

The future starts now

GO!

Achieving greater efficiency with systems engineering

*A guide to saving time, money and
sparing your nerves.*



stay connected



The future awaits you

We need change to effectively counter ever greater competitive and financial pressure.

There are solutions for electrical machinery and plant installations that redefine energy, signal, and data transfer, thereby minimizing and easing financial pressure.

It's enough

to make you scream!

There is a need for new mechanical and plant engineering solutions.

Question installation concepts. Eliminate stand-alone solutions. Opt for comprehensive automation systems instead. What you need to do: **Don't wait GO! now**

Does this sound familiar?

- The control cabinet is out of space
- Construction and machinery concepts, which have evolved over the years, barely support economical production
- A shortage of skilled workers
- Too many parts from too many suppliers
- Increased wiring and activation work because individual components don't work well with one another
- Subsequent expansions and modifications over the machine's lifespan
- Pressure to meet deadlines



Murrelektronik will take the decisive step with you.

Allowing you to experience uncompromising cost-effectiveness.



Major potential It's time

Find cost saving
up to 30% with
Murrelektronik.

Scientifically proven:

The DESINA **study project** at the Technical University of Munich systematically examined decentralized and conventional installation concepts and their resultant savings potential. The study results are confirmed by our practical experience as well as references from companies of all sizes in a range of industries.



The following factors provide machinery installation with new, economically ideal function fields that make cost savings of up to 30% possible:

- Decentralized automation technology – components are taken out of the control cabinet and placed next to the process.
- Use of systemic installation technology – coordinated system modules instead of different individual components.



Take the first step into the future today! For economical electrical installation concepts – bring your industry expertise together with our automation know-how.

Murrelektronik's installation solutions offer you:

- Shorter lead times from construction through start up
- Cost saving installation technologies
- Future viability thanks to cutting-edge technologies
- Compact automation systems with optimum diagnostics
- Systems that work together and generate savings for all areas

Explore a

systematic approach!

The Murrelektronik approach takes into account the interplay of all the areas.

No
installation
errors

Less
component
diversity

Greater efficiency
thanks to modular
activation

Reduced
project
planning

GO!

**Synergies
and process
savings**
for all areas

Installation costs
using a series machine
as an example

Impact on costs / time

Proportion of costs / machine



Construction

70 %



Production

20 %



Assembly / installation

10 %

10 %

20 %

70 %

A balanced approach

Reduced workload

in terms of
construction.

Major impact

on
installation.

The installation technology of machinery and plants can be optimized at any point along the value chain.

It's all about choosing the right path at the start – for example, at the construction stage. This is where decisions have to be made regarding how power, data, and signal paths are defined, 70 % of a machine's costs are determined during the construction stage.

Remarkable!

Productivity and quality are increased

30%



This is your savings potential.

Expected installation costs

Construction



Purchasing



Installation



Software



Activation



Service



Production



Installation costs with system solutions: savings every step of the way

Construction



Purchasing



Installation



Software



Activation



Service



Production



Construction

The installation concept is defined at the construction stage. This determines the course of the subsequent processes. A significant portion of the cost-effectiveness of machines and plants is generated at this stage.

Purchasing

The chosen installation solution has a direct impact on purchasing. The number of different parts to be procured diminishes. Additional advantages include verified quality, delivery reliability, a global sales network and fewer suppliers.

Installation

Decentralized, streamlined, and flawless installation is the core idea when it comes to installation technology. Huge time savings can be achieved with the aid of standardized connectors. This results in a lower error rate. It's plug-and-play time!

Software

The time spent on programming is reduced thanks to intelligent software functions within Murrelektronik systems. What's more, standardization is made considerably easier. Connection to higher level software systems is supported.

Activation

Decentralization of the I/O systems makes ongoing part activations possible and reduces their activation time. The diagnostics in our modular system minimize the troubleshooting workload.

Service

Industrial quality, durable design, and EMC-resistant electronics guarantee long operating times, even in tough environments. Subsequent modifications and additions are easy to make thanks to modularity and functionality.

Production

With the installation technology being decentralized, less space is needed, thus freeing up valuable production space. A new dimension in, and level of, availability are achieved thanks to diagnostics information. The option of IIoT connections opens up new productivity potential.

What we can do for you.



As your consulting partner, Murrelektronik will set up your machines and plants with the future in mind, be it for new concepts or retrofits. We are technophiles. We can identify the cost drivers in your installation and will present you with solutions. We think holistically – in terms of systems rather than components. This enables us to deliver installation solutions perfectly tailored to you.

Our experts actively help shape the future within the following organizations:

- IO-Link Consortium
- German Electrical and Electronic Manufacturers' Association (ZVEI), Industry 4.0
- ODVA EtherNet/IP user organization
- PROFIBUS User Organization (PNO)
- SPE Industrial Partner Network

We are your partner for:

- System analysis and advice
- Development of system solutions with our products
- Sound application support
- Training and qualification opportunities
- Advice regarding the latest and future technologies

Success stories

Bühler AG, Uzwil / Switzerland

For chocolate processing, Bühler transitioned its rolling mills from centralized machine control with conventional point-to-point wiring to a decentralized installation concept featuring plug and play. Preassembled cables and plug-in connectors and the shifting of intelligence to sensors and actuators reduced the number of terminals and therefore the size of the control cabinet by half. The low number of cables running between the control cabinet and machine likewise results in clarity and transparency. The time it took to connect the machine was reduced by a factor of 2.5. The retrofitting of

Murrelektronik's Cube67 did not result in any material technology savings, but it did significantly reduce the installation time required for activation – which applies to more than 150 machines a year.

Armin Metzger,
Head of Machine Control Systems & Standards,
Consumer Foods Automation



SOMIC Verpackungsmaschinen **GmbH & Co. KG,** Amerang / Germany

Flexible modularity of the functional units is an absolute must in our modular system. Murrelektronik's installation technology is fully integrated into this as it meets all the system technology requirements. Connecting the modules is simple, standardized, and open.

Eric Lah,
Head of Construction and Electrics



SN Maschinenbau GmbH, Wipperfürth / Germany

The switch from single wiring in individual terminal boxes to decentralized machine installation gave us material and time savings of up to 70%. What's more, the introduction of preinstalled function modules has made our construction and assembly quicker.

Jan Kronenberg,
Head of Electrical Engineering





stay connected

Talk to us!

We will happily develop a concept tailored to your needs and show you where you can find savings.

www.murrelektronik.com

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Our social responsibility encompasses all of the company's actions. We also ensure that the production chain for our brochures is eco-friendly.