

# DIGITAL ORTHOTICS

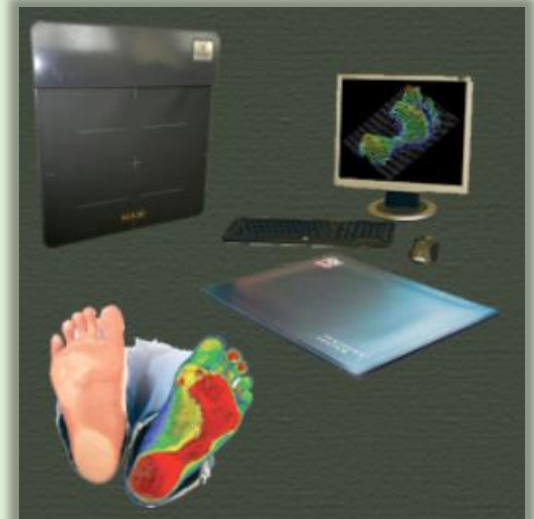
**\*Now available at Louise Stirk Podiatrist\***

## Step 1 : Biomechanical Assessment

The first step in a digital process is the biomechanical assessment. This is done with the use of a biomechanical plate. Plates come in various sizes from 0.5m to 3.2m and from various manufacturers (Sensor Medica, Medicaptuers, TekScan, Rs Scan, Zebris, Novel). Our only requirement is the practitioner must have one, and he needs to use the plate to evaluate his patients biomechanical differences.

You walk or stand on the plate and it measures you pressure, gait, stride length etc

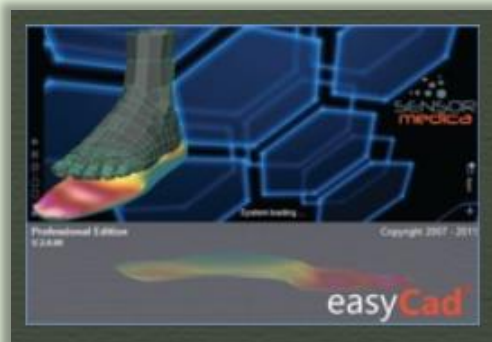
Once the practitioner has completed the assessment the plate data is exported so it can be used when designing your orthotic.



## Step 2 : 3D Foot Scan

The 3D foot scan allows the practitioner to take an accurate image of your foot. The process takes 4-5 seconds per foot and the image is converted into a 3D mesh of your foot. This step alone saves the practitioner 15 minutes as the old methodology required them to use plaster of paris to mould your feet.

The foot scan is optional as the CAD CAM software is capable of using just the plate data in the design of an orthotic.



## Step 3 : CAD CAM Design

Once all the data has been captured and the practitioner knows what he wants to correct he can now start designing your orthotic. After he has imported your digital data he is able to make adaptations and corrections to your orthotic to within 0.1mm, allowing for a greater level of control and accuracy.

## Step 4 : Manufacturing

Manufacturing takes between 3.5 and 15 minutes for the milling machine to manufacture a pair of orthotics.



## Step 5 : Finishing and fitting

This is the final step in the process. The milled pair is removed from the machine, then cut out from the blank, and a technician grinds and sands the pair until smooth. They prepare the orthotic so it will easily fit into your shoe.

## 8 reasons to us a "Digitally Compliant" practitioner

1. **DIGITAL SCANNING:** allows a high resolution accurate 3D image of the cast or impression box to be captured and imported into the design software. NO MORE manual casting and messy plaster of paris
2. **VIRTUAL POSITIVE:** the creation of a "virtual" positive allows accurate application of your prescription variables to the foot scan. The "virtual" positive can be adjusted to satisfy your changing prescription requirements and stored removing the need for additional casting or cast storage.
3. **DESIGN STORAGE:** your orthotic design is digitally stored allowing easy ordering of repeat pairs or modification of design parameters.
4. **CAD CAM:** Computer aided manufacturing decreases turn around time to you and increases the accuracy of the finished product.
5. **REDUCED BULK:** direct milling technology results in a more accurate EVA shell compared to the same thickness of vacuum-formed materials. This allows a reduction in orthotic bulk whilst not compromising on performance.
6. **FLEXIBILITY OPTIONS:** Direct milling allows EVA orthotic shell thickness to be modified by fractions of a millimeter rather than 1mm increments, resulting in a wide range of flexibility options to suit your prescription needs.
7. **QUALITY MATERIAL:** Our material is imported from Italy and comes with CE mark approval so it is both very light and certified to be worn against the skin.
8. **REPEAT SCRIPTS:** You can quickly get a repeat script made to suit your other shoes without the need to re-scan or visit your practitioner. They can also make small modifications should you experience discomfort and re-make your pair.



## Wearing in your "New" Digital Orthotics

The "inserts" that have been dispensed to you are called **ORTHOTICS**. They are custom made from the Digital imprint of your foot that conform to the shape and contours of your feet. The orthotics are designed to correct the alignment of your feet & legs, thus relieving symptoms of abnormal foot function. During the next few weeks your body will gradually become accustomed to this new alignment. Because each person is different this period of adjustment may differ from person to person. It can take anywhere from one to six weeks before you feel re-adjusted. During this time you may experience mild discomfort in your knees, hips or lower back. This is temporary, and should disappear when the orthotics have been "worn in". Please be **PATIENT!**

### INSTRUCTIONS

- ★ **Day one.** Wear the orthotics for one hour only, regardless if you sit or stand, then remove
- ★ **Day two.** Wear the orthotics for a maximum of two hours.
- ★ Thereafter increase the wearing time by one hour per day, until the orthotics are fully comfortable.
- ★ If you are still experiencing discomfort, reduce your wearing time.
- ★ If after six full weeks you have not fully adjusted, contact your practitioner as a small adjustment may be necessary.
- ★ NEVER attempt to adjust the orthotics yourself.

### TIPS

- ★ Blistering may occur especially in the long arches of the feet. Vaseline can be applied to the area prior to putting on your socks.
- ★ Cut back on using the orthotics if muscle strains are felt.
- ★ Only use a cloth with luke warm water to clean the top of your orthotics. NEVER immerse them in water or use strong detergents.
- ★ When purchasing new shoes, take your orthotics to insure a proper fit.