Plug & Produce A case study of MODULAR PRODUCTION thanks to MTP (Module Type Package).

WHY MODULAR PRODUCTION ? (D), which was newly opened in 2020. When selecting system partners for its automation solutions, Merck attaches the greatest importance to open platforms



Source: www.namur.net/en/



Merck, a leading science and technology company, is automating the laboratory ivironment in addition to digitalizing production at its global HQ in Darmstadt and the independence of individual applications. This should result in a more efficient interaction between production and R&D and accelerate the market laune of new products by up to 50%.

While automating laboratories was previously considered unthinkable, by applying this approach, the company is responding to the needs of a market th emands ever shorter lead times and customized products. In contrast to the pro duction hall, everyday work in a research laboratory is characterized primarily by the fact that systems regularly have to be reconfigured and work steps continually changed. This makes the laboratory an environment that, at first glance appears to have little automation potential.

lerck has found the key to success in modular production and is relying on an standard called Module Type Package (MTP). MTP is a solution approach at enables all the equipment within a central control system to communicate idently of the typically fragmented hardware and software landscape in idual work steps are saved in completed modules and researchers car combine them into new applications and processes in jus a few clicks and without the need for programming knowledge. One important benefit is that MTP modules can be transferred seamlessly from the laborate production: formulas developed in R&D can be cansferred to mass production reduc

MTP – MODULE TYPE PACKAGE

- MTP is a vendor independent description of production modules.
- It is the foundation for modular plant engineering by a «Plug&Produce» approach.
- Concept defined and promoted by NAMUR, an international association of companies active in process industry.

THE ENGINEERING STEPS













Author: Giuseppe Menin

COPADATA // ISPE



fe Sciences and Process Industry Manager useppe.menin@copadata.com

	zenon HIGHLIGHTS	CUSTOMER BENEFITS
ns ngly	Individual components and equipment can communicate in one single environment	PLUG & PRODUCE APPROACH FOR INDIVIDUAL EQUIPMENT
zed ht	 Single process steps can be saved and newly combined as modules whenever needed zenon thereby enables a rapid transfer of MTP modules from the laboratory to the 	SCALABILITY OF MODULES FROM RESEARCH TO PRODUCTION
	production life	NO PROGRAMMING SKILLS REQUIRED