

Expressway to safety.

**THE SAFE CHOICE
TO MAINTAIN
A COMPETITIVE EDGE.**



open 
SAFETY

MACHINE MANUFACTURERS FACE CONFLICTING GOALS



Set in stone: Customer needs

- more functionality
- more productivity
- improved energy efficiency
- a smaller footprint
- lower investment expenses
- minimal maintenance

Set in stone: Regulations

- machinery directives
- IEC 61508

Set in stone: Competitive environment

- rushed development
- Vtime-to-market pressure

Set in sight: the solution

One system makes machine manufacturing more flexible, more productive, more efficient, smaller and simpler. A fully integrated safety system featuring intelligent drive safety functions, openSAFETY provides increased safety in the workplace while at the same time enabling users to boost overall machine efficiency and productivity.

- ensuring faster development, certification and production
- ensuring quick achievement of Machinery Directive compliance
- ensuring total independence from the choice of control technology

**openSAFETY opens up
a safe path to the future.**

HOW CAN I SAFELY STOP MY COMPETITORS COLD?

10x faster.

We learned this back in driving school: stopping distance = reaction distance + braking distance. The braking distance is determined by physical conditions. The reaction distance depends on a system's electronics.

openSAFETY provides live monitoring for motors and safety devices, which results in 10 times shorter fault response times compared to conventional safety circuits. openSAFETY hits the brakes sooner than other safety systems.

If you can stop sooner, you can drive faster. If less room is needed to come to a halt, designs can be smaller. If mechanical components are subject to less impact energy, constructions can be lighter.

Integrating tried and tested safety will get you to the market faster.

openSAFETY requires no discrete wiring. It travels on the fieldbus. And as a drive-integrated feature, it is directly connected to the motors.

All of that saves time when designing the electrical system and enables faster development of options and variants for modular machines.



openSAFETY is not a hard-wired solution; instead, it is based on software networking and virtual testing, which in effect cuts down on tedious prototyping runs during development and, because cabling is done away with, delivers higher availability in production.

openSAFETY is the only integrated safety system with no strings attached. While it is best suited to Ethernet-based industrial networks, it fulfills its function on any widely used platform. Users therefore do not have to bother with multiple developments for markets with different control system preferences.

openSAFETY is TÜV certified for hardware, protocol, and safe functions according to IEC, which saves time and effort in the certification process for a machine as a whole.

Proportionate reactions will get you back into production faster.

openSAFETY can do more than just bring the system to a screeching halt in imminent danger. Digital inputs are complemented by analog inputs and direct motor monitoring via safeMC. openSAFETY is the only network-enabled, certified safety system to provide a comprehensive range of smart safe reactions above and beyond the commonly featured STO (Safe Torque Off).

The protocol therefore enables nuanced reactions to various dangerous conditions. As a result braking to protect human life will not inevitably cause destruction to material assets like tools, dies and machine parts. And regular productive operation can swiftly resume as soon as conditions are clear again. The same goes for those occasions when a component is replaced because no configuration work is required.

openSAFETY: expressway to safety!

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WE FEEL SAFE ABOUT IT

