in a plate mounting device away from the machine and then only slight readjustment is called for on the machine itself.

Provision is made for adjusting the inking rollers from outside the printing units while the machine is running. The movement of the ink distribution rollers can be adjusted to between 0 – 24 mm, and the plate rollers can be adjusted relative to the rubber blankets either parallel or on one side. The pressure applied by each plate cylinder to the rubber blanket can be read against a scale.

Printing units for colours not needed for a particular print image can be disengaged from the drive by means of an electro-magnetic clutch. Where required, the printing unit can be provided with its own electric drive that is independent of the basic machine. This has the advantage of making it easier to ink the rollers before commencing printing and to wash up the rollers once a job is completed.

TECHNICAL DATA DECORATION PLANT H200

Capacity Mechanical machine	Up to 200 tubes/min.
Diameter scope	10 – 80 mm
Trimmed tube length	60 – 270 mm
Drying chain	5/8" x 3/8" bzw. 3/4" x 7/16"
Electrical connected load	approx. 30 kW
Compressed-air supply pressure	6 bar
Compressed-air consumption	approx. 3.5 Nm ³ /h
Maximum printed length	270 mm
Optional equipment	
Decoration plant	Sound absorption cladding
Coating machine	Shoulder coating unit Solvent exhaust booth Lacquer circulation Lacquer cooling
Printing machine	Printing plate mounting device Separate printing unit drive Washing equipment
Weight	
Coating machine	approx. 4500 kg net
Printing machine	approx. 6200 kg net
Dimensions (L x W x H)	
Coating machine	approx. 2500 x 1950 x 1900 mm
Printing machine	approx. 2950 x 1950 x 1980 mm