







### **Future-oriented mixer automatisation**

Our production management for safety and efficiency

**MTI control system** – fully complies with the standards of the European Machinery Directive 2006/42/EG

**MTI control system** – safe and reliable operation by integrated fault management and guided operator support

**MTI control system** – your reliable partner for a smooth production flow in manual and automatic operation mode

**MTI control system** – modular design with strategy, reduction of components variety and optimised spare part inventory

- Modern and reliable system architecture with Profi Net / Profi Safe
- Fast and simple installation and start up by "Plug & Mix"
- Integrated fault management
- Worldwide spare part supply through our partners
- Integrated remote service







# SYSTEMATIC SAFETY - WORLDWIDE

The MTI control system is setting new standards for mixing and processing equipment with regard to safety, efficiency, economic benefits and reliability.

The requirements of the European Machinery Directive 2006/42/EG have been the starting point for this technical development.

Not only fulfilling, but rather exceeding the requirements has always been our motivation for innovation, which inspires MTI to highest performance. Out of this passion for the best MTI has developed the new control system.

Our secret of success? More than four decades of experience and competence as well as the ability to understand any customer's challenge as a chance for innovation.



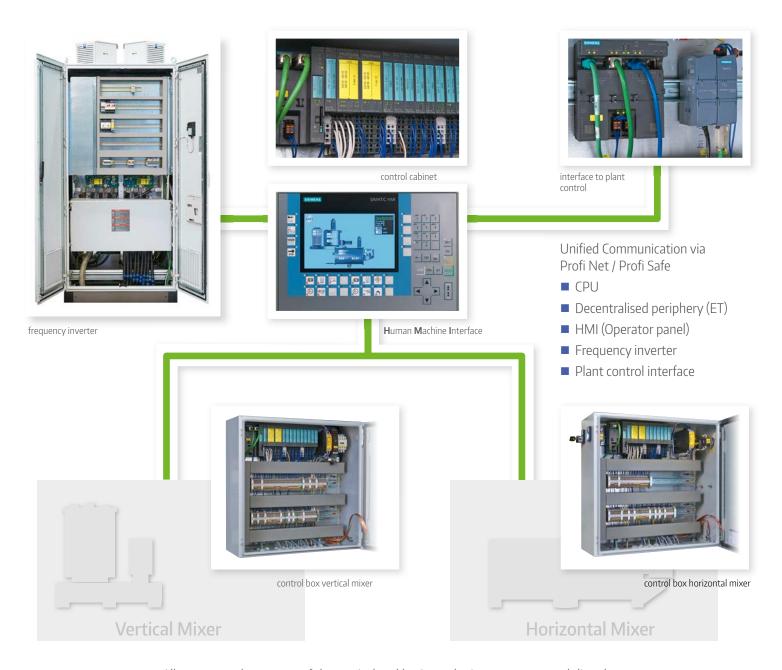
"One Global Level of Safety"

By using one standardised control system for all customers worldwide MTI consequently continues the way of "One Global Level of Safety". As a minimum requirement, all MTI control systems are in full compliance with the European Machinery Directive 2006/42/EG and if requested extended by national requirements. State of the Art technology is not only developed by MTI, it is the solid base of every day's work.

All MTI controls are programmed with the SIEMENS Totally Integrated Automation Portal (TIA-Portal). This clear system structure allows the optimum integration of all different control components in one uniform system environment.

With this strategy MTI sets standards again for the entire industry.

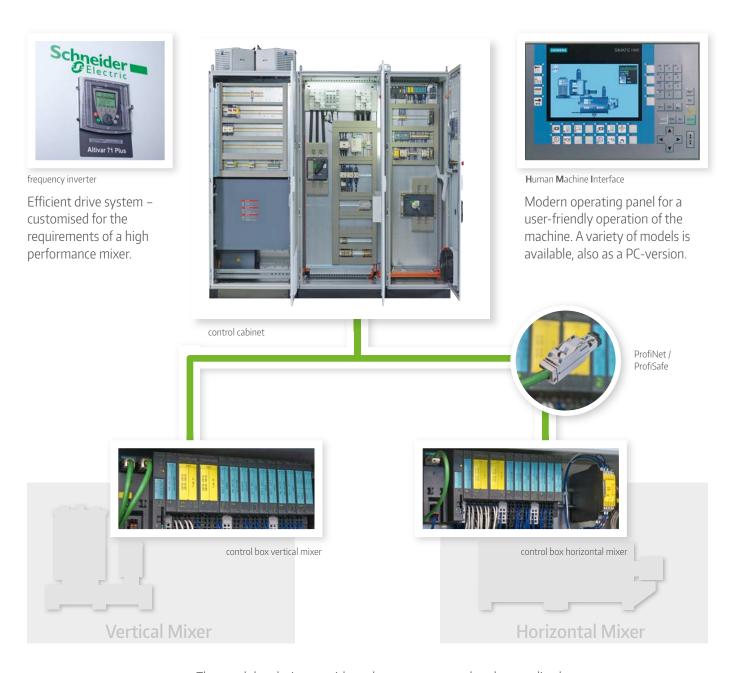
## THE NETWORK



All sensors and actuators of the vertical and horizontal mixer are connected directly to their own decentralised periphery.

The bidirectional signal exchange with the central control (CPU) inside the main control cabinet is exclusively made by one single Profi Net/Profi Safe cable.

# THE ARCHITECTURE



The modular design – with a clear structure and a decentralised location of the control-components – enables a considerable reduction of the item-diversity and cabling.

Less sources for faults, more safety – more EFFICIENCY

# **OUR FAULT MANAGEMENT**



#### **Hot Swapping**

Should there be a problem despite the high quality of the selected components, the affected module can easily be replaced anytime. By this "Hot Swapping" possibility the affected component can be removed and replaced by a new one. The machine is immediately fully operative again.







### System diagnosis

Each of the SIMATEC ET 200 modules has status-LEDs which inform about the current condition of each individual signal. Thanks to this technology the fault diagnosis is much easier and faster. A quick look at the HMI or at the affected SIMATEC ET 200 module and the fault is located fast and efficiently.

The time consuming and complicated test of each individual component inside the control cabinet is now history. The MTI control system offers you an active system diagnosis.

#### OUR PRODUCTION MANAGEMENT FOR SAFETY AND EFFICIENCY





#### What if ...?

one of the main components – such as the CPU or the HMI – has to be replaced:

No problem!

Within the MTI control system this case has been considered, too. The CPU has a SIEMENS Micro Memory Card (MMC) on which the entire program is stored. Additionally the HMI has a SD-card with the complete software for the user-interface.

You simply remove one of these cards, replace the hardware and re-boot the system by using the specific memory card.

Solving a problem can be this easy.





### In case of emergency

Should there be a situation in which you require MTI-support we will be pleased to help you.

As a standard feature all MTI mixers are equipped with a remote service unit.

Adapters for GSM mobile connections or VPN connections are available.



Ohmstraße 8 32758 Detmold | Germany Tel. +49 (5231) 914 0 Fax +49 (5231) 914 299 info@mti-mixer.de | www.mti-mixer.de

Hotline +49 (5231) 914 0