



Fig.1: Model sole from the 3D-CAD data



Fig.2: Upper core- and lower cavity plate of Silicone of one-way sample mould



Fig. 3: One-way Silicone sample mould Installed on Lab- or test machine



Fig.4: Single-layer PU-sole

For some customers, an evaluation on the basis of a model sole is not sufficient. Our Rapid Tooling service enables the production of a single-layer PU sole on the basis of the model sole (Fig. 1).

This non-reusable sample mould consists of an aluminium frame with a silicone casting around the model sole. After removal of the model sole, a two part mould is obtained, consisting of an upper silicone core plate and a lower silicone sole cavity (Fig. 2).

To make PU sample soles, the mould is installed in a laboratory or testing machine (Fig. 3).

Single layer PU soles can thus be produced which can be cemented to the actual upper. They may also be used for preliminary wearing tests. (See Figs 4 & 5) Depending on customer requirements, the process may be repeated several times. Rapid Prototyping and Rapid Tooling eliminate the risks involved in producing a costly and time-consuming metal mould which may eventually have to be rejected.



Fig.5: PU-sole cemented to upper

Surface structures and various punched engravings cannot be shown either on the model sole or in the non-reusable silicone sample mould and thus not on the PU soles. This detail is left to the metal mould.