

# Tie-bar-less. The economical machine concept

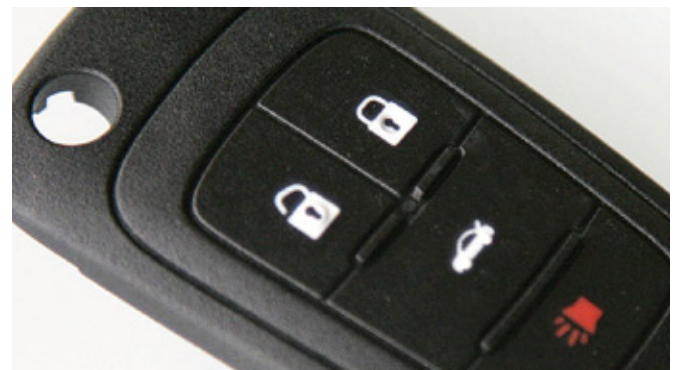
Tie-bar-less machines by ENGEL offer a decisive advantage: **free access to the clamping unit.** This means that robots can work faster without needing to avoid obstacles. And you can change bulky moulds easily in the shortest possible time.

More flexibility, efficiency and economy in production are the results. For more than 20 years. **Tried and trusted 50,000 times.**



Christoph Faßhauer  
Executive Board Oechsler AG, Deutschland

“Many of our applications require larger and more complex moulds, as more functions are packed into applications so that, for example, several solenoids are required or the tools have to cover a number of component variants. In addition, from the very outset when designing the system, we need to plan for a greater number of cavities in order to ensure cost-effective production. Thus, mould technology has become more complex and more demanding, resulting in greater space requirements at the mould fixing platen.



Because the ENGEL victory machines don't have tie-bars, we can use the fixing platens to the full. This ample free space gives us the freedom to deploy larger and more bulky moulds - on the same machines and using the same clamping force. We can thus deploy large moulds on relatively small machines. This means savings both in terms of investment and in valuable machine deployment space. Another benefit: Robots can quickly and efficiently take off the moulded parts from the side because there are no tie-bars in the way.“