

A black and white photograph of a man with short hair and a beard, smiling. He is wearing a white lab coat with a name tag that reads "GARDENEN" and "Gerben". He is holding a large, white plaster cast of a human foot and lower leg. The background shows a workshop environment with a large white container on the left and a metal cabinet on the right.

ottobock.

Quality for life

Ottobock planning & equipping

Your partner for the orthopaedic and orthopaedic footwear workshop

An Ottobock Group company

jos america





Highlights and new product features

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It takes careful planning to produce the perfect working environment

Our work begins before you start yours. And the results are convincing: Your workshop is ideally matched to your needs and goals from day one.

Before new machines are installed in your workshop, our experienced team of consultants and draughtspersons at Ottobock | Jos America work through a clearly defined step-by-step plan. During this process, we consider the specific on-site situation as well as the available space, your personal wishes and your plans for the future.

Only once pre-planning has been successfully completed do we proceed with the implementation: Our service and installation team assembles your new train of machines, just the way you want it. This is how we ensure that all devices and machines are working at full capacity – and that your workshop remains a perfect place to work for years to come.

For more information, please visit our website:

www.ottobock-josamerica.com

You can access your product directly by entering the article number in the search field.

Orthopaedic technology: New product features and highlights

Manufacturing custom medical devices takes time. Our workshop equipment ensures that the involved production steps can be carried out as quickly and efficiently as possible.





1.1 Plaster processing

It all comes down to the equipment: With systems from Ottobock | Jos America, your plaster room will offer the ideal conditions for fabricating perfect-fit plaster impressions.

758A110=★ plaster modelling table, square

Carefully planned, handy and spacious: With the smartly designed plaster modelling table, cleanliness and user-friendliness come first.

Twelve holes for positioning plaster impressions are supplied in the worktop as standard. Plaster waste can be simply brushed into the large opening in the centre, where it is collected in a mobile waste container (available separately). Plaster particles that fall onto the floor stick to the soles of shoes, which can result in traces of footprints throughout your business.

Grate frames, which can be installed in or on the floor, ensure a clean working environment.

All features and benefits at a glance:

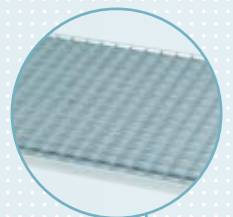
- Dimensions, W x D x H:
758A110=1250: 1,250 mm x 1,250 mm x 850 mm
758A110=1420: 1,420 mm x 1,420 mm x 850 mm
- Can be bolted to the floor
- Wire shelf for tools
- Holes around worktop edge, Ø 20 mm

Holes around worktop edge, Ø 20 mm

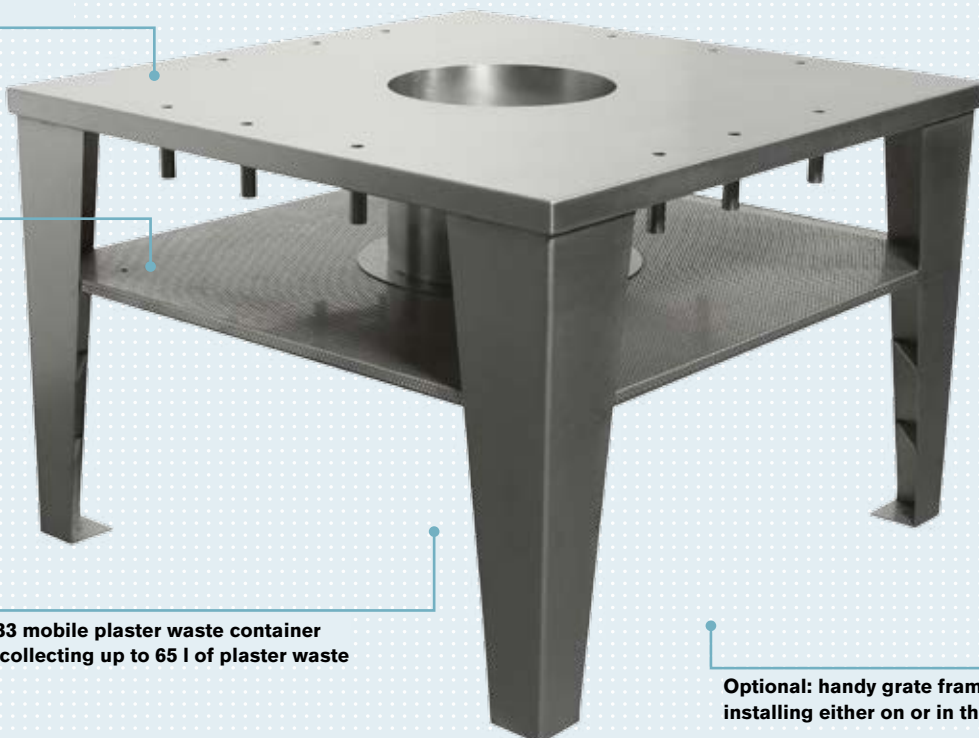
Wire shelf



Optional: 754W33 mobile plaster waste container on 4 wheels for collecting up to 65 l of plaster waste



Optional: handy grate frame, suitable for installing either on or in the floor



1



1. 754B1 plaster mixing bowl

Handy, practical, easy to clean: As soon as plaster begins to harden in the flexible rubber bowl, you set it aside and continue working directly with a new bowl. The plaster residue can be easily removed later on, and the bowl is ready to use again in no time. Its filling capacity is 0.5 kg.

2



2. 756G1=* plaster spatula

Perfect for plaster application and precise modelling: The plaster spatula features a pointed oval end and a flat end for making versatile adjustments to your impressions.

756G1=12: blade width 12 mm

756G1=16: blade width 16 mm

756G1=20: blade width 20 mm

3



3. 718G1 plaster knife

Ideal for small adjustments: Curved and concave lines can be created using the round end, while marks on the plaster can be made with the pointed end. Can also be used to separate plaster negatives from the positive. This tool is made from stainless steel and measures 180 mm long.

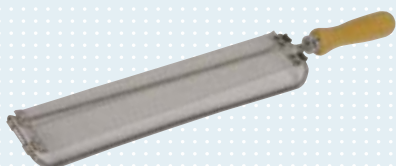
4



4. 718H5 deburring knife

Extremely sharp knife for cutting precise openings in a plaster negative or in plastic. Includes protective cap, 160 mm long. Plastic-coated handle.

5



5. 716G2 plaster smoothing tool

The classic tool for processing hollow areas: Includes a holder with a round, exchangeable, finely woven blade. Ideal for smoothing hollow surfaces.



The benefits at a glance

- Variably adjustable vice can be rotated and swivelled 360°
- Optimal working position thanks to the 360° rotating waste container
- Height-adjustable waste container (from 550 to 950 mm)
- Removable grate
- Light grey (RAL 7035)
- Can be bolted to the floor
- Includes vice and mounting materials



704G300 clamping device for tubes

Clever and versatile: Thanks to versatile adjustment options and the ability to quickly clamp tubes, plaster impressions can be repositioned and processed in no time.

The clamping device can be mounted on a workbench top or on a casting table using four screws. The clamping device can be swivelled horizontally as well as vertically and is suitable for tubes with a diameter of up to 35 mm.



754W20 plaster processing station

The plaster processing station combines a range of advantages.

Using the vice, which can be rotated and swivelled by 360°, you can quickly bring the plaster impression back into the right position at any point during processing.

The collection container offers enough space so that even long plaster impressions can be processed and plaster residue can be easily captured. The integrated grate can be removed and cleaned separately. All plaster and waste residue that arises can be disposed of via a waste opening with a bucket placed under it.

1.2 Alignment equipment and accessories

The alignment of an orthosis has considerable influence on the functional characteristics of the device, and therefore on the fitting quality. Ottobock | Jos America offers outstanding equipment for the best possible device alignment.

743A6 orthotic alignment aid

The orthotic alignment aid is designed for the three-dimensional alignment of lower limb orthoses and the positioning of ankle and knee joint pivot points on a plaster negative or plaster positive. The orthotic alignment aid is secured in a vice prior to use.

Step 1

Place the plaster negative on the footplate and clamp it between the holding forks at the knee and ankle by adjusting the spindles.

Step 2

When the impression is secured, the pivot points (e.g. knee pivot point according to Nietert) can be traced easily. During the AP measurement, the calliper can rest on the holding fork.

Step 3

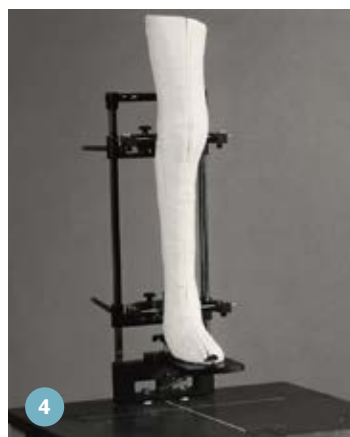
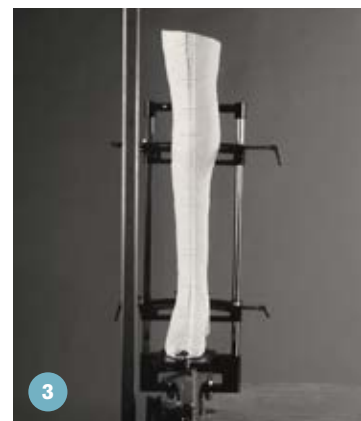
After the adjustment of the heel height and the foot position, the frontal and sagittal alignments are performed with the help of the 743L30=* LaserLine device.

Step 4

Using the square shafts creates a square channel in the plaster positive after the impression is filled with the plaster, which makes orthotic alignment possible with the proven alignment adapters of the 743R6 orthotic joint alignment fixture.

Step 5

Finished plaster positive with marked construction lines.





743R6 orthotic joint alignment fixture

Ideal for constructing lower limb orthoses.

With this alignment fixture you can carry out "constructive orthotic alignment" from a schema/delineation as well as using lamination resin and vacuum forming techniques according to a plaster impression. This method requires the use of the alignment axis.

Orthotic alignment according to a plaster impression

Step 1

The alignment axis is installed in the plaster negative after defining the pivot points and with the help of the 743A6 orthotic alignment tool. ❶

Step 2

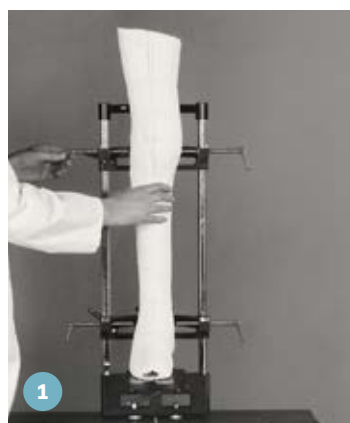
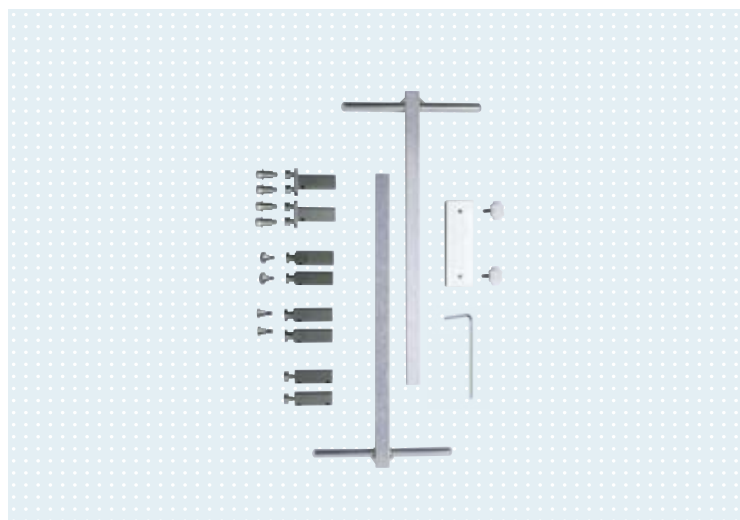
To insert the axis into the plaster negative, make an X-shaped cut or a hole at the joint pivot point and push the greased alignment axis through the plaster negative ❷. After the plaster negative has been filled and the plaster positive has hardened, pull the alignment axis out of the impression. This will leave a square channel for the alignment adapters. The joints attached to the alignment adapters can now be positioned on the plaster impression with correct axis orientation and aligned correspondingly.

Step 3

Every adapter has a rotation adjustment that allows alignment of the joints in the sagittal plane. ❸

Orthotic alignment according to a drawing

This requires the use of the parallel adapter. ❹ It is used to hold two alignment adapters, which in this case must be fixed in the 0° position, in proper axial alignment. The clamping screws on the outsides of the parallel adapter allow precise adjustment of the joint distances when adjusting the splints and straps.





743Y48 adapter sleeve

The square adapter sleeve made of rigid foam is permanently cast in the plaster. The alignment adapter can be positioned in the sleeve and pulled out without causing damage after use.



Planning & equipping example: Gardeslen Orthopaedie in Goes, Netherlands

This success story began in 1985, when Marcel and Nellie Gardeslen opened their specialist orthopaedic shop in a former supermarket in Hoogerheide, a village in the province of Brabant. Five years later they moved to Goes in the centre of the neighbouring province of Zeeland, where there was essentially no provision of orthopaedic care up until that point. Based in this central location, the pair continued to provide fittings for their “old” customers in Brabant – and,

thanks to a host of innovative ideas, went on to quickly become one of the leading specialist orthopaedic providers in the region.

A shared goal: top quality, every time

The Gardeslens became members of “Bewegingsvisie”, a professional group which brought together 14 orthopaedic companies. The cooperation comprised the areas of procurement, marketing and quality management. The couple were soon producing silicone products for various colleagues, among other services.

But it was the patients who benefited from this intensive, partner-based cooperation most of all: They now received the most suitable devices every time, fixed consultation times were held at hospitals and rehab centres throughout the province, and patients who weren’t mobile could be visited at home on a regular basis. Thanks to close contacts with leading specialists, patients could now be assisted as effectively and directly as possible. And their lives simplified to the greatest possible extent: Gardeslen Orthopaedie can carry out the entire settlement process with health insurance companies for you upon request.

**“Finding the best way,
even under changing conditions”**

After successfully completing his orthopaedic training, the Gardeslens’ son Yoei took over the family company. In 2014, he took on a partner as well: Richard Valkenburg is actually a logistics expert from the private sector. Together, they are leading the growing company and resetting its strategic direction. “A company has to be able to change, it’s down to circumstances as well. New ideas, new techniques and new materials, new regulations, new payment terms – the market doesn’t stand still anyway, so we might as well be leading it.” Valkenburg understands that fear isn’t a sound adviser.

“You have to make bold decisions. They’re the only ones that pay.” Because a growing number of hospitals are now prescribing standardised devices, Gardeslen Orthopaedie is focussing increasingly on fabricating customised medical devices. “We are producing a lot more prostheses now.”

**New techniques allow expansion
of production**

The company has been growing continually throughout its 31 years of existence. Its previous staff of seven has grown to 18 employees today. The company’s previous office was partially demolished in 2015 and replaced with a large main building, which includes office space, a cafeteria, storage, technical departments, a welcoming reception area and modern treatment rooms.

Silicone processing and the orthotic support department are also housed here. But before the company got this far, they consulted Ottobock | Jos America: We carefully examined every square metre of the new company headquarters and developed an optimal plan for it. The company is now ready for the future: The new casting and laminating room offers a total of 13 fully equipped workstations. Larger quantities of devices can therefore be easily produced as well. There’s now a sophisticated compressed air system and the decentralised extraction system ensures the entire working environment remains clean.



Work as usual during the conversion

Thanks to the backup workshop consisting of 24 cubicles, which was set up by Ottobock | Jos America, production was able to continue as usual in the building even during construction. “Preparations for the conversion were perfect, and it was completed after just nine months – without anything slowing us down,” Valkenburg remarks with satisfaction. “Choosing Ottobock | Jos America as our partner was the right decision. We’ve been working together successfully for decades. The experts from Ottobock | Jos America were incredibly committed: Everything was planned down to the centimetre, their experts visited the site on a regular basis, monitored the work, offered tips and kept an eye on all the details. They provided us with incredible support – you don’t carry out a conversion of this size every day!”

“The future is coming – we want to help shape it”

During the grand opening, Gardeslen Orthopaedie presented itself as a dynamic, active and energetic company. Guided tours of the new premises were a key part of the celebration, and everyone was full of praise for the building. Physicians, customers, employees and suppliers alike were impressed. This confirms Valkenburg's view: “A healthy company doesn't stand still. Changes always offer opportunities as well.”







Orthopaedic footwear technology: New product features and highlights

Many steps are involved before an orthopaedic shoe is ultimately completed. The old maxim applies here, too: Proper preparation is the only way to achieve the best result.



3.1 Infrastructure for dust extraction

A properly functioning extraction system requires more than a dust extractor with the sufficient capacity. The appropriate pipe construction is just as important. Our experts match all components perfectly with one other, so fine dust doesn't stand a chance in your workshop.

The individual environment

The first question is always whether the project will consist of a new construction, a conversion or an installation in an existing workshop. Starting by involving the technicians from Ottobock | Jos America in the initial planning phase helps avoid obstacles and save costs. Our experts analyse the architectural conditions, the technical infrastructure, fire safety regulations and the used building materials. This is the only way a suitable plan can be developed – in close consultation with the architect as well.

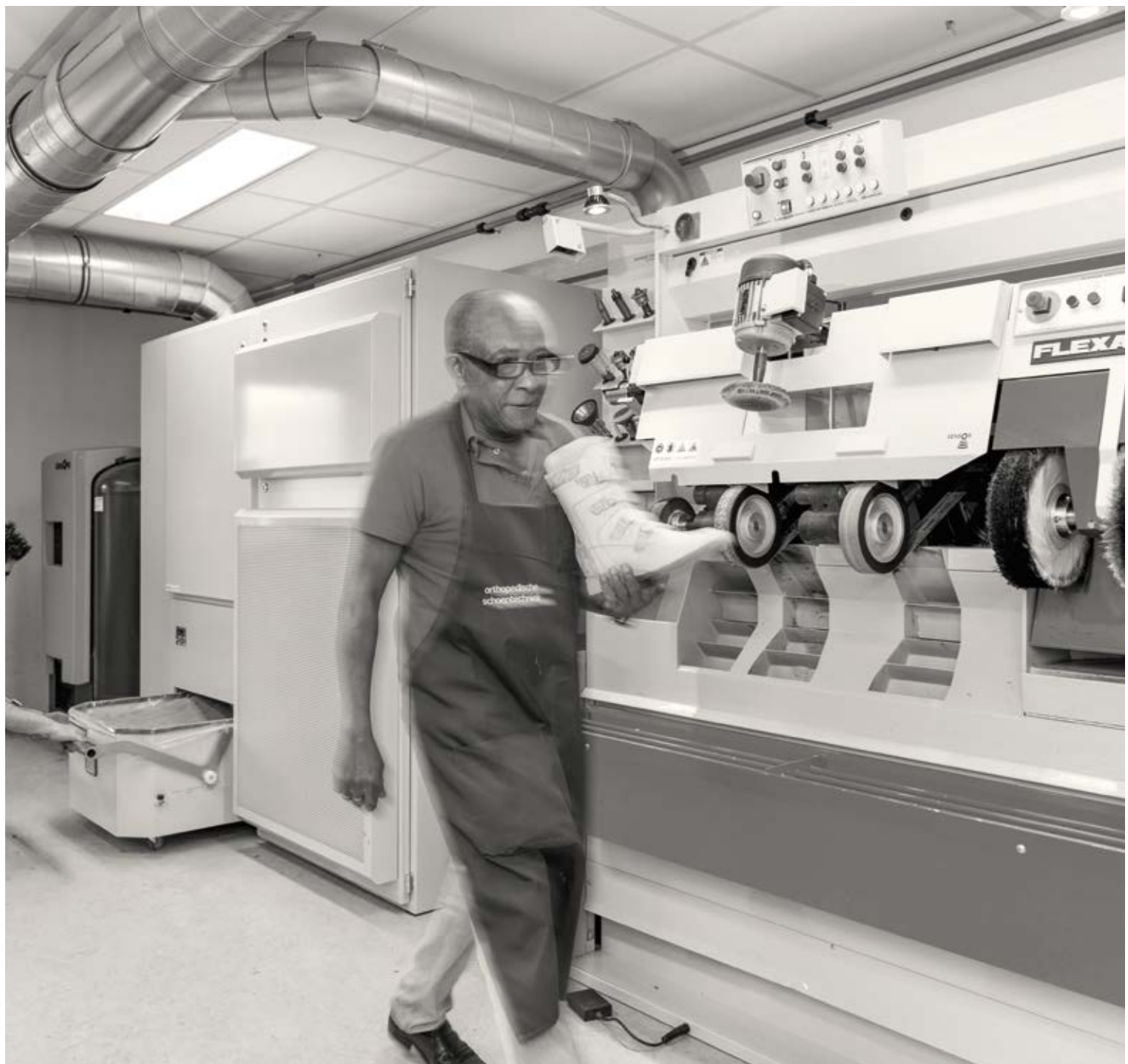
An ideal extraction speed

When carrying out the calculation, we aim to achieve an optimal extraction speed of 15 to 17 m/s. An air velocity that is too high produces undesirable noise, while dust won't be extracted completely at a velocity that is too low. The length and the diameter of the pipes generate resistances and thereby influence the velocity. Our experts calculate the best possible solution for each individual project. They also ensure that the air velocity is reduced before the actual filtering. This is the only way that the maximum quantity of dust can be collected and cleaned before the air is directed back into the workshop via the recirculation system.

Proposal including drawing

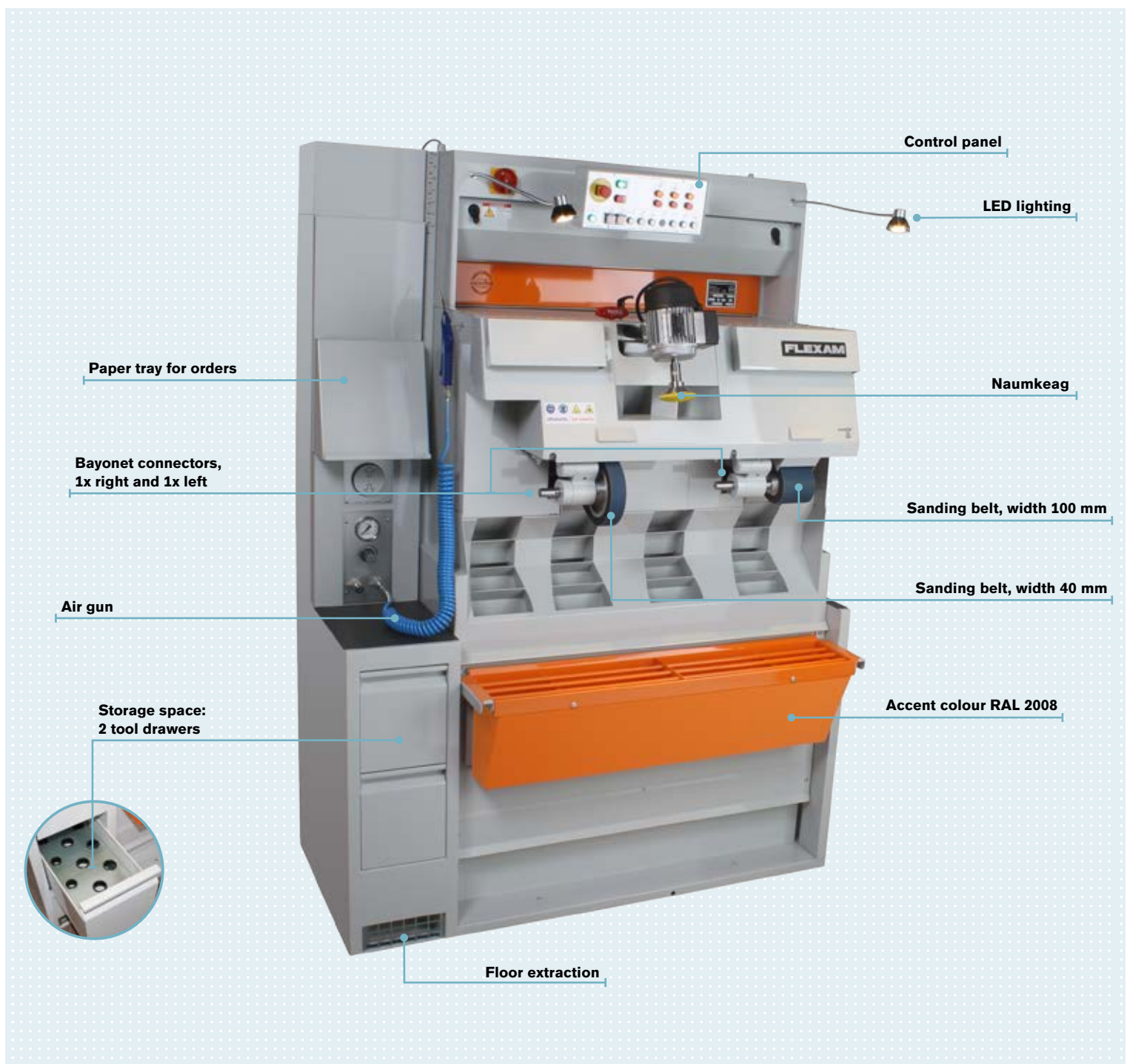
Every prospective customer receives an individual quote with a precise drawing of "their" infrastructure. Regardless of whether you'd like pipes concealed discreetly or routed in an easily visible location for a trendy, industrial look.

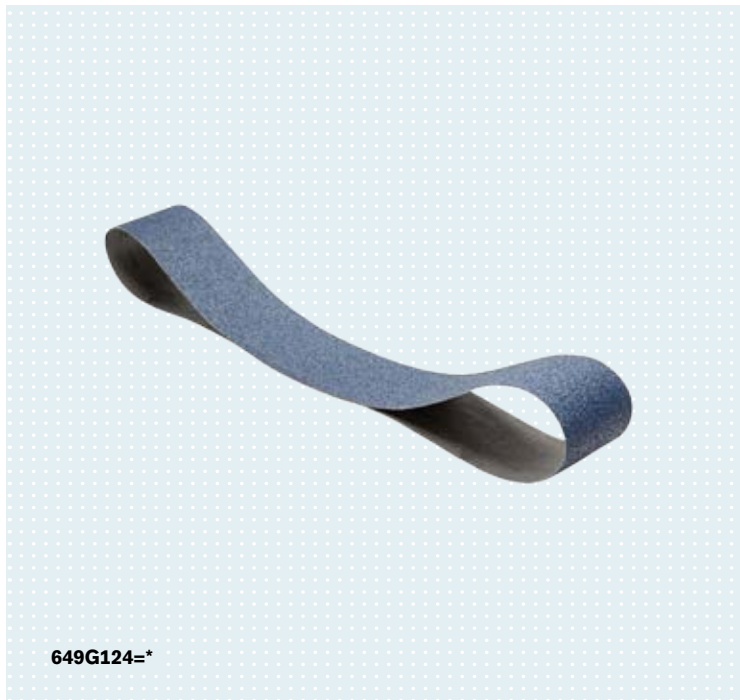




3.2 Shoe making machines

The pros work with Flexam machines. Our cutting-edge classic products offer an impressive combination of ergonomic features, smart design and extreme durability.





701L21=SB105 Flexam SB105 Executive

This efficient, top-quality machine features two sanding belts and a naumkeag motor. The 450 mm distance between the sanding belts offers especially high freedom of movement as you work.

The space behind the sanding belts has been optimised so that this version is ideally suited for sanding long lasts, among other workpieces. The machine also features two bayonet connectors for attaching additional tools.

The machine comes with a range of standout features, including the power height adjustment and the integrated sensors on the sanding belt, which automatically open the extraction channel located there. The machine can also be equipped with further options such as the AACS (auto air cleaning system). Operated by a foot pedal, the workpiece can be cleaned of dust and chips using compressed air.

The Flexam SB 105 Executive at a glance:

- Dimensions, W x D x H:
1,421 mm x 750 mm x 1,980 mm
- Working height: 1,020 – 1,220 mm
- Sound intensity level: 73 dB(A)
- Electrical connection in V/Hz/kW:
3x 400/50/2.45
- Incl. LED lighting, floor extraction, automatic height adjustment, air curtain between operator and sanding belt, sensor-controlled extraction, sound pressure isolation, dust-protected motors, internal cleaning of motor compartment, two compressed air connections, air gun

We can fit the model with a Widia grinding roll upon request.

Planning & equipping example: l'École de Reconversion Professionnelle in Metz, France

Claude Stricher, professor for orthopaedic footwear technology at l'École de Reconversion Professionnelle "Jean Moulin" vocational school in Metz, France, discusses his search for the right equipment for the school's new workshop: "We wanted to meet the highest standards. That's why we focused on only the best and most modern machines. We need highly functional workstations here."

A top workshop with special equipment

"We compared all of the machine suppliers we could find. We also made enquiries at many different companies, including Mathis Orthopédie in Colmar.

We wanted to make sure we found a reliable partner." A delegation from the French school soon approached us, first visiting well-known Dutch training centre DHTA in Utrecht followed by the Ottobock | Jos America showrooms in Nieuwkuijk, Netherlands.

"The public tendering process took a long time, but we're certain that we're offering our students the very best of the best with our equipment from Ottobock | Jos America," says Stricher.

Retraining opens up opportunities on the job market

The French school is quite unique, offering adults aged 18 years and over retraining opportunities as shoemakers and orthopaedic shoe technicians.

In order to be accepted, candidates must be officially classed as having a disability and/or proven to have fewer opportunities on the job market due to an illness. The school is primarily attended by people who are no longer able to pursue their actual profession due to an illness or following a work accident. Applicants come from across France.

The admission process is comprehensive, including a psychological test as well. This enables the school to be certain it can guide and support absolutely every student in the best possible manner. During the two-year course, students live in the school's own halls of residence with medical, psychological and occupational therapy support.

New workshop fulfils unusual conditions

As many of the students use a wheelchair, Ottobock | Jos America produced a modified sanding machine, the Flexam RSB 130 Medi Plus Executive, with extra space in its lower section.

The control unit was moved to an easily accessible position. Today, two spacious work areas offer twelve workstations: Ten tables are equipped with drawers for tools as standard, while two tables were adapted for wheelchair users. Chemicals are securely stored in a safety cabinet with doors that open and close automatically.

More comfort, enhanced safety and outstanding ergonomics

Everything in the workshop is clean and safe: All dust particles are thoroughly removed with the Vacuum V80 Compact.

Thanks to machines equipped with automatic sensor valve technology (ASGA), all workstations are provided with full extraction capacity at all times. There is also an automatic dust dividing system (ADDS) between the operator and the extraction system. The materials used and the special design of the dust collector and machines minimise the noise level. In addition, the work tables were fitted with extraction openings, and the modern airflow system removes hazardous vapours produced by adhesives. A high-performance compressor also offers sufficient compressed air at all times.







Height adjustment with an unusual positive effect

“The working height of the Flexam SB 105 sanding machine can be adjusted from 1,020 to 1,220 mm, so all users can work in the posture that’s best for them. As a result, our occupational therapist hardly ever needs to visit us anymore,” Stricher is happy to report.

The school maintains excellent contacts with numerous companies, helps its students find internships and supports them during the application process. And it does so successfully: Some 70 % of graduates are offered a permanent position right after finishing their training.

“Once they are employed at an orthopaedics company, we continue to look after them. The personal support process lasts between six and ten months and is very effective – it puts our students ahead in the job market. We love seeing this, and it drives us on.”

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