

Showcase

STURDY MATERIAL FOR SKIN CONTACT

KITRIS Tennis is an analysis and learning system for coaches and players which functions through the collection of millions of items of playing data by a data tracker worn on the wrist.



INITIAL SITUATION

The Swiss startup was looking for support in re-engineering a product designed in the Netherlands so as to make it suitable for plastics processing. In addition to this, Mythentec was also tasked with the industrialisation and production of the plastic components and the design and commissioning of downstream processes such as ultrasonic welding and laser marking.

DEVELOPMENT

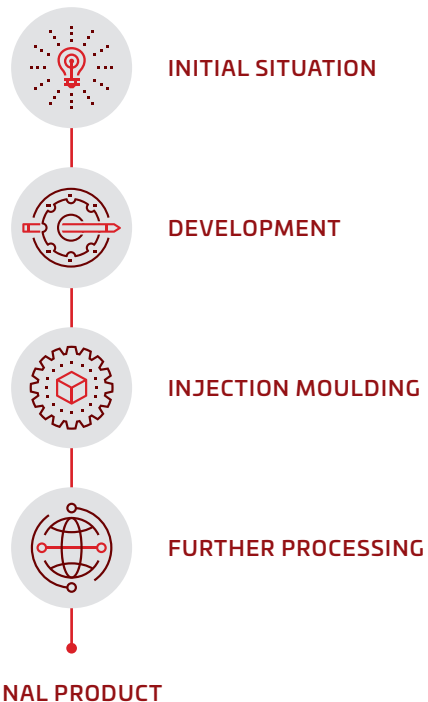
The most demanding task involved the selection of suitable materials, as the tracker would be in constant contact with the skin during sports activities and may be exposed to a variety of aggressive contact substances (e.g. sun cream, perspiration, body lotion or insect repellent). Mythentec developed a network for the procurement of supplementary housing components and has since been responsible for the direct purchase of these products.

INJECTION MOULDING

Favourable framework conditions and low initial costs for the market launch were achieved through the use of multi-cavity moulds. The commissioning of injection moulds, ultrasonic welding and optimisation were carried out on site of a competent partner's facility in China. All parts are coloured with masterbatches to ensure a rapid reaction to market demands.

FURTHER PROCESSING

The scratch-resistant coated display is machined and then decorated by means of a screen printing process. The display, front frame, base plate and main frame are ultrasonically welded by Mythentec, while an adhesive hydrophobic fabric is used to cover the microphone. All trackers bear a consecutive serial number applied by laser marking to aid batch traceability. The display and laser marking are covered by a protective film. This film can be removed without leaving any residue.



KEY FACTORS

- One central contact for the customer
- Commissioning and production monitoring abroad
- Design and industrialisation of further processing
- Network development for purchase of systemic parts
- Complete batch traceability for all articles



TPE components ensure pleasant tactile properties and an effective sealing of the housing.



The scratchproof display of the front frame is decorated in a screen printing process and ultrasonically welded.



Each tracker can be clearly identified, thanks to laser marking.