

# Timmerije Client Case



## Relaxed travelling with the Maxi-Cosi Rodi XR Footrest Cooperation in development

*Helmond/Neede - In the Netherlands and Belgium, children up to a height of 135 centimetres must be carried in a child seat when travelling by car. One of the most popular and well-known brands in the market for baby and children's articles is Maxi-Cosi. Maxi-Cosi is one of the international Dorel Group's brands. In order to further improve its range, Dorel started the development of a foot rest for car seats for children. The Rodi XR Footrest was realised in close cooperation with Timmerije.*

### Joint development

Timmerije was involved in the development of the footrest at a very early stage. Dorel chose Timmerije as a partner thanks to technical know-how and experience and its reputation in the field of innovative solutions. Furthermore, Timmerije has the expertise and possibilities of manufacturing a wide range of products and provide assembly and integrated logistics services. This makes Timmerije an attractive total solution provider for various customers.



The Rodi XR Footrest is easy to attach to the Maxi-Cosi Rodi XR car seat, offering children between about 3.5 to 6 years old extra comfort. In combination with the Rodi XR's 'sleep position', the footrest allows for comfortable and relaxed travelling, in particular because the footrest is very easy to adjust.



### Minimise the parts, maximise the results

Dorel's initial concepts were extensively discussed with Timmerije, as Timmerije's Product and Process Development department offers a wealth of know-how within the field of Industrial Product Design, Mould Technology and Materials Technology. In consultation with Dorel, an assembly (-based product) was realised, minimising the number of parts and maximising the result. Based on the technical feasibility, the departments focused on choosing the right materials, ergonomics and the final design.

### Project plan

The requirements were prepared at the start of the project, which were expanded in the course of the project. Timmerije prepared specifications of the various concepts in 3D-CAD based on these requirements, which were evaluated in consultation with Dorel. Based on a product FMEA (Failure Mode and Effect Analysis), the best concept was further optimised. Rapid proto-typing models, generated from the 3D-CAD models, served to test the various functionalities. After fine-tuning the last details and following Dorel's approval, the moulds were sent to a Chinese supplier.

Timmerije is certified for ISO 9001, ISO 14001 and ISO TS 16949. The purpose of ISO TS 16949 (which was specifically designed for the automotive sector) is encouraging continuous improvement, minimising variation, reducing waste and preventing errors. In this context, Timmerije uses tools such as FMEA, Control plans, PPAP (Production Part Approval Process) and CPk-studies.

### Building on success...

Meanwhile, the Maxi-Cosi Rodi XR Footrest is available in shops. The system is currently being rolled out to other Dorel brands, including Béb  Confort. Timmerije looks back on a successful development and production. This also proves Timmerije's power in joint development and engineering of solutions for complex injection moulding products.

### More information

We hope that this Timmerije Client Case is interesting to you, perhaps even offering links into your own projects. The 'Timmerije Techniforum' information sheet series provides more technical information. Please do not hesitate to call or email us if you have any more questions.

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