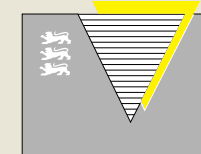


830

Designed for Modern Lacquer Systems.

A fully electronically controlled heavy duty universal machine designed and built with quality and economy at the forefront.

- ▶ For accurate calibration
- ▶ For quality veneer sanding
- ▶ For perfect denibbing (10 g/m²)
- ▶ 3 wide belt unit options
- ▶ Easy to operate
- ▶ Optimum accessibility and simple maintenance
- ▶ Long working life with ERNST quality
- ▶ High dependability with a 10.000 hour guarantee on the pressure beams
- ▶ Unequalled cost reduction and economy
- ▶ Built with over 30 years experience of automatic sanding machines



An award for innovation from Baden-Württemberg
Dr. Rudolf Eberle prize

Top furniture and door manufacturers have for many years relied on the legendary name of Ernst for quality and will continue to do so in the future.

More than 30 years of experience in building automatic cross-sanding machines and more than 5000 machines delivered are testament to the quality and reliability of the product.

Ernst has achieved a highly respected position in the market and has earned the praise of many experts around the world. If you have any questions about the Ernst 830, would like more information or would like to run tests with your own panels?

Call us!

We will be pleased to advise you, without obligation, about the 830 or any other machine in the extensive Ernst range of sanders and brushing machines.

Subject to design change / cdesign - forum.de/6042-20000507.GB



The Three Belt Cross Sanding Machine

830

The leading universal sanding machine showing the way for door and furniture manufacturers.

Technical Data:		ERNST 830
Working width	mm	1350
Work piece thickness	mm	3-120
Cross beltmotor	kW	15
Wide belt motor 1	kW	22
Wide belt motor 2	kW	22
Cross belt dimension	kW	150 x 5400
Wide belt dimension	mm	1400 x 2620
Feed speed	m/min.	5-25
Weight approx	kg	6500

Further options: Vacuum equipment, test system, infinitely variable feed speed, transport belt cleaning, wide belt paper length 3150 mm, computer network interface

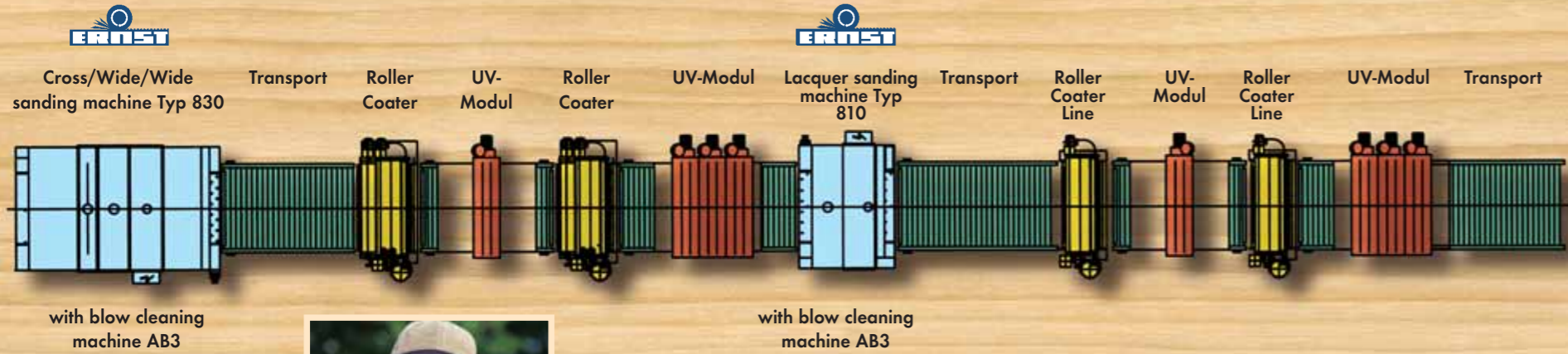


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www.ernst-maschinen.de

Sanding with ERNST is halfway to producing a superior lacquer finished product!



Example of a UV roller coating line



Targets:

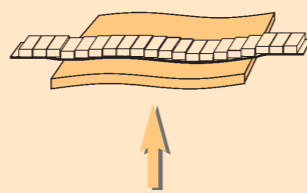
- ▶ Top class finishing
- ▶ Economic lacquer usage
- ▶ Lower investment costs
- ▶ Reduced running costs

Achievements:

- ▶ This new range from Ernst, the 830 Series, gives exceptional results and reduces costs.

Build to the Highest Standards:

- ▶ Advanced techniques
- ▶ Ease of operation
- ▶ Easy access and maintenance

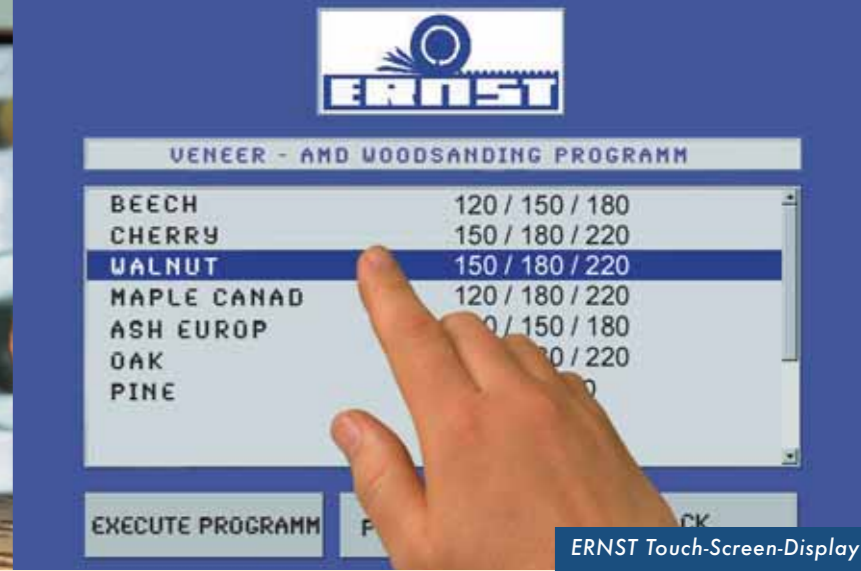


Cross Belt Unit:

The high capacity cross sanding unit is for perfect presanding



Heavy duty ERNST Duplex system



EXECUTE PROGRAMM

ERNST Touch-Screen-Display

>> For the right investment: Three options are available for the wide belt units

1

High capacity standard machine with one cross and two simplex wide-belts

2

Heavy duty Duplex-machine for feed speeds beyond 25m/min. One cross belt, one simplex wide belt and one duplex wide belt (four pressure beams).

3

With the Combinator Wide Belt unit which can also be used for calibrating solid wood. Type 830

The centrepiece of a modern lacquering line is the sanding machine. It obviously has a great influence on the quality of the finish, but it also influences the economics and profitability of the whole lacquering process. Present day demands for high quality finishing with less coating weights (e.g. 10 g/m²) and the increased use of UV and water based lacquer systems require high class sanding and the use of a cross belt is essential. Ernst's technical designers have been equal to the challenge and have developed a

heavy duty universal sanding machine that has impressed experts all round the world.

The new system 800 series is based on a modular design, configurable to your application. In one pass workpieces are perfectly sanded even at feed speeds of 25m/min fully using the complete width of the conveyor, running multiple lanes.

This is an ideal solution that gives first class results with minimum lacquer usage and low investment and running costs.

Pressure Beams
The special feature of this system is the configuration of the extremely fast microprocessor controlled pressure beams using a **pneumatic air cushion**. The shape of the panel is identified during it is travelling under sensing rollers spaced at 20 mm intervals and transmitted to the pressure elements which are spaced at 40 mm intervals. The scan is so accurate, that full and very precise sanding is achieved even on the thinnest of veneers.

Operation
Operation of the machine is both simple and precise. Different working parameters can be input by way of a preset code that automatically sets the machine to the parameters required. This eliminates human error and at the same time ensures ease of operation.

To further enhance ease and simplicity of operation an optional extra is the 'Electronic Touch Screen Display' which can store over 1000 preset programmes. This system is without doubt the favourite of the operator because it uses easy to read plain text.

Servicing and Maintenance
Ease of access for routine maintenance is outstanding with hinged access panels to every aspect. A fault diagnosis system ensures that faults on the sensors or the pressure beams can be quickly and easily identified. Light emitting diodes identify the function of all of the 99 or 132 pressure elements at all time.

- ▶ The ERNST series 800 is the first sanding machine with a telediagnose with WAP interface - the fastest method for detection and clearance of problems.

A guarantee for lower down time.



Cross sanding unit with hood raised.

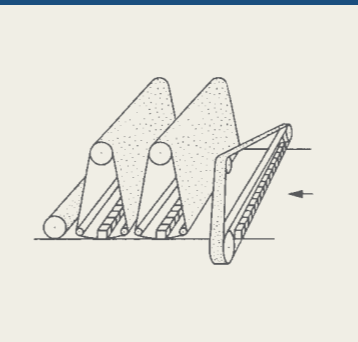
All of the Type 830 sanding machines can be used in high volume or mass production lines and come equipped with a standard proven cross sanding unit. The crosssanding unit will remove paper tapes, glue percolation, hotmelt and can be used for calibrating of lipped panels.

The standard Ernst 830 comes equipped with two Simplex Wide Belt System.

This wide belt sanding unit works in conjunction with the

electronically controlled pressure beam and produces outstanding veneer sanding.

For calibration work the pressure beam is fitted with an electronically controlled ceramic shoe. For lacquer denibbing the wide belt unit is fitted with a frequency converter which in conjunction with a special rotary brush produces fine denibbed panels. Paper grades of 400-500 are typically used and sanding



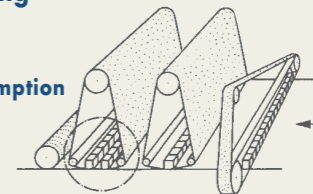
belt speeds are infinitely variable between 2.0 and 10 mps. Final cleaning of the panels is by way of a 200 mm dia. rotary brush at the outfeed.



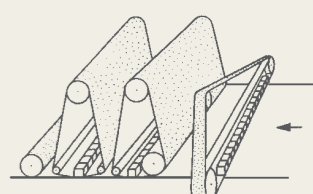
Four independent research institutes acknowledge: That the Ernst Duplex System, incorporating two Heavy Duty Pressure Beams achieves at least the equivalent sanding performance of two separate wide belts in four belt crosssanding machines. However, because of the benefits of using a single wide belt unit, everyday running costs and investment costs are reduced. There are also knock on reductions in the costs of extraction, compressed air, electricity and floor space amongst many others.

Savings to be made by installing the Duplex System:

- reduction in electr. energy consumption
- reduction in compressed air costs
- reduction in extraction costs
- reduction in floor area



The combined head in a 830-WK



DUPLEX

- The economical alternative to conventional four belt cross sanding.
- Equivalent surface quality with reductions in investment and running costs.
- The proven ERNST technology is recognised world wide.
- Innovation at the right time.

This system uses a 200 mm diameter steel contact roller and an electronically controlled cushioned pressure beam. It combines the performance of the Simplex Pressure Beam with that of a contact roller. In addition to veneer and

lacquer sanding (See the description of Simplex) other difficult materials can also be processed accurately. Both solid wood and very thick lipped panels can easily and accurately be calibrated using this system.

