Planning & Equipping

Your partner for the orthopaedic and orthopaedic footwear workshop

News & Highlights

Planning & Equipping example

- Saigon House in Ho Chi Minh City, Vietnam
- Ottobock Technical Repair Service Center supports the athletes at the Paralympic Games in PyeongChang

Product highlights

Plaster drying oven • 3D L.A.S.A.R. Posture • PROS.A. Assembly • Lamination workstation • Socket router with integrated suction system • Vacuum machine
IVO 2018 international trade show in Toronto, Canada

Ottobock Planning & Equipping once again participated successfully in the IVO World Congress. Held every three years in a different part of the world, the international congress and manufacturer exhibition took place in Toronto, Canada this year.

The IVO (International Association of Orthopaedic Footwear Specialists) promotes international cooperation in the field of podiatry and the orthopaedic footwear specialism. The IVO aims to bring qualified personnel, professional organisations and related sectors together and promote cooperation among different countries.

Market-specific products were selected and presented in close coordination between Ottobock North America and Ottobock Planning & Equipping. The Ottobock team presented the Flexam LSB 115 Executive and the Vacuum V80 All-in-One dust collector at the trade show. Both of these machines feature modern touchscreen controls in addition to their outstanding technical characteristics.

These jointly selected products appear to have been the right choice, as these machines attracted a great deal of interest. We made numerous customer contacts and received numerous project enquiries, and the exhibited machines were sold on the spot at the trade show.
Planning and equipping example:

Winter Paralympics,
PyeongChang, South Korea
Ottobock Technical Repair Service Center supports the athletes at the Paralympic Games in PyeongChang

For 30 years, Ottobock has been at the heart of the Paralympic movement. Ottobock is the longest serving partner of the Paralympic Games and has been offering its technical service since the 1988 Games in Seoul. Athletes have been benefiting from the company’s experience at every Winter and Summer Games since.

Similar to the role of mechanics in motor sports, Ottobock is responsible for the repair and maintenance of the athletes’ equipment and ensures that they can return to their competitions as quickly as possible. At the 2016 Paralympic Games in Rio, a 100-member service team put in over 14,500 hours of work and carried out 2,408 repairs. Meeting this challenge requires specialist knowledge and the ability to work under high pressure.
Every two years, Ottobock’s Planning & Equipping division sets up the Repair Service Center for the Paralympic Games. The athletes’ sports equipment is adjusted, modified and repaired in the over 300-square-metre workshop, which is equipped with the latest machines and tools.

And our Repair Service Center in PyeongChang worked at high speed, right from the start. Repairs and fine adjustments were the order of the day. A Korean skier, for example, had his skiing prosthesis adjusted on the 3D L.A.S.A.R. Posture measuring device and was then all set for his competition.

2018 Paralympic Games in PyeongChang by the numbers

- 23 O&P professionals, wheelchair technicians and support staff
- Four welders
- Ten languages
- Four technical service repair centres in the Athletes’ Village as well as the alpine, Nordic and ice sledge hockey venues
- 300 square metres of workshop space in the Technical Repair Service Center in the Athletes’ Village
- 19 days of technical service

The 3D L.A.S. A.R. Posture supports you in providing optimal prosthetic and orthotic alignments as well as in checking body posture.

The alignment of a prosthesis or orthosis is a key factor in the quality of the fitting. Only when the statics are correct can the device achieve its full functionality and the user regain the highest possible level of mobility and independence.

The 3D L.A.S. A. R. Posture captures the force path and simultaneously displays it for both legs in the form of lines projected onto the patient’s image with millimetre accuracy.

Benefits at a glance

- Synchronous measurement and visualisation of the force path along both legs incl. load distribution display
- Comprehensive patient database including fitting progression, comparison view and PDF creation feature
- Extensive tutorials, help functions and integrated alignment recommendations
- Electrical connection: 110 – 240V / 50 – 60Hz
- Article number: 743L500

Further information available at: pe.ottobock.com/en/743L500.html

“For 30 years, Ottobock has been at the heart of the Paralympic Movement.”
Multiple Olympic medal winner Anna Schaffelhuber used her first visit to the Repair Service Center to obtain technical support for her wheelchair. There were also many requests to mount flag holders on wheelchairs – as always before the opening ceremony of the Paralympic Games.

After the first two days, Ottobock technicians had already performed 100 repairs. The estimated figure of 260 jobs during the entire Paralympic Games was exceeded with 287.

“The main workshop in the heart of the Athletes’ Village is now an established meeting point for the community of athletes.”

Socket router with integrated suction system

This compact, powerful grinding and milling machine lets you process your products with a high degree of precision and put the finishing touches on sockets. The Ottobock socket router is suitable for processing all orthopaedic materials and includes an integrated high-performance, separately switchable suction system: this not only allows you to work cleanly but also provides optimum protection against fine particles which can be hazardous to health.

The integrated sound-damped suction system eliminates the need for a separate dust collector. This gives you a big advantage in a number of ways: you save money and space, and there is no need to install tubing between the socket router and the dust collector. This has a direct impact on the router’s suctioning efficiency, as it minimises the loss of suction pressure.

Benefits at a glance

- Minimal space requirements
- Connection to a further machine in alternating operation
- Low noise level thanks to sound-damped suction unit (<70 dB(A))
- Electrical connection: 3 × 400 V / PE / 50 Hz / 3.0 kW
- Article number: 701F30=1

Further information is available at: pe.ottobock.com/en/701f30.html
Over the years Ottobock’s workshops have not only become vital repair hubs for athletes, but also gathering places where Paralympic athletes come to enjoy a cup of coffee and reunite with technicians and friends from previous Paralympic Games. The main workshop in the heart of the Athletes’ Village is now an established meeting point for the community of athletes. Learn more about the Paralympic Games on Ottobock’s Facebook page and our website pe.ottobock.com/paralympics
Ottobock Vietnam, Ho Chi Minh City, Vietnam

Planning and equipping example:
Better treatment
Ottobock’s new clinic in Saigon makes it a bold pioneer. This step represents our clear goals and visions: improving medical treatment in Saigon, the integration of people with disabilities, developing infrastructure and industry in the entire region.

“We want to show that the topic of disabilities doesn’t need to be hidden, but rather is and remains an important issue,” says Matthias Kittler, Country Manager in Vietnam. “We want to offer practical and professional treatment for the people here in Vietnam.” Ottobock has opened one of the most modern workshops for orthopaedic technology in Southeast Asia directly on the main street in the heart of the city of Saigon.

Vietnam is a socialist republic in Southeast Asia with a population of over 90 million. The coastal nation has one of the highest growth rates in the world and is home to two major cultural centres: the lively economic centre of Saigon in the south, also known as Ho Chi Minh City, and the more politically focused centre of Hanoi in the north.

However, orthopaedic technology in the country has been only rudimentary thus far. The specialists at the few companies and workshops can only carry out basic repairs in many cases – due to a lack of equipment. This means there is a need for improvement, and the country is on its way towards offering more support for people with disabilities.

Benefits at a glance
• Vacuum connection: vacuum distribution integrated into the workstation
• Users friendly: work area with cutting and adhesives worktop as well as storage space for rolls
• Protection against vapours: integrated suction slots remove vapours continuously from the workstation (external explosion-proof suction system required).
• Article number: 758Z113=2000

Lamination workstation for decentralised vacuum system
The compact all-rounder: this multifunctional workstation for casting and laminating is ideally equipped for the efficient fabrication of orthopaedic devices such as lamination resin sockets.

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Vacuum machine
We combine reliable technology such as our proven motor with pump together with an innovative control system and a modern design – for even more precise laminating results.

Benefits at a glance
• Performance: the two separately controllable vacuum circuits deliver an extraction volume of 25 l/min via a total of six vacuum outlets.
• Motor with pump: the robust drive has been proven over years of everyday use and delivers a consistently high suction capacity
• Filters: the external filters can be easily inspected and replaced
• Electrical connection: 1 × 230 V N/PE/50 Hz/0.11 kW
• Article number: 755E600=220

Further information available at: pe.ottobock.com/en/755e600.html
The PROS.A. Assembly was designed for the bench alignment of TT or TF modular lower limb prostheses. Up to twelve degrees of freedom have to be taken into account for the three-dimensional static alignment of these prostheses. The PROS.A. Assembly makes this alignment easier: the socket, knee joint and foot can be secured in the device and positioned correctly according to Ottobock’s alignment recommendations.

Ottobock opened its newest branch in the Asia-Pacific region – Saigon House – after a detailed project planning phase. Focusing on lower limb prostheses and feet, the clinic combines all functions under a single roof. It offers a modern workshop of the highest standard, an area for direct patient care and a management and sales department on a total space of 560 m².

**Upscale workshop**

In addition to a central workshop with five workbenches, the facility includes a lamination and vacuum forming room, a plaster modelling room and a machine room. High-end prosthetic alignment equipment such as the 3D L.A.S.A.R. Posture, PROS.A. Assembly and vacuum system enable professional prosthetic treatment. “From screwdrivers to compressors to the chemicals cabinet, all of the products come from Duderstadt,” Matthias Kittler says. “We have made every CPO’s dream a reality.”

**Feel-good ambiance**

Bright and friendly Saigon House is easy to reach in its central location. A wide range of users from rice farmers to business owners are provided with the appropriate treatment here in a pleasant atmosphere. The two large fitting rooms and two additional patient rooms offer ideal conditions for successful consultation, fitting and gait training.

**Professional expertise**

All of the 13 employees are from Vietnam and work either in Saigon or at the Hanoi branch. The team includes seven technicians and three CPOs trained at the prestigious VIETCOT Training Center. They are thrilled about their new working environment and the innovative machines. Thanks to this, their technical expertise and their many years of experience, they can now significantly improve the standard of patient care in Vietnam.

**Further information available at:**
pe.ottobock.com/en/743a220.html
With its new presence in Saigon, Ottobock is helping affected people in difficult situations to return to a normal life. The company is simultaneously promoting a new way of thinking in the country and can develop an orthopaedic technology infrastructure in close cooperation with regional authorities and NGOs. For example, a separate workshop in Hanoi is already planned for the coming year. Saigon House represents a milestone in the further development of the entire region.
New product:

Plaster drying oven
New product: plaster drying oven

What's behind the principle?
Drying takes place via condensation: the plaster models are placed in a chamber and cool, dry air is introduced. The air is then warmed and absorbs moisture. Finally, the warm, moist air is conducted out of the chamber to a condenser that cools the air rapidly.

The condensation process produces liquid water that is discharged through a hose as well as cool, dry air that is conducted back into the chamber. This results in a cycle that extracts moisture from the plaster more quickly and efficiently.

Excellent test result
An comparative test carried out by Ottobock clearly demonstrates the success of the innovative principle: the new plaster drying oven required only 13 hours of drying time for six plaster models made of alabaster modelling plaster with a weight of 4 kg each and a plaster to water mixing ratio of 1:1.5. The 701E8 infrared convection oven, meanwhile, required a drying time of 24 hours.

The drying time was therefore reduced by almost half in the test described above. Our plaster drying oven saves you a great deal of time during the fabrication of orthopaedic components and shortens plaster drying times significantly compared to conventional methods.

Clearly efficient fabrication
The new plaster drying oven from Ottobock is like no other in the world. Thanks to its innovative principle, it saves energy while drying plaster more quickly than is currently possible in a convection oven such as the 701E8 Ottobock infrared oven. This means you can reduce fabrication costs significantly, achieve better results during further processing and improve the quality of your products.

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Technical data:
- Dimensions W×D×H: 1,479 × 789 × 1,978 mm
- Interior dimensions W×D×H: 1,246 × 540 × 1,218 mm
- Interior volume: 820 l
- Window dimensions W×H: 280 × 480 mm
- Material: steel, stainless steel
- Temperature range: 40–60 °C / 104–140 °F
- Electrical connection: 1 × 230 V N/PE / 50 Hz / 3.0 kW, 3-m power cord with CEE plug (2 P + PE, 16 A) and CEE socket (2 P + PE, 16 A)
- Weight: 365 kg
- Colour: light grey (RAL 7035)

Ottobock’s plaster drying oven – all the benefits at a glance
- Save time and money during the fabrication of orthopaedic components such as prosthetic sockets
- Faster plaster model drying times – proven in a comparative test
- Modern touchscreen control in five languages with temperature display and timer for up to 20 plaster models
- Premium workmanship with perforated shelves made of galvanised steel and a stainless steel interior
- Functional design with three levels for plaster drying, two swing doors and two windows

“The new plaster drying oven from Ottobock is like no other in the world.”
Gardeslen, an orthopaedic technology company in the Netherlands, had its entire workshop re-equipped by Ottobock Planning & Equipping in 2016. It has now acquired Ottobock’s 701E31 plaster drying oven in addition to the existing convection sheet heating cabinet, which was previously used for heating synthetic materials as well as for drying plaster models.

Gardeslen’s Workshop Manager Gerben Dokter speaks with Christoph Neugebauer, the head Product Manager at Planning & Equipping, about the changeover to the new equipment and the key benefits of the new plaster drying oven.

Is drying faster in the new plaster drying oven?
The new oven does exactly what we hoped for: it dries much more quickly! We can have our plaster models dried in just one night – every night. Depending on the size of the plaster model, many models are already dry the next morning and ready for further processing. With the new plaster drying oven, we are now able to process plaster models during the week as well, which makes our entire schedule for the week more flexible.

What are the benefits of the new oven’s design?
The new plaster drying oven has three levels we can use for drying plaster models. This saves us space, and we have more room for our plaster models than ever before. Finding room for all the models in the sheet heating cabinet was really tricky.

Is the new plaster drying oven more convenient to use?
Yes, definitely. It’s very easy to control with the touchscreen, and we can save energy by using the eco mode. I find the timer on the device very efficient, for instance. It lets me set up to 20 individual drying times with alarms – so every plaster model gets the right amount of time.

What was so complicated about the old sheet heating cabinet?
With the old sheet heating cabinet, we could only dry plaster models over the weekend because drying took so long for starters, and secondly because the heating cabinet was already used to capacity from Monday through Thursday for heating thermoplastics. This meant we had to plan plaster drying every Friday for an entire week in advance.