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Quality for life

## Ottobock Planning & Equipping News and highlights

Your partner for the orthopaedic and orthopaedic footwear workshop

An Ottobock Group company

**jos america**





## Highlights and new product features Contents:

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## Efficient work processes thanks to custom-fit equipment

Our goal is to make your production processes more efficient. That's why we develop machines and workshop facilities that meet the highest standards. And we also regularly monitor working processes at our own company. This involves measuring and evaluating our own workflow at intervals so we can adapt it to new circumstances and requirements.

We treat your company's working processes in much the same way. Our analysis of your processes is followed up by suggestions as to how you might optimise them. The goal is to develop tailored solutions for your workshop and to complement them, where required, with sophisticated products.

Are you ready to put your work processes and workshop facilities to the test with us?

For further information regarding our products please visit:  
**[www.ottobock-josamerica.com](http://www.ottobock-josamerica.com)**.  
You can access your product directly by entering the article number in the search field.

# Orthopaedic technology: our new product features

Our expertise in the area of workflow management, machine construction and dust and vapour extraction technologies makes us the perfect partner for designing, constructing and setting up your workshop.







# 1.1 Inventory management

A well-organised workshop is indispensable for comfortable, efficient working practices. Systematised material and inventory management also saves you time.

## 758A61 sizing table with storage

Thanks to its spacious dimensions, our sizing table offers you ample space for cutting your materials with its high-quality multiplex worktop.

As a multifunctional workstation that makes optimal use of space, it also offers additional storage for materials. You can conveniently store your fabric and padding materials on six stable, pull-out wooden shelves — easily accessed with practical handles. Dimensions other than those listed below are also available upon request.

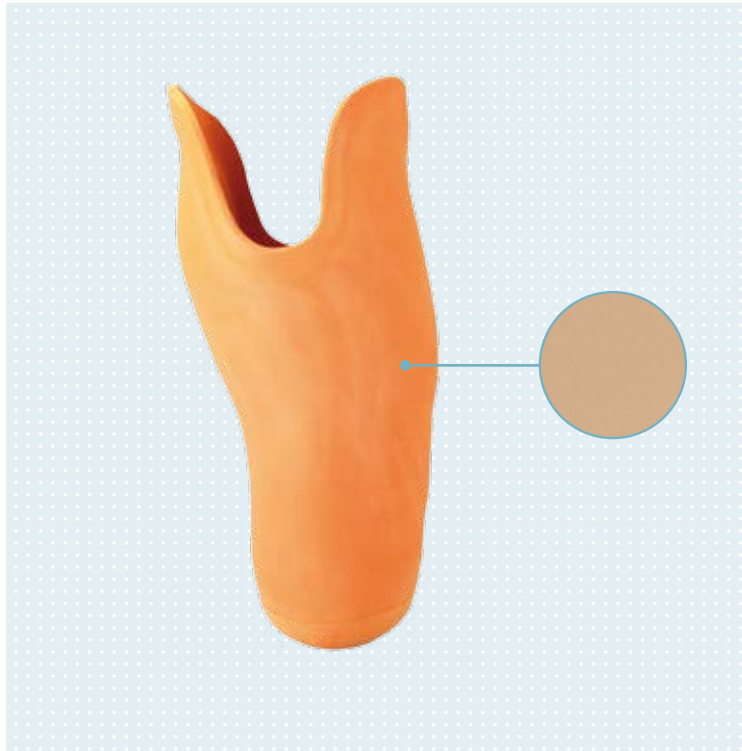
### Technical data at a glance:

- Dimensions (W x D x H): 1,480 mm x 1,220 mm x 1,050 mm
- Equipment: 40 mm multiplex worktop, six pull-out shelves
- Weight: 319 kg
- Colour: light grey (RAL 7035)
- Material: steel, wood

### Optional:

- HMPE worktop, foam or masking film as protective material





## 617S203

### Pedilin SilverShield padding material – a proven classic for soft sockets

and integrating SKINGUARD® technology – works invisibly and impresses from start to finish.

Pedilin SilverShield padding materials come recommended for their low shrinkage properties and their consistent volume and flexibility. They are ideally suited as padding material for prosthetic sockets as well as for producing soft-walled inner sockets.

The inclusion of an antibacterial substance (silver) results in the continual release of silver ions, giving the padding materials long-lasting protection against odours. Thanks to their improved hygiene, they offer the user protection against bacteria and a more pleasant feeling against the skin.

#### Technical data at a glance:

- 617S203=10 is suitable for fabricating redression helmets
- Antibacterial effect
- PE foam, closed-cell
- Hardness: approx. 35° Shore A (proven Shore hardness for fabricating soft sockets)
- Density: approx. 140 kg/m³
- High resilience
- Good thermoforming properties
- Good gluing and sanding characteristics
- Washable
- Temperature recommendation: 130 °C (convection oven, infrared oven)

#### Article number, sheet size, colour, thickness:

- 617S203=3, 1,050 mm x 1,050 mm, skin colour, 3 mm
- 617S203=4, 1,050 mm x 1,050 mm, skin colour, 4 mm
- 617S203=5, 1,050 mm x 1,050 mm, skin colour, 5 mm
- 617S203=6, 1,050 mm x 1,050 mm, skin colour, 6 mm
- 617S203=10, 1,050 mm x 1,050 mm, skin colour, 10 mm









## 758R25 mobile storage table

Our mobile storage table is an all-rounder when it comes to storage and supporting your work.

Made of high-quality materials, the storage table is stable and heavy-duty. At the same time, it remains mobile even when loaded and its flexibility makes workshop cleanup easier. The storage table is also available in other dimensions and without wheels upon request. The worktop height is suitable not just for your work, but also for mounting a Vacupress device or an oven.

### Technical data at a glance:

- Worktop: 40 mm multiplex made of beech wood
- Dimensions (W x D x H): 2,100 mm x 850 mm x 1,250 mm (other sizes upon request)
- Storage surface: 2x 5 shelves for storing sheet material
- Equipment: 4 heavy-duty wheels



## 758R27 material trolley

The T850 material trolley is perfect for storing and transporting sheet material.

Thanks to high-quality materials and a solid construction, the trolley still offers essential rolling ease and the necessary manoeuvrability. Its storage capacity and mobility make the T850 indispensable for every workshop. Six compartments with crossbars let you store sheet materials of varying sizes.

### Technical data at a glance:

- Dimensions (W x D x H): 1,000 mm x 650 mm x 600 mm
- Material: steel/wood
- Colour: light grey (RAL 7035)
- Weight: 74 kg
- Max. load capacity: 600 kg

## 758A60 adhesives workstation with material storage

This workstation is a versatile and stable workshop assistant your company won't want to be without.

Designed to be the proper working height, the table comes equipped with four vertical and horizontal compartments each for storing sheet and strip materials as well as 12 tube compartments for storing rolled materials. It also offers a special adhesives work surface with a connector for an external extraction system for adhesive vapours.

### Technical data at a glance:

- Steel worktop with integrated adhesives worktop and connector for external adhesive vapour extraction system
- Dimensions (W x D x H):  
1,500 mm x 1,000 mm x 1,000 mm
- A HMPE worktop, foam or masking film is optionally available as protective material.
- Different dimensions or a wooden tray are available upon request.



## 621J2 chrome kid leather

This natural leather with its fine, soft quality, is very popular as lining leather within the orthopaedic industry.

Due to its high tear resistance (along with minimal thickness), it is also suitable for constructing inserts and footbeds.

### Technical data at a glance:

- Size: 0.40–0.50 m<sup>2</sup> per hide
- Thickness: 0.5 mm
- Colour: grey-white





# Planning and equipping example: Container workshop

Mobile workshops are being employed more and more where there is a temporary need for orthopaedic devices. We'd like to introduce you to just such a mobile solution for maintaining orthopaedic devices used at the Toronto 2015 Parapan American Games.

## **A high-function service station, a tight space**

The Parapan American Games are a special challenge not only for athletes with a disability, but also for orthopaedic professionals who put in top performances with their expertise and a mobile workshop packed into just a few square metres of space.

To help them concentrate fully on the competition, the 1,600 athletes from 28 countries needed to be able to count on the proper functioning of their orthopaedic devices under extreme competitive conditions. During the games, a team of 22 Ottobock technicians from Brazil, the USA, Canada and Germany made sure that the athletes' prostheses and orthoses were individually and optimally adjusted for their respective disciplines so that individual medal chances wouldn't be jeopardised by material defects.

Oftentimes, this wasn't a matter of simply tightening a screw; rather, the on-site technicians were called upon to fix small and moderate disasters such as welding wheelchairs or fabricating a completely new prosthetic socket. In order to offer this high level of service, Ottobock shipped large quantities of materials and equipment to the mobile service workshop in Toronto.



### **Multifunctional layout**

Using two containers – positioned at a 90° angle – Ottobock Planning & Equipping set up a fully functioning orthopaedic workshop onsite at the games. The area in front of the containers was also roofed over and used as workshop space. The mobile fixtures and machines such as the PROS.A. Assembly, the mobile vacuum pump, mobile casting apparatus, as well as the custom-made collapsible workstations (W x D: 2,000 mm x 750 mm), can be moved outdoors in just a few simple steps. These products are securely fastened and stowed while the containers are being transported. This solution makes the best possible use of the space both inside and outside the containers. The multifunctional solutions found inside the containers are also worth mentioning: The treatment table's dividing curtain doubled as a welding curtain.

The combined laminating/vacuum forming workstation features a swivelling extraction hood also used to extract vapours arising on the welding table.

### **Custom-made designs**

The containers are also equipped with the latest machines, some of which are specially adapted for this purpose. These include the Pro-Fit 4000 socket router tailored for use as a tabletop model. Like the original, it offers the same motor capacity, a swivelling milling shaft and a continuous speed regulator. The shavings produced during milling are extracted with a mini dust collector (photo: pp. 4–5). Space was also made in the containers for the new infrared oven, which includes an integrated sensor for monitoring material sag. Custom-made, lockable drawer units and a special shelving system offer plenty of storage space for tools, materials and spare parts.

Conveniently, the same boxes used at Ottobock also fit onto the shelves. This makes for a smooth flow, logistically, between Ottobock and the containers.

### **Health and safety**

Of course, safe and ergonomic working conditions are still guaranteed in the compact workshop. Height-adjustable vices on swivelling vice lifts, along with height-adjustable seats, are key in providing an ergonomic workplace. This makes it possible to stand or sit while carrying out any activity at the workbench or the sewing machines. The workshop naturally includes a safety cabinet with an activated carbon filter attachment for storing hazardous materials such as lamination resin and adhesives.



## Project: container workshop

### **Complete and comfortable**

The container is also fitted with a heating and air conditioning system. All power and air connections on the outside of the container are concealed behind covers.

The container workshop can be locked and portable equipment and objects such as the welding table and patient bed can be locked in place with special hooks and straps, making it possible to transport both containers including all of their equipment.

Because containers with standardised dimensions are used, they can be easily transported by lorry. This setup makes it possible to offer quick orthopaedic treatment on the spot, for example as part of support measures in war zones or in regions afflicted by natural disasters. The mobile workshop is also suitable for orthopaedic companies that are moving, for example, and need to be able to continue offering their services.





# Orthopaedic footwear technology: Our product highlights

Whether you perform all of your tasks and processing in your own workshop or contract the work out: Ottobock has the right solutions for equipping your workshop.







## 3.1 Cutting and adhesives workstations for footwear production

A workstation should offer ample room for work tasks, while taking up as little space as possible. Furthermore, your employees should be protected against vapours released at their workstation. With our workstations, you can guarantee that both of these requirements will be met.

### 758A350=1.5 Adhesives workstation with integrated suction

This ultramodern workstation for processing adhesives features a cutting and adhesives worktop with an embedded suction trough.

This means that a central vapour extraction system is no longer necessary, making this workstation an especially worthwhile acquisition for smaller orthopaedic operations. Vapours occurring during adhesives work, which are explosive and hazardous to health, are extracted by an integrated ATEX-certified fan and transported outside via a separate duct system. The explosion-protected fan is housed in the lower cabinet of the adhesives workstation, which also features drawers for smaller work tools. A multiplex worktop with an integrated cutting and adhesives worktop and edge suction system gives the work station an attractive appearance that's also highly functional. The cutting and adhesives worktop made of high-strength HMPE (high-modulus polyethylene) is especially resistant to adhesive materials and is exceptionally well-suited as a surface for carrying out cutting work. The worktop can also be used on both sides and easily replaced with a new one when it is worn out. The cutting and adhesives worktop is bordered by an edge extraction system into which the heavy adhesive vapours (heavier than air) sink downwards and are extracted through the integrated explosion-protected fan.

#### Technical data at a glance:

- Dimensions (W x D x H):  
1,500 mm x 750 mm x 750 mm
- Electrical connection in V/Hz/kW: 1x 230/50/0.7
- Weight: 105 kg
- Colour: light grey (RAL 7035)
- Exhaust connection piece (Ø 150 mm)  
right and/or on top

#### Optional equipment:

760A40 suction arm (range: 1 m) with suction hood (Ø 280 mm) for on-the-spot extraction



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**Equipment:**

If you require vapour extraction across the entire breadth of the workstation, we would be happy to fit the table with an Airflow system.

**HMPE cutting and adhesives worktop  
with edge extraction system**

**optional: Airflow system**

**multiplex worktop**

**On/off switch**

**cabinet with explosion-  
protected ATEX fan**



## 636N9 contact adhesive

This product is a versatile industrial adhesive for bonding flexible materials.

Orthopaedic footwear technicians in particular value it for its strong and especially durable adhesive strength. A brush is used to apply the adhesive to the components being glued. A permanent connection is formed after the components have been joined together for a drying period of 5–20 minutes. The contact adhesive also serves as an extra primer for EVA foams for concave leg prostheses in the field of orthopaedics. This protects the polyform cover coating against overstretching.

### **The adhesive is suitable for bonding the following materials:**

- Leather, cork, wood, rubber, EVA, felt, textiles, flexible foam materials, hard PVC, metal and ceramics. Caution: not suitable for soft PVC or polystyrene!

### **Technical data at a glance:**

- Temperature-resistant to 100 °C
- Net contents: 636N9=0.660 (0.66 kg)
- 636N9=4.500 (4.5 kg)
- Short evaporation time
- Colour: yellow





**Safety information:**

This adhesive may only be used in a well-ventilated space and in combination with a vapour extraction system that extracts harmful vapours directly at their source. You, your employees and your company are optimally protected at an adhesives workstation that has an external explosion-protected extraction system or an integrated ATEX fan.



## 3.2 Grinding machines for orthopaedic footwear technology

With our easy-to-operate, time and space saving technology we offer you support for those standard or frequently recurring workshop tasks that are performed by different employees. The following pages provide you with an overview of worthwhile investments to add to your fleet of machinery.

### 701P46 Oneliner

Orthopaedic footwear technicians know how important each individual work step is in the production of orthopaedic footwear.

With the VS1150 Oneliner, you can make these repetitive work steps easier and more efficient. This grinding machine, the only one of its type on the market, is ideally suited for sanding completely smooth bases, footbeds, lasts, wedge heels and inserts. The included inspection rack makes storing shoes and the subsequent monitoring of grinding work a cinch.

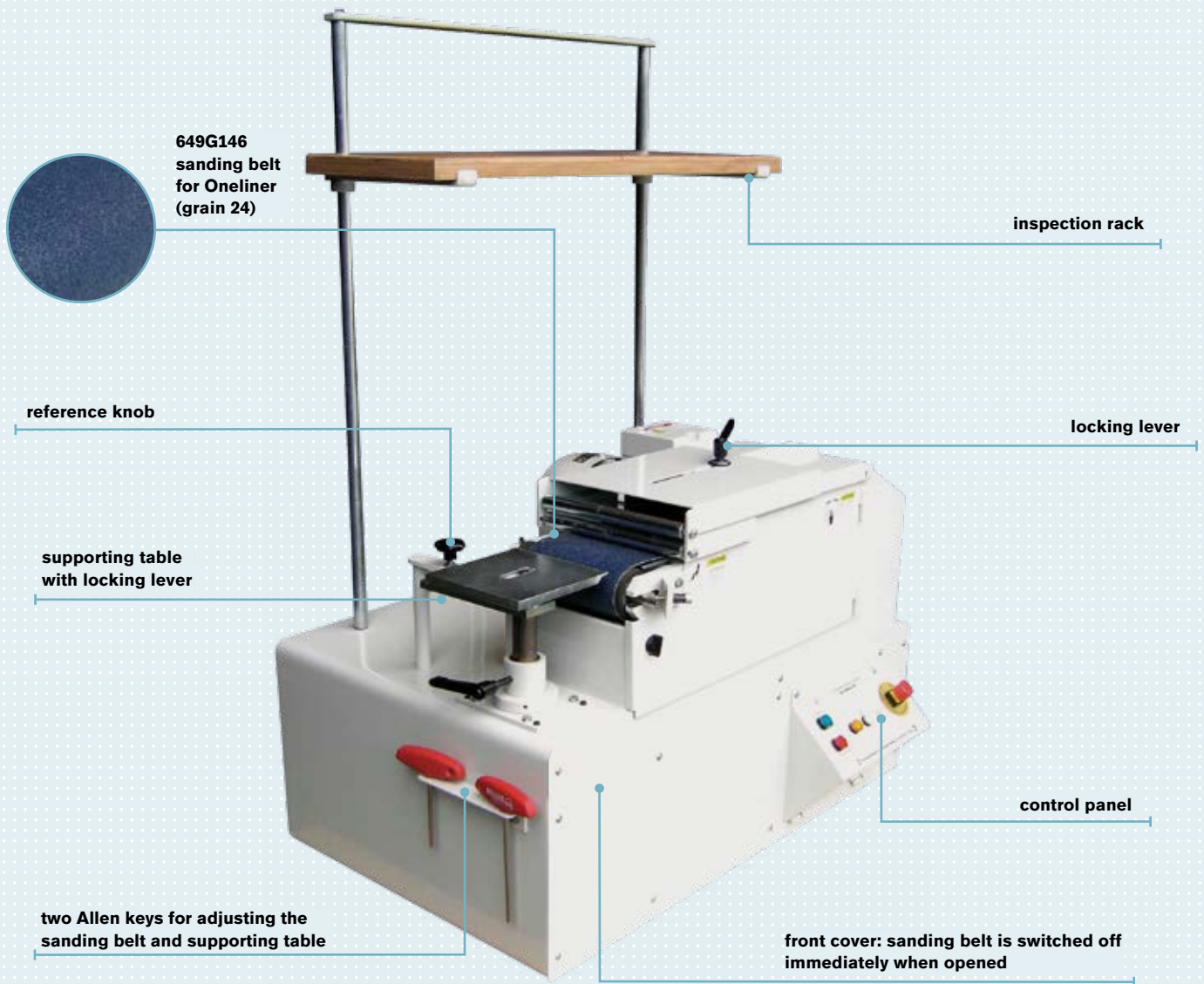
#### **Advantages at a glance:**

- Sanding performance up to 5 cm
- Net sanding surface: 150 mm x 190 mm
- Saves time and materials
- No risk of material loss due to over-grinding
- Also suitable for less experienced employees, provides professional results for beginners

#### **Optional equipment:**

- 758A86: cabinet with multiplex worktop and 2 storage compartments
  - Colour: light grey (RAL 7305)
  - Weight: 75 kg
  - Dimensions (W x D x H):  
1,000 mm x 600 mm x 800 mm





# Planning and equipping example: Reumkens Voet & Zorg orthopaedic workshop in Venlo, the Netherlands

As an example of our proven “project support from A to Z”, we’d like to introduce to you Peter Reumkens from Reumkens, Voet & Zorg in Venlo, a small city on the border between Germany and the Netherlands.

Peter took over the company from his father in 2009. Although he grew up in the orthopaedic footwear environment, it wasn’t initially a given that he would follow in his father’s footsteps.

Today Peter is glad that he chose to be trained as an orthopaedic technician and can now make well-informed decisions for his own company himself. Despite his enthusiasm for the profession, the son didn’t want to simply rely on his family’s reputation and the tried-and-tested Flexam production machines from Ottobock | Jos America when he took over. His desire to modernise his father’s workshop first led him to other manufacturers. “Having made some comparisons, I’m now certain that I have the best machines in the world in my workshop,” says Peter, discussing his decision to pursue the highest quality and “project support from A to Z” service.

Peter was full of ideas for his dream workshop and eager to move forward when he contacted Ottobock | Jos America in 2012. At the suggestion of the workshop consultant an extensive list of ideas was compiled, which Peter finally headed with the title, “I have a dream”. Various suggestions and sketches prompted him to steer away from a redesign of the company’s existing premises and instead move into a new, larger building on the edge of Venlo near the local hospital. Intensive consultations between Peter, Ottobock | Jos America and an architecture firm resulted in a completely new division of the available space.



The new health centre would have an attractive entryway with a back office where Peter's wife Ingrid could take care of the accounting side of the business. Behind this would be a professionally furnished treatment block with rooms for physiotherapy, nutritional counselling and podiatric therapy.

The central workshop with various adjacent rooms for embroidering and material stretching machines, as well as a machine room and rooms for plastering and moulding work, would be connected to the treatment block.

All of these rooms would extend across the entire back side of the building, while still remaining connected to its front via the warehouse. Then it was time to move the concept from the drawing board and into reality.

No sooner said than done. The fact that the workplace's design was extremely sophisticated was apparent to everyone involved not least due to the efficient use of every last centimetre of space and numerous details such as custom-made storage options between the Flexam grinding, milling and polishing machines, a built-in grate in the floor of the plastering room, automatic doors and convenient storage compartments at every workstation.

Finally, mobile trolleys for employees were the highlight in terms of efficient workplace design. Employees can move their individual trolleys from one process step or workstation to the next. The use of both windows and LED lighting create comfortable and efficient working conditions as well.







Only a full-service provider with expert knowledge in ventilation technology can provide the right advice when it comes to extraction systems.

As specialists in dust and vapour extraction, the experts from Ottobock | Jos America installed not only a Vacuum V80 dust extraction unit, but also an extraction system with a return air function. The extraction unit replaces the air in the adhesives processing room at a rate of six times per hour. Adhesive vapours are drawn outdoors and the room is supplied with fresh air. The other rooms in the building, in cooperation with an external specialist, were also fitted with a climate control system. The lasts, which serve as an orthopaedic technician's primary working material, are now stored in a fireproof safe.

Although the redesign of the workshop caused Peter a few sleepless nights, within a week of its completion it was already clear that his dream of a perfect working environment had been accomplished — with the help of the right partner.

