

Customer testimonial

👉 Jonathan MURFIN
Business Development Director at Steeper



R4D : Can you introduce yourself ?

J.M : Jonathan Murfin, Business Development Director for Steeper, qualified Orthotist with 30 years experience, specialising in paediatrics, scoliosis treatment and lower limb orthotics. I have also worked in R&D to develop new orthotic devices and clinical practices, moving into management and continuing to provide clinical training and practice in orthotics. We lead the Steeper 3D print program together with our production director and further supported by senior technicians, clinicians and Steeper's product evaluation, and best practice groups.

R4D : You choose Arkad, why did you switch to digital and 3D ?

J.M : We are always seeking to develop products which offer significant benefits to patients, investing in digital and 3D printing was the next step in doing this, allowing Steeper to offer the latest technological advancements in orthotic insoles. The environmental advantages were also a key factor, with between 60 – 90% of waste saved vs traditional methods of production per pair of insoles, as 3D printing is an additive manufacturing process, so produces close to zero waste, it also consumes very little power as the main energy consumer is the small print heads that heat the print material with a very small heater element. The flexibility of the Arkad 3D printing solution that allows an almost infinite amount of designs and densities was another reason for choosing Arkad, other systems are available but no other 3D printer offers this variety of densities variations. The Arkad system allows 17 different densities combinations to be printed with shore values between 25 and 70 available (Poron to high density EVA equivalents). The switch also allowed us to reduce the cost of production and the labour costs associated with this as well as keeping up with and offering an additional benefit from our competitors.

R4D : How did you adopt and handle the solution ?

J.M : We conducted a significant research project with regards to the technology available and our production rates and order volumes, finding that 91% of our insoles could be made via FDM printing. At that point we knew we were seeking a partner who could offer a solution to produce high volume, multi-densities insoles whilst retaining precision and quality. The Rodin4D Arkad system, including acquisition (scanning) software was the most superior and offered everything we were seeking, allowing the potential to grow the reach of Steeper insole orthoses worldwide.

R4D : Does the Arkad solution change your way of working ?

J.M : Absolutely, thanks to the Arkad system, we are far more efficient, cleaner and more environmentally friendly, also we are now able to carry out continuous automated production, as the system can be loaded with print files and print continuously 24 hours a day, 7 days a week utilising Arkad's unique automated print file storage software and the print machines conveyor systems.

R4D : What is Arkad's added value ?

J.M : The feedback we have received from both patients and clinicians alike is that, thanks to the insoles being seen as 'the latest thing in technology' patient compliance and acceptance has increased. Biomechanically, the Arkad printed insoles are a better solution, especially with the variety of designs and densities combinations. Further feedback suggests that the insoles fit much better into patient's own footwear than those of traditional manufacture. The solution is scalable for us and so has allowed the insoles to be adopted well within the NHS and our private market with the opportunity to expand into other markets. It's also a very flexible system as we can accept scan files directly to model, or modeled files to print for clinicians or customers, but with the high speed Arkad scanning devices we can use cast impression boxes to scan, model and 3D print devices to the clinicians exact specifications.