

PAINTING SYSTEMS

To sell a shotblasting machine is one thing. To deliver a complete shotblasting and surface treatment line is quite another. It is not as simple as it seems to paint freshly shotblasted steel.

Because of the roughness of the material every element has to be exactly balanced in order to obtain a smooth and well-dried paint layer. Optimise the paint use as 2/3 of the total running costs are determined by this. This is a job for the specialists. INTEC. The partner of KALTENBACH for painting systems. Together we offer a complete package. Water blow off units. Ovens that switch off automatically when the roller conveyor is idle or when the chamber is empty. Highly efficient paint sprayers, both for the application of primer and top coating. Energy-saving dryers. Everything you need to clean the steel and preserve it against new corrosion. KALTENBACH will look at your unique situation and advise you.

- ▶ **PRIMER SERIES SPRINT - PRE FABRICATION**
Cost effective painting and drying systems for plates, profiles and tubes.
- ▶ **PRIMER SERIES MARATHON - PRE FABRICATION**
The Long Distance Runner. Powerful painting and drying systems for plates, profiles and tubes.
- ▶ **TOPCOATING SERIES TRIATHLON - POST FABRICATION**
When steel is also welded to a complete construction. We offer the all-rounder. Top coating and drying systems for plates, profiles, tubes as well as welded constructions.

PRIMER SERIES SPRINT + MARATHON 1504 | 2504 | 3004 | 4004

PAINTING AND DRYING IN A SINGLE PACKAGE



Simultaneous application from top and bottom side to achieve complete painting in a single movement.

Paint booth:

- ▶ Two moveable spraying bridges for positioning spray guns (4 to 8 units)
- ▶ Adjustable width of the spraying process for paint saving application
- ▶ Automatic adjustment of the spraying stroke to the feedrate to minimise paint usage
- ▶ Bi-lateral optimized airflow ensures uniform application of coating
- ▶ Optimized use of paint to achieve economical operation



Energy saving and fully isolated Pre-heaters ensures the right material temperature before painting.

Spray Guns:

- ▶ Spray guns apply paint to finished parts using an airless method
- ▶ Clogging of the feed and discharge lines is avoided through the continuous circulation of paint in the system
- ▶ Automatic height adjustment of the upper spray guns through photoelectric beams for optimum, economical paint application



Paint system package.

Paint System:

- ▶ High-pressure pump for paint
- ▶ 200-litre drum with mixer
- ▶ Drum lid with all necessary connections (e.g. paint extraction device)
- ▶ Pneumatic mixing device lifter for easy drum change
- ▶ Continuous flow heater for consistent paint temperature

The KALTENBACH PRIMER SERIES SPRINT and MARATHON are constructed to pre-heat, paint and dry not only plates and tubes but also profiles. Together with the KALTENBACH shotblasters they build a complete preservation line. A light curtain detects the material height for adjusting the upper sprayguns automatically to the correct height. A special control for avoiding double coatings and the precise detection of throughput position reduces the overspray to a minimum. The dry booth layout reduces waste volume. Non adhesive foil at the walls and an optimised airflow in the booth simplifies cleaning. A separate fine filter reduces the dust share in the exhaust air to the recommended minimum.

ADVANTAGES AT A GLANCE

- ▶ Optimized concept in respect of paint use, drying times and maintenance to achieve economical operation
- ▶ Low paint consumption due to ideal spray gun concept
- ▶ Complete material painting in a single movement
- ▶ Suitable for use with water-soluble and/or solvent-based paints
- ▶ Energy & time saving drying process due to ideal combination of multiple air flow loops supported by gas heating, as required, dependant on ambient temperature
- ▶ Integrated chain conveyor transport system during drying process for movement free transport of freshly painted material
- ▶ Minimized cleaning times
- ▶ Extendable with after burning systems

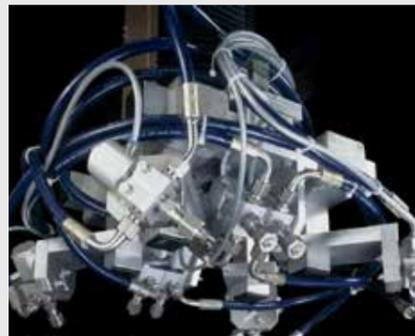
APPLICATIONS

- ▶ Steel construction
- ▶ Steel service centre
- ▶ Surface treatment service centre - subcontracting
- ▶ Automotive sector
- ▶ Machine construction
- ▶ Crane manufacturer
- ▶ Shipyard
- ▶ Plate processing



TOPCOATING SERIES TRIATHLON 1512 | 2512 | 3012

FINAL PAINTING FOR STEEL PROFILES AND CONSTRUCTIONS



12 paint guns for complete painting in a single movement.

Topcoating:

- ▶ Painting of finished welded steel constructions
- ▶ Water- or solvent-based painting options
- ▶ Highly economical due to low energy and paint costs
- ▶ Maintenance and user friendly
- ▶ 12 spray guns for painting made-to-measure steel profiles and steel constructions
- ▶ Thickness of the paint layer continuously adjustable from 20 up to 160 µm



Painted steel constructions.

Drying Tunnel:

- ▶ Dryer with Rockwool insulation in cartridge form
- ▶ Adjustable temperature range
- ▶ Optimized drying process through circulating air fans
- ▶ The drying tunnel is connected to the preheating furnace by means of a duct system, so that the heated air can also be used in the drying process



Reduced overspray through precise contour determination of the surfaces to be coated and exact control of spray guns.

Preheating furnace (optional):

- ▶ Two burners
- ▶ Extremely low gas consumption
- ▶ Adjustable temperature range
- ▶ The preheating furnace is connected to the after-dryer by means of a duct system, so heated air can thus be used in the drying process

The new automatic spray painting offers the world's latest in finish coating. It scans the steel structure in 3-dimensions (optional) to identify head and footplates as well as stiffeners. The parts are painted fully automatically with highest precision - without wasting any paint. This reduces paint consumption as well as the turnaround time due to the short drying time and space requirement.

ADVANTAGES AT A GLANCE

- ▶ Paint and time saving solution for top coating of steel constructions. Average processing time for touch dry application approx. 45-60 minutes (depending on material lengths)
- ▶ Automated painting process
- ▶ 12 paint guns (optionally 24) for complete painting of constructions, top and bottom simultaneously, in a single movement
- ▶ Suitable for use with water-soluble and/or solvent-based paints
- ▶ Gauge option in preheater and after dryer fitted to the material load
- ▶ Energy & time saving drying process due to ideal combination of multiple air flow loops supported by gas heating, as required, dependant on ambient temperature
- ▶ Integrated chain conveyor transport system during drying process for movement free transport of freshly painted material
- ▶ Extendable with variable in and outfeed systems (roller conveyor as well as chain conveyor) for ideal production flexibility
- ▶ Minimized cleaning times
- ▶ Extendable with VOC air treatment system

APPLICATIONS

- ▶ Steel construction
- ▶ Surface treatment service centre - subcontracting



TECHNICAL DATA OF PAINTING SYSTEMS AT A GLANCE

PRIMER SERIES SPRINT

HARD FACTS	1504	2504	3004	4004
Layer thickness [µm]	15 - 40	15 - 40	15 - 40	15 - 40
Part range [mm]	1600 x 600	2600 x 600	3100 x 600	4100 x 600
Max. part width [mm]	1500	2500	3000	4000
Max. part height [mm]	500	500	500	500
Number of Spray guns	4 (optional 8)	4 (optional 8)	4 (optional 8)	4 (optional 8)

PRIMER SERIES MARATHON

HARD FACTS	1504	2504	3004	4004
Layer thickness [µm]	15 - 40	15 - 40	15 - 40	15 - 40
Part range [mm]	1600 x 600	2600 x 600	3100 x 600	4100 x 600
Max. part width [mm]	1500	2500	3000	4000
Max. part height [mm]	500	500	500	500
Number of Spray guns	4 (optional 8)	4 (optional 8)	4 (optional 8)	4 (optional 8)

TOPCOATING SERIES TRIATHLON

HARD FACTS	1512	2512	3012
Layer thickness [µm]	> 40 - 160	> 40 - 160	> 40 - 160
Part range [mm]	1600 x 700	2600 x 700	3600 x 700
Max. part width [mm]	1500	2500	3000
Max. part height [mm]	600	600	600
Number of Spray guns	12 (optional 24)	12 (optional 24)	12 (optional 24)

