

### COLOURS & SHAPES

Uncompromising quality for packaging made of aluminum, glass and plastic

# PRODUCT





Since over 50 years, the company HINTERKOPF GmbH develops and manufactures machines and complete lines that are used all over the world for the fully automated high-volume production of cans, bottles, collapsible tubes or other cylindrical bodies, made of aluminum, steel or PE/PP.

State-of-the-art concepts, modern design and a robust construction of the systems ensure high reliability and uptime, an efficient production and long lifetime of the systems.

The HINTERKOPF product range includes machines for trimming and brushing, washing, coating, printing and varnishing, necking and capping, driers and accumulators.

Additionally to lines and machinery, HINTERKOPF also offers its customers an expert advice and support in

- Installation
- Start-up
- Training
- Upgrades of machines or lines
- Service over the lifetime of the machine

On the following pages we will give you an overview of the product portfolio of our company.

We will gladly provide further and more detailed information to you through our sales department.

Yours

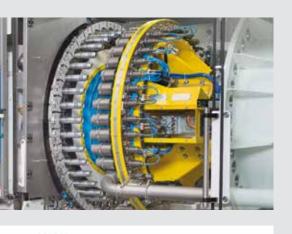
**Hinterkopf GmbH** 

A. Met

**Alexander Hinterkopf** 

### RANGE









**LINES** 

**IMPACT EXTRUSION PRESS** 

NEW

**CUTTING & BRUSHING** 

**BASIC MACHINE** 

**OFFSET PRINTING** 

**DIGITAL PRINTING** 

**LACQUERING** 

**DRYING** 

**CAPPING** 

**NECKING (IE)** 

**NECKING (DWI)** 

**WASHING** 

**POST WASHING** 

**ACCUMULATING** 

**SERVICE** 

### COMPANY

### **Quality and Responsibility**

Machines from Hinterkopf embody highest productivity, reliability, precision and durability. We develop state of the art custom solutions, that improve your bottom line. For us, consultation and planning are equally important to technical optimization and around the clock support anywhere in the world.







### **Competent experts**

Together with our customers, we devolop energy efficient and economical solutions, perfectly tailored to meet your requirements. Every Hinterkopf employee feels responsible for our customers' success, and contributes their expertise for mutual success.

### Responsibility Employees Service

### Partnership from the very beginning

Our comprehensive service and support solutions are an integral part of our company mission. Experts in their respective field, our service team will support you for the life of the equipment, from installation and startup, to genuine spare parts and equipment upgrades.





### Retrofits – future proofing your investment

Upgrades of electronics, drives and motors, additional inkers, or a new printing drum – together with you we will find the solutions for existing production systems, in order to minimize waste, maximize flexibility, efficiency and performance.

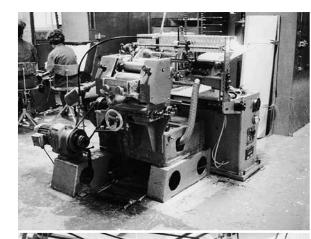
### COMPANY



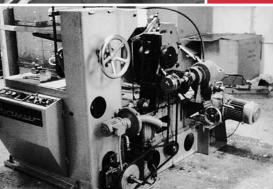
### Leader since 1962

We are setting the benchmark in production and decoration of tubes, cans and sleeves from aluminum or plastic, since our founding in 1962. Thanks to innovative technology made in Eislingen, Hinterkopf customers are prepared for any change in the market, today and tomorrow.











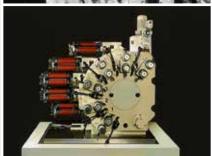












### History













# LINES



### H240

Advanced high-volume production line for cans, bottles and tubes, production speed up to 240 parts/min.

### H240 H200 C400 K080



HINTERKOPF offers its customers complete production lines or parts thereof. In a line for aluminum aerosol cans, for example, the fully shaped and decorated can ("Coil-to-Can") is formed from the aluminum blank, the slug.

The production line consists of HINTERKOPF's proven standard equipments and is adapted according to our customer's specific requirements.

Each line is carefully projected by us and agreed between our experts and the customer.









### C400

Continuously running production line for cans and bottles, high production speed up to 400 cans/min., particularly suitable for large serial productions.

### H200

Index-driven production line for cans, bottles, cylinders and tubes, production speed up to 200 parts/min.

### K080

Index-driven production line for plastic tubes, with integrated UV curing systems, for smaller serial production, production speed up to 80 tubes/min.

# IMPACT EXTRU



# SION x150s x250s x300s x400s PRESS



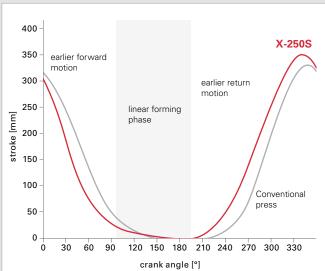
### High-quality extruded parts.

For packaging industries that requires highquality extruded components, the XS series sets new standards in terms of cost-effective manufacturing, quality and production reliability.

The most important feature of the XS series is the motion characteristic of the knuckle-joint. This design provides a slide motion that permits higher production speeds and material such as higher strength aluminum alloys. At the same time, it improves part quality and broadens the spectrum of possible parts that can be made on the press. Other performance enhancing design features complement the motion characteristics.

### **Advanced features:**

- Innovative knuckle-joint drive
- Hydrostatic slide guiding
- Blank feeding and finished part unloading by servo drive
- Hydraulic tool clamping
- · Processing of higher strength aluminum alloys





# CUTTING &



With its new B240 trimming and brushing machine Hinterkopf has reached another milestone on the way to be an overall supplier of highspeed lines for the production of aerosol cans.

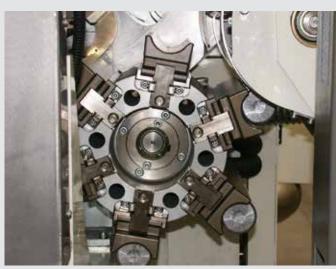
# BRUSHING

**B240** 



The B240 trimming and brushing machine is based on the H240 basic machine. The 16-station mandrel plate offers plenty of space for the work and monitoring stations, and the wellknown triple transfer from the mandrels onto the continuously running pin chain ensures a smooth running. As in the H240, the transfer unit is driven by a servomotor, its motion can be adjusted to the can length. Short can, short stroke – long can, long stroke.

Besides, the B240 has the following outstanding features: A separate drive and control system and the known design of the H240 basic machine. Big acrylic-glass doors create transparency, the pivotable operating panel ensures its easy operation and allows access to the integrated operating and service manuals.



### н240 н200 с400 к080 ВАЅІС





Basic machine for the continuous transfer of the products from and to a transport chain, production speed up to 400 products.



Basic machine with printing unit for the production of plastic tubes. Production speed up to 80 parts/min.



Standard basic machine for a wide range of tube and can dimensions, production speed up to 200 parts/min.



# MACHINE

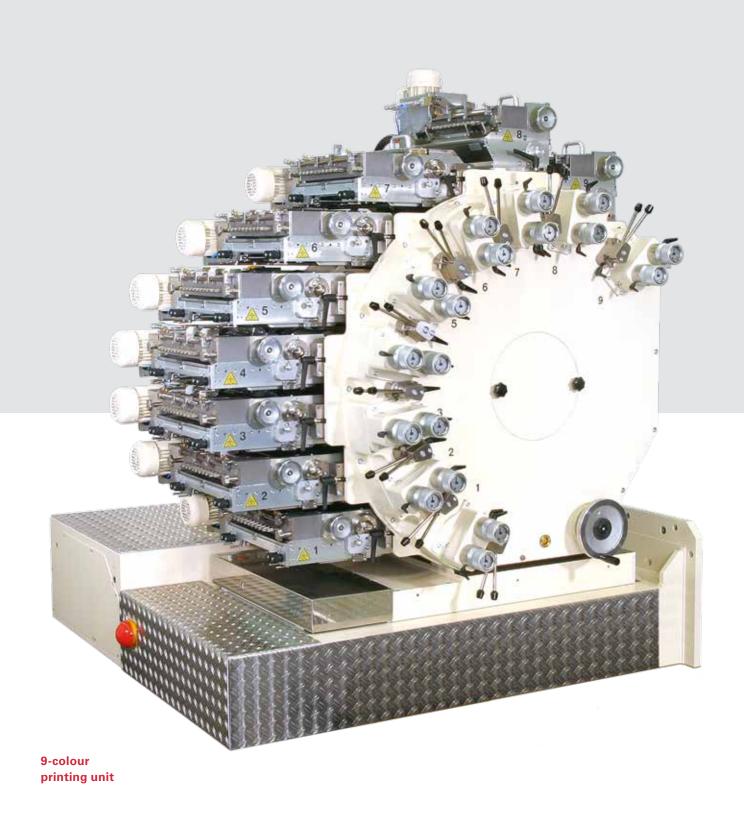




### H240

The advanced H240 machines offer high reliability at a production speed of up to 240 parts/min.

# OFFSET PRINTI



16

### G DW12 DW14 DW16 DW18 DW20

### DW20/9

### 9-colour printing unit

Even most sophisticated print images can be realised with high speed, owing to 4 blankets and 9 ink units.

To achieve perfect ink application with varying outside temperatures the DW20/9 is equipped with temperature-controlled plate cylinders and ink units.

The compact design guarantees good accessibility despite the 9 colours.

In order to ensure perfect quality, the image can be monitored by a camera system, optionally.







### 8-colour printing unit

Printing unit DW 20 with up to 9 inking units, widely used for the decoration of cans, bottles, cylinders and tubes by indirect letterpress printing.

### 7-colour printing unit

Standard inking unit widely used for the decoration of cans, bottles, cylinders and tubes by indirect letterpress printing.



# DIGITAL



### D240

### The digital printing machine D240 is a real world innovation!

The D240 combines the benefits of conventional printing techniques in a single machine.

It is the ideal solution for high quality decoration of round hollow bodies made of aluminum, plastics, steel or laminate – be it tubes, aerosol cans, bottles, cartridges, cups or the like.

### PRINTING

**D240** 





### Benefits at a glance:

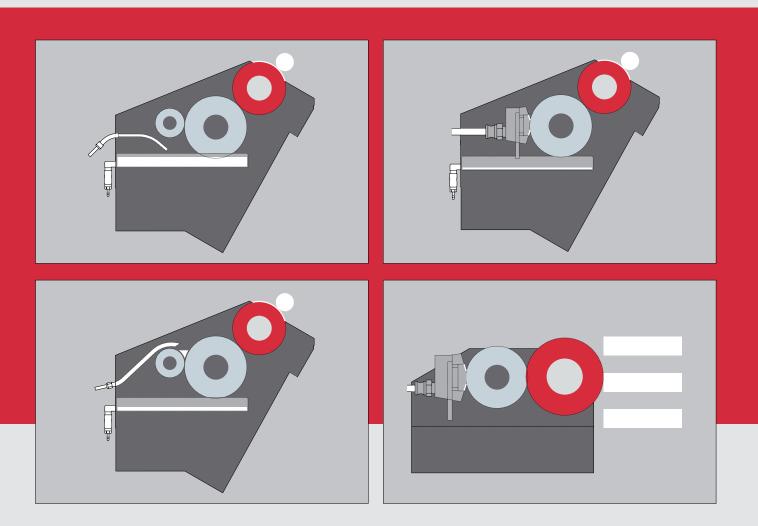
- Perfect quality with the first product
- Photorealistic printing up to 1200 dpi
- Print-on-demand: Small orders and samples at any time
- Continuous production no changeover losses
- Environmentally friendly: No waste products, no color change
- Free choice of resolution
- Easy operation and maintenance



For detailed information please check our D240 Brochure.



### LW29 LW44 LW64 LW80 BASE



### **Dip-coating unit**

Wide range of use for all kinds of lacquers and varnishes, including 2-component lacquers.

### **Roller-coating unit**

Used mostly for the application of matt-finished and textured lacquers and varnishes.

### Anilox coating unit

Used for coating at high speeds achieving precise lacquer thicknesses.

### **Bottom rim coating unit**

Used for coating the bottom rim of cans.

# COATING



### H240

### **Coating machine**

used for base coating and/or varnishing of cans, tubes, or other cylindrical bodies.

# DRYING



**TS 19**UV curing system in a production line of plastic tubes.



**Thermal drying ovens** or **UV curing systems** are used to fix and harden the applied lacquering or ink layers.



### TG15 TE15 TG40 TS20 TS40



### A120 A212 A240



# CAPPING

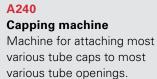














Capping machines of HINTERKOPF are in use for various applications, for tubes made of plastic and aluminum.

- Screw caps
- Fliptop caps
- Tube positioning
- Sealing
- Welding of sleeve and shoulder
- Quality control





### NECKING OF IE





N30
Necking machine for standard cans with 30 work stations.





# CANS

### N30 N40.2 N40.3



### N40.2 and N40.3

Machines for high-precision, multistage necking of the can shoulder or bottle neck, respectively, and of the can or bottle wall, with 40 work stations. The big and variable stroke of the **N40.2** necking machine allows to accommodate to a maximum of various product requirements at a speed of up to 220 parts/min.

The **N40.3** enables highest production speed of up to 240 parts/min. for a limited stroke range.

### NECKING



### N50.3 - Ready for DWI

The necking machine N50.3 from HINTERKOPF with its 50 working stations opens up new possibilities for the shaping of bottles and cans made of aluminum.

Even thin-walled products, manufactured by the DWI-process can be shaped along the whole body length. Through 30% savings in material and the alternative use of recycled aluminum the environmental impact and cost are reduced.

With the variable working stroke and product diameters of 35 – 74 mm, a large variety of aluminum packagings can be shaped efficiently, with a speed up to 200 parts/min.

# FOR DVI

**N50.3** 



### Benefits of the N50.3 at a glance:

- Necking of DWI or impact extruded (IE) cans or bottles
- Less tool exchanges for "normal" products
- Increased necking force (96 kN)
- More auxiliary functions possible (lubrication)
- Up to 8 compact rotary stations with direct drives
- Lightweight clamping chucks
- Ready for future shaping requests







### **WASHING**



### **DWA**

### Washing machine for cans

This type of washing machine is used for washing residues off cans after extrusion and trimming and before lacquering.

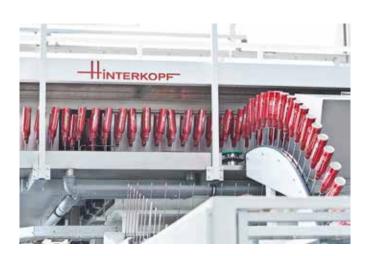
Cascaded cleaning steps in up to 5 baths, including degreasing, acidic and alkaline cleaning and subsequent rinsing by DI water and drying is used.



### **DWA**



### POST-WASHIN



### **PWA**

### Post washing machine

Final cleaning of cans or bottles, after necking and before packaging. Rinsing is made with pure or demineralized water.

A highly efficient drying system ensures that products are free from water residues.



G

### **PWA**



### S200 S240 S400

# ACCUM



### ULATING



Accumulators represent an important element in the complex production process of tubes and cans. Owing to their capability of buffering products, line parts before and after the accumulator can operate more independently.

Differing machine speeds and interruptions in the production flow are compensated by the accumulator and enable an efficient and continuous production flow with high uptime.

The capacity and layout of the accumulator is adapted according to the line's production speed and type and dimensions of the product.









