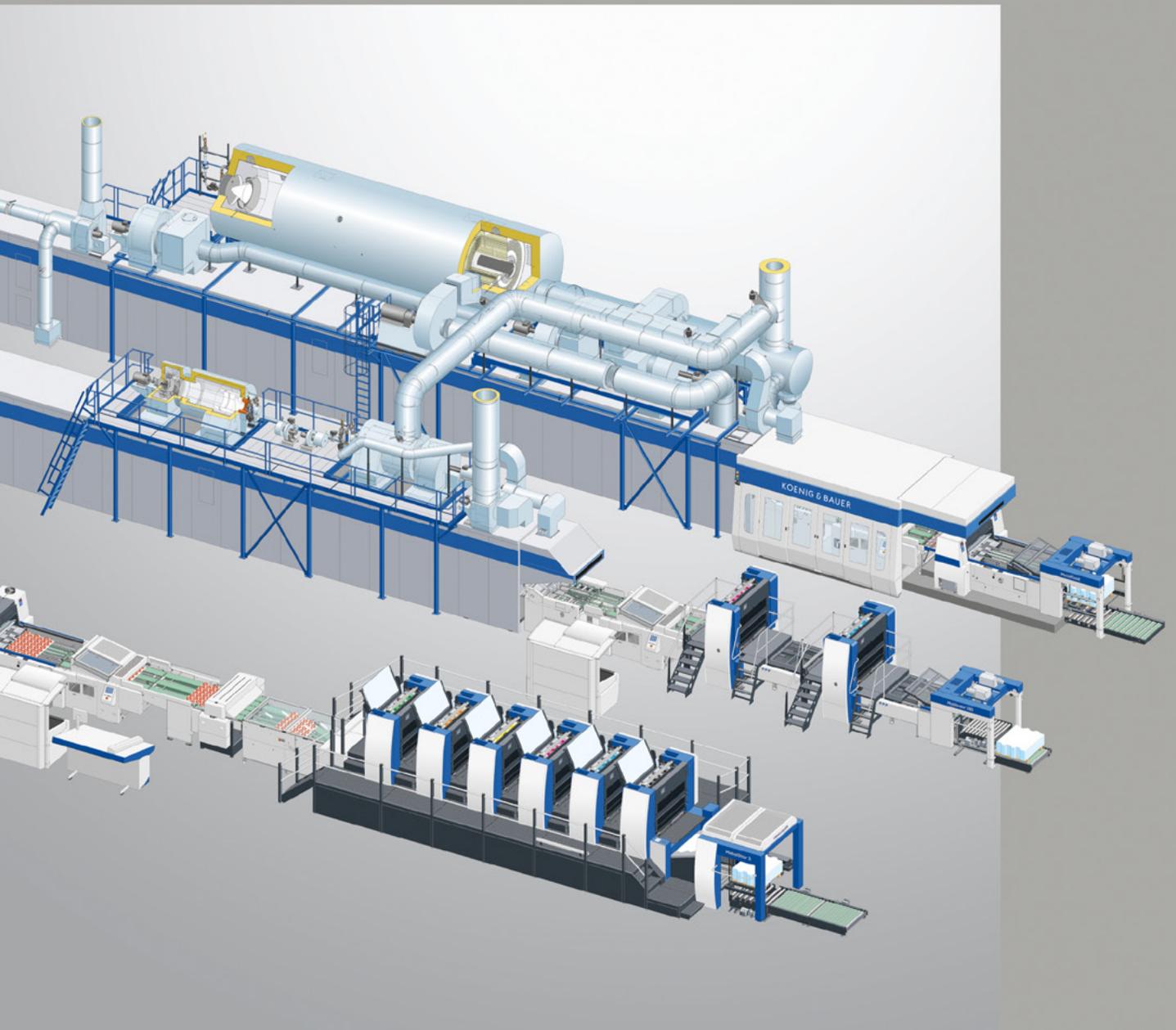


KOENIG & BAUER

Innovative solutions for 3-piece metal decorating



we're on it.

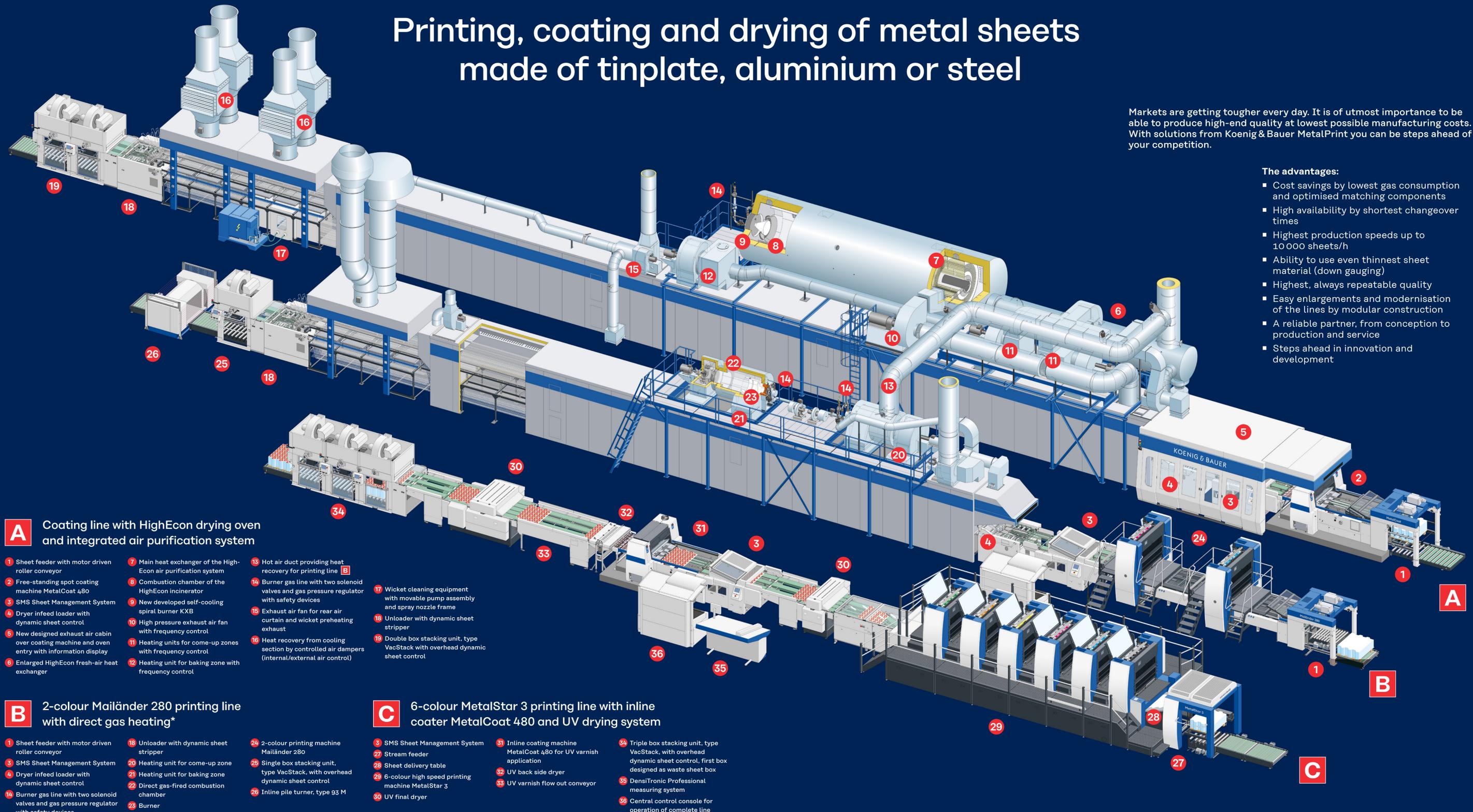
KOENIG & BAUER

Printing, coating and drying of metal sheets made of tinfoil, aluminium or steel

Markets are getting tougher every day. It is of utmost importance to be able to produce high-end quality at lowest possible manufacturing costs. With solutions from Koenig & Bauer MetalPrint you can be steps ahead of your competition.

The advantages:

- Cost savings by lowest gas consumption and optimised matching components
- High availability by shortest changeover times
- Highest production speeds up to 10 000 sheets/h
- Ability to use even thinnest sheet material (down gauging)
- Highest, always repeatable quality
- Easy enlargements and modernisation of the lines by modular construction
- A reliable partner, from conception to production and service
- Steps ahead in innovation and development



A Coating line with HighEcon drying oven and integrated air purification system

- | | | |
|---|---|---|
| 1 Sheet feeder with motor driven roller conveyor | 7 Main heat exchanger of the HighEcon air purification system | 13 Hot air duct providing heat recovery for printing line B |
| 2 Free-standing spot coating machine MetalCoat 480 | 8 Combustion chamber of the HighEcon incinerator | 14 Burner gas line with two solenoid valves and gas pressure regulator with safety devices |
| 3 SMS Sheet Management System | 9 New developed self-cooling spiral burner KXB | 15 Exhaust air fan for rear air curtain and wicket preheating exhaust |
| 4 Dryer infeed loader with dynamic sheet control | 10 High pressure exhaust air fan with frequency control | 16 Heat recovery from cooling section by controlled air dampers (internal/external air control) |
| 5 New designed exhaust air cabin over coating machine and oven entry with information display | 11 Heating units for come-up zones with frequency control | 17 Wicket cleaning equipment with movable pump assembly and spray nozzle frame |
| 6 Enlarged HighEcon fresh-air heat exchanger | 12 Heating unit for baking zone with frequency control | 18 Unloader with dynamic sheet stripper |
| | | 19 Double box stacking unit, type VacStack with overhead dynamic sheet control |

B 2-colour Mailänder 280 printing line with direct gas heating*

- | | | |
|--|---|---|
| 1 Sheet feeder with motor driven roller conveyor | 18 Unloader with dynamic sheet stripper | 24 2-colour printing machine Mailänder 280 |
| 3 SMS Sheet Management System | 20 Heating unit for come-up zone | 25 Single box stacking unit, type VacStack, with overhead dynamic sheet control |
| 4 Dryer infeed loader with dynamic sheet control | 21 Heating unit for baking zone | 26 Inline pile turner, type 93 M |
| 14 Burner gas line with two solenoid valves and gas pressure regulator with safety devices | 22 Direct gas-fired combustion chamber | |
| | 23 Burner | |

C 6-colour MetalStar 3 printing line with inline coater MetalCoat 480 and UV drying system

- | | | |
|---|--|--|
| 3 SMS Sheet Management System | 31 Inline coating machine MetalCoat 480 for UV varnish application | 34 Triple box stacking unit, type VacStack, with overhead dynamic sheet control, first box designed as waste sheet box |
| 27 Stream feeder | 32 UV back side dryer | 35 DensiTronic Professional measuring system |
| 28 Sheet delivery table | 33 UV varnish flow out conveyor | 36 Central control console for operation of complete line |
| 29 6-colour high speed printing machine MetalStar 3 | | |
| 30 UV final dryer | | |

*also available with direct oil heating



MetalStar 3 – Peak performance class in metal decorating

For decades, the MetalStar series has been the benchmark for automation and production speed in metal decorating. With an output of up to 9000 sheets per hour, the MetalStar 3 is the fastest metal decorating press on the market.

Features such as automatic plate changing, washing systems and many other automation modules all serve one purpose: The shortest possible make-ready times and thus maximum productivity.

Highlights

- Sidelay-free infeed DriveTronic SIS
- Automated blanket changing with RBC (Rapid Blanket Change)
- Reduced washing times with CleanTronic Synchro
- Ultra-modern console
- Automatic data acquisition and evaluation of the KPI with LogoTronic Professional



Mailänder 280 – Reliable technology for efficient production

The Mailänder 280 offers you the best of both worlds! Benefit from long-proven and -appreciated Mailänder technologies, combined with the outstanding automation of high-performance MetalStar 3 printing units.

Print even the most challenging sheet types and thicknesses both stably and reliably, without foregoing the print quality and automation of the MetalStar 3 technology.

Highlights

- Robust feeder and optimised sheet transport
- MetalStar 3 printing units for ultimate print quality and automation
- Centralised press control via the ErgoTronic console
- High flexibility
- Convenient handling



MetalCoat 470 – High performance coating

As a high-performance machine, the MetalCoat 470 unites all the attributes which characterise a modern coating process – stability and reliability.

The VacuMatic infeed guarantees absolute register accuracy even with thin substrates or scroll sheets. Spot coatings are applied with highest precision on the most varied sheet materials. The three-roller coating application system of the MetalCoat 470 guarantees uncomplicated handling and processes for both conventional and BPA-NI coatings without limitations.

Highlights

- Simple and intuitive operation
- VacuMatic infeed for absolute register accuracy
- Newly developed three-roller coating application system
- New roller system reduces coating consumption



MetalCoat 483 – The new star of the coating world

High-end – also for coating. Dedicated drives, touchpanels with memory function, laser-assisted machine make-ready: These and other cutting-edge technologies are now also available for the coating of metal sheets.

The MetalCoat 483 makes no compromises when it comes to the implementation of modern technologies – it is the fastest, most modern and most productive coating machine in the world.

Highlights

- VacuMatic sheet infeed for exact sheet alignment
- Maximum coating precision thanks to dedicated drive technology
- Laser-assisted cylinder positioning
- Quick-change kit for fastest possible coating changes
- Newly developed three-roller coating application system



MetalCure UV – State of the art UV drying technology

The new MetalCure UV dryers are fitted with the latest reflectors, which allow optimised focusing and at the same time reduce the heat build-up on the metal sheet by reducing IR and scattered light.

Each drying module can be equipped with an integrated operating hours counter, so that even in the event of a change in position, it is always possible to ascertain how long a UV lamp has already been in use. All MetalCure UV dryers are continuously adjustable from 80 W/cm² to 160 W/cm² (or optionally 200 W/cm²).

Highlights

- Integrated solution in the ErgoTronic control console
- High level of efficiency through the use of state-of-the-art-reflectors
- Plug & Play replacement
- Integrated operating hours counter in each UV module
- No waiting time before washing thanks to CleanTronic UV



Thermal drying ovens – Proven technology

Koenig & Bauer MetalPrint drying ovens are known as the best ovens in the world for the drying of printed and coated metal sheets for several decades.

The principle has been copied on many occasions, but never equalled. Through to the present day, a temperature constancy of +/-1.5 %, the fast and gentle heating phase, and efficient cooling have remained the benchmarks for drying ovens.

Highlights

- Precise and constant temperature over the whole surface of the sheets
- Low energy consumption
- Integrated exhaust air purification with heat recovery
- Acquisition and recording of production times together with the corresponding job parameters
- Automatic gas consumption monitoring



High Econ drying oven – High-tech for exhaust air purification

Save up to 70% of gas cost with the award winning HighEcon technology. Only from Koenig & Bauer MetalPrint.

The latest generation of drying ovens from Koenig & Bauer MetalPrint promises even greater energy savings and efficiency, allowing for a further significant reduction in energy costs. The new HighEcon drying oven – winner of a silver METPACK Innovation Award – is the only drying oven in the world which enables you to run sheets down to a thickness of 0.100 mm, while at the same time achieving energy savings of up to 70 %.

Highlights

- Gas costs reduced by up to 70 %
- Newly developed KXB burner
- Modern design with a new exhaust cabin
- Repeatable job programs and remote service
- Handling of sheets down to a thickness of 0.100 mm



Air purification – Considerable savings potential

The thermal drying of metal sheets requires an enormous energy input in order to generate the necessary heat. At the same time, the process produces a large volume of solvent-laden exhaust air, which must subsequently be purified.

Drawing on decades of experience in the field of exhaust air purification, Koenig & Bauer MetalPrint has successfully achieved a considerable increase in efficiency and cost-saving potential compared to traditional air purification solutions with its EcoTNV system.

Highlights

- Exhaust air purification system for new production lines
- Retrofit for lines without exhaust air purification
- Retrofit or replacement for lines currently fitted with less energy-efficient exhaust air purification systems
- HighEcon systems available for maximum energy efficiency



Sheet handling – Optimise processes with our solutions

As the leading system supplier, Koenig & Bauer MetalPrint offers all the components necessary to ensure smooth, highly automated production.

Koenig & Bauer MetalPrint offers individually tailored solutions for process optimisation and automation, including adaptation to any relevant local circumstances.

Product range

- Pallet changers
- Feeder logistics
- Sheet management systems / Inspection sheet removal
- Intermediate transport solutions / Bridges and wide belt conveyors
- Modular stacking / Delivery logistics solutions
- Pile turners