Quality
Made in
Germany

Q-FIN

MARTIN

Turning complex
sanding processes
into rapid results!

A new era begins for window manufacturers:

Quality Finishing with MARTIN Q-FIN.

Intermediate sanding is one of the most expensive and time-consuming steps in the window manufacturing process. But that is now a thing of the past. Surfaces prepared with Q-FIN no longer require intermediate sanding. And what's more, with exceptionally smooth and velvety surfaces, Q-FIN provides a clear quality advantage.

Find out more about this innovative technology at:
www.martin.info

MARTIN.
Precision-made in Germany.

MARTIN has been manufacturing machines in Germany for over 100 years. We only work with high-quality materials and components. All of the crucial components of our machines are produced at our in-house state-of-the-art production facilities in Ottobeuren (Germany) by well-trained, motivated employees. No MARTIN Q-FIN machine leaves our plant before it has undergone the strictest quality controls. In addition, thanks to our well-respected and efficient brand suppliers, we guarantee high flexibility during production, perfect adaptability to current requirements and first-class quality of all purchased components. Read on and find out for yourself!

Masterpieces crafted
from over 100 years of experience

Q-FIN

PATENT
MADE IN GERMANY

Effective technology – without intermediate sanding, that’s Quality Finishing by MARTIN.

In the window manufacturing industry, intermediate sanding is one of the most time-consuming and costly steps in the production process. In addition to sanding between coats, the frames also have to be transported, laid and turned, all of which takes time while also running the risk of damaging the parts.

This is precisely where the simple yet effective Quality Finishing process comes in. Through fine cross-grain cutting, the wood fibres which run lengthwise, are cut microscopically at right angles. And that’s done with a degree of definition that cannot be achieved with conventional methods. When water-based varnishes are subsequently applied, the fibres do not straighten up again, and the surfaces remain smooth.

When surfaces are processed with Q-FIN, the need for intermediate sanding is almost completely eliminated along with all the handling processes associated with it. In practice this means considerable reductions in production costs, and a significant improvement in quality.

Configure
your own Q-FIN.

Innovative operation – for your success.
The touch-sensitive screen enables you to operate the machine quickly, easily and precisely. Intuitive menus help to effectively reduce set-up times and ensure first-class work results. A high-performance database allows you to log and store up to 100 programs, which you can then organise as you wish into 48 program sets with 24 programs each. This allows you to master even the most extensive product range.

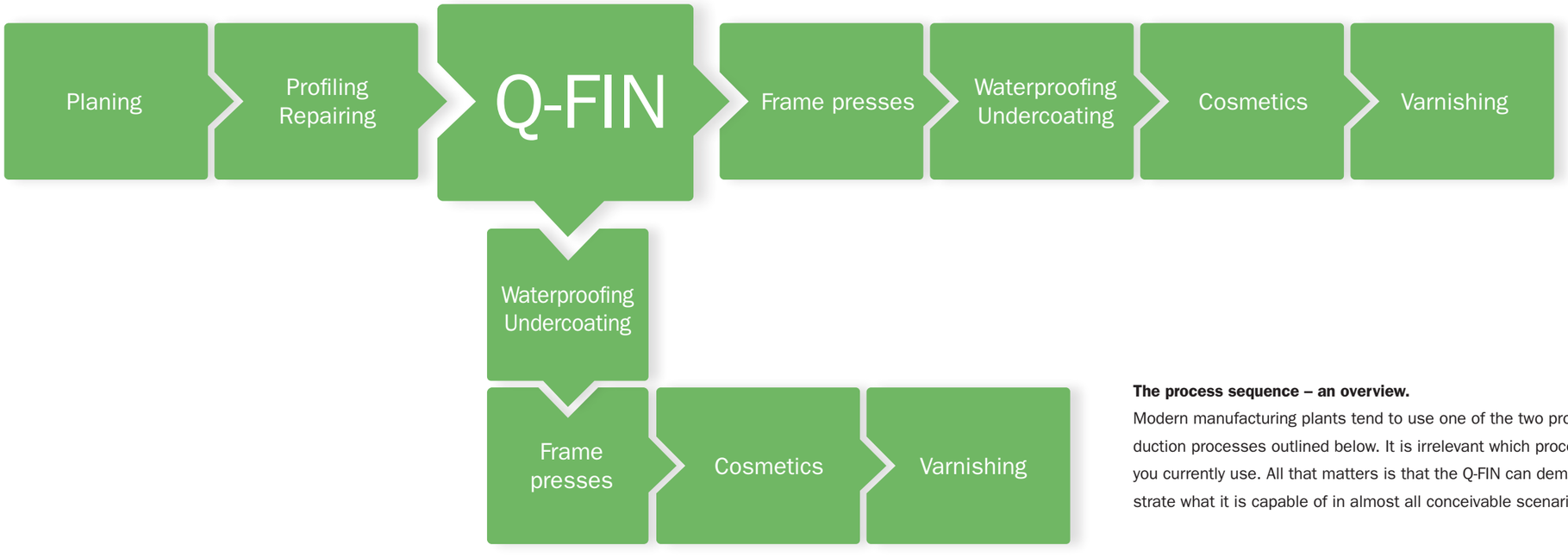
With a whole range of advantages for perfect surfaces.

Higher quality, lower production costs and so much more.

In addition to clearly improved quality and reduced production costs, your windows will have a longer service life thanks to the wood preservation treatment applied on all sides. You can also give your staff a healthier work environment due to lower dust emissions. Another advantage, of course, is that from a pure craftsmanship point of view, the perfect surface quality achieved with Q-FIN technology is the true bottom line.

The fine-planing or finish-planing techniques used widely in the window manufacturing industry today promise very smooth and, above all, homogeneous wood surfaces. However, the more uneven the annual rings in the wood and the greater the difference in hardness between early wood and late wood, and the duller the tool, the more unsatisfying the planing results achieved. This leads to uneven absorption behaviour of the wood which can cause patchy or blotchy effects, especially when dark colours are used. With Q-FIN, you produce evenly absorbent surfaces and therefore perfect colouring.

The surface on your products is the best way to promote your company.
Where windows were once considered to be part of the basic structure of a building, today, they are increasingly perceived as “design objects”. Customers make a very conscious decision to choose technically sophisticated windows and therefore expect a correspondingly first-class surface. The Q-FIN procedure makes it possible for you to optimally fulfil such high demands with significantly less effort.



The process sequence – an overview.
Modern manufacturing plants tend to use one of the two production processes outlined below. It is irrelevant which process you currently use. All that matters is that the Q-FIN can demonstrate what it is capable of in almost all conceivable scenarios.

No more intermediate sanding – not even on bevelled planes.

In order to eliminate intermediate sanding on the bevelled edges of sashes and frames, our engineers have developed a chamfer unit that can be adjusted in the angle range from 0 to 60 degrees. This means that not only the sash and frame parts on all relevant surfaces, but also the equally important glazing beads, no longer need to be sanded between coats.
These small yet crucial areas can now also be processed with Q-FIN technology. With less use of resources and a better result.

Patented roller support | standard

The best kind of intermediate sanding is no intermediate sanding.

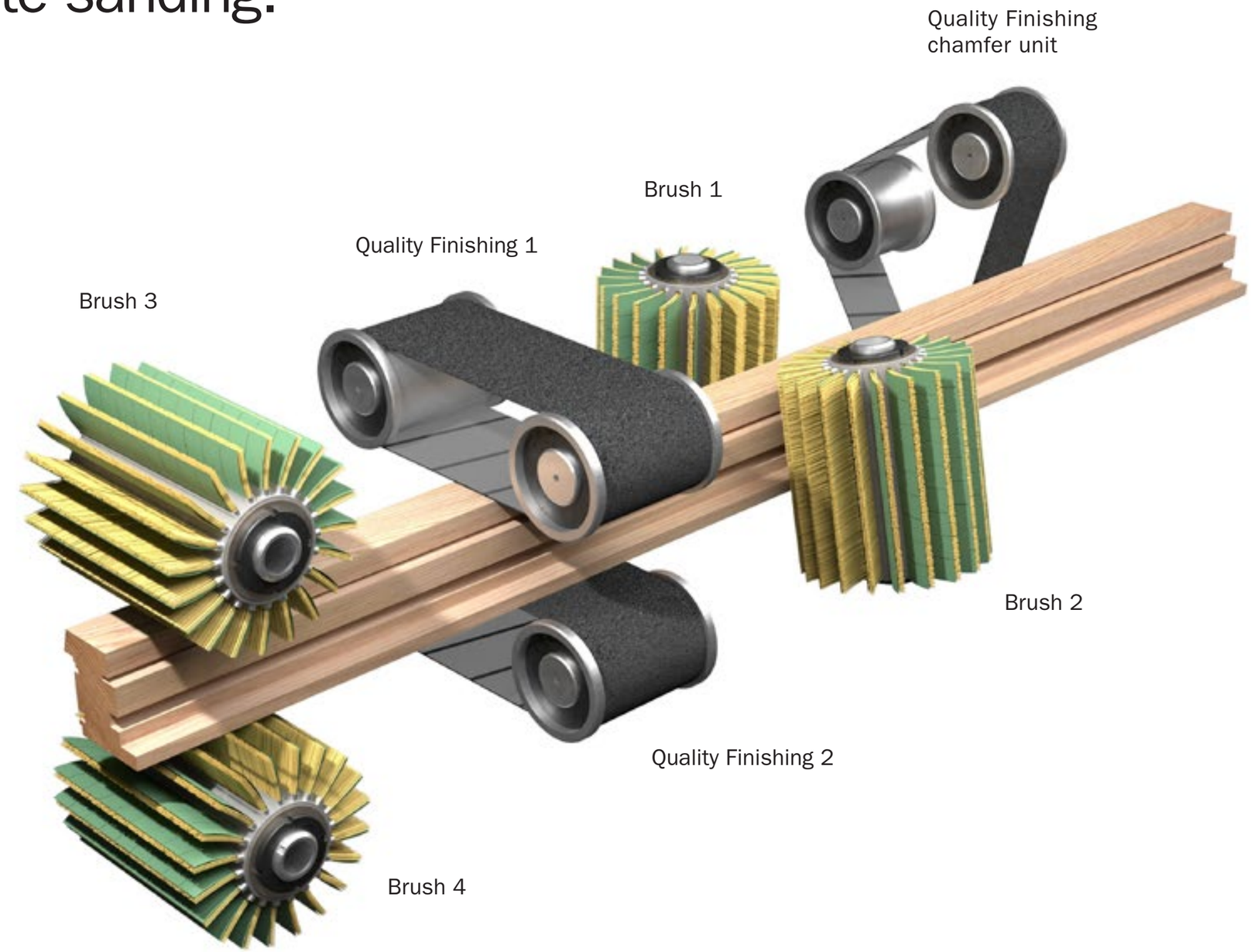
Sanding and handling costs make up over 20% of the costs involved in manufacturing a wooden window frame. These steps in the production process are unpleasant and yet they must be carried out conscientiously. Such work often takes up the time of expensive, highly-qualified staff when they could be focusing on other activities with greater added value.

Q-FIN makes your processes far more efficient: Ideally, the machine, which can be operated via a large touchscreen, is implemented directly after profiling. After that, the window manufacturer has several options to choose from. Either the frames are bonded directly after being processed by the Q-FIN and then go on to surface finishing. Or, after Q-FIN and before bonding, they pass through a tunnel, where they are bonded, and then they move on to surface finishing. The advantage of this is that all six sides of the component are protected with a waterproofing treatment.

Machining of individual window profiles continues to make headway thanks to the possibilities provided by CNC manufacturing. Coating each individual profile before assembly is just another logical step in the right direction. Not only does this method increase productivity, it also ensures coating in the corner joints without any weak points.

Whatever the situation in your company, Q-FIN will bring you huge cost advantages. The machine will have paid for itself within a very short space of time, for instance after an annual production of approx. 1,500 windows.

Q-FIN is the perfect machine for any business that is looking to ease the cost burden while at the same time improving surface quality.



Q- FIN schematic diagram

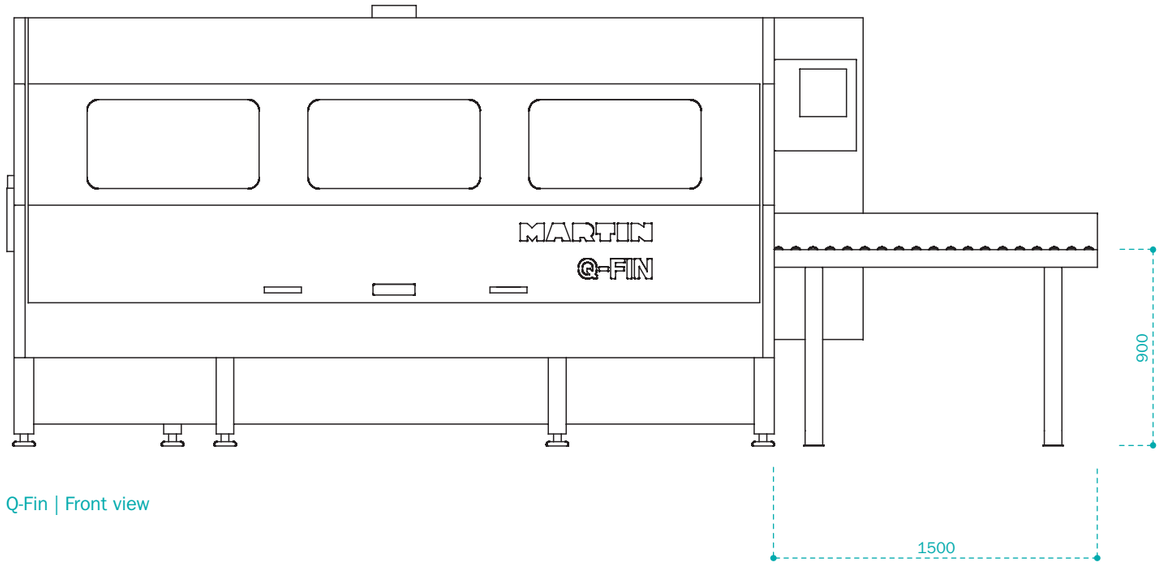
Quality Finishing unit.

Quality Finishing refers to the geometrically defined cross-grain-cutting of fibrous wood. Through fine cross-grain cutting, the wood fibres, which run lengthwise on three sides of the workpiece, are cut with a degree of definition that cannot be achieved with conventional brush methods. This means that when water-based wood preservatives and varnishes are subsequently applied, the fibres do not straighten up again and the surfaces remain perfectly smooth. Therefore, no further sanding between coats of varnish is required, which means that not only can the sanding process itself be dispensed with, but all the associated handling tasks too.

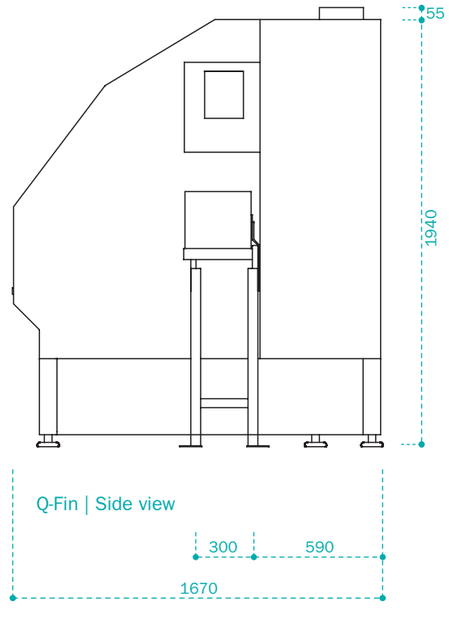
Perfection even in the transitions.

The lateral profiles of the workpieces are efficiently machined by the brush units on the left and right. Due to the design of the beading, the Quality Finishing technique cannot be applied to these areas. These two units are primarily used for trimming the beading areas and the transitions. Both of these lateral brush units can be optimally regulated via the control system in terms of rotational speed, working angle and position, in relation to the machining plane.

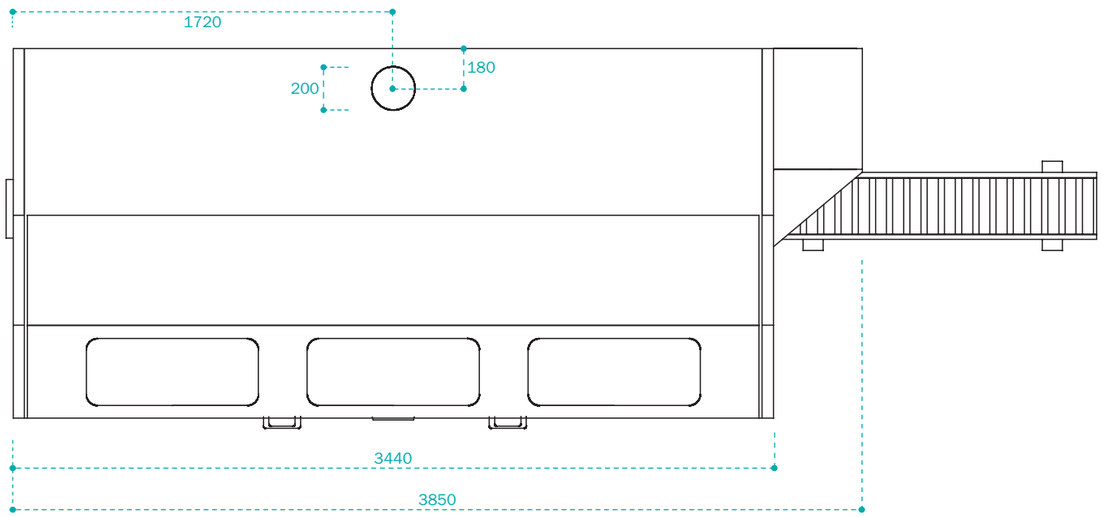
Q-Fin



Q-Fin | Front view



Q-Fin | Side view



Top view

Specifications

Control	10.4” touchscreen control
Quality Finishing	Right chamfer unit Top sanding unit Bottom sanding unit
Brushes	Right brush unit, motor-controlled Left brush unit, motor-controlled Top brush unit Bottom brush unit
Processing width	10 – 250 mm
Processing height	10 – 250 mm
Workpiece length	min. 350 mm (surface to be sanded without tenons)
Feed	continuously adjustable from 10 – 20 m/min
Infeed mechanisation	Height-adjustable roller conveyor, 1,500 mm in length
Power consumption	approx. 7 KW
Suction	Central connection ø 200 mm 38 m³/min at 20 m/s
Weight	approx. 2,500 kg

Dimensions and specifications are subject to technical innovation and may change without prior notice. Illustrations may differ from the original.

Please refer to the valid price list for binding technical features and equipment.

The machines are “wood dust tested” according to DGUV 209-044 / BGI 739-1.

All dimensions provided in millimetres. Made in Germany.

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