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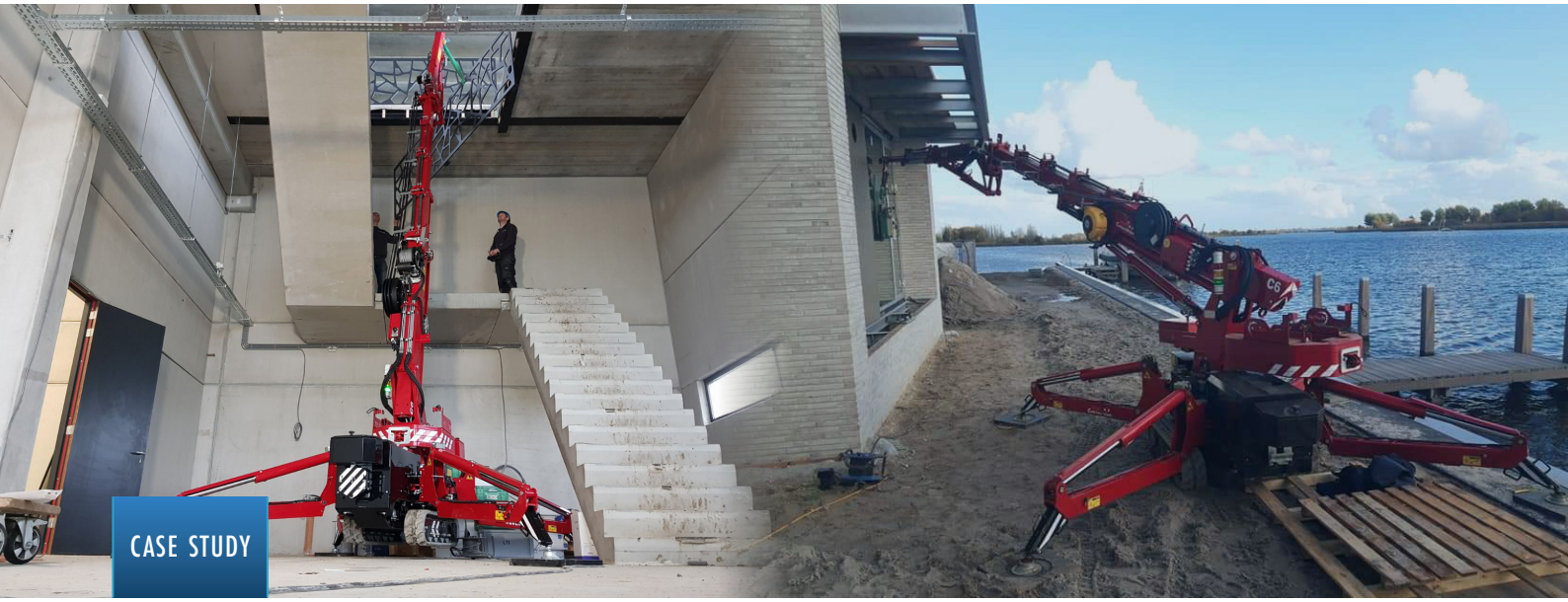
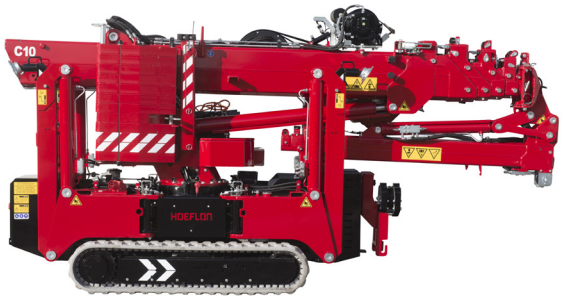


Mini-crane with unique safety sensors

For fifteen years, Gert van Hoef – Hoeflon's founder and owner – has focused on developing the perfect 'compact crane'. Small enough to pass through a standard doorway, these tiny cranes can lift a load of up to 9,000 kg! Rotero supplies unique safety sensors for these machines. Each sensor has a unique NodeID plus marking to ensure it gets mounted at the correct position on the crane. Five crane models are currently on the market, and the Hoeflon aims to double production by the end of 2022.



With its electrically powered compact cranes – also known as 'mini-cranes' – Hoeflon has carved out a niche in a global market. There are five models in the range, four of which fit through a regular door opening. The largest model can pass through a double door. Despite their compact dimensions, these cranes can hoist up to 9,000 kg to heights as high as 22 metres. Export manager David Fokker: 'These cranes are designed for a wide variety of uses, both indoor and outdoor, such as staircase fitting, façades, and construction in steel, concrete or timber. But also, for renovations and relocation of industrial plant.'

Maximum quality and safety

The popularity of these cranes is due in part to their exceptional quality and reliability. Owner Gert van Hoef has never made any concessions in this area during the fifteen years of developing 'the perfect mini-crane'.

Electrically powered and remotely controlled

Apart from compact dimensions and exceptional reliability, safety was obviously another critical aspect in the development process.

Especially when you consider that these mini-cranes are intended for use inside or close to buildings where people are working. The possibility that a crane could tilt or topple due to overload or overreach had to be ruled out.

Sensors

Hoeflon therefore went in search of a partner capable of supporting them in achieving the required level of safety. Initial contact with Rotero at an industry event soon led to the development of a custom series of unique 'inclinosensors': one dual-axis sensor (±90°) for horizontal mounting and two single-axis sensors for vertical mounting (360°).

'Four of the five compact cranes can fit through a doorway'

David Fokker: 'This type of sensor is able to measure both angle and tilt. The steeper the angle of the boom and jib, the greater the load that the crane can hoist. Combined with the crane geometry, these values instantaneously determine whether the crane is still within the safe operating envelope. For the user, this means you can always rely on the crane to stop automatically when you attempt to place a load that is too heavy, too far away.'

Unique

The sensors are custom-produced for Hoeflon. As a result, at delivery each sensor has its own NodeID, enabling Hoeflon to incorporate the sensor directly into the crane control system. Moreover, the intended mounting site and position of each sensor is stated on the part itself. David Fokker: 'This prevents inadvertent swapping of the single-axis sensors during the assembly process.'

Ready to face the world

The significant time and effort invested in the development of the mini cranes has paid off. Hoeflon already exports 85% of its cranes abroad, and the company is also experiencing strong growth.

'This is the result of our investment over recent years in developing the perfect crane,' says David Fokker. 'Now that we have it, we can focus on production, which is why we moved to new premises four years ago. Here we can ramp up the manufacturing capacity to meet the expected growth in order volumes. It's a wonderful, exciting time.'