



Industry 4.0 Solutions:  
**MEP<sup>®</sup>Manager**  
for the secure remote service



## Our solutions

### Hardware MEP®SmartDevice



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### Individual Software



Secure Remote Service

Machine Data Collecting

## For a secure monitoring and remote service of plants and machines

Remote Service for extruders



**Issue presented:** need to set up a global secure remote service

**Solution:** global secure service net

**Results:** Ca. 800 plant can now be monitored globally in a secure net. Cost saving through reduced travel times and expenses and quality improvement. Platform solution for Coperion service, clients and suppliers.

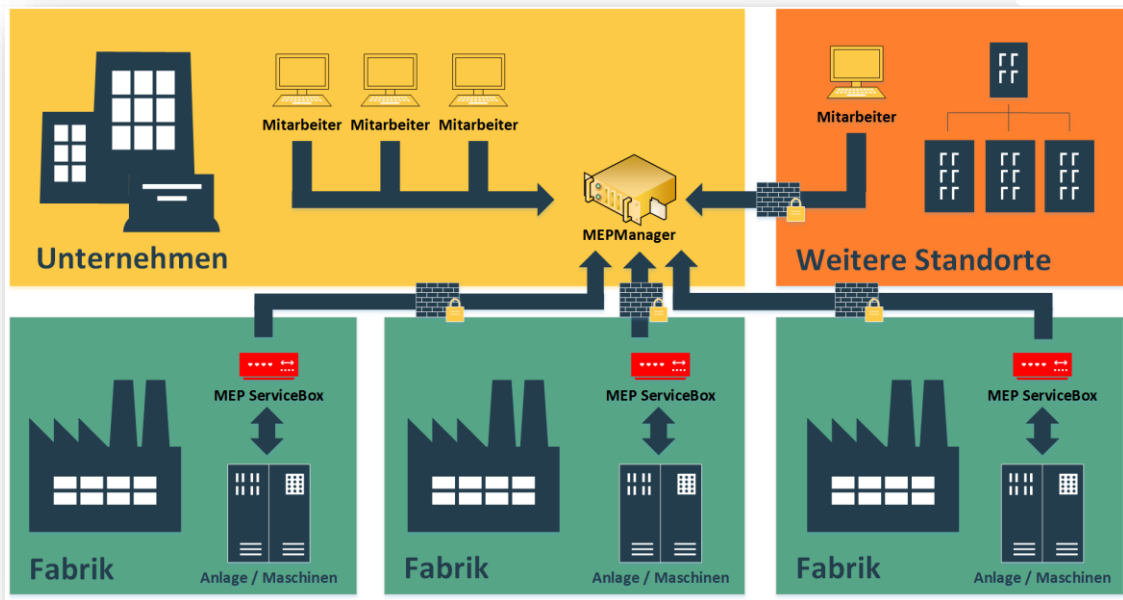
Machine data collecting for cement factories



**Issue presented:** need of global monitoring of cement factories

**Solutions:** plant visualisation with service data

**Results:** collection of data from different sensors taken forward to quality assurance. Protection against manipulation, saving of travel time and expenses. Time saving in service through reports.



## MEP®Manager: Remote service and remote maintenance

### The Software

Through the MEP®Manager INTEC International GmbH offers a service management system for the secure remote connection to industrial machines or plants that allows to visualize the data from the PLCs or from the sensors as well as to reset the PLC, create backups, etc.

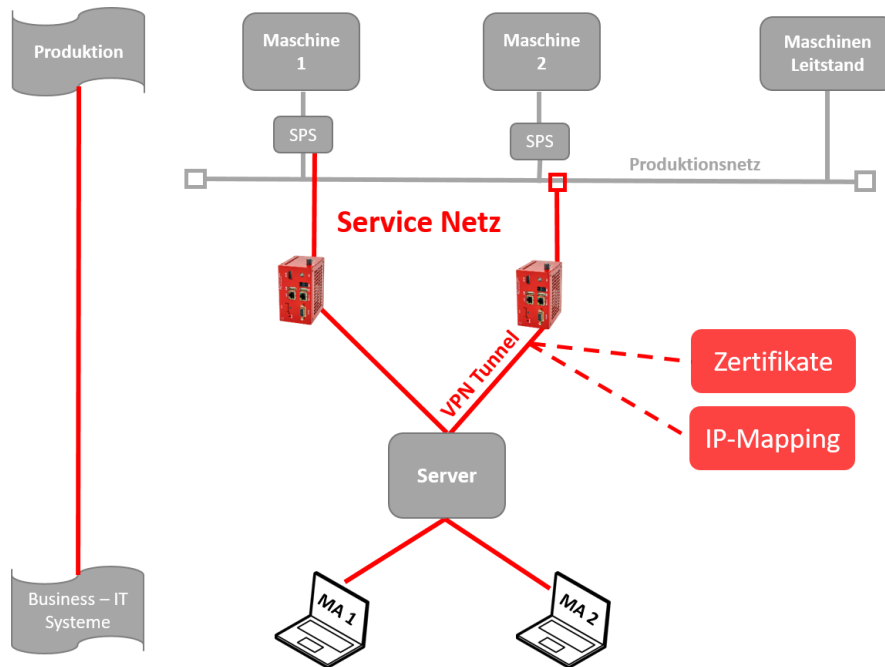
It is also possible to develop other business model and services, such as backup services, support when bringing a machine into service or pay-per-use-model services.

#### How to draw benefits from technique:

- The connection goes from the box to the Mep®Manager. The service technician then has to establish a connection to the box or a plant behind it.
- The service technician no longer has to drive on-site, but can also handle the urgent service while on the move.
- Service staff can be bundled and used efficiently while at the same time saving travel costs.
- The result is more completed service assignments, at a lower cost.

#### The latest state of the art from Baden-Württemberg in Germany

- Service become modern and timely.
- Those who implement and show innovation are also seen by their customers as an example to follow.
- MEP®Manager is so innovative that the state has acknowledged INTEC International GmbH as „Industry 4.0-Site“ in Baden-Württemberg.



## The secure connection

The MEP®Manager disposes of a sophisticated individual as well as role concept and a certificate management to insure that only the authorized persons can access to the system.

The combination of hardware and software secure the machine from manipulations and unauthorised penetrations. The service is started through a physical button on the machine. In this way not only is the machine side protected from an access of the IT, also the IT is protected from possible accesses from the machine side. After the request of service has been made, the access has to be confirmed by the related technician. This has already been proved by penetration tests and the security level has been successfully confirmed.

### Combination of hardware and software made secure through a dial-button

- The client decides when the service has to be made and he trusts the physical button
- Security of the client's business secret
- Certificates and firewall rules for the IT security

### Functions that every remote service should have:

By every remote access the security should be at first place. With the right security concepts and certificates the data bring the desired benefits and at the same time the company secrets are kept safe.

When speaking of data security it is also essential to provide user and group management, so that each person is able to see only the information of his interest and competence.

In terms of cost-effectiveness, attention must be paid to long-lasting hardware with industry-standard components, as well as long-lasting software in order to be able to achieve the best results in the future.



## MEP®SmartDevice

### The Hardware

Data collecting and data transfer as a flexible embedded system for machines, plants and technical systems is now made possible thanks to the products of the MEP® series. They allow the preventive maintenance and, in the event of malfunction, a simple and fast problem-solving remote access via secure internet connection.

#### Employment of MEP®SmartDevice:

- Set up of a cost efficient global service net
- Recording of valuable machine data

#### Central component of a remote service structure:

VPN Router, Data Recorder

- Date acquisition from PLCs, sensors and other devices
- Allocation of timestamps for every measured value
- Free eligible circular buffer
- Diverse interfaces
- Transfer of data to the central system

#### Functioning:

The MEP®SmartDevices are embedded industrial PC composed of add-on modules which are extensible to other different interfaces. Furthermore, the actual connection RS232 can also be reset to a RS422 or RS485.

On request we can deliver the IPC with your brand on it!

<b>Type:</b>	<b>MEP® SmartDevice</b>
<b>Voltage supply:</b>	12V – 24V DC
<b>Processor:</b>	ARM-Cortex A9 Quadcore 4x 1 Ghz
<b>Graphic:</b>	onboard
<b>Main storage:</b>	1 GB DDR3 onboard
<b>Mass storage:</b>	1 GB NAND Flash onboard 1GB – 128GB Industrial Grad microSD(HC)
<b>Case (BxLxH in mm):</b>	60x95x110
<b>Extensions:</b>	LAN: 2x USB: 2x HDMI: 1x CAN: 1x GPI/O: 3x (24V) μSD: 1x RS232: 1x
<b>cabling:</b>	2 PIN Terminal-Block for voltage storage/supply
<b>switch:</b>	On / Off
<b>Taste:</b>	Reset Dial (int. LED)
<b>assembly:</b>	35mm DIN rail
<b>Temperature range:</b>	0 °C – 70 °C
<b>Operating system:</b>	LINUX (Kernel 3.19.5)
<b>Status LED:</b>	Power Dial / Connect eMMC
<b>Certification mask:</b>	CE
<b>Beeper:</b>	onboard