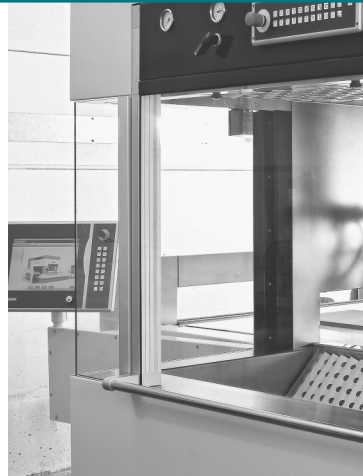




Venjakob™

THE NEW DIMENSION
IN HIGH-CAPACITY LACQUERING

VEN SPRAY
PERFECT



VEN SPRAY PERFECT

Value-added investment

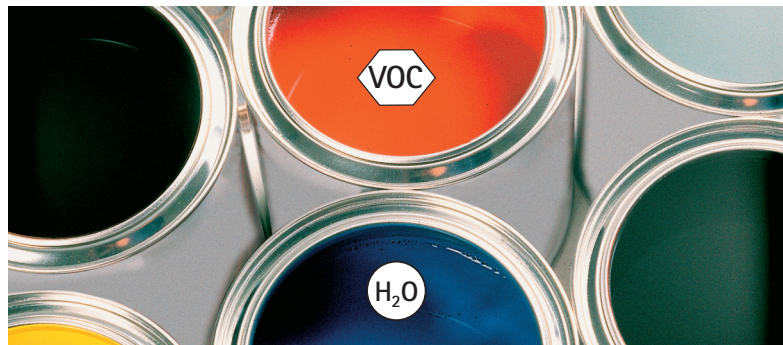
- retroactive expandability
- low production downtime
- short paint-change times
- perfect painting results
- optimised material utilisation
- time-saving cleaning
- great operational comfort

INVESTMENT SECURITY THROUGH MODULARITY

Venjakob innovatively provides for all of the requirements of the market with the VEN SPRAY PERFECT. Based on many years of know-how in producing powerful spray-coating lines, this new generation is characterised by its flexibility. The fast pace of change, the multitude of parts and small batch sizes in all sectors of industry require adaptable production technology. Naturally the assurance of a reproducible high surface quality is part thereof.

The modular system, designed in compliance with the Safety Standard DIN EN 12215, offers long-term provision for all production requirements. From the time of acquisition, the machine concept produces all models from the solid standard equipment right through to the high-end finishing line solution. The modular system makes the implementation of changed conditions through the upgrading with new modules possible at any time, thus making your investment future-proof.

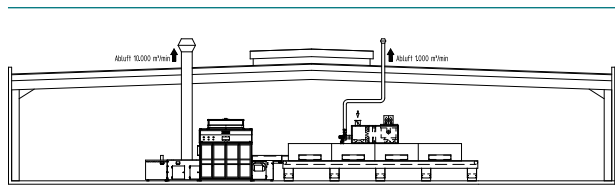
LACQUER COMPATIBLE



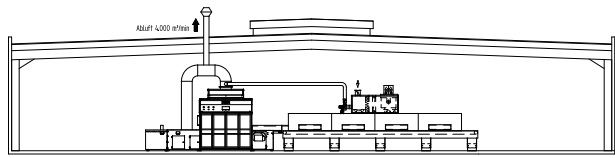
SUITABLE FOR ALL PAINTS: The current VOC regulations determine the use of modern, water-based lacquer systems in addition to the traditional solvent-based paints. The large modular-adaptable cabin volumes, complemented by matching ventilation systems, effectively dissipate the high mist-forming energies in water-based paints. VEN SPRAY PERFECT makes changing from water-based to solvent-based paints in an installation possible in a matter of seconds.

Operating widths 1300 | 1600 | 2200
 (Width of conveyer belt)
 Operating length 2280 | 2800
 (Length of the cabin)

Length 5510 mm
 Width 4910 mm
 Height 3270 mm



Exhaust air operation



Recirculating air operation

RESOURCE-SAVING

ENERGY EXPERTISE: Venjakob is the market leader in the development of energy-efficient spray-coating lines. The sophisticated spray gun control minimises the rate of overspray. With the modern, patented V-belt design you can reclaim up to 98 % of the liquid overspray. The paint retrieved in this way is recycled into the paint process. Over and above, the innovative ventilation system improves the ecological energy balance.

Venjakob™



MAXIMUM EQUIPMENT ACCESSIBILITY

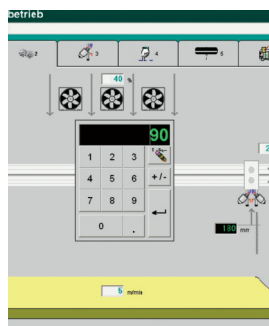
Large operating doors provide an overview and are user-friendly at every stage. The tried and tested spraying system with lacquer spray guns and a multitude of independent paint-feeder circuits, impress by the parallel use of various paint systems in one finishing line. Each spray gun can be controlled individually by means of the spraying program and adjusted to the specific task. The spray guns are mounted on a quick-changing system that makes replacement simple.

The solid and durable linear drive axle reliably provides for the precise and consistent movement of the spray guns. Completely encapsulated and fitted with an automatic lubrication system, the linear axle attains a high degree of reliability and customer satisfaction in long-term production utilisation. The spray gun carrier units can be equipped with up to 12 spray guns if needed. Automatic colour-changing systems minimise the setup times in the changing of colours.

SPRAYING SYSTEM



QUICK-CHANGE SYSTEM: The spray gun bracket connected to the linear axle is equipped with separate quick-couplers for the lacquer supply. This enables quick changes in removing a set of spray guns and continuing production with a second set.

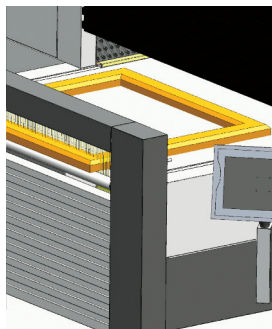


HEIGHT ADJUSTMENT: The optional automatic height adjustment of all of the spray guns offers quick adjustments for the lacquering of high or low workpieces. It is controlled via a central control panel/user interface.



The control system can be supplied in two versions.

As a switch cabinet solution with Windows-based industrial PC, visualisation by means of a touch screen on a high-quality arm mount or in the switch cabinet door. As alternative hardware (Siemens) PLC control system, visualisation by means of touch screen with pedestal at the machine or in the switch cabinet door.

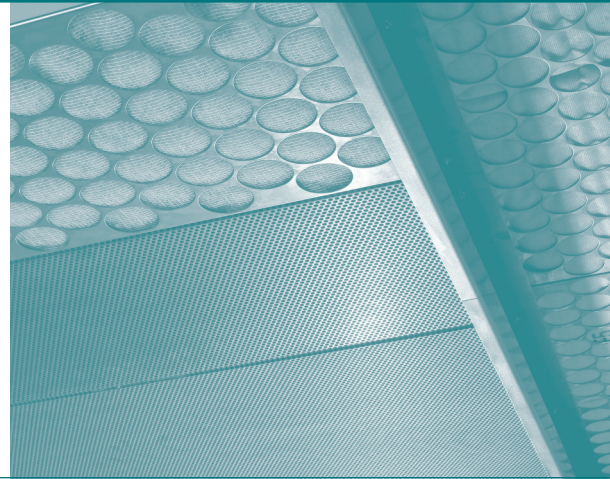
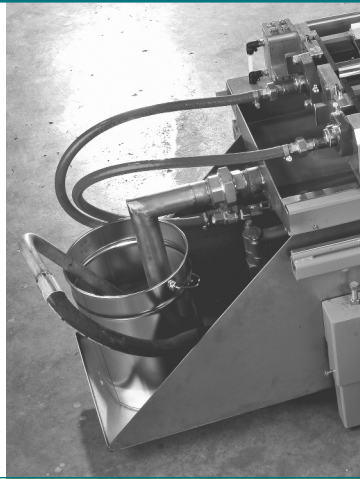


WORKPIECE RECOGNITION: Possible via a light barrier as well as via a high-precision sender-receiver bridge. The detailed information gathered with the second version is stored as operating data and can be called up per mouse click.



ACCESSIBILITY: The comfortable diagnostics system directly and reliably provides information via the display on the condition of the machine. Complemented by the Venjakob remote maintenance and the high-performance service, downtimes are reduced to a minimum.

CONTROL SYSTEM

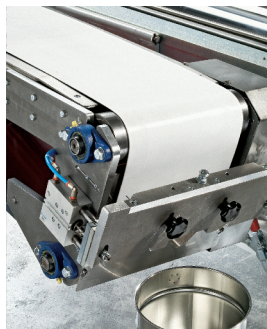


SHORT AMORTISATION PERIOD

Selecting the correct conveying system as well as the optimal reclaimation and cleaning systems is a significant factor in determining the cost-effectiveness. Large viewing panes in front of the washing units enable safe control of the cleaning liquid levels. Cleaning can take place at any time, independent of the production operation in progress. This flexibility and the efficient paint consumption result in a high degree of productivity.

The patented V-belt reclaim system increases your profits. Alternatively, it can be replaced by an oscillating scraper system. Complemented by the newly designed belt washer the innovative flooding system produces consistently good belt cleaning results. Through the tremendous savings in lacquer use the investment in the VEN SPRAY PERFECT is amortised in a short time. An important criterion for long-term company success.

PAINT RECLAMATION



HIGHLY EFFICIENT: The innovative V-belt system guarantees great cost-efficiency. The self-cleaning Teflon belt, running diagonally to the conveying direction, gently and extremely effectively collects the overspray and returns the paint via a controlled V-shaped scraper back into the container.

BELT CLEANING



RELIABLE: In applications with abrasive, low-viscosity or high-solid filler lacquer systems and consistent colours, the scraper system regulates the single variety reclaimation. An oscillating scraper provides for a constant high return.

SYSTEMATIC PAINT RECLAIM OFFERS THE HIGHEST EFFICIENCY



- It is possible to clean a washer unit while production operation is in progress.

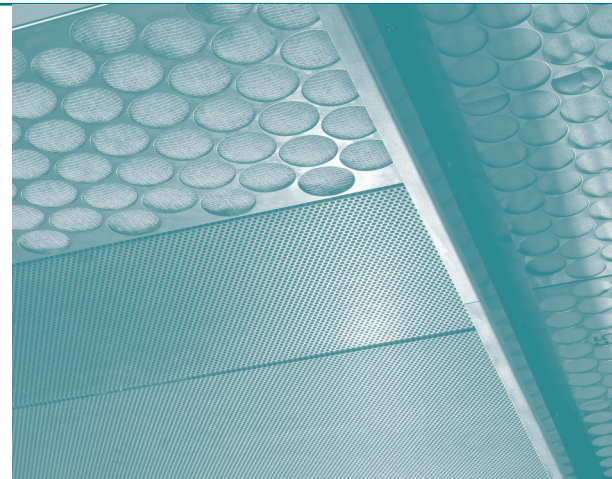
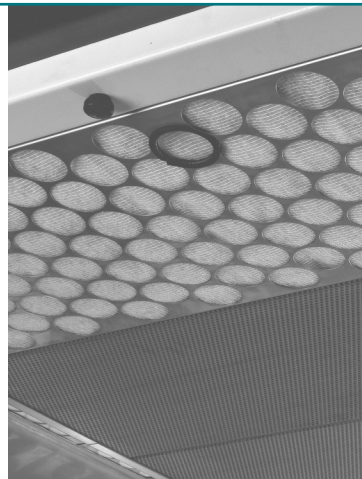
COMBINATION OPTIONS

| Module | Model I | Model II | Model III | Model IV | Model V |
|----------|---------|----------|-----------|----------|---------|
| V-belt | X | X | X | | |
| Scraper | | X | | X | X |
| Washer 1 | X | | | | X |
| Washer 2 | X | X | X | X | X |

CLEANING SYSTEMS

CONVEYING SYSTEMS

POWERFUL: From belts, steel belts, bars, paper tape right through to closed webbing belt conveying, a wide range of conveying systems are available. A special non-stick surface coating increases the rate of paint reclamation. Sealed belt edges and connections prevent the penetration of cleaning agents into the belt structure, ensuring a long service life of the conveying belts.

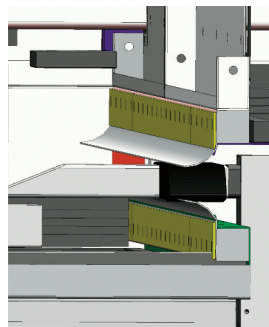


MORE ROOM FOR QUALITY

Several factors within the modular system contribute to the high performance capacity of the VEN SPRAY PERFECT ventilation system. The size of the machine cabin determines the climate inside the spraying chamber. The optimal ventilation volumes of 7,000, 10,000 or 12,000 m³/h are already defined during the project planning phase. The integrated, flexible ventilation system provides for optimal air-conditioning with its multilevel filter system. Full air-conditioning of the cabin is possible in modern water-based lacquer systems.

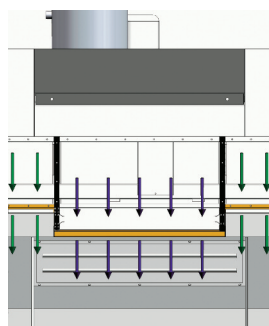
Being equipped with an air recirculation return system, the energy use for the preparation of the supply air is reduced. The filtered exhaust air is fed back into the spray chamber on a pro rata basis. This reduces the exhaust air flow, is environment-friendly and consequently lowers costs. The new extensive, lateral filter zones offer a much longer service life and minimise the downtimes made necessary by cleaning and replacing of paper filters. The exhaust air is accumulated for operation in exhaust air cleaning equipment.

SUPPLY AIR



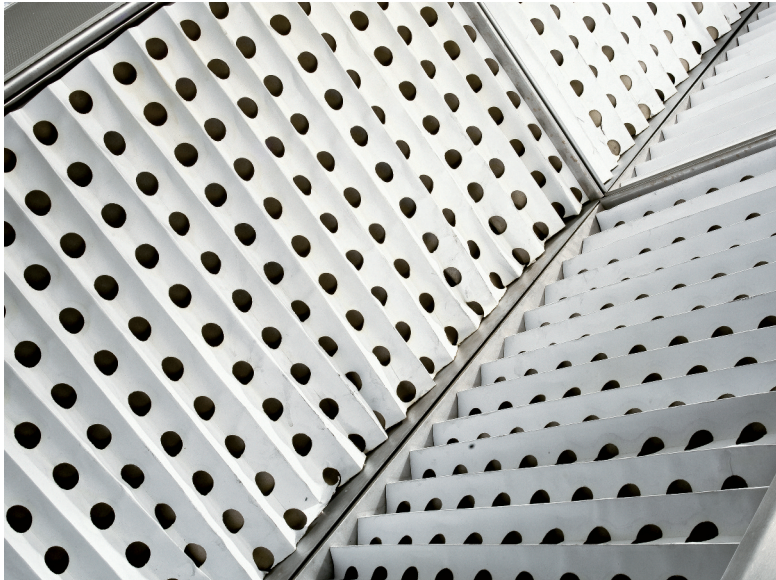
HORIZONTALLY DIVIDED FILTER COVER:

The downward drift of dirt particles onto the workpiece surface is avoided by the horizontal division of the filter cover. This effective dust prevention creates the conditions for the best surface quality.



3-ZONE VENTILATION:

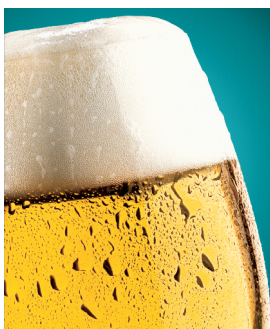
The conditioning of the supply air can be adjusted per section. This means a tremendous reduction in outlay for the cleaning of the cabin. The choice between a purely fresh air/exhaust air operation, a mixed air operation of 0–30% or an energy-saving recirculating air operation is possible.



■ The large filter surfaces and optimised cross-sections of a dry filter extraction system



WET EXTRACTION: This ensures optimal results especially in high-capacity finishing lines. The laterally positioned water shafts provide for the perfect ventilation climate. The separation of the paint sludge takes place by a sludge remover or cyclone separator.



COOLAC®: This cleaning technology is a clear winner particularly with water-based paints. The self-cleaning efficiency of the system, the very short downtimes during cleaning and the utilisation of the reclaimed lacquer material in the same colours are significant factors.

EXHAUST AIR

Venjakob™



ECONOMIC AND ECOLOGICAL

The cost-effectiveness of VEN SPRAY *PERFECT* is based on a number of factors. The productivity and reliability during production in progress are outstanding features of this machine. The short setup times, long service life of the filter elements, fast changing times for spray systems and automated paint-change procedures offer a very high degree of efficiency. The twin cleaning units make the use of solvent-based paints as primer and the direct switchover to the second unit operating with water-based paints possible.

Maintenance and cleaning operations take place completely separate from the production process. The use of traditional solvent-based paints is possible, because the complete system can be extended by an exhaust air purification module. Sustainable environment-friendliness is a result of the resource-saving criteria. The impressive ecological balance, permanent cost-savings in the production process and the effective maintenance are proof of the Venjakob expertise in innovative and top-performing spray-coating systems appreciated worldwide.

ENERGY



EFFECTIVE: The pre-treated supply air and the reduced exhaust air volumes reduce energy costs. Complemented by the optimised lacquer utilisation and non used cleaning agents, result in an impressive ecological balance. Water-based paints make it easier to keep to strict ecological obligations.

SERVICE



RELIABLE: The Venjakob remote maintenance, the 24-hour service and the extensive parts warehouse enable fast reaction times. The global network of competent service employees guarantees a high degree of flexibility in case of malfunctions.

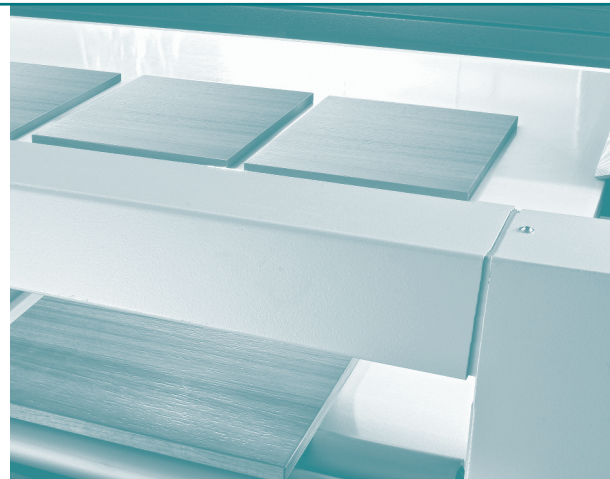


Qualified contact partners with top technical expertise in process engineering and application technology assist with every phase of cooperation from the initial discussions right through to the actual first operation of the new production line. In partnership we achieve decision-making and planning certainty through simulated practical applications in our own technical development centre with customer-related materials.



CUSTOMER SATISFACTION

We are committed to achieving the objective that the trust placed in us is answered with innovative system solutions and convincing service. The satisfaction of our partners drives the consistent and innovative growth of our company.



BLUECOMPETENCE

Alliance Member

Partner of the Engineering Industry Sustainability Initiative

SURFACE COMPETENCE WITH KNOW-HOW

As an internationally renowned system manufacturer Venjakob has been designing innovative surface coating machines for more than 50 years. Individual machine line solutions, optimisation of production processes as well as development of innovative system technologies are devised and realised on the basis of many years of experience and the profound expert knowledge of our employees. Our daily work is characterised by individuality, close dialog with our partners in the various lines of industry and a concept-referenced way of thinking and acting.



Wood



Plastic



Metal



Glass

VEN BRUSH

BRUSHING | SANDING

VEN CLEAN

CLEANING

VEN MOVE

HANDLING

VEN TRANS

CONVEYOR TECHNIQUE

VEN SPRAY

COATING

VEN DRY

DRYING

VEN CLEAN AIR

EXHAUST AIR PURIFICATION

PRODUCTION LOCATIONS

Venjakob Maschinenbau GmbH & Co. KG
Augsburger Straße 2-6 | 33378 Rheda-Wiedenbrück | Germany
Fon +49 52 42 9603-0 | info@venjakob.de

Venjakob Umwelttechnik GmbH & Co. KG | Wellweg 97 | 31157 Sarstedt | Germany
Fon +49 50 66 9806-0 | info@venjakob-ut.de

Nutro Inc. | 11515 Alameda Drive | Strongsville OH-44149-3099 | USA
Fon +1 440 572 3800 | usa@venjakob.de

INTERNATIONAL SUBSIDIARIES

The contact details please find on
www.venjakob.de/en/contact/locations/

Venjakob Maschinenbau Division South
Venjakob North America Inc. (Canada)
Venjakob España
Venjakob Russia
Venjakob Finishing Solutions Pvt. Ltd. (India)
Venjakob South East Asia (Kuala Lumpur)

