

HỘI THẢO TRỰC TUYẾN

Chương trình Hợp tác cùng Đối tác Chế tạo máy

Thời gian: 9:00 – 11:00 Thứ Năm, ngày 7 tháng 5 năm 2020

[siemens.com.vn](https://www.siemens.com.vn)

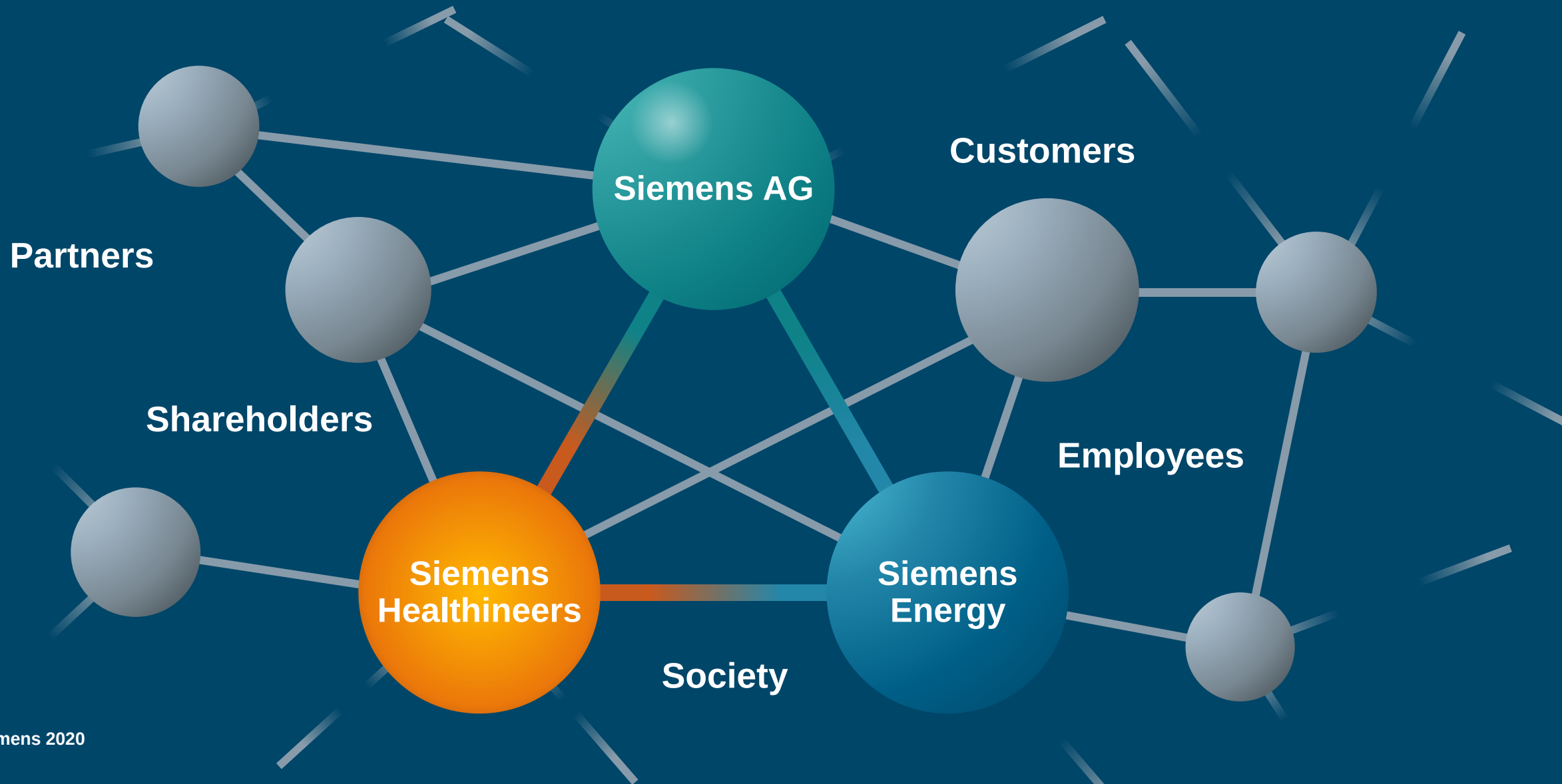
Nội dung	Người trình bày
1 Giới thiệu "Chương trình Hợp tác cùng Đối tác Chế tạo máy"	Tô Minh Hải
2 Tổng quan về Danh mục Tự động hóa	Lê Tiến Vinh
3 Tổng quan về Danh mục Truyền động điện	Phạm Vũ Quang Huy
4 Tổng quan về Danh mục Thiết bị điện	Võ Đình Thịnh
5 Hỏi đáp	
6 Thực hành thiết kế dự án với TIA selection tool	Lê Tiến Vinh & Trần Cửu Long
7 Hỏi đáp	

Nội dung	Người trình bày
1 Giới thiệu "Chương trình Hợp tác cùng Đối tác Chế tạo máy"	Tô Minh Hải
2 Tổng quan về Danh mục Tự động hóa	Lê Tiến Vinh
3 Tổng quan về Danh mục Truyền động điện	Phạm Vũ Quang Huy
4 Tổng quan về Danh mục Thiết bị điện	Võ Đình Thịnh
5 Hỏi đáp	
6 Thực hành thiết kế dự án với TIA selection tool	Lê Tiến Vinh & Trần Cửu Long
7 Hỏi đáp	

OEM Initiative Program

The Siemens Ecosystem

SIEMENS
Ingenuity for life



The “new” Siemens AG

SIEMENS
Ingenuity for life

Digital Industries



Smart Infrastructure



Siemens Mobility



Siemens in Vietnam Milestones



Two industrial steam turbines & electrical equipment for Bai Bang Paper Company



First Magnetic Resonance System in the Friendship Hospital in Hanoi



Power Island for 1,500MW Ca Mau 1&2 CCPP & the long-term maintenance service contract in 2008



Power island for 750MW Nhon Trach 2 CCPP



Electrical package, automation system and gear units for Cong Thanh Cement Plant



Long-term service program contract extension for Phu My 3 CCPP



Supply contract of materials and services for 500kV Son La Substation



Technology transfer & motors/drives supply for e-Bus project of VinFast

1979 | 1993 | 1996 | 2002 | 2005 | 2008 | 2009 | 2010 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019



Opening of Representation Offices in Hanoi and Ho Chi Minh City



Establishment of Siemens Limited



Inauguration of Siemens Automation Systems Ltd.



Supply of Braumat solution for a number of large-scale breweries



Siemens Building Management System for Bitexco Financial Tower



SCADA/DMS and 110kV unmanned substations for Southern Power Corporation



BMS, Fire alarm system and Energy Management system for Deutsches Haus

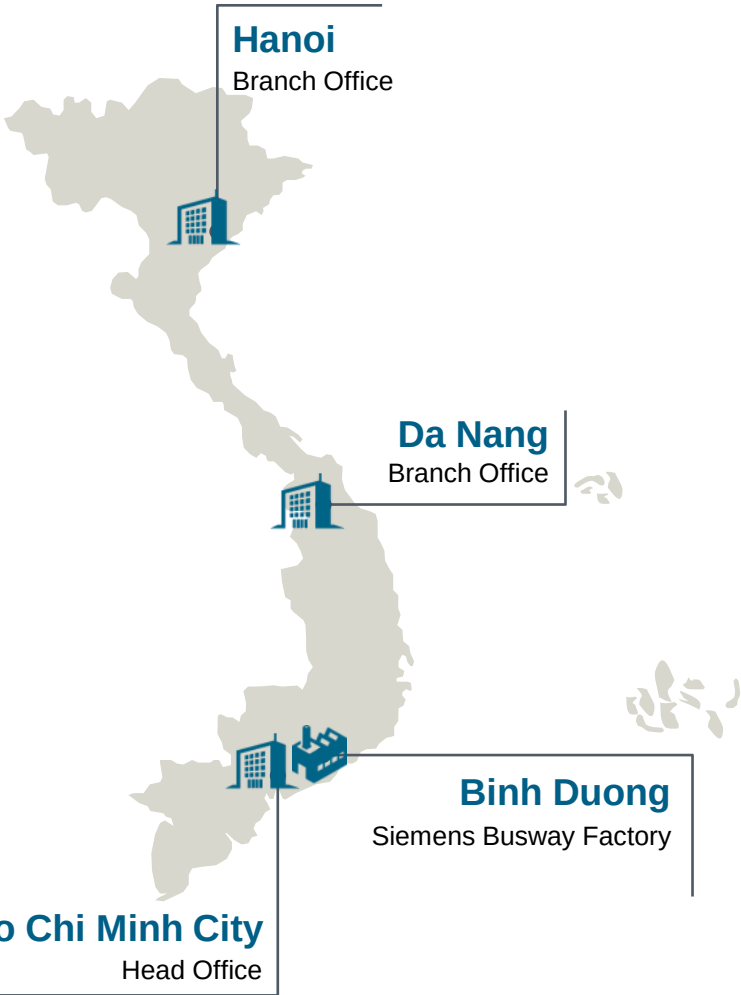


Low & Medium voltage products & systems for almost Vinhomes CentralPark project



Upgrade of Hiep Phuoc 1 steam power plant to a combined cycle power plant

Siemens in Vietnam
Innovation and market leader in a wide range of businesses



Digital Industries



Smart Infrastructure



Siemens Mobility



Siemens Energy*



SIEMENS Gamesa*
RENEWABLE ENERGY



SIEMENS
Healthineers



*Partial spinoff of Siemens Energy planned; transfer of majority stake in SGRE (67%) to new company planned

The automation portfolio for the Digital Enterprise with efficient proven automation components



Totally Integrated Automation »TIA for the Digital Enterprise«

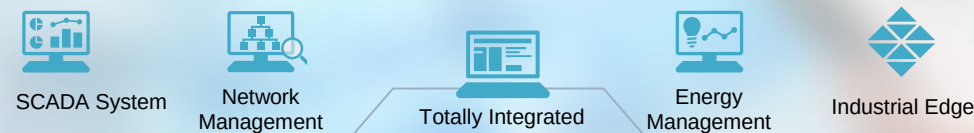
Cloud



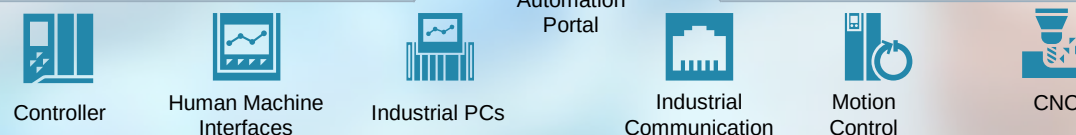
Management



Operations



Control



Field



Integrated Engineering



Industrial Communication



Industrial Security



Data Intelligence



Digital Industry Services

TIA Values

Our portfolio focuses on customer needs
with software, automation and services



Factory Automation

SIEMENS
Ingenuity for life

SIMATIC PLC



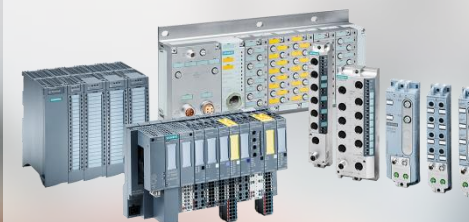
SIMATIC HMI



SIMATIC IPC



SIMATIC DP



Totally Integrated Automation



TIA Portal



PROFINET



Safety & Security



Energy Management

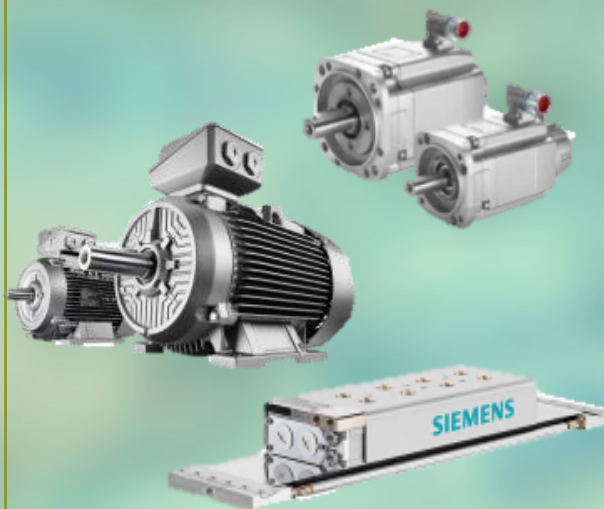
Motion Control

SIEMENS
Ingenuity for life

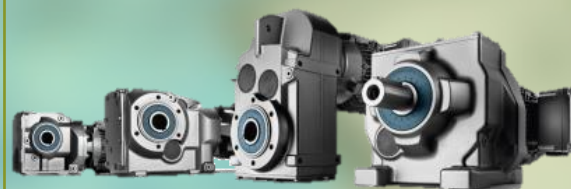
DRIVES



MOTORS



GEARED MOTOR



MACHINE TOOLS

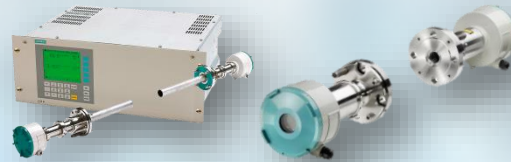


Process Automation

SIEMENS
Ingenuity for life



Process Instrumentation



Analytical Products



Industrial Communication
Identification and Locating



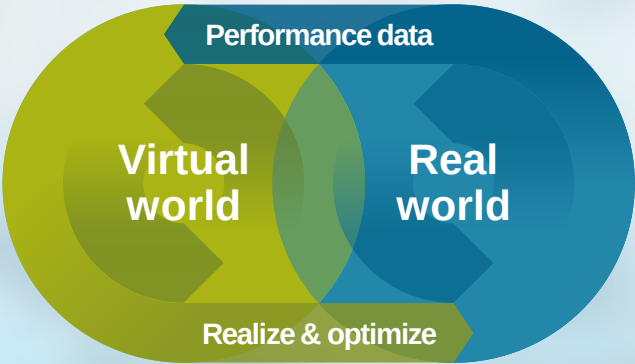
SIMATIC PCS 7 & DCS Hardware



Electrical Products



Power Distribution – SENTRON	Industry Controls – SIRIUS	Medium-voltage Products	Power distribution boards and Software



MindSphere

NX CAD	Teamcenter Manufacturing	NX Line Designer/MCD/ Automation Designer	Simatic IT	MindSphere Apps
Polarion			Camstar	Digital Lifecycle Service
Simcenter	NX CAM / Additive	Simit	WinCC/SCADA	Asset Performance Suite
Mentor Xpedition	Tecnomatix	TIA Portal	CNC Shop floor Mgt SW	
Mentor Capital	Mentor Valor	Simatic PCS7	Edge Apps	

Teamcenter, Comos, PlantSight

Industry Services provides services for the whole lifecycle of the customers machines, plants and factories



Industry Services



SITRAIN Vietnam Digital Industry Academy



Officially open since May 2018

> 20 **standardized training courses** on Factory Automation, Process Automation, Motion Control, CNC Automation Systems and Digital Enterprise

... together with **Custom-tailored courses**

Professional trainers from Siemens Vietnam & Siemens global

Over 300 courses so far

Highlighted customers: VinFast, SABECO, Coca-Cola, Heineken, Samsung, TetraPak, GROB-WERKE, etc.

More than 2,500 members on the Facebook group of SITRAIN Vietnam

Digital Technology Education Center in Dong Nai D-TEC



Established in mid 2019

Located inside Lilama 2 International Technology College, Long Thanh, Dong Nai Province

Offer training courses aligned with Industry 4.0 and Digitalization for Machine tools in Vietnam

All training programs are set up:

- based on curriculum from Siemens Germany
- adapted to Vietnamese language

Professional trainers from Siemens global



Siemens Vietnam OEM Initiative Program

OEM Initiative Program



**Direct support from
Siemens Vietnam**



Prototype Build



Site support



**OEM
Initiative
Program**

Direct support from Siemens Vietnam

- Technical knowhow transfer from Siemens, on product wise and application wise
- OEM local application & local developing, support guaranteed from Siemens by our local expertise and local expert
- Test run with Siemens demo
- Commercially support on OEM projects, especially mixed portfolio projects.

Prototype Build

Customer Scope:

- Mechanical system
- Cabinet Installation
- Mechanical Installation

Siemens Vietnam Scope:

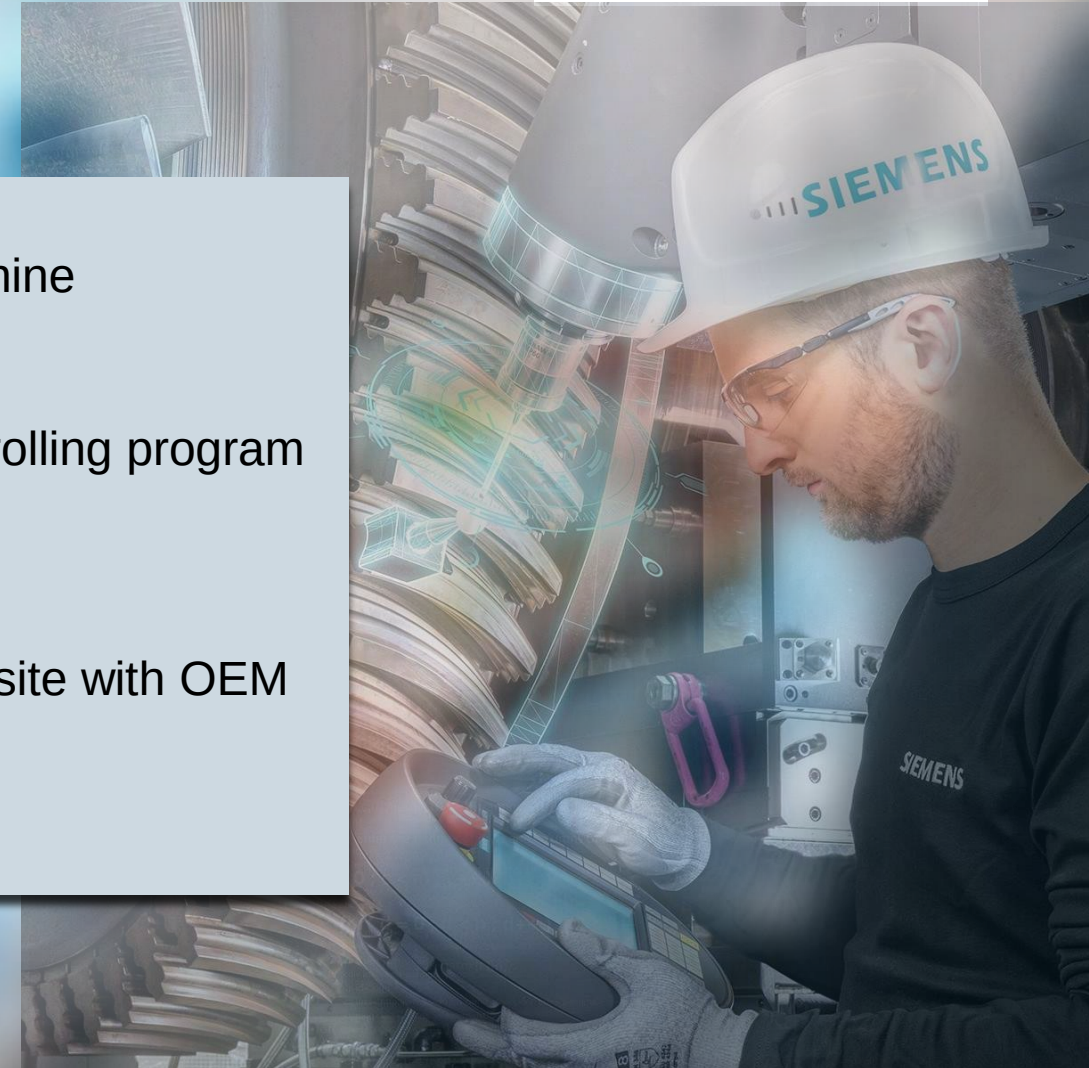
- Training products from Siemens Vietnam
- Free demo for OEM self-practice
- Demo Siemens devices for prototype machine
- PLC Programming support, commissioning and configurations

OEM Initiative Program



Site support

- On site support for prototype machine
- Onsite support for integrated controlling program with mechanical systems
- Commissioning, configurations onsite with OEM for prototype machine



Thank you for your attention!



To Minh Hai

Digital Industries - Siemens Vietnam

Deutsches Haus, 7th Floor

33 Le Duan Street, District 1, Ho Chi Minh City, Vietnam

Mobile: +84 (91) 803 5778

Email: to-minh.hai@siemens.com

www.siemens.com.vn

www.facebook.com/Siemens.Vietnam

Nội dung	Người trình bày
1 Giới thiệu "Chương trình Hợp tác cùng Đối tác Chế tạo máy"	Tô Minh Hải
2 Tổng quan về Danh mục Tự động hóa	Lê Tiến Vinh
3 Tổng quan về Danh mục Truyền động điện	Phạm Vũ Quang Huy
4 Tổng quan về Danh mục Thiết bị điện	Võ Đình Thịnh
5 Hỏi đáp	
6 Thực hành thiết kế dự án với TIA selection tool	Lê Tiến Vinh & Trần Cửu Long
7 Hỏi đáp	

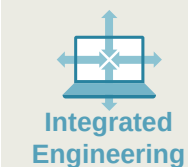
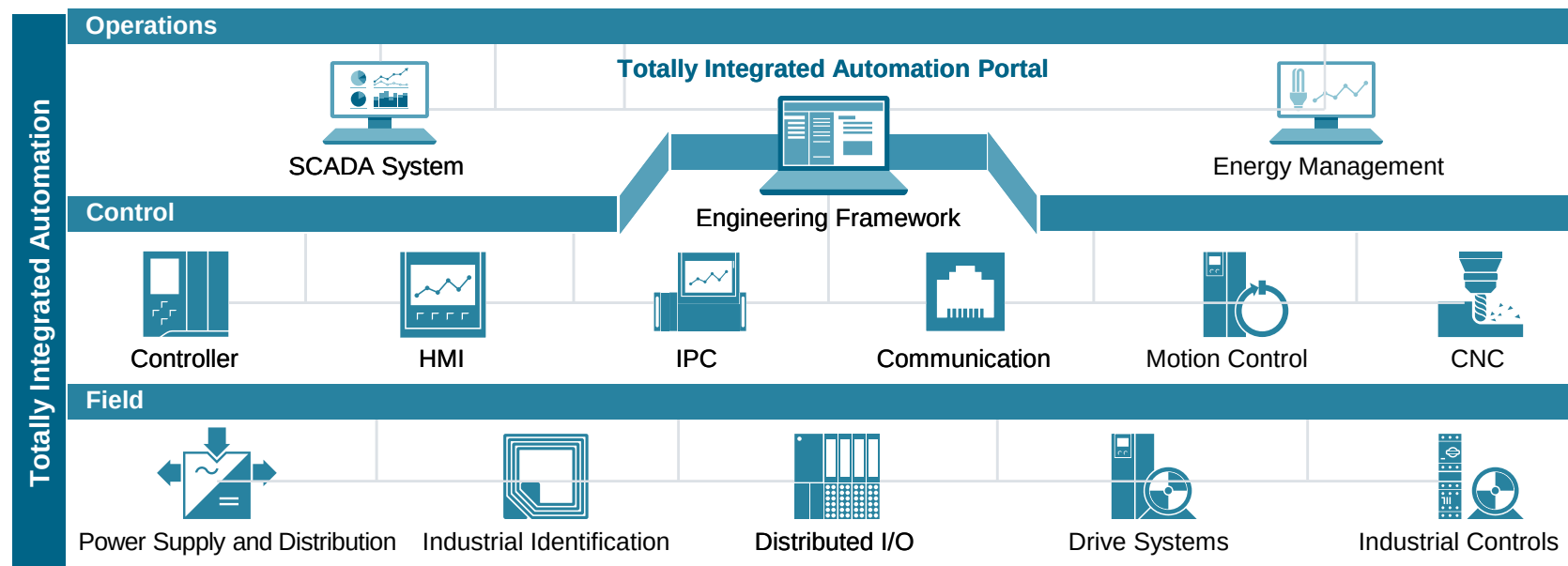
Factory Automation Products Portfolio

TIA- the automation portfolio for the Digital Enterprise with efficient interoperability of all automation components



Totally Integrated Automation

»TIA in the Digital Enterprise«

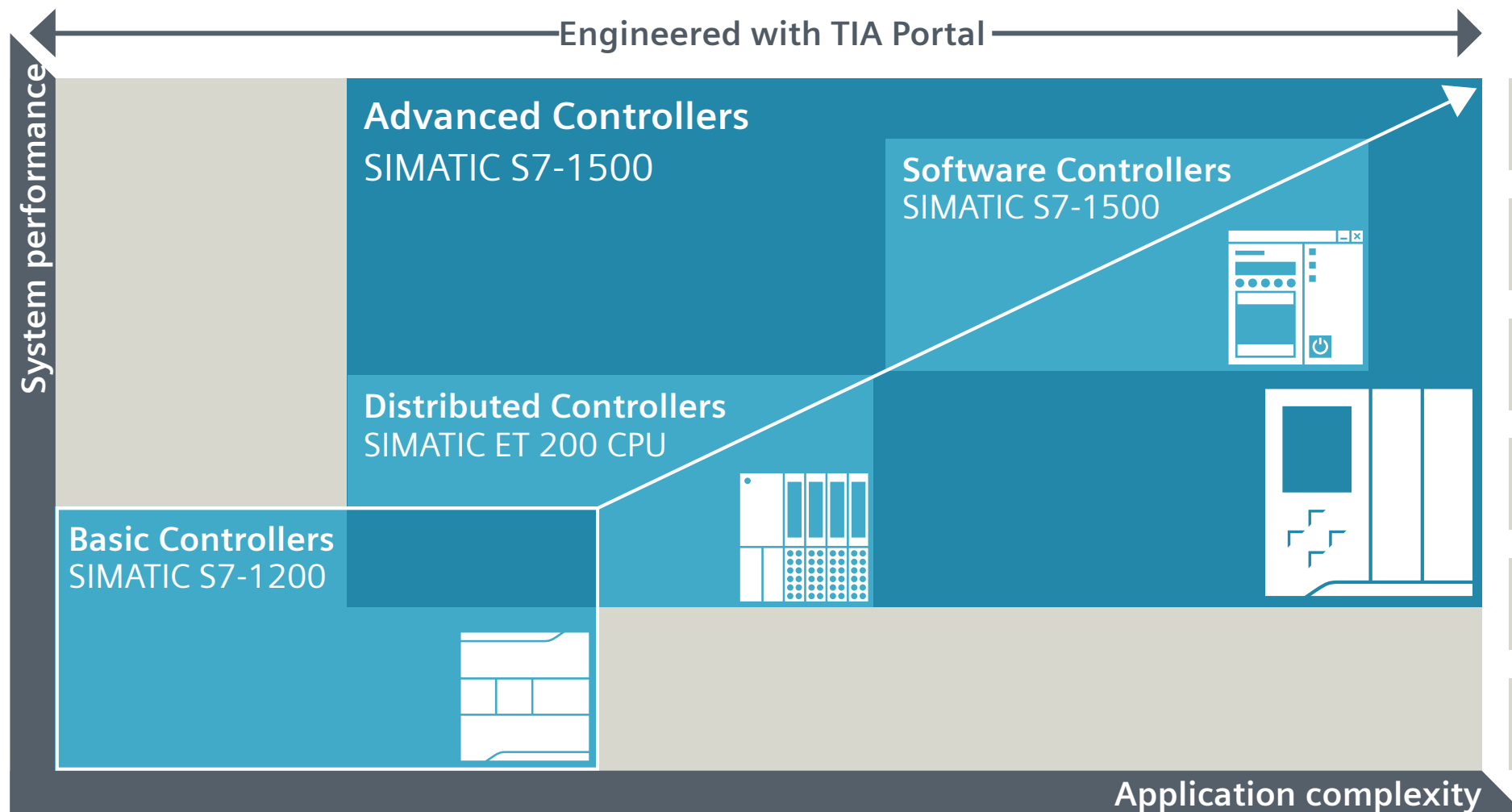


Industrial Data Management





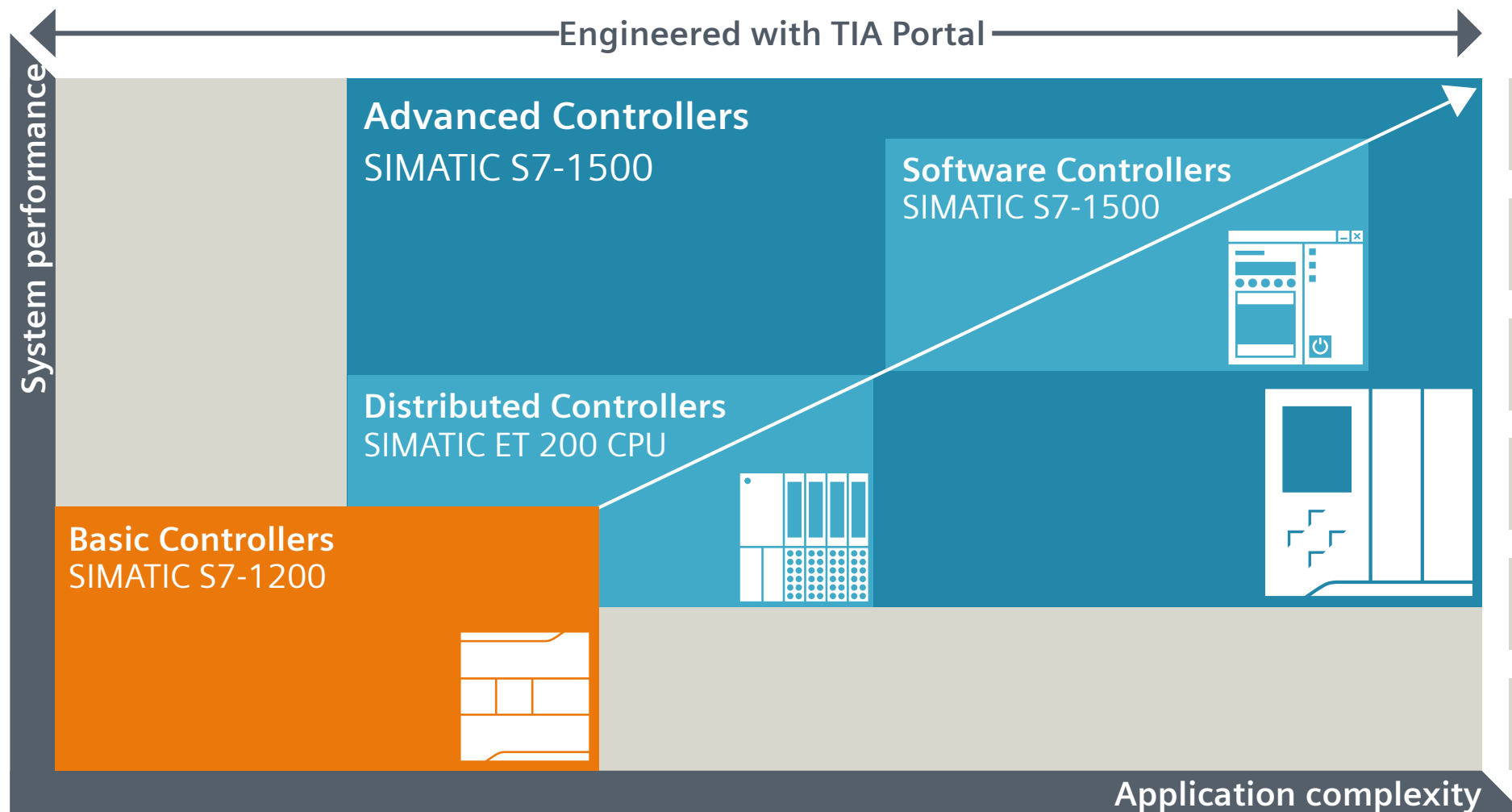
SIEMENS
Ingenuity for life



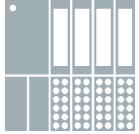
-  Efficient engineering
-  Innovative design
-  Reliable diagnostics
-  Safety Integrated
-  Security Integrated
-  Technology Integrated



SIEMENS
Ingenuity for life



-  Efficient engineering
-  Innovative design
-  Reliable diagnostics
-  Safety Integrated
-  Security Integrated
-  Technology Integrated



Basic Controller - SIMATIC S7-1200

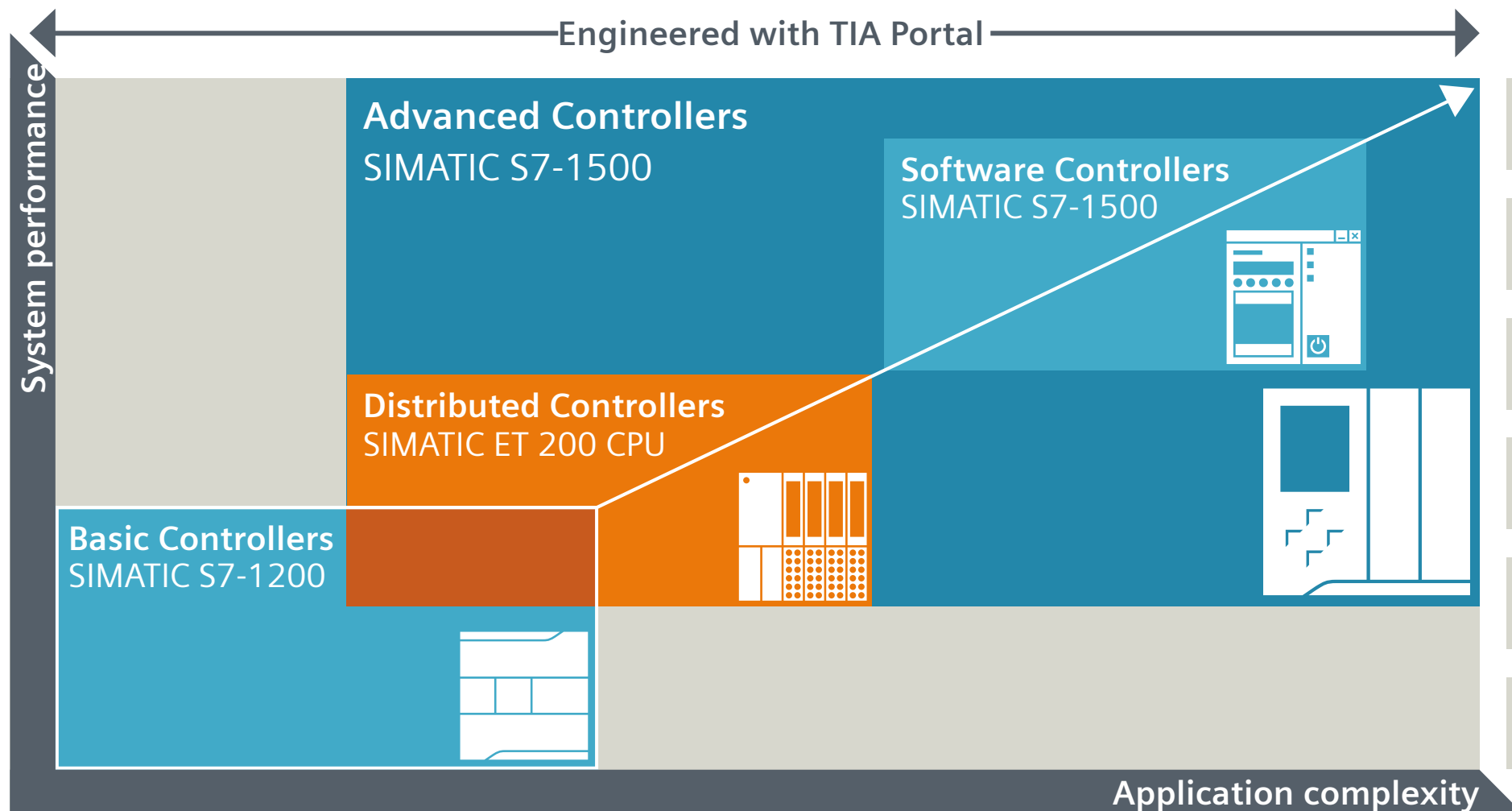
Feature / Function

Benefit

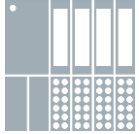




SIEMENS
Ingenuity for life



-  Efficient engineering
-  Innovative design
-  Reliable diagnostics
-  Safety Integrated
-  Security Integrated
-  Technology Integrated



Distributed Controller - SIMATIC ET 200 CPU



Feature / Function

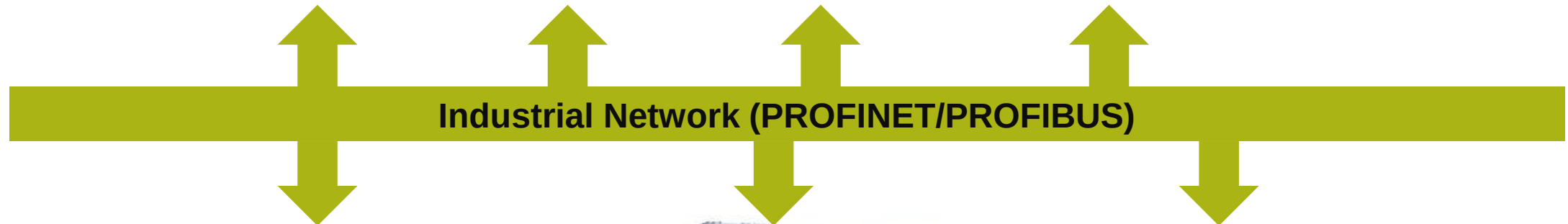
Benefit

S7-1200 features



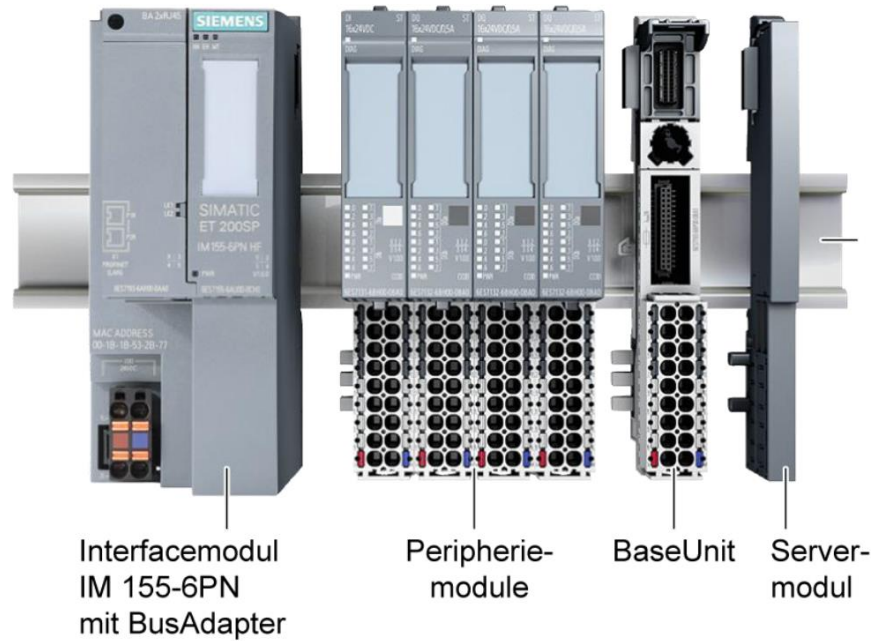


SIEMENS
Ingenuity for life





SIMATIC ET 200SP



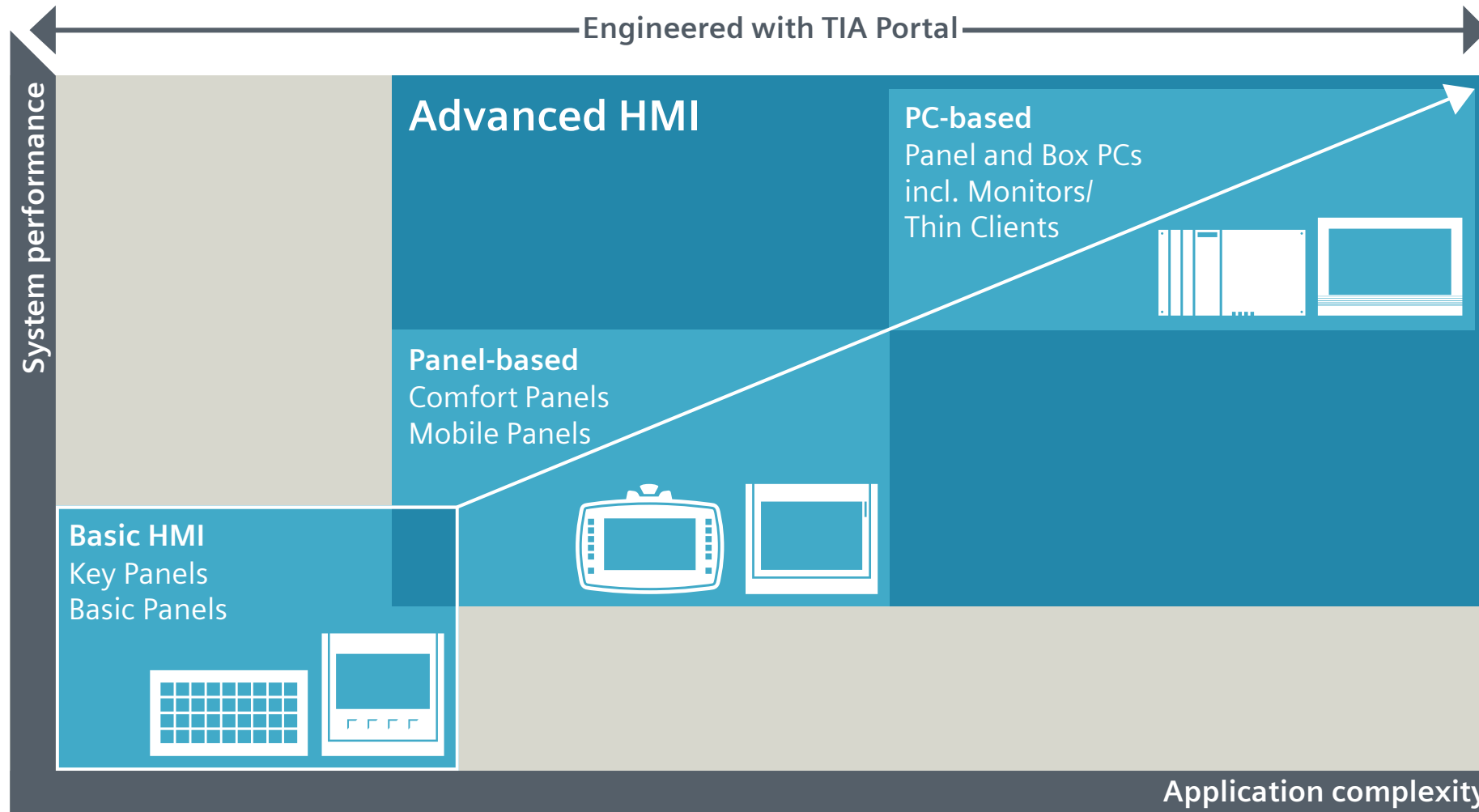
Feature

Interface module
I/O modules

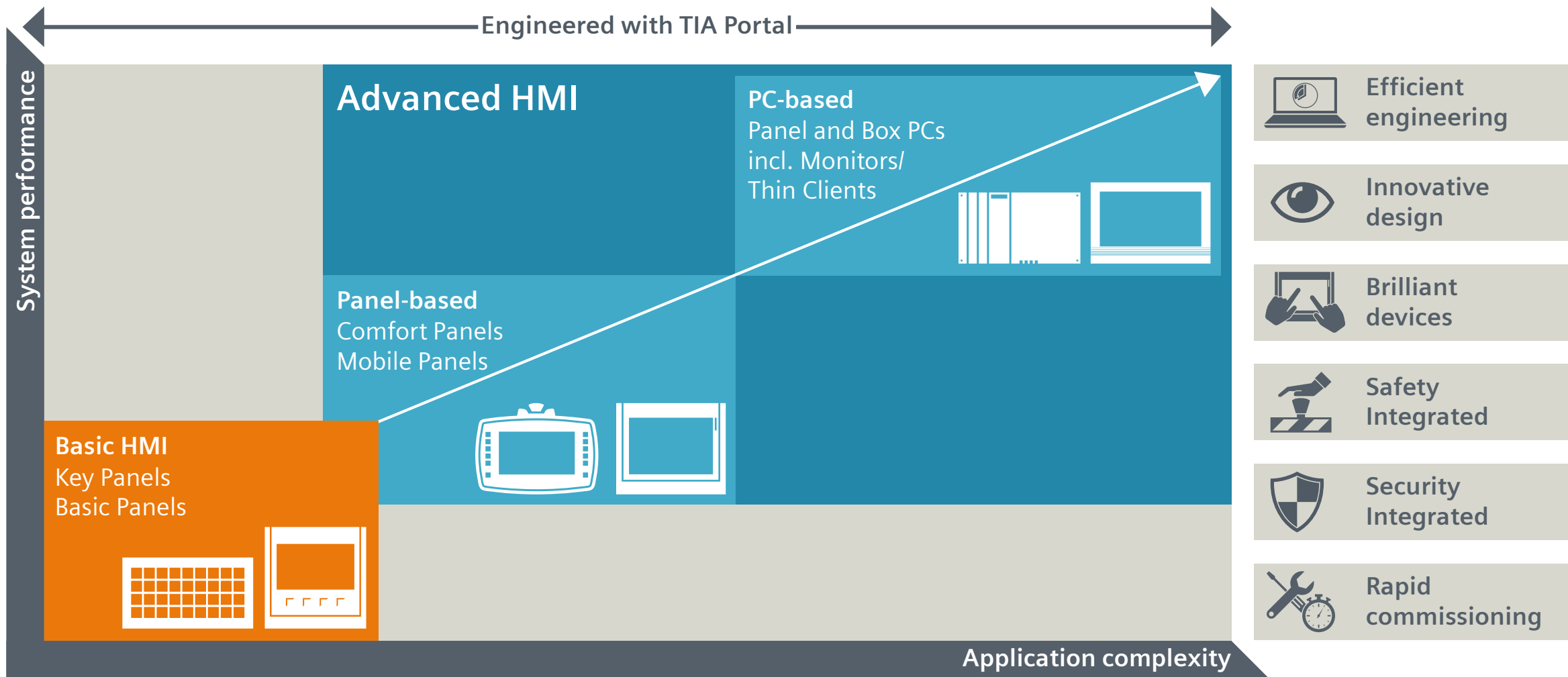
BaseUnit:
Light-colored: new load group
Dark: continued load group
Long: +10 auxiliary terminals

Benefit

- Flexible connection to PROFINET/PROFIBUS via copper or fiber optic
 - Large selection of I/O modules flexible in use
-
- Reduced module variance through module/BaseUnit combination
 - 1- to 3-conductor connection with the same space requirements



- Efficient engineering
- Innovative design
- Brilliant devices
- Safety Integrated
- Security Integrated
- Rapid commissioning



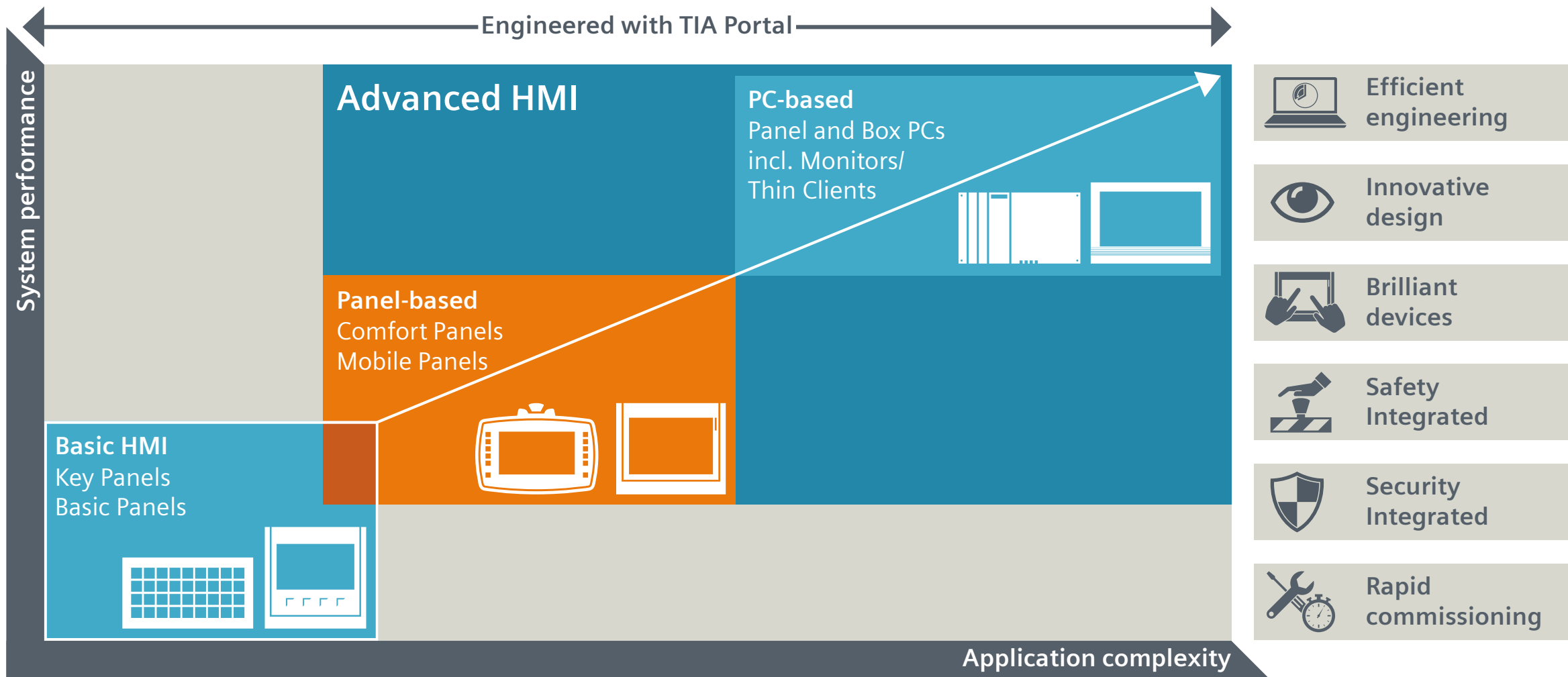


Basic Panels 2nd Generation

Feature / Function

Benefit



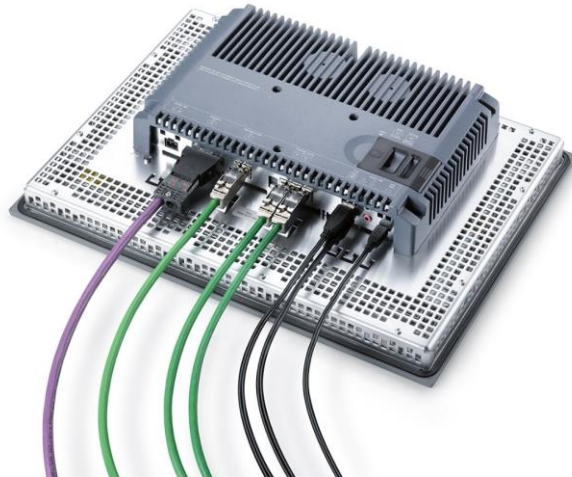




Comfort Panels

Feature / Function

Benefit





SIMATIC HMI (machine-oriented)

SCADA

MES

**WinCC Comfort
(TIA Portal)**
for panel-based
solutions

**WinCC Advanced
(TIA Portal)**
for PC-based single-
user solutions

**WinCC
Professional**
the SCADA
system in the
TIA Portal

WinCC V7
The standard
SCADA system

**WinCC
Open Architecture**
The specialized /
customer-specific
SCADA system



Networking nearby Machines - With SCALANCE X-000, X-100



Function / Feature

Benefit

Thank you for your attention!



Le Tien Vinh

Factory Automation

Digital Industries - Siemens Vietnam

Deutsches Haus, 7th Floor

33 Le Duan Street, District 1, Ho Chi Minh City, Vietnam

Mobile: +84 902 586 121

Email: le-tien.vinh@siemens.com

www.siemens.com.vn

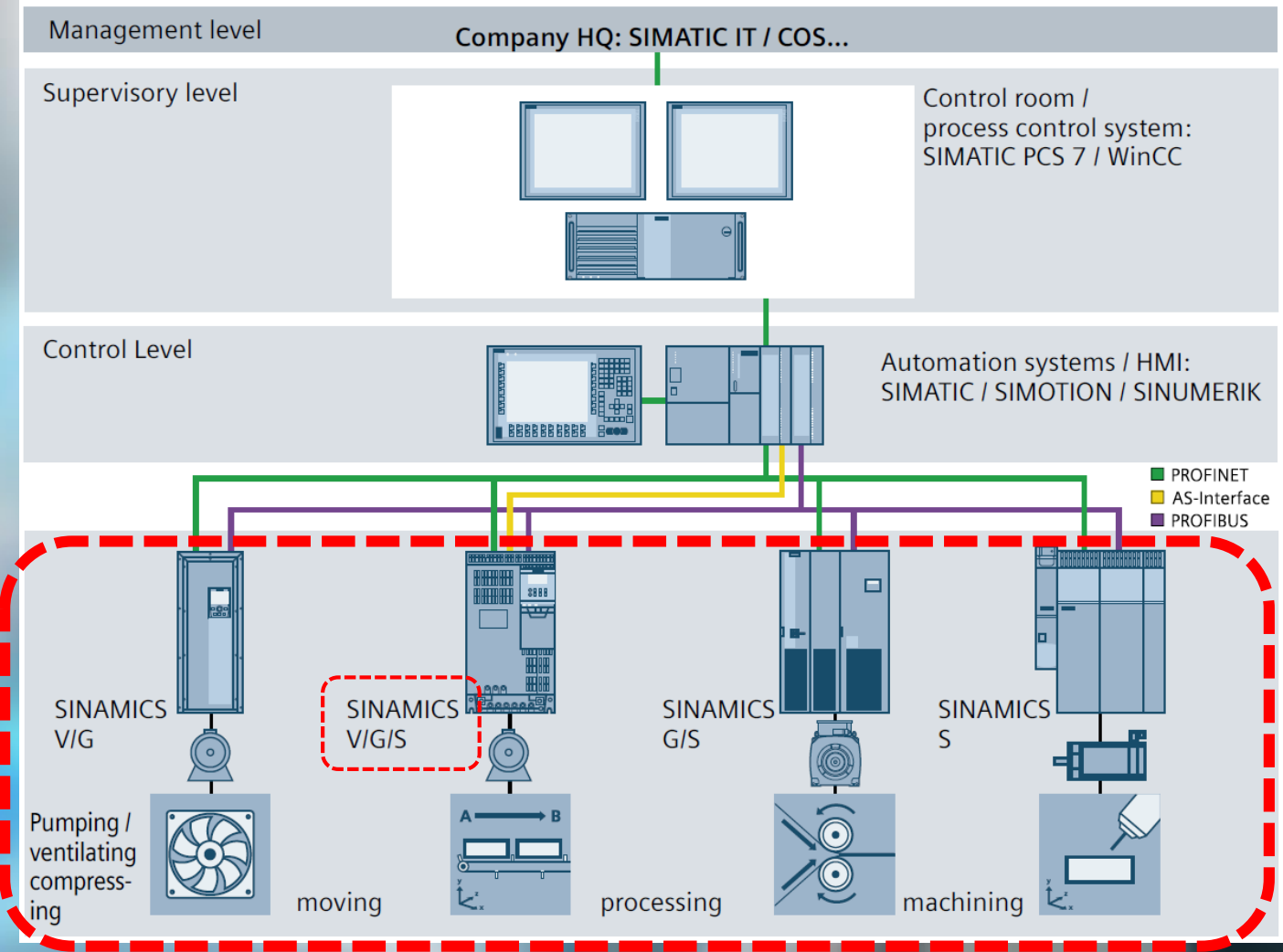
www.facebook.com/Siemens.Vietnam

Nội dung	Người trình bày
1 Giới thiệu "Chương trình Hợp tác cùng Đối tác Chế tạo máy"	Tô Minh Hải
2 Tổng quan về Danh mục Tự động hóa	Lê Tiến Vinh
3 Tổng quan về Danh mục Truyền động điện	Phạm Vũ Quang Huy
4 Tổng quan về Danh mục Thiết bị điện	Võ Đình Thịnh
5 Hỏi đáp	
6 Thực hành thiết kế dự án với TIA selection tool	Lê Tiến Vinh & Trần Cửu Long
7 Hỏi đáp	

The scalable Motion Controller & SINAMICS Portfolio

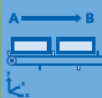
The SINAMICS drive family

Fully integrated in the control and supervisory levels



The SINAMICS drive family

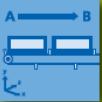
Suitable for each and every application

Performance ¹⁾	Continuous motion			Discontinuous motion		
	Basic	Medium	High	Basic	Medium	High
Purpose						
 Pumping/ ventilating/ compressing	Centrifugal pumps Radial/axial fans Compressors		Eccentric spiral/ worm/screw pumps	Hydraulic pumps Dosing pumps		Descaling pumps Hydraulic pumps
 Moving	Belt conveyors Roller conveyors Chain conveyors	Belt conveyors Roller conveyors Chain conveyors Vertical/horizontal material handling Elevators/escalators Gantry cranes Ship's drives Cable railways	Elevators Container cranes Mine hoists Open cast mine excavators Test stands	Accelerating conveyors Rack feeders	Accelerating conveyors Rack feeders Cross cutters Roll changers	Rack feeders Robotics Pick & Place Indexing tables Cross cutters Roller feeds Engaging/disengaging
 Processing	Mills Mixers Kneaders Crushers Agitators Centrifuges	Mills Mixers Kneaders Crushers Agitators Centrifuges Extruders Rotary furnaces	Extruders Winders/unwinders Leading/following drives Calenders Mechanical presses Printing machines	Tubular bagging machines Single axis motion control i.e. • positioning profiles • path profiles		Servo presses Rolling mill drives Coordinated multi-axis motion control i.e. • Multi-axis positioning • Cam discs • Interpolation
 Machining	Main Drives i.e. • Turning • Milling • Drilling	Main Drives i.e. • Drilling • Sawing	Main Drives i.e. • Turning • Milling • Drilling • Gear cutting • Grinding	Axis Drives i.e. • Turning • Milling • Drilling	Axis Drives i.e. • Drilling • Sawing	Axis Drives i.e. • Turning • Milling • Drilling • Laser machining • Gear cutting • Grinding • Nibbling and Punching

¹⁾ Requirements regarding torque precision / speed precision / positioning precision / axis coordination / functionality

SINAMICS application-based approach

Low-voltage product assignment

Performance ¹⁾ Purpose	Continuous motion			Discontinuous motion		
	Basic	Medium	High	Basic	Medium	High
 Pumping/ ventilating/ compressing	V20 G120C G120P	G120P G130/G150 G180 ²⁾	S120	G120	S110	S120
 Moving	V20 G110D G110M G120C	G120 G120D G130/G150 G180 ²⁾	S120 S150 DCM	V90 G120 G120D	S110 DCM	S120 DCM
 Processing	V20 G120C	G120 G130/G150 G180 ²⁾	S120 S150 DCM	V90 G120	S110	S120 DCM
 Machining	S110	S110 S120	S120	S110	S110 S120	S120

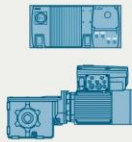
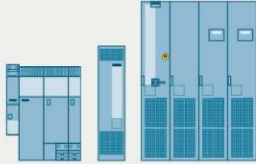
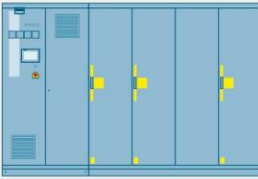
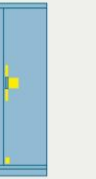
¹⁾ Requirements regarding torque precision / speed precision / positioning precision / axis coordination / functionality

²⁾ Industry specific drive

The SINAMICS drive family

Complete regarding power ratings and functionality

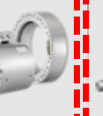


Low voltage AC										Direct current DC	Medium voltage AC			
Basic Performance		General Performance							High Performance		For basic applications and demanding applications	For demanding applications with high power ratings		
														
SINAMICS V20	SINAMICS V90	SINAMICS G120C	SINAMICS G120P / G120P Cabinet	SINAMICS G120	SINAMICS G110D / G120D / G110M	SINAMICS G130 / G150	SINAMICS G180	SINAMICS S110	SINAMICS S120 / S120M	SINAMICS S150	SINAMICS DCM	SINAMICS GL150 / SL150	SINAMICS SM120 CM / SM150 / GM150	SINAMICS GH150 / GH180 (cell-based)
V/f control	Servo control (speed and torque) with encoder	V/f control, vector control without encoder		V/f control, vector control with/without encoder	V/f control (G110D), sensorless vector control (G120D / G110M)	V/f control, vector control with/without encoder	V/f control, vector control with encoder	Servo control	V/f control, vector control with/without encoder, servo control with/without encoder		Speed control, torque control	V/f control, vector control		
0.12 – 30 kW	0.05 – 7 kW	0.55 – 18.5 kW	0.37 – 630 kW	0.55 – 250 kW	0.37 – 7.5 kW	75 – 2,700 kW	2.2 – 6,600 kW	0.55–132 kW	0.55 – 5,700 kW	75 – 1,200 kW	6 kW – 30 MW	2.8 – 85 MW	0.8 – 31.5 MW	0.15 – 28.5 MW
Pumps, fans, compressors, conveyor belts, mixers, mills, spinning machines, textile machines	Handling machines, packaging machines, automatic assembly machines, metal-forming machines, printing machines, winders and unwinders	Pumps, fans, compressors, conveyor belts, mixers, mills, extruders	Pumps, fans, compressors, building technology, process industry, HVAC	Pumps, fans, compressors, conveyor belts, mixers, mills, extruders, single-axis positioning applications in plant and machinery construction	Conveyor technology, single-axis positioning applications (G120D)	Pumps, fans, compressors, conveyor belts, mixers, mills, extruders	Sector-specific for pumps, fans, compressors, conveyor belts, extruders, mixers, mills, kneaders, centrifuges, separators	Single-axis positioning applications in plant and machinery construction	Production machines (packaging, textile and printing machines, paper machines, plastics machines), machine tools, plants, process lines and rolling mills, ships and test stands	Test stands, cross cutters, centrifuges	Rolling mill drives, wire drawing machines, extruders and kneaders, cable railways and lifts, test stand drives	Pumps, fans, compressors, mixers, extruders, mills, rolling lines, mine hoist drives, excavators, test stands, ships' drives, conveyor belts, blast furnace blowers	Pumps, fans, test stands, ore conveying systems, ore mills, compressors, excavators, marine drives	Pumps, fans, compressors, mills, crushers, conveyor systems, retrofit projects
Engineering tools:										Drive Technology Configurator – selection and configuration SIZER – simple planning and engineering STARTER and SINAMICS Startdrive – for fast commissioning*, optimizing and diagnostics				

- Wide range of power ratings from 0.12 kW to 85 MW
- Available in low voltage, medium voltage as well as DC voltage versions

SIMOTICS

Motor portfolio

SIMOTICS®												
 Low voltage motors for line and inverter operation							 Motors for motion control application				DC motors	High-voltage Motors
General Purpose	Severe Duty	Explosion Protected	Definite Purpose	Flexible Duty	Trans-standard	High Torque	Servo	Main	Linear	Torque	Direct Current	High Voltage
GP	SD	XP	DP	FD	TN	HT	S	M	L	T	DC	HV
												
Application examples												
- Pumps / Fans / Compressors - Mixer / Mill / Extruder - Motors with explosion protection - Ship propeller drives - Paper machine applications - Centrifuges							- Machine tools e.g. - Turning / Milling / Grinding - Production machines e.g.: - Packaging / Plastics processing - Textile - Timber / Glass / Ceramics - Printing / Presses - Handling and assembling systems - Robotics				Drive apps. in all industries with DC	- Pumps - Compressors - Main drives with high power for: - Ships - Rolling Mills - Mills

SIMOTICS

Low voltage motors for line and converter operation



SIMOTICS®													
 Low voltage motors for line and inverter operation							 Motors for motion control application				DC motors	High-voltage Motors	
General Purpose	Severe Duty	Explosion Protected	Definite Purpose	Flexible Duty	Trans-standard	High Torque	Servo	Main	Linear	Torque	Direct Current	High Voltage	
GP	SD	XP	DP	FD	TN	HT	S	M	L	T	DC	HV	
													

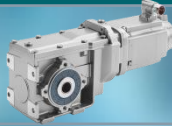
- Energy-efficient and at the same time compact
- Versatile range - from standard up to sector-specific versions
- Wide power range from 0.09 kW up to 3,500 kW

SIMOGEAR

Geared motors for standard applications

Standard geared motors

SIMOGEAR gearboxes ▪ Helical gearboxes ▪ Parallel shaft gearboxes ▪ Bevel gearboxes ▪ Helical worm gearboxes ▪ Worm gearboxes
Product series: SIMOGEAR
Conveyor technology pumps, fans, agitators; transport drives continuous material webs (converting)

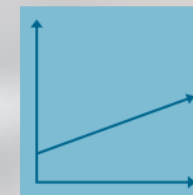
Servo geared motors

SIMOGEAR gearboxes ▪ Helical gearboxes ▪ Parallel shaft gearboxes ▪ Bevel gearboxes ▪ Helical worm gearboxes
Product series: SIMOTICS S-1FG1
Production machines, packaging, storage and retrieval machines, metal forming

Servo planetary geared motors

Alpha planetary gearboxes
Product series: SIMOTICS S
Machine tools, woodworking and other processing machines, robotics and handling, rotary indexing tables

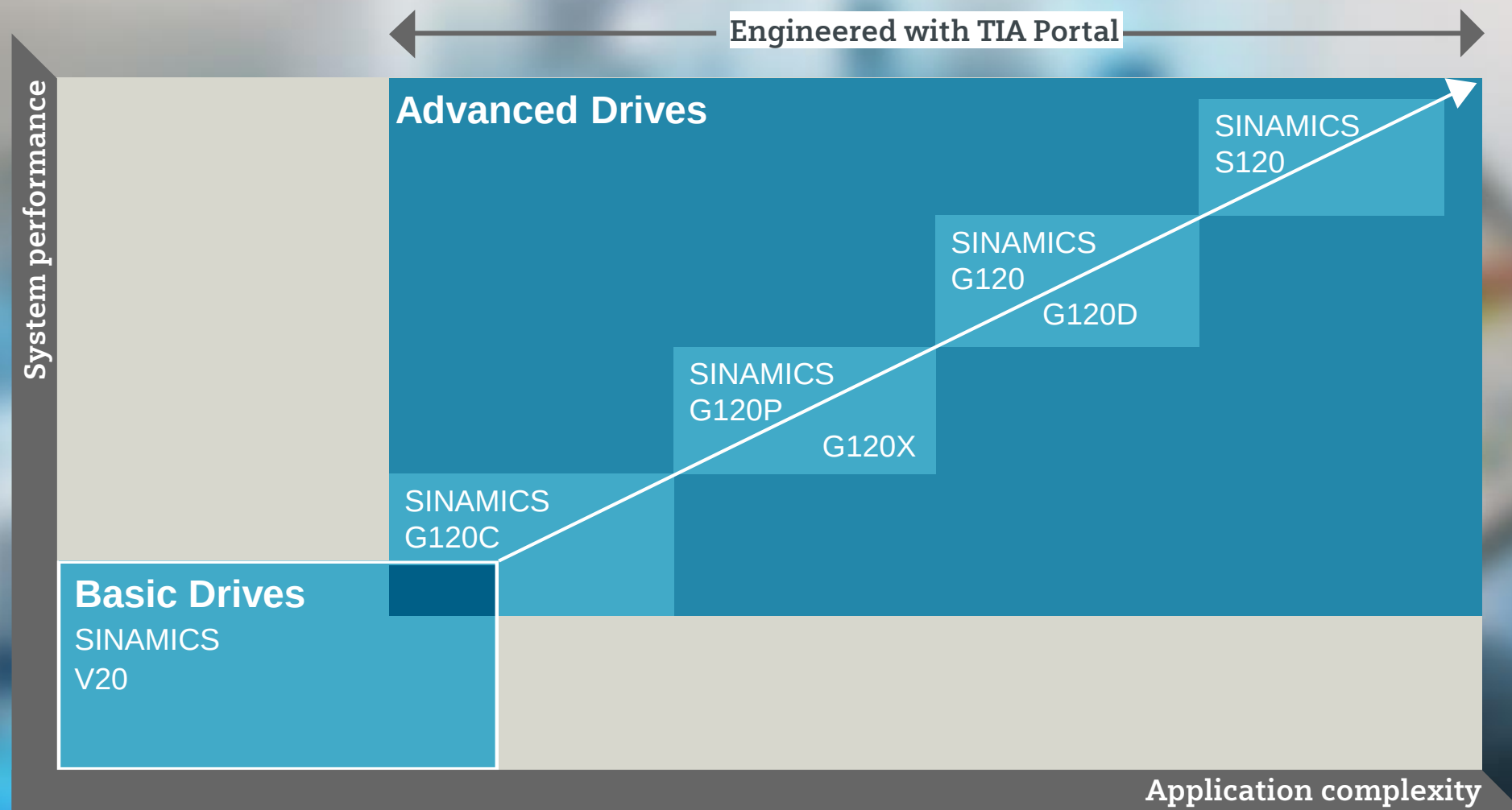
The SINAMICS Drives Portfolio for “Continuous Motion”

Always the right drive – plus integrated added value



SIEMENS

Ingenuity for life



 Consistent drive and automation solutions

 Seamless interaction of all drive components

 Optimum maintenance and service

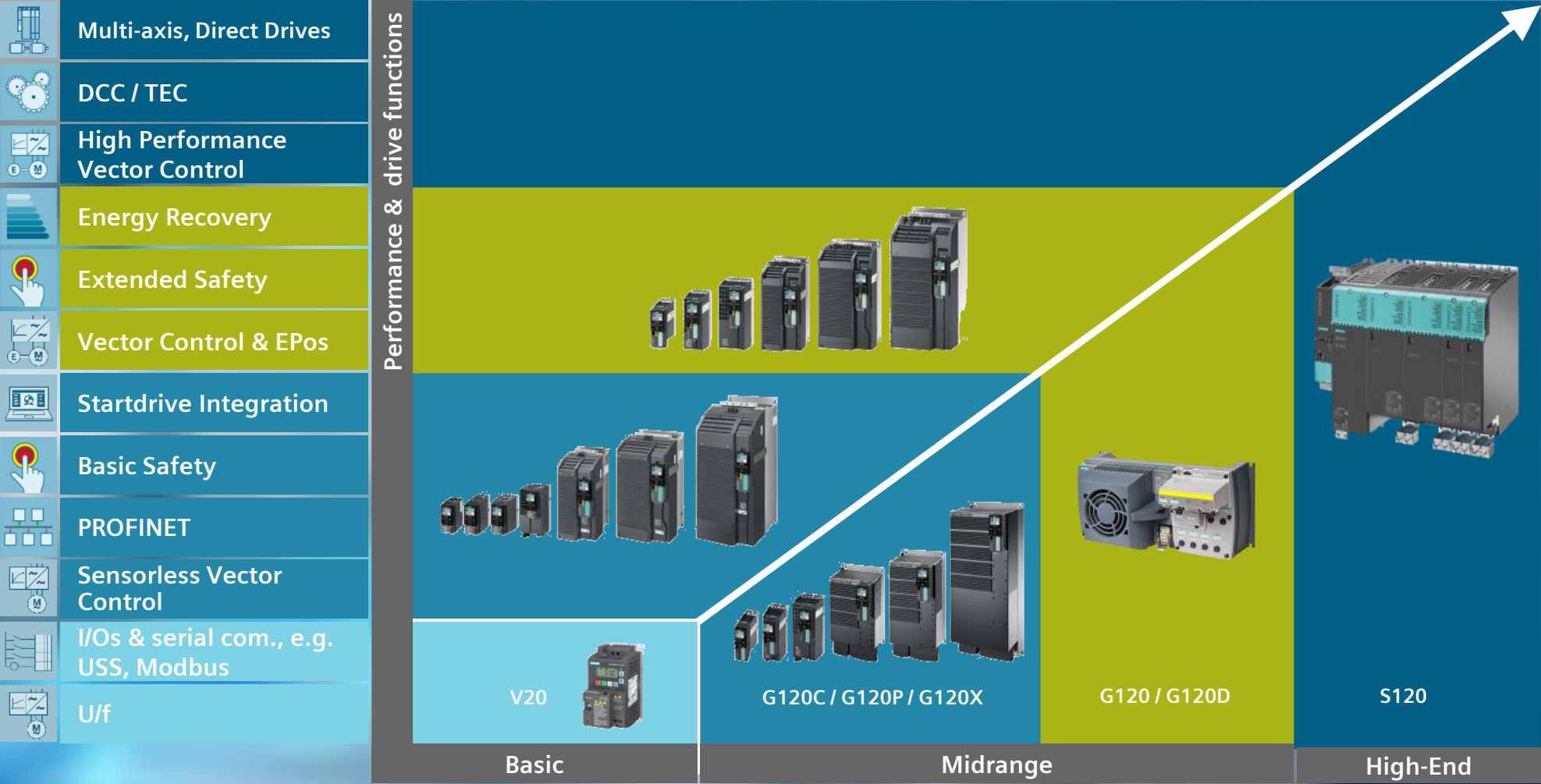
 Safety Integrated

 Technology Integrated

The scalable SINAMICS Drives Portfolio for “Continuous Motion”

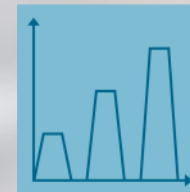


Engineered with TIA Portal



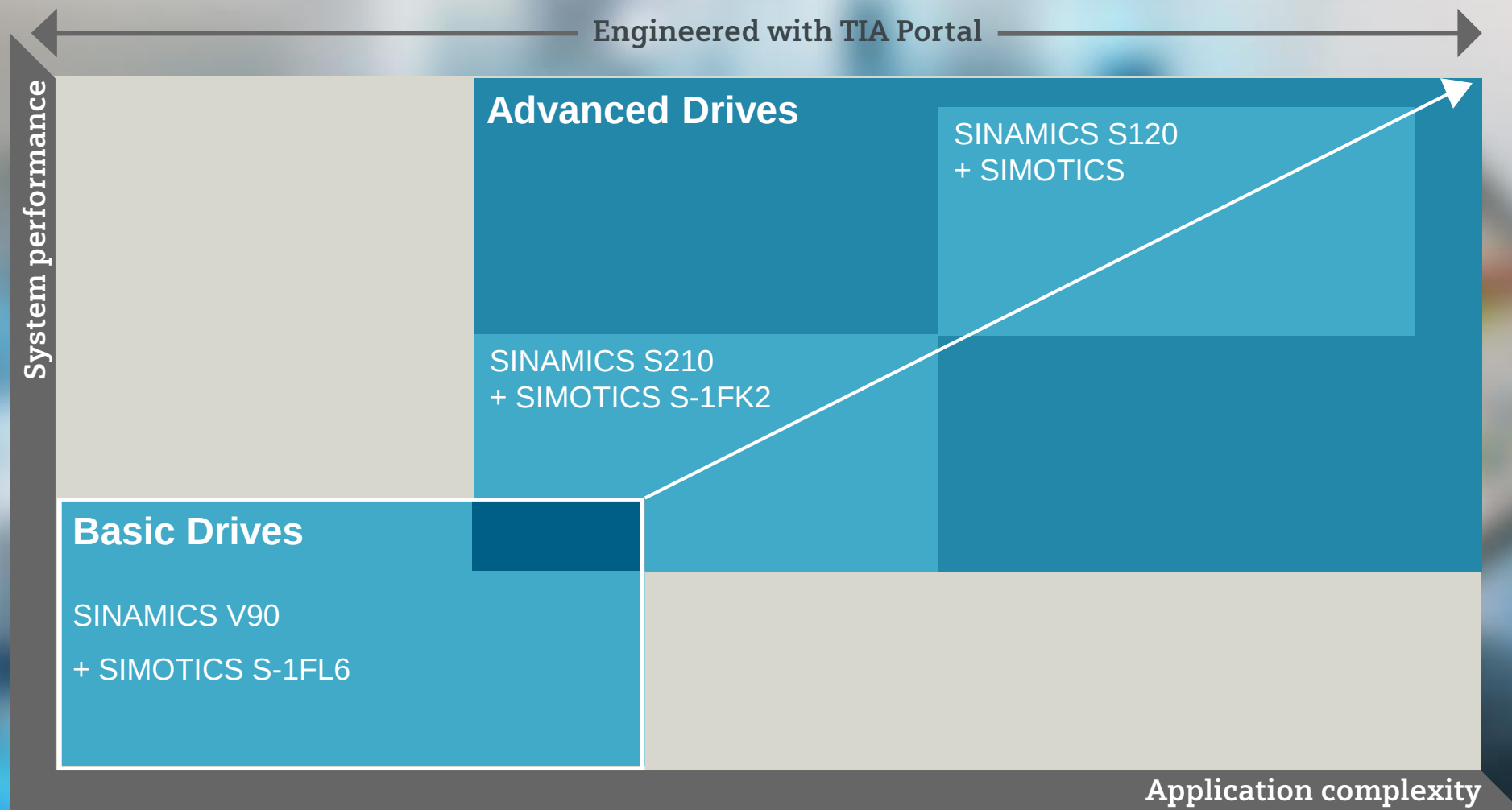
The SINAMICS Drives Portfolio for “Discontinuous Motion”

Always the right drive – plus integrated added value



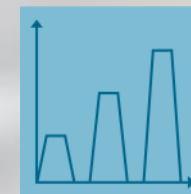
SIEMENS

Ingenuity for life

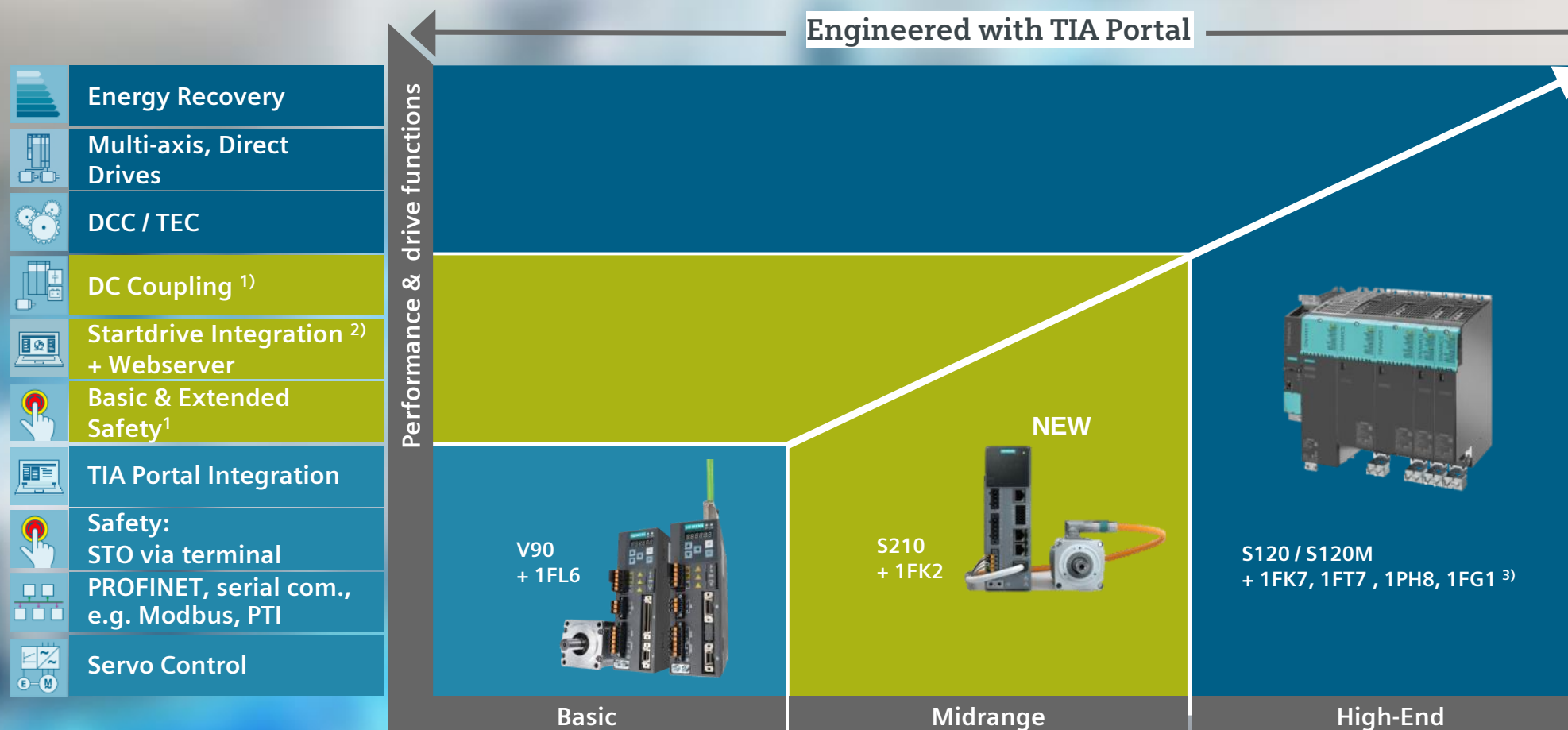


-  Consistent drive and automation solutions
-  Seamless interaction of all drive components
-  Optimum maintenance and service
-  Safety Integrated
-  Technology Integrated

The scalable SINAMICS Drives Portfolio for “Discontinuous Motion”

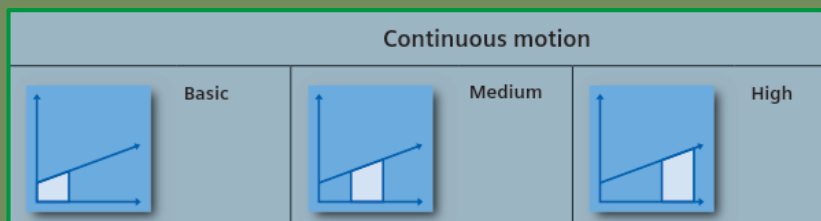


SIEMENS
Ingenuity for life

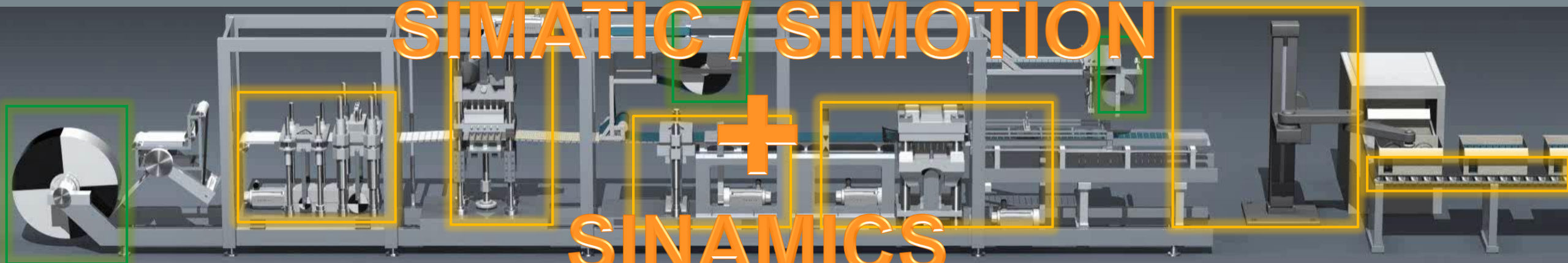


¹⁾ Only 400V devices ²⁾ Once the complete S210 product portfolio available, E2018 ³⁾ + additional SIMOTICS

Typical Motion Control Applications



SIMATIC / SIMOTION
+
SINAMICS



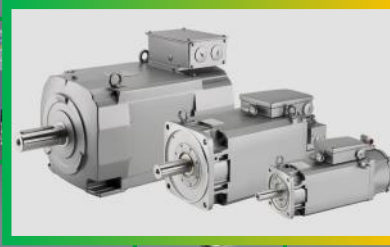
SIMOTICS GP, SD, FD
V20



SIMOGear 1FG1
G120x



SIMOTICS 1PH8
G120D



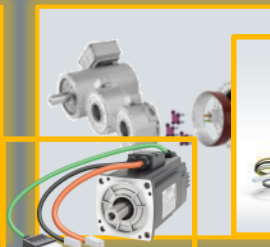
SIMOTICS S 1FK7, 1FT7
G110M



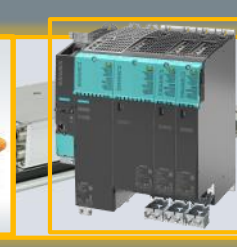
SIMOTICS V90
V90



SIMOTICS S 1FW3, 1FW6
S210



SIMOTICS L 1FN3
S120



SINAMICS application



Conveyor technology application

SIEMENS

Siemens has the fitting and optimum portfolio for all conveyor-related applications
Whether it involves conveying, sorting, storing or picking & placing – in conveyor systems, across-the-board productivity defines the success of the operation. In all sectors. Whether for standard or highly complex applications.

- The optimum products and systems: As THE partner for conveyor technology, Siemens provides support with a portfolio of drive and automation components that precisely fits the application
- Competent consulting and extensive support for engineering concepts that are fit for the future.
- Service in over 130 countries around the world.

Products:
Converters, geared motors, motor starters and control systems



Pump, fan and compressor applications

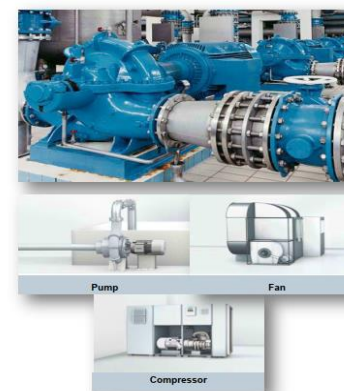
SIEMENS

Siemens offers integrated drive solutions for pumps, fans and compressors:

Integrated drive trains with components that are perfectly harmonized and coordinated with one another plus the corresponding automation technology – all from a single source.

To precisely dimension fluid flow machines and positive displacement pumps. With competent support when implementing future-proof concepts – for basic throttle controls as well as for soft starter-converter cascades and other complex applications.
Over the complete lifecycle of the application with comprehensive service and support.

Products:
SINAMICS G120P, SIMOTICS motors, SIRIUS switchgear



Storage and retrieval machine application

SIEMENS

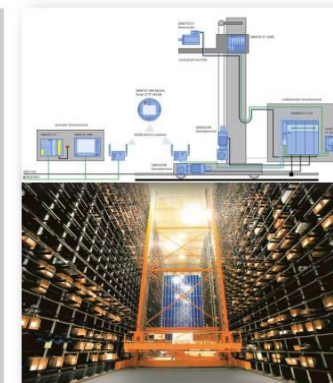
In addition to conveyor systems, storage and retrieval machines represent the core of warehouse technology.
A storage and retrieval machine is a rail-based, single-track vehicle for storing and retrieving goods in a high bay warehouse

A storage and retrieval machine moves in three axes:
x = along the aisle - travel gear
y = vertical direction - hoisting gear
z = transverse to the aisle - load suspension device

- For typical requirements like...
- Oscillation of the mast
 - Safety functions acc. type C standard (EN528)
 - Optimized throughput
 - Maximum storage capacity
 - Energy efficiency

... the optimal solution is included in Products from Siemens.

Products: SINAMICS S120



Servo pump application

SIEMENS

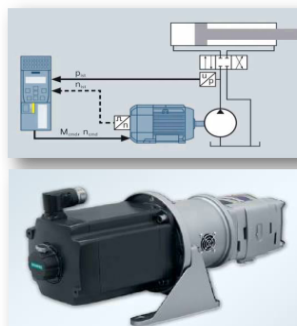
High efficiency, high dynamic performance and quiet

The Siemens solution is based on SINAMICS S120, SINAMICS G120 and SINAMICS V20 converters in conjunction with SIMOTICS S-1FK7, SIMOTICS S-1FT7, SIMOTICS M-1PH8 and SIMOTICS GP 1LE1 motors. The portfolio allows the suitable combination – ranging from the highest performance products to those that have been optimized from a cost perspective.

Advantages when compared to conventional solutions

- Energy costs are slashed by up to 70%
- Noise levels are significantly reduced
- Lower oil temperatures
- Space saving through a compact design
- Simple integration and commissioning
- All of the relevant parameters are monitored
- All in all, a simpler hydraulic system

Products: SINAMICS V20, G120 and S120



Application conveyor system for bulk materials (bulk material handling)

SIEMENS

Drives for bulk material conveyor systems up to 1500 kW – for smooth and efficient transport

Our harmonized drive systems for conveyor systems for bulk materials are supplied mounted on a frame and ensure that materials are safely, reliably and efficiently transported even under the harshest of conditions – heat, cold, dust, dirt and vibration.

Perfect interaction between SINAMICS converters, SIMOTICS motors, FLENDER couplings and FLENDER gearboxes:

- The belts speed is precisely adapted to fluctuating loads on the conveyor belt
- Lower operating costs as a result of lower energy usage
- Minimum belt oscillation
- Lower brake wear
- Low maintenance overall system with long service life

Products: SINAMICS G120, G130, G150 and S120 - SIMOTICS SD, TN and FD - FLENDER couplings - FLENDER FZG and SIG gearboxes



Segment winder as converting application

SIEMENS

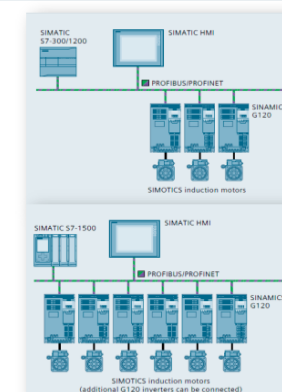
Siemens offers all of the usual control modes for winders

Winders are a fixed element of every converting machine. The application specifically developed for the purpose covers all of the usual control modes. The following modes are available:

- Dancer roll position control with speed correction
- Tension control with torque limiting
- Tension control with speed correction, and
- Open-loop torque control (indirect tension control).

This application eliminates complex work steps. The diameter is either calculated using an external sensor, from the ratio of the material web velocity and speed - or by adding the material thickness over several revolutions.

Products: SINAMICS G120, S120



Thank you for your attention!



Pham Vu Quang Huy

Motion Control Products

Digital Industries, Siemens Vietnam

Deutsches Haus, 7th Floor

33 Le Duan St., Dist.1, Ho Chi Minh City, Vietnam

Mobile: +84 91 161 8844

Email: pham-vu-quang.huy@siemens.com

www.siemens.com.vn

www.facebook.com/Siemens.Vietnam

Nội dung	Người trình bày
1 Giới thiệu "Chương trình Hợp tác cùng Đối tác Chế tạo máy"	Tô Minh Hải
2 Tổng quan về Danh mục Tự động hóa	Lê Tiến Vinh
3 Tổng quan về Danh mục Truyền động điện	Phạm Vũ Quang Huy
4 Tổng quan về Danh mục Thiết bị điện	Võ Đình Thịnh
5 Hỏi đáp	
6 Thực hành thiết kế dự án với TIA selection tool	Lê Tiến Vinh & Trần Cửu Long
7 Hỏi đáp	

Electrical Products

Electrical Products – comprehensive low-voltage and medium-voltage product portfolio for IEC and UL/CSA markets



Industrial Applications



Process industry



Manufacturing industry



Substations



Industrial buildings



Infrastructure



Commercial buildings



Residential buildings



Integrated EP product portfolio for the IEC market

IEC Products

Low-voltage Products

Power Distribution – SENTRON

- Protection, switching, measuring and monitoring devices
- Power monitoring system
- Residential storage
- Wiring accessories



Industry Controls – SIRIUS

- Protection and switching devices
- Electronic starting devices
- Commanding and signaling devices
- Measuring and monitoring devices



Medium-voltage Products

- Medium-voltage vacuum circuit breakers
- Medium-voltage contactors
- Surge arresters/limiters
- Medium-voltage interrupters



IEC Systems

SIVACON, ALPHA

Switchboards



Cubicle systems



Power distribution boards and distribution boards

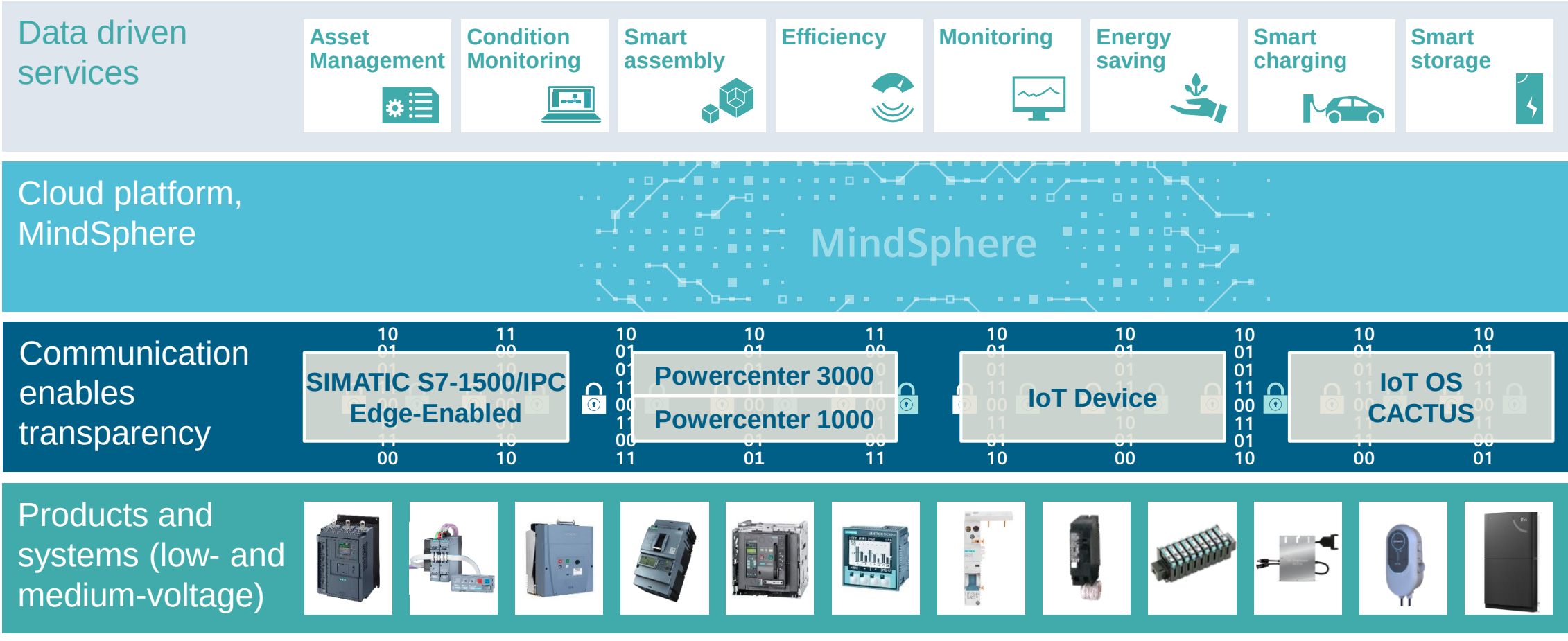


Design and planning tools – SIMARIS, Control Panel Designer



EP core product portfolio renewed!

Focus on digital growth opportunities



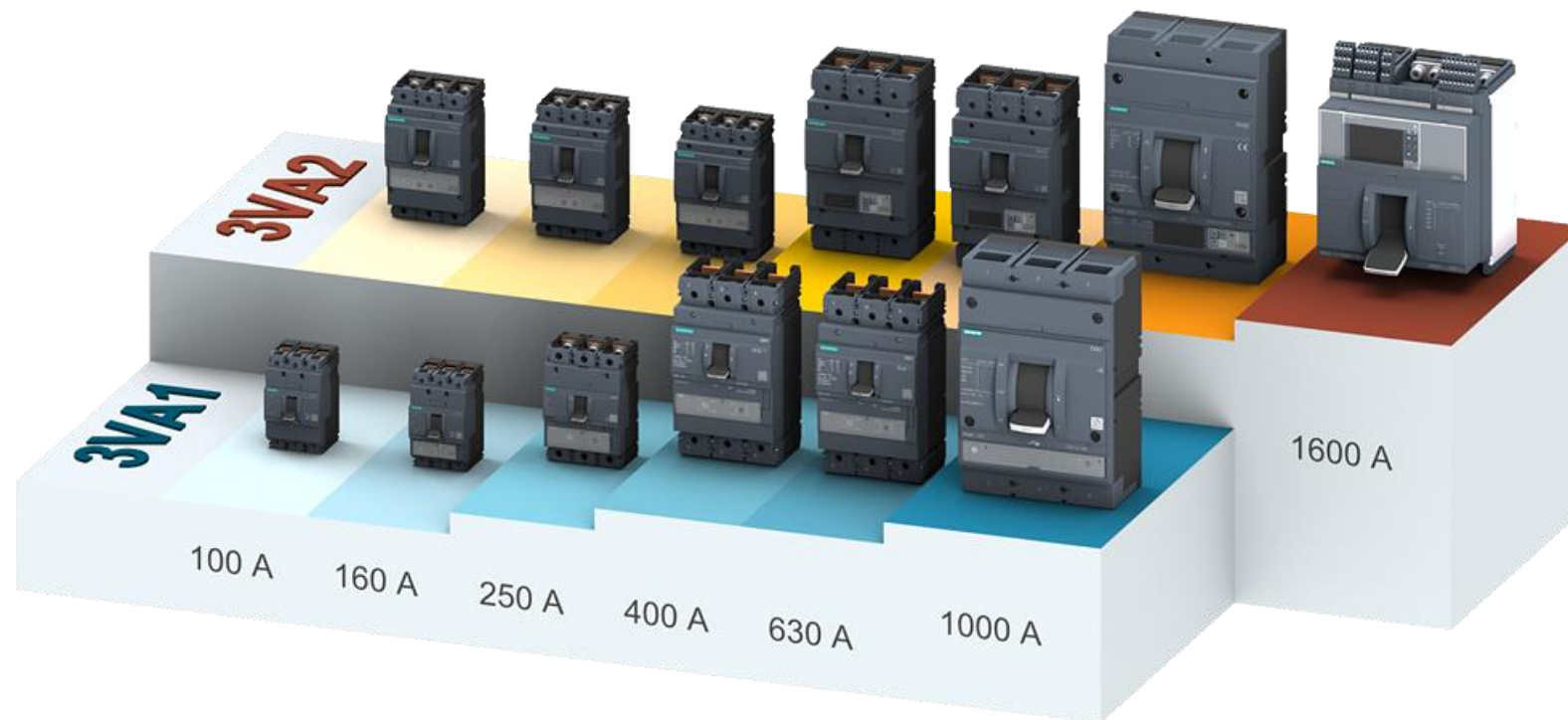
The 3VA 3VM molded case circuit breaker

Discover the perfect system.

The 3VA molded case circuit breaker

Discover the perfect system.

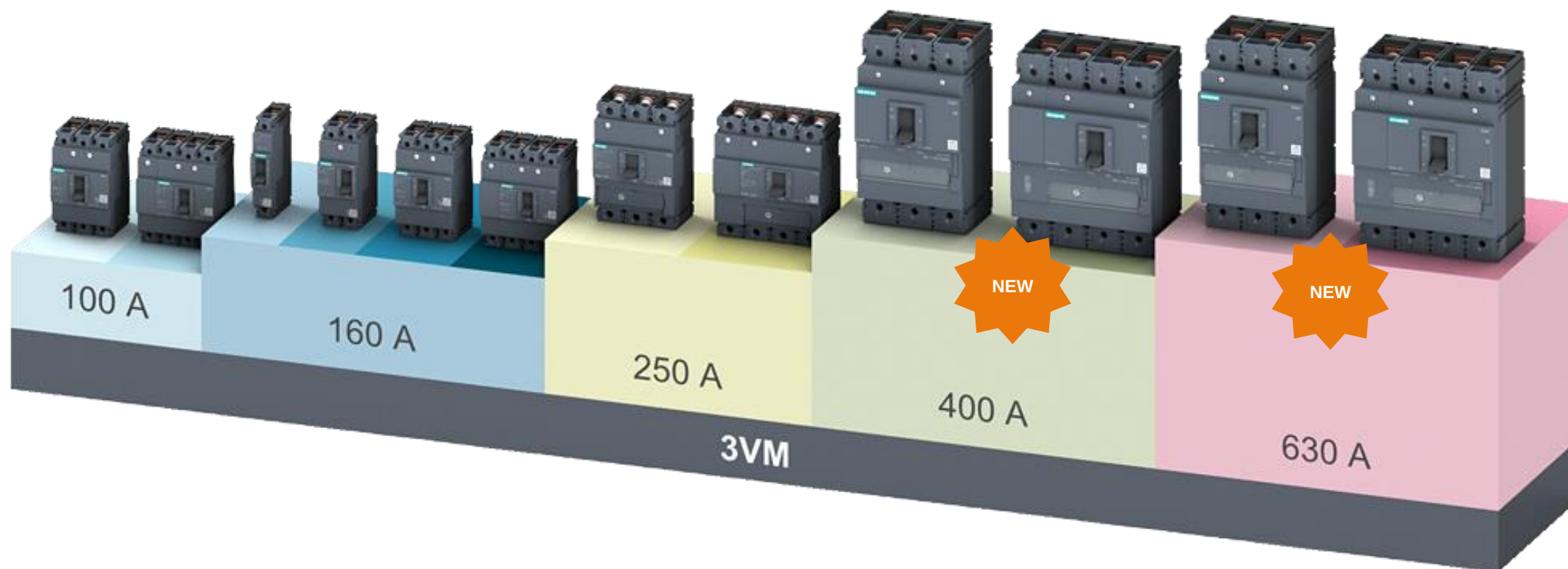
SIEMENS
Ingenuity for life



3VM molded case circuit breaker

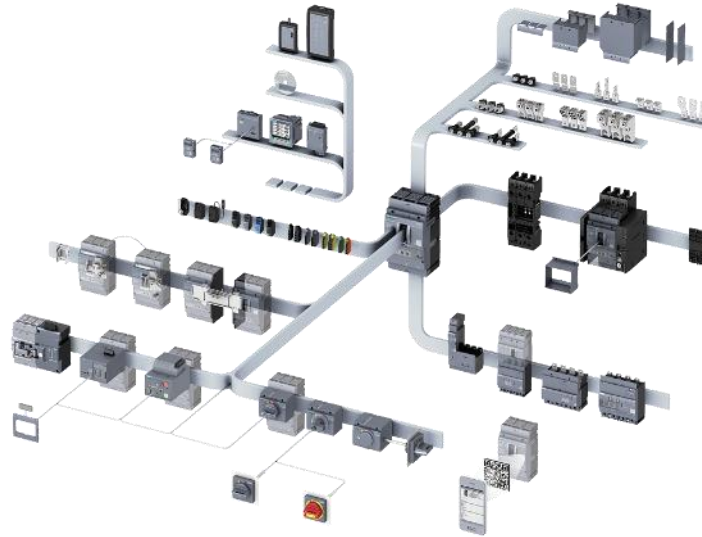
Portfolio overview

SIEMENS
Ingenuity for life



The 3VA molded case circuit breaker

Top highlights at a glance



+ Highly variable system to fulfill all specific customer requirements

+ Wide range of accessory components

+ Universal accessories for both series

+ Excellent, highly sophisticated selectivity concept

+ Flexible and various communication options

+ Easy integration in higher-level automation system

+ Knowledge Manager: Technical information accessible directly via a QR code on the device

+ Huge time savings during planning and configuration due to high quality CAX data

Industry Controls – SIRIUS



SIRIUS Control

Everything for switching and protecting

✓
Proven

✓
Versatile

✓
Customized

SIRIUS Hybrid

Everything for optimally starting motors

✓
Compact

✓
Economical

✓
Flexible

SIRIUS Command

Everything for commanding and signaling

✓
Sophisticated

✓
Reliable

✓
Intuitive

SIRIUS Monitor

Everything for monitoring and responding

✓
Proactive

✓
Communicative

✓
Cost-effective

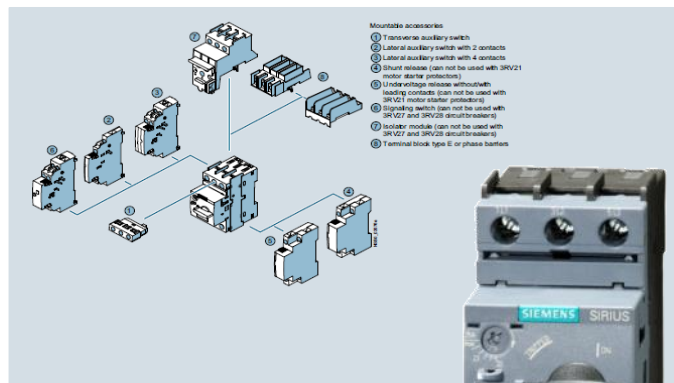
Control
Perfection –
SIRIUS
Industria
Controls

SIRIUS Control Portfolio



				3 kW / 400 V						Size		250 kW / 400 V
	Function	Products		S00	S0	S2	S3	S6	S10	S12		
Main circuit	Switching	Contactors, contactors for capacitive loads, etc.										
		Electronic contactors										
		Soft starters										
	Starting	Load feeders										
		Compact feeder, motor starters										
		Motor starter protectors, motor circuit breakers										
	Protecting	Overload relays	thermal									
			electronic									
	Monitoring	Current monitoring relays										
Control circuit		Function and communication modules										

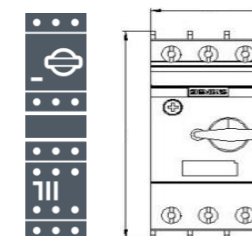
3RV Motor starter protectors/Circuit breakers



The 3 arguments for the 3RV

highest power range with lowest space consumption

- S00 till 16A, 7,5kW 45mm width
- S0 till 40A, 18,5kW 45mm width
- S2 till 80A, 37kW 55mm width
- S3 till 100A, 55kW 70 mm width
(values with 400V / AC – 3)



description 3RV

- full Portfolio for all applications and the same accessories for 4 diff. Frame sizes (S00, S0, S2, S3) ★
- Connection modules for direct connection to contactors, soft starter and solid state contactors
- 3RV in combination with 3RT contactor till 150kA short circuit breaking capacity (at 400V) ★
- IE3 & IE4 Ready



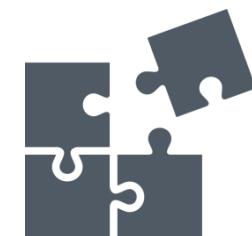
Highest short circuit breaking capacity

- S00 / S0: 100kA till 12,5A
- S0: 50kA till 40A
- S2: 100kA till 80A
- S3: 100kA till 100A

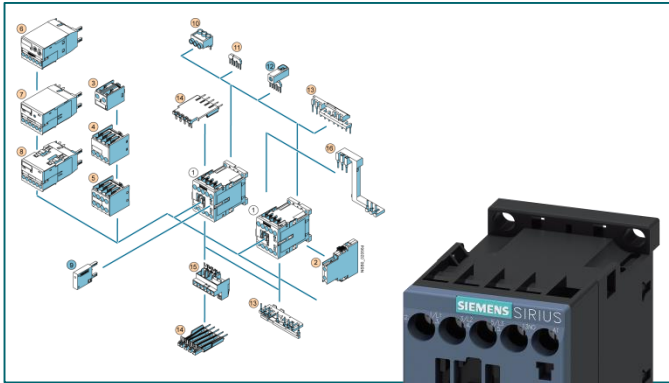


continuous combination and connection technology

- Screw connection for all frame sizes
- Spring load connection till S3, (S2-S3 only auxiliary contacts)
- Feed In system with screw – and spring load technology



Contactor 3RT



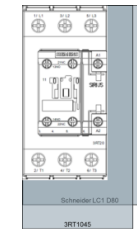
Short description 3RT

- Comprehensive portfolio for all applications and consistent accessory for 4 different sizes (S00, S0, S2, S3)
- Link modules and wiring kits for motor units in each case in screw- and spring-loaded connection technology
- Accessory for AS-i and IO-Link-Communication
- IE3 & IE4 Ready

3 arguments **pro** SIRIUS contactor

Highest power range at low space requirement

- Smaller Footprint with the same switching capacity



Approved combinations

- for reversing- and star-delta-starters
- 3RA combinations up to 90KW 160A



Consistent connection – and linking technology

- Wiring kits for reversing and star-delta combinations in screw- and spring loaded technology;
- Fast, error-free wiring in main- and control circuit
- Expandable with standard components
→ application monitoring, communication



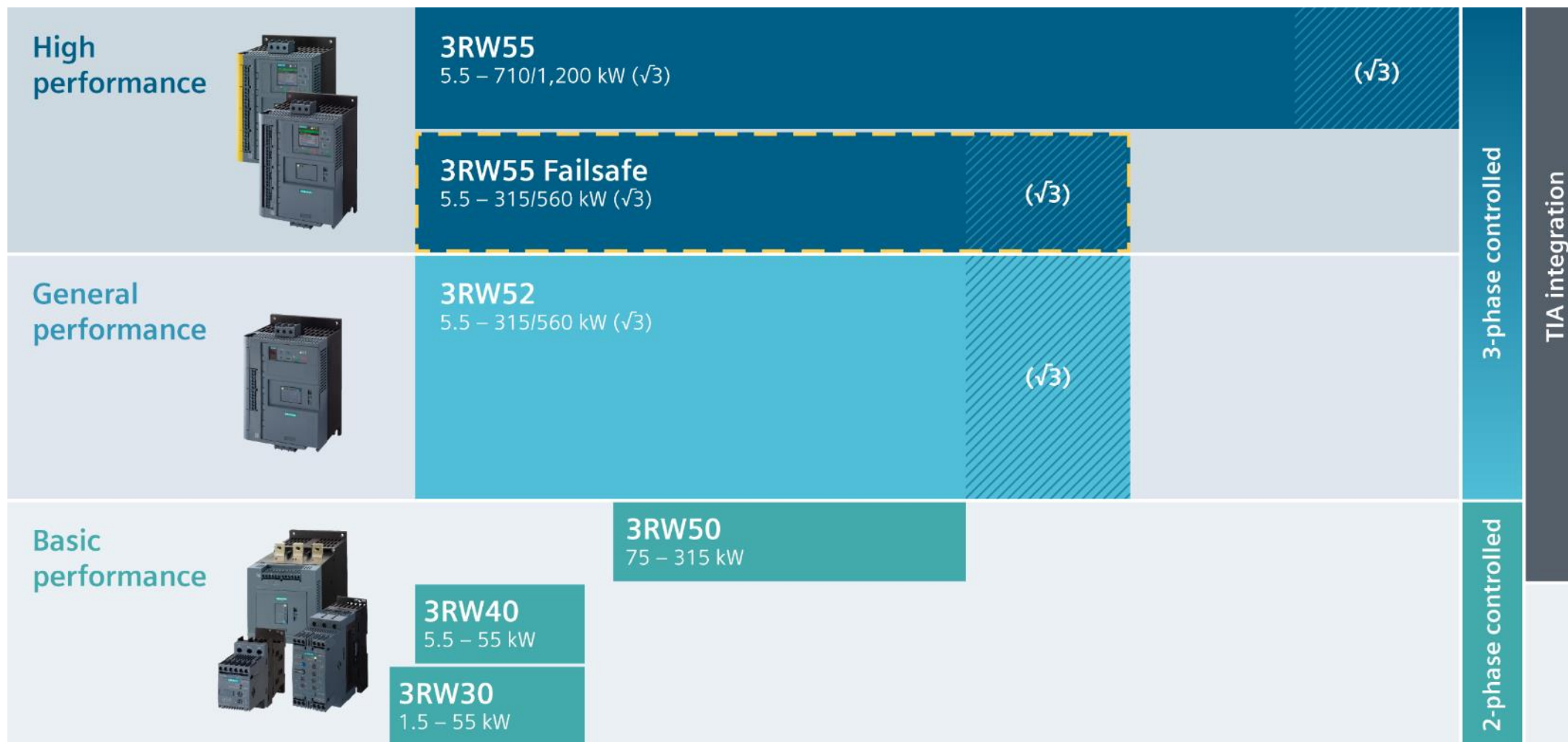
SIRIUS 3RW Soft Starters

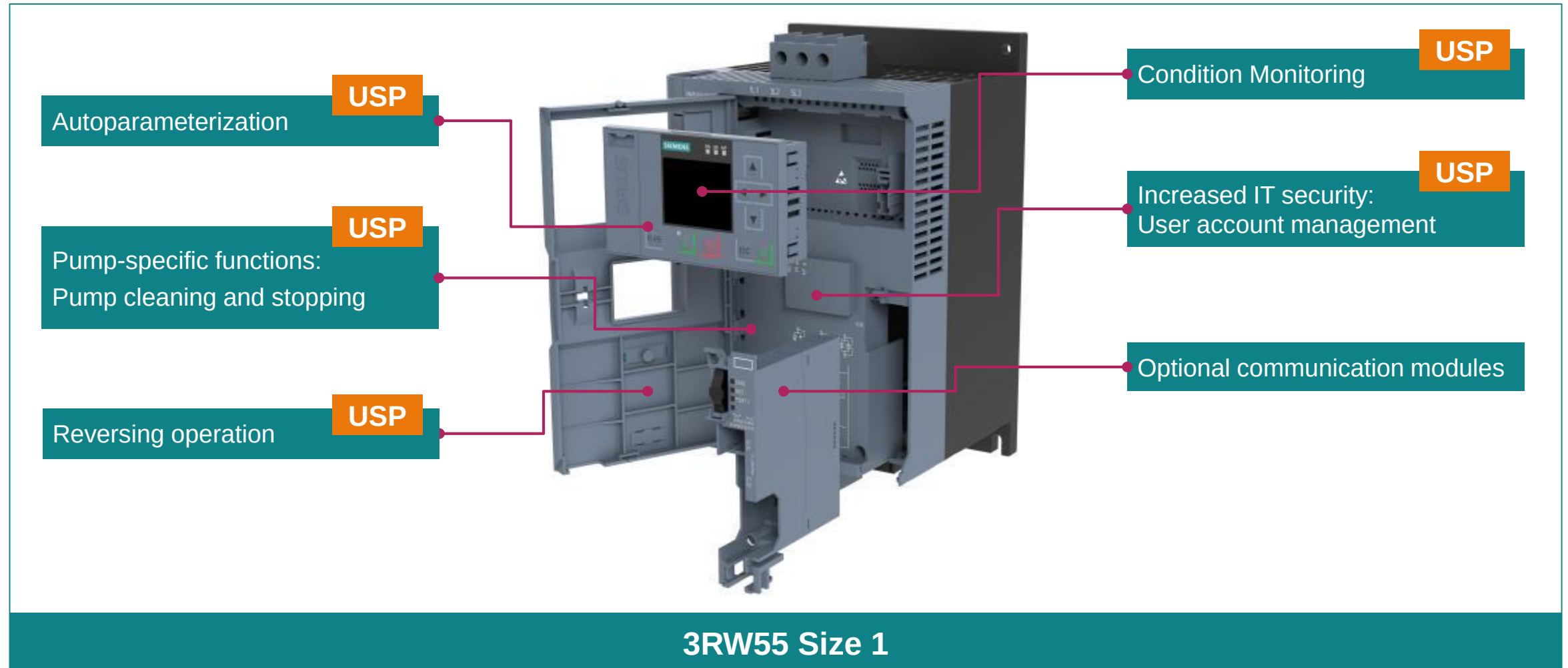
As versatile as your application

SIRIUS 3RW5 Soft Starters in the future

Our portfolio will be complete in 2019

SIEMENS
Ingenuity for life





Thank you for your attention!



Vo Dinh Thinh

Electrical & Control Products

Smart Infrastructure, Siemens Vietnam

Deutsches Haus, 7th Floor

33 Le Duan Street, District 1, Ho Chi Minh City, Vietnam

Mobile: +84 916 230 577

Email: vo-dinh.thinh@siemens.com

www.siemens.com.vn

www.facebook.com/Siemens.Vietnam

Hỏi đáp

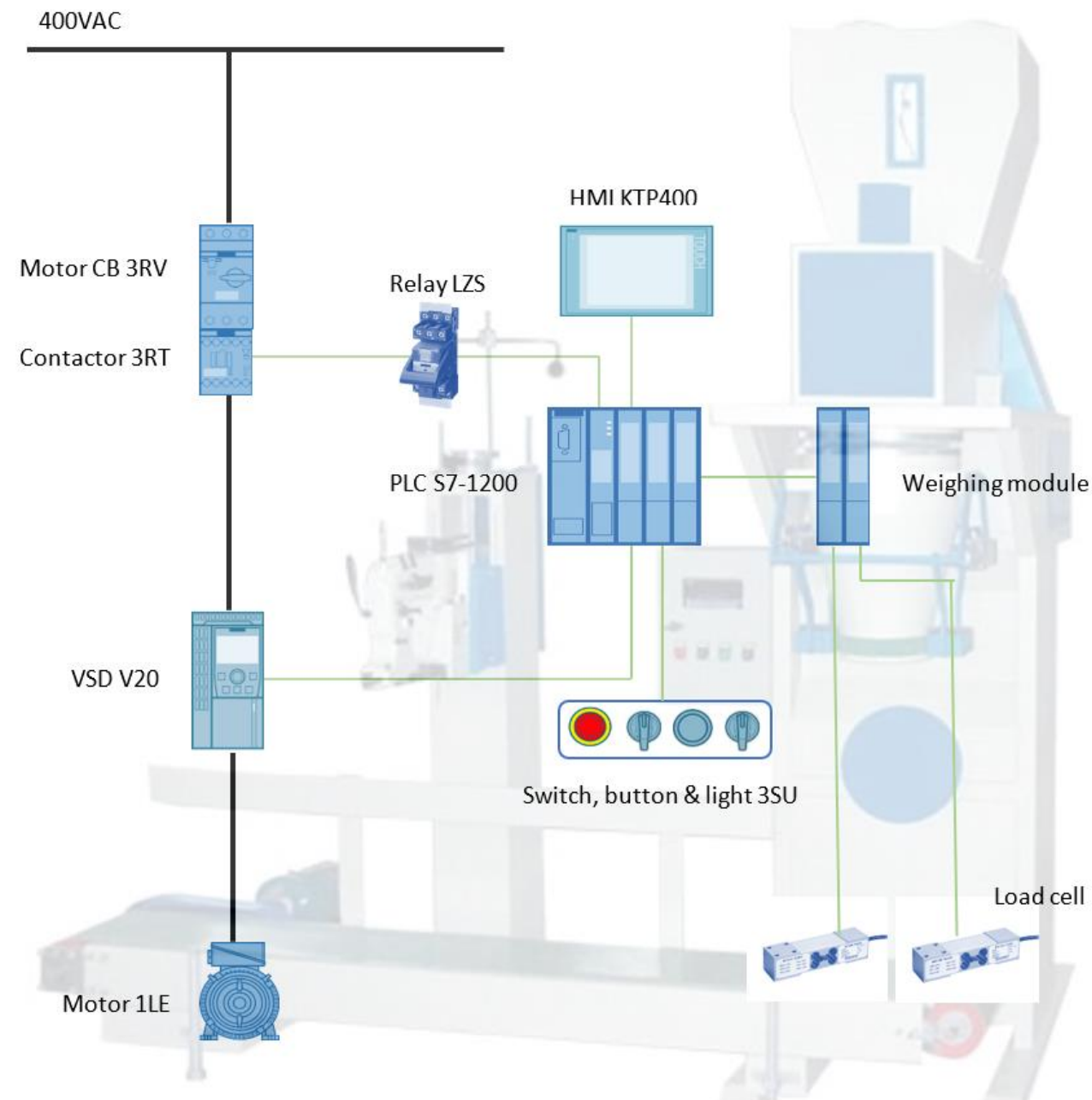
Nội dung	Người trình bày
1 Giới thiệu "Chương trình Hợp tác cùng Đối tác Chế tạo máy"	Tô Minh Hải
2 Tổng quan về Danh mục Tự động hóa	Lê Tiến Vinh
3 Tổng quan về Danh mục Truyền động điện	Phạm Vũ Quang Huy
4 Tổng quan về Danh mục Thiết bị điện	Võ Đình Thịnh
5 Hỏi đáp	
6 Thực hành thiết kế dự án với TIA selection tool	Lê Tiến Vinh & Trần Cửu Long
7 Hỏi đáp	

Hướng dẫn chọn thiết bị
với TIA Selection Tool



Machine name	CÂN ĐÓNG BAO
--------------	--------------

Requirement	Solution
- Chính xác - Giảm hao tổn - Tăng tốc độ sản xuất - ...	Sử dụng hệ thống loadcell đo chính xác khối lượng. Kết hợp thuật toán điều khiển của PLC và biến tần giúp đóng đếm nhanh, chính xác cho từng bao thành phẩm



Machine name	CÂN ĐÓNG BAO
--------------	--------------

Requirement	Solution
- Chính xác - Giảm hao tổn - Tăng tốc độ sản xuất - ...	Sử dụng hệ thống loadcell đo chính xác khối lượng. Kết hợp thuật toán điều khiển của PLC và biến tần giúp đóng đếm nhanh, chính xác cho từng bao thành phẩm

No	BU	Description	Reference	Qty
1	CP	Motor CB 12A	3RV2011-1KA10	1
2		Contactor 12A 220V	3RT2017-1AP01	1
3		Nút nhấn nhả LED xanh 220V	3SU1106-0AB40-1BA0	1
4		Nút nhấn nhả LED đỏ 220V	3SU1106-0AB20-1CA0	1
5		Công tắc xoay 3 vị trí	3SU1100-2BL60-1NA0	1
6		Công tắc xoay 2 vị trí	3SU1100-2BF60-1BA0	1
7		Relay kiếng	LZX:PT270024	10
8		Đế relay kiếng	LZS:PT78720	10
9	FA	S7-1212C	6ES7212-1HE40-0XB0	1
10		Battery	6ES7297-0AX30-0XA0	1
11		Mememory card 4MB	6ES7954-8LC03-0AA0	1
12		Touch HMI 4"	6AV2123-2DB03-0AX0	1
13	PA	Siwarex WP231	7MH4960-2AA01	2
14	MC	Biến tần V20 1HP	6SL3210-5BE17-5UV0	1
15		Motor 3phase 1HP (0.75kW)	1LE1002-0DB33-3AA4 (EU) 1LE0102-0DB33-3AA4 (CN)	1

Hỏi đáp

Để tìm hiểu thêm hoặc cần trợ giúp, xin vui lòng liên hệ:



Automation Forum Siemens Việt Nam



Siemens Training Center – SITRAIN