

CASE

Conmeq reduces time-to-market with Motar

Mini-loaders are one of the most widely used machines on construction sites, as you can use them in endless ways with dozens of matching attachments. Due to customer demand, many suppliers replaced their diesel engines with electric powertrains in recent years, but that didn't exactly make mini-loaders better and safer. This is why Boris Koot took the bold step of starting his own company – Conmeq – which designed a completely new electric mini-loader from scratch. By using the Motar platform developed by ICT, he was able to develop the software for the mini-loader considerably faster.

Koot held management positions in the equipment manufacturing industry for many years, where he would receive many customer queries about zero-emission, vibration-free and noise-free mini-loaders. He found that replacing the diesel engine with a battery pack did not achieve the desired results. Not only did this create mechanical problems, but because the centre of gravity changed, safety was also compromised. 'I quickly realised that you have to start from scratch,' he says. Because the existing suppliers let that opportunity slip, he knew he'd found himself a niche. Koot founded Conmeq

and started working with a small team of engineers. 'Developing your own new product takes an awful lot of time and money. I soon knew that the strength of the new product would lie in the software control. Because I wanted to keep our start-up company a compact size, I started looking for a partner who could help me in that area.'

Transparency

He came into contact with ICT and was amazed at the openness he found there. 'Other suppliers like to cultivate



CASE Conmeq reduces time-to-market with Motar

an air of mystery around their expertise, so it's not quite clear what they're doing. ICT is a lot more down to earth that way. They use the Motar platform, which they developed in-house. Motar is a model-based development tool that allows you to bring software directly from your drawing to production, without writing any code. This reduces the time required for product development.'



This reduction of the time-to-market was also needed, says Johan van Uden, the technical consultant in ICT's Engineering R&D Products business unit. 'Boris was incredibly ambitious and had a time frame in mind which is very unusual in this industry. But we succeeded, thanks to the excellent cooperation.'

Koot is delighted that he and ICT have succeeded in improving both the passive and active safety of mini-loaders. 'Designing the machine from scratch has allowed for optimum weight distribution. But what's even more important is that the software systems ensure that you always work safely. This prevents a lot of industrial accidents.'

Continuous improvement

One of the reasons Conmeq chose to partner with Motar was their intention to keep optimising and upgrading the mini-loaders. Koot: 'Because the majority of the functionality is in the software, customers don't need to buy a new machine if they want more functionality. We'll simply update the software. The other day we had a customer who wanted better security of the mini-loaders because there was a huge amount of theft on the construction site. We received the request on Tuesday, and by Thursday all his mini-loaders were already equipped with a PIN required to activate the loaders. Another customer needed greater acceleration power for a specific job. That was done within a day. In Motar, it's merely a matter of adding a block of code. The new functionality integrates seamlessly and automatically with the other features.'

Now that the mini-loaders are finding their way to the market, Conmeq is focusing on the larger vehicles. 'We have shown that a vision of innovation enables you to transform a market. Now that we have taken the first step, we will certainly take the next step too, with ICT as our trusted partner.'



Do you want to know more about the project or the results? Please contact Johan van Uden, Technical Consultant:

E: johan.van.uden@ict.nl

T: +31 (0)62 532 1119



Kopenhagen 9
2993 LL Barendrecht
The Netherlands

T +31 (0)88 908 2000
E info@ict.nl
W www.ict.eu