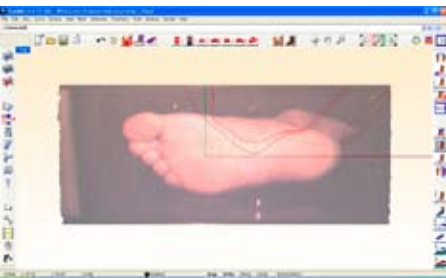


FootMILL Custom Insole System

An outstanding 3D solution for the design and manufacture of custom insoles



FootMILL is a powerful and remarkably easy-to-use system for the design of custom insoles using 3D scans. It utilises a market-leading 3D CAD/CAM platform to create a solution that allows the fast and reliable conversion of 3D scans into accurate custom insoles of any kind.

FootMILL is fast and flexible. It can create a fully customised insole from a 3D foot scan in less than a minute, and it has all the features you need to modify the insole for any corrective requirement. It also enables you to create an extensive library of insole shapes and designs, that can be instantly graded and modified to fit the patient.

FootMILL represents a major leap forward in the field of custom insole design. Based on the powerful and widely-used Rhinoceros CAD/CAM technology, it has a unique combination of power, simplicity, and compatibility. It is as suitable for use in clinics as it is in large-scale production labs and, used with the leading FotoScan 3D scanning systems, it offers a highly cost-effective approach to digitising the production of custom insoles.

Easy Import of 3D Scans

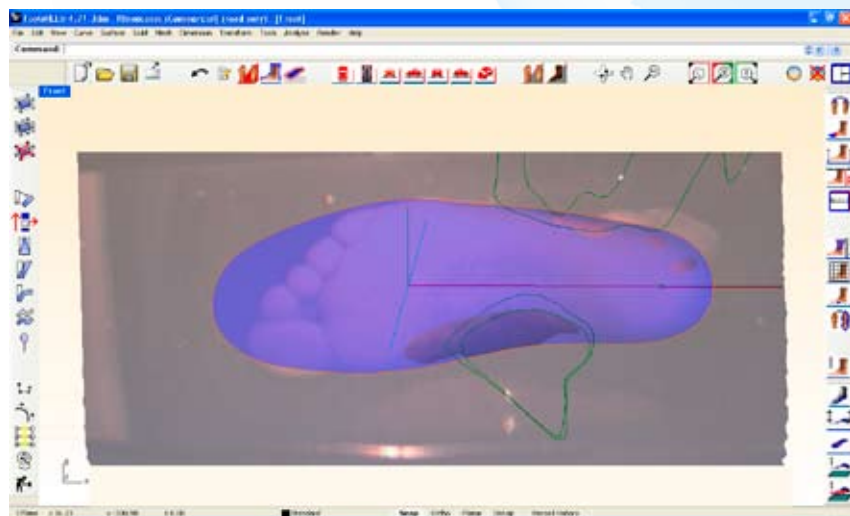
FootMILL is fully integrated with the FotoScan 3D scanning technology. So it can work with full colour 3D images of the foot and plantar surface, and it can use these images as the basis of the custom insole shape. You can see the plantar surface of the foot in full colour, and design the insole to fit the foot perfectly, in both 2D and 3D.

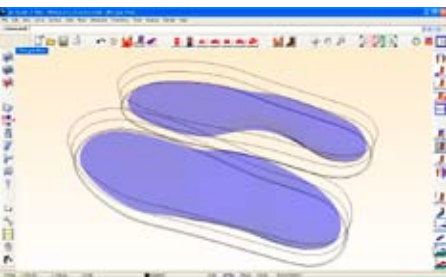
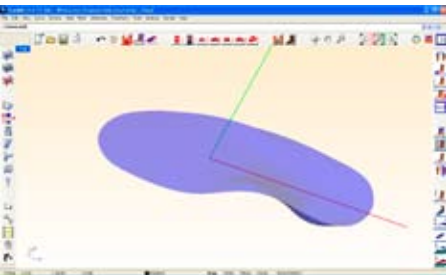
In addition, FootMILL is a truly open-architecture system so it will import 3D scans from any scanner capable of exporting a standard file format, such as STL and VRML.

Foot, Plantar and Foam Box Scans

FootMILL works equally well with a range of different types of 3D scans. For example, you can use a complete foot scan or a scan of the plantar surface only. Both approaches, when used with scans from a FotoScan 3D scanner, give you full colour 3D data to use as the basis of the insole design.

FootMILL will also create insoles from scans of conventional foam boxes and plaster casts. Again, FotoScan scans will display any reference points or notes on the boxes and casts while designing the insole.





Fast and Simple Conversion of 3D Scans into Insoles

The process of converting a 3D scan into a custom insole couldn't be simpler. You select the scan, choose the insole design you wish to use, confirm the shoe size and then, in a single keystroke, FootMILL will map the 3D contour of the foot to the insole design.

The whole operation takes a matter of seconds and, if you are using a FotoScan 3D scanner, you will have an insole that maps to the plantar surface at an accuracy of 0.5mm.

Powerful Tools for Detailed Insole Design

FootMILL is supplied with a wide range of easy-to-use tools that allow you to precisely control all aspects of the shape of the insole. Functions include scaling, rotating, bending and mirroring, as well as control point-based editing to finely tune the shape you require. And all of this can be done while the colour 3D foot scan is onscreen, so you have an accurate reference point at all times.

Easy Addition of Corrective Shapes

FootMILL makes it simple to add corrective shapes to an insole. You just select the shape you want to use, position it on the insole, and then adjust its size and shape as required. Then a single keystroke merges it into the insole.

FootMILL is supplied with a wide range of standard shapes or pelottes that you can combine with the insole to create the corrective design that you need. And you can easily extend the range by creating your own shapes to add to the library.

Flexible Milling Solutions

FootMILL can export finished insoles to over 30 different 3D file formats. This allows you to use any suitable CNC milling machine and you are not tied to expensive, specialist devices.

Alternatively, having the data in digital form means that you can simply email the complete digital insole to any production lab in the world who will be able to mill it on their own equipment.

Specialist Technical Support

FootMILL is developed and supported by a specialist shoemaking technology company whose staff have over 25 years experience in the orthopaedic sector. FootMILL is a proven solution backed by a business with a detailed knowledge of insole manufacturing.

Technical Specification

- Direct conversion of foot scan to insole
- Direct conversion of plantar scan to insole
- Direct conversion of foam box scan to insole
- Insole preview and selection
- Auto adjustment of insole to fit foot
- Rotation function
- Insole scaling
- Surface editing – fine and coarse control
- Auto smoothing
- Corrective shape preview and selection
- Single keystroke merge of corrective shapes
- Toe and heel pitch control

- Mirroring of insole (left and right)
- Import foot scans in multiple formats (incl. STL and VRML)
- Export to multiple file formats (incl. STL, VRML, DXF, etc)

System Requirements

- Windows XP/Vista/7
- 2 GHz
- 1 Gbyte RAM
- Rhinoceros CAD/CAM 4.0

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