

PEER Group Corporate Overview

2020



Largest supplier of factory automation software for semiconductor OEMs and factories



Canadian-owned
company,
established in 1992



Factory automation
software solutions for
Smart Manufacturing



We believe every
computer chip on the
planet has been processed
by equipment with our
software running on it

Market leader with strong financials and stable, diversified customer base



9
consecutive
years of growth



Self-financed



22%
of global revenue
is from our
largest customer



185
customers
purchased from
us in 2019

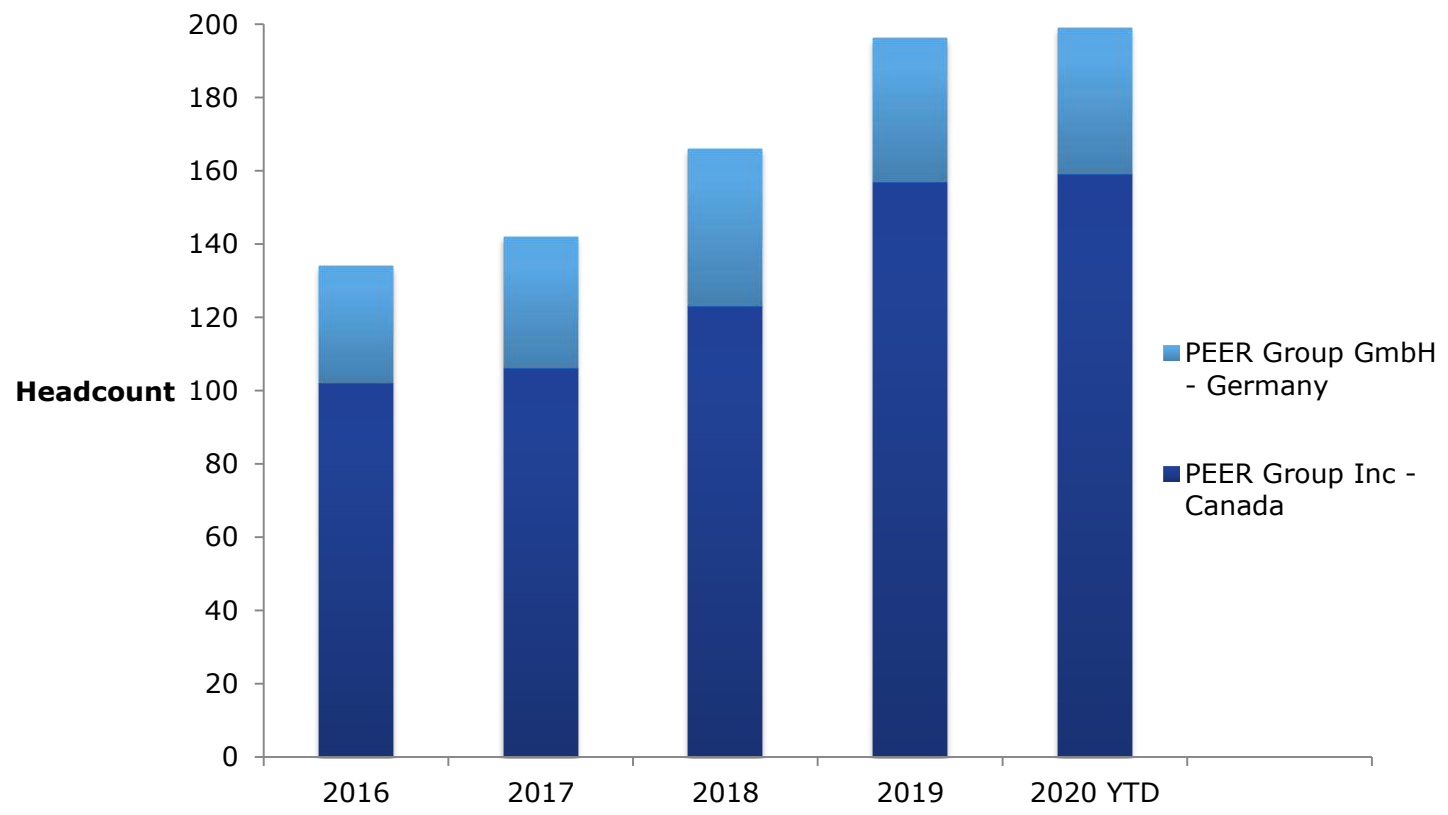


We invest in our
products to create
more value for
our customers

Employment Footprint



Headcount Trend



Global Sales and Support





5 Consecutive Years as an Intel Preferred Quality Supplier

Recognized for innovative factory automation software solutions for high-volume Smart Manufacturing (2015-2019)

Certified Supplier Award (2014)

“Commitment to quality and continuous improvement” over 2 consecutive quarters

Supplier Recognition Award (2011)

“Outstanding contribution to successful collaboration and design on Sprint 100i and MHS automation capabilities”

Best Workplaces™

Great Place To Work®

CANADA
2020

8 consecutive years as a Best Workplace

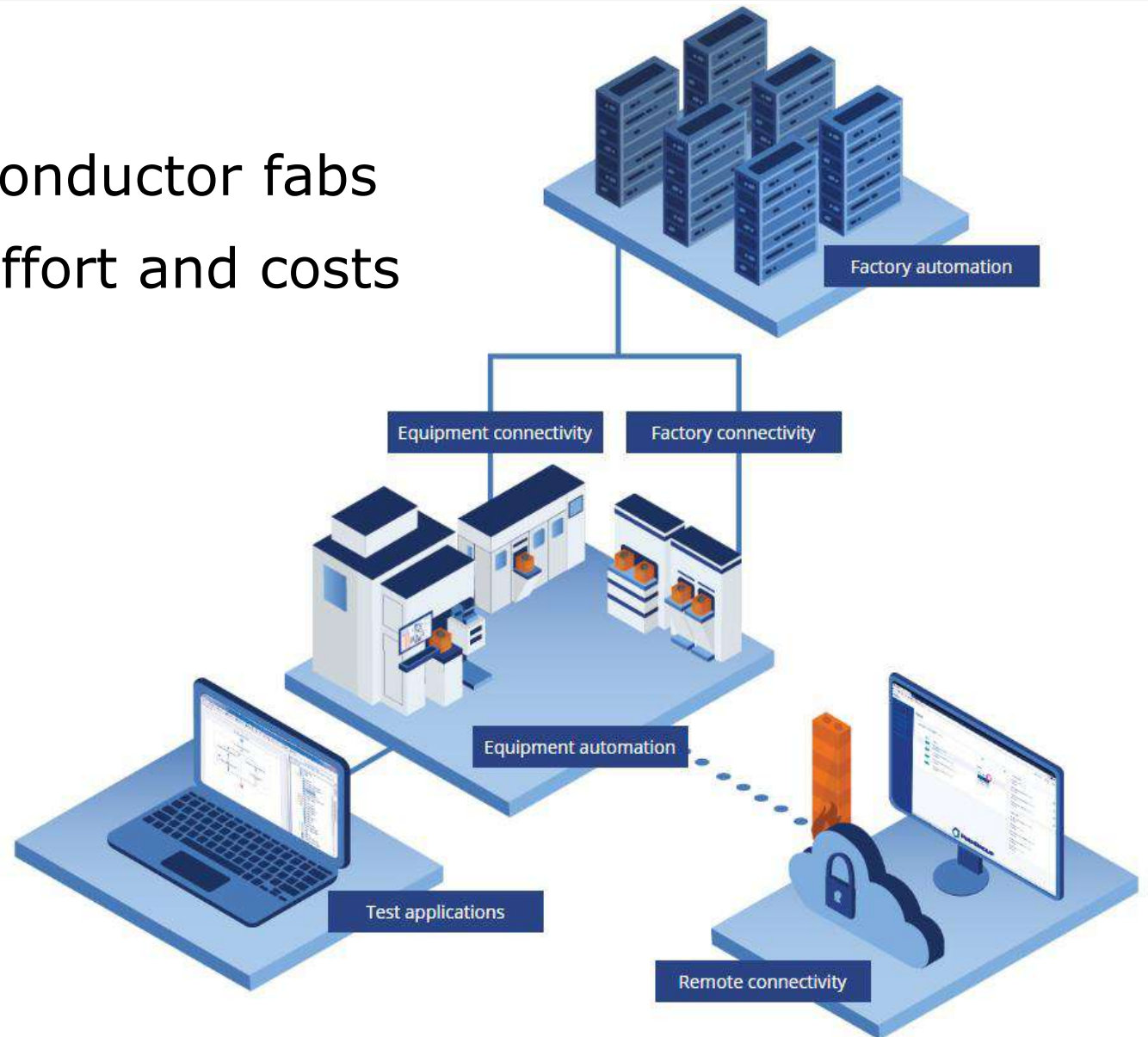
- #6 in 2020 (medium-sized companies)
- Great Place to Work Certified 2016-2020
- Recognized for:
 - Inclusion
 - Women
 - Technology
 - Millennials
 - Giving Back
 - Mental Wellness



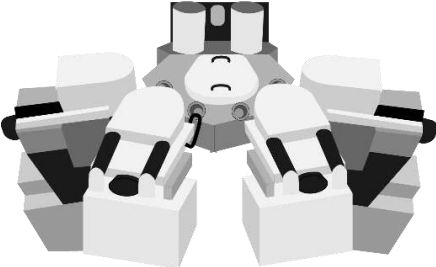
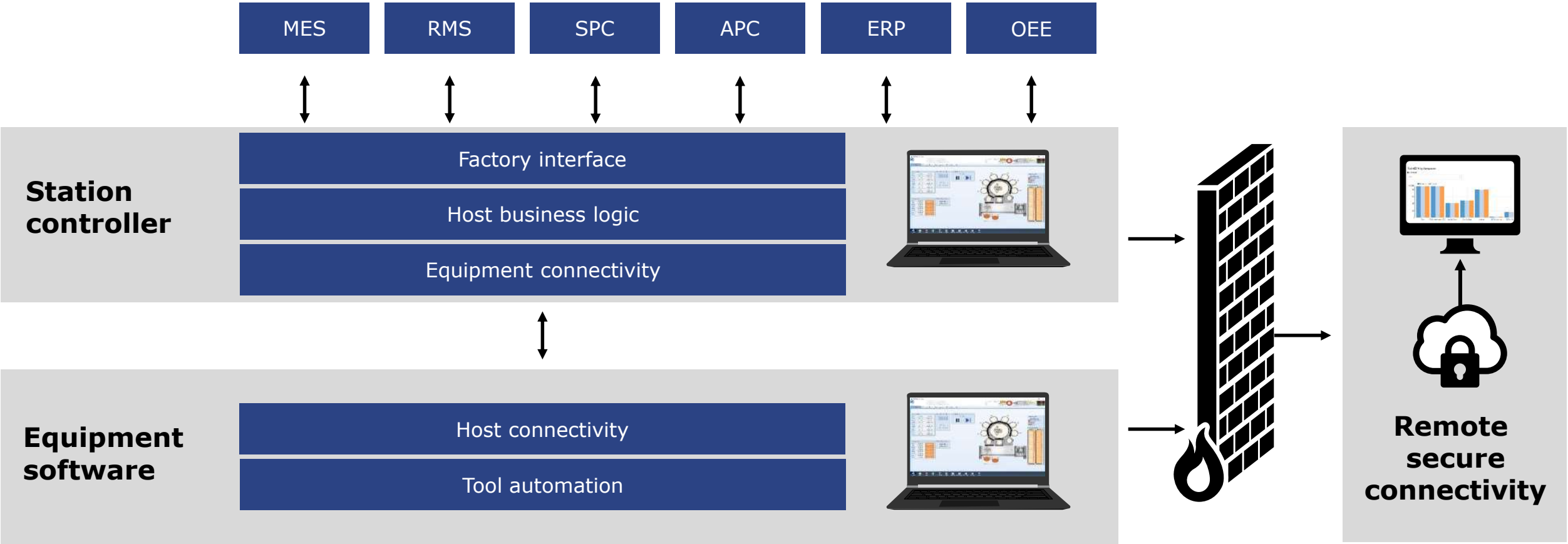
Comprehensive Product Portfolio

Our products:

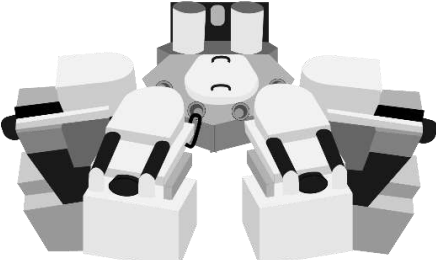
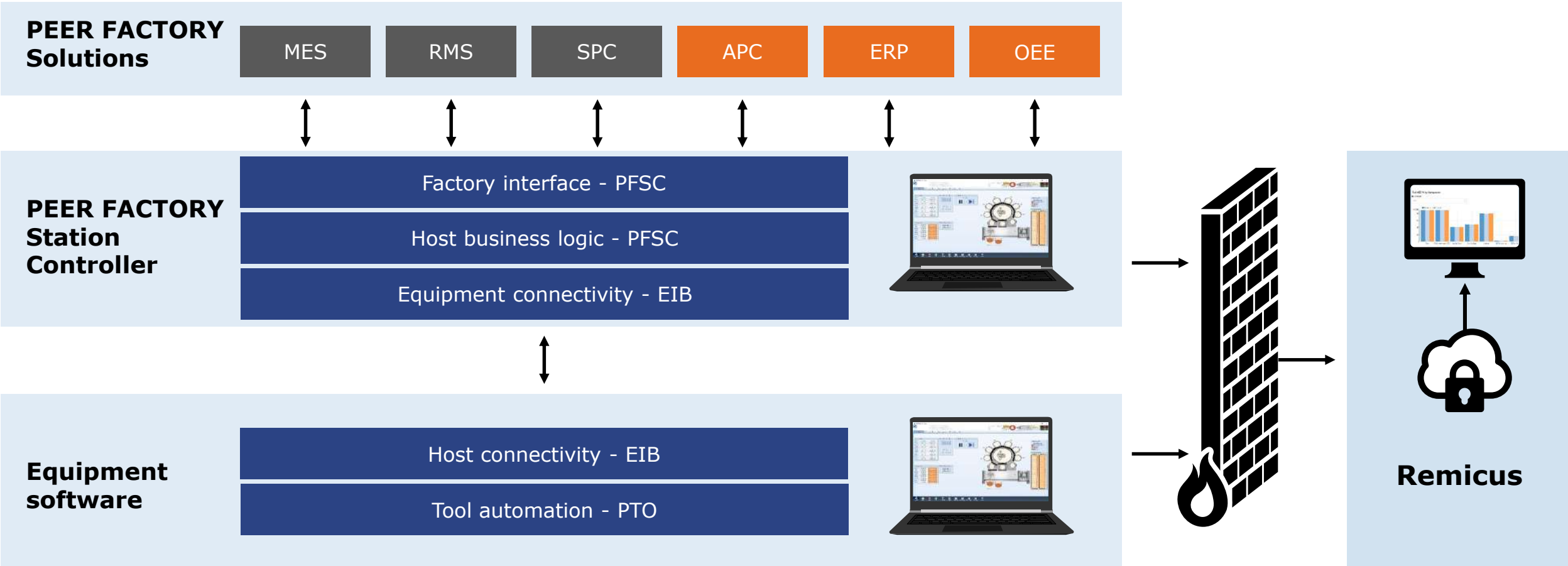
- Are accepted in over 100 semiconductor fabs
- Lower equipment deployment effort and costs
- Reduce time to market



Typical Factory Software Stack



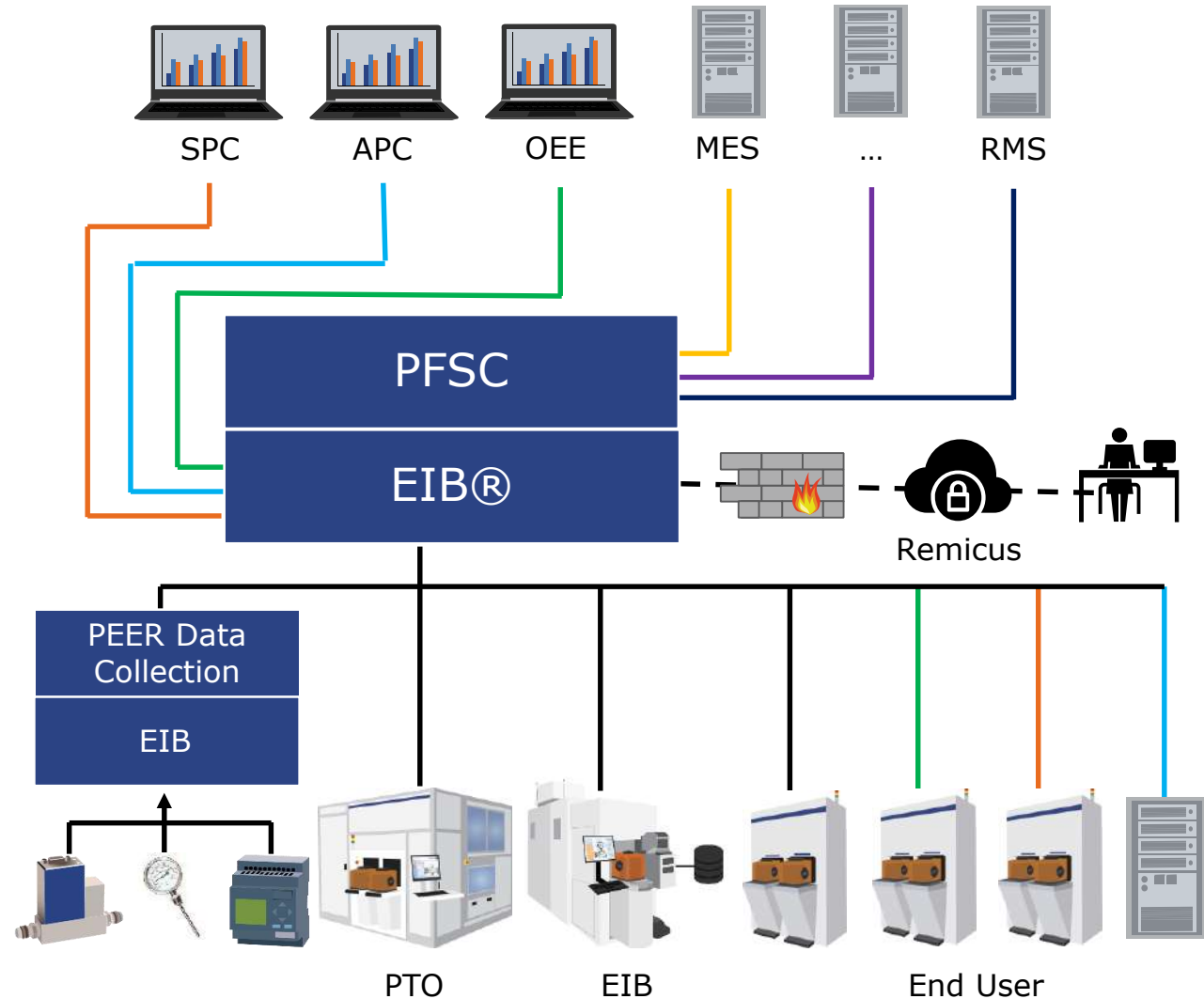
PEER Group Factory Software Stack



Legend

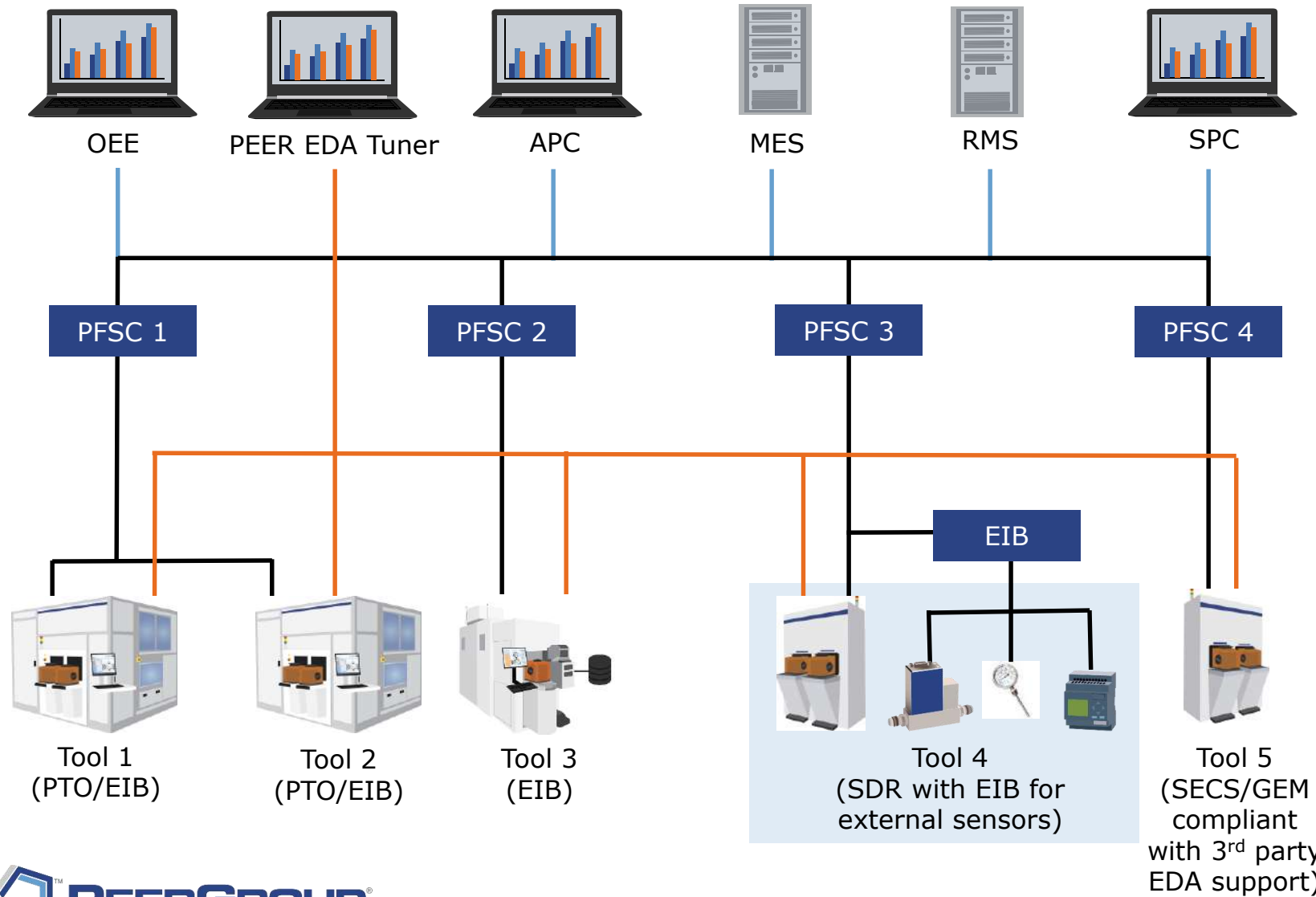
- PEER Group product (represented by a dark blue box)
- Custom PEER service (represented by a grey box)
- External system (represented by an orange box)

Complete Smart Manufacturing Solution



- Tool connectivity options: SECS/GEM, OPC, Serial, COM, TCP/IP, other custom protocols
- Automate and control your equipment
- Track components consumed during assembly
- Push recipes to the tool
- Provide log management
- Collect engineering data for end-user product and processing data
- Access tools and data remotely and securely from anywhere via the web
- Monitor and manage your deployed tools
- Share data with any analytics package

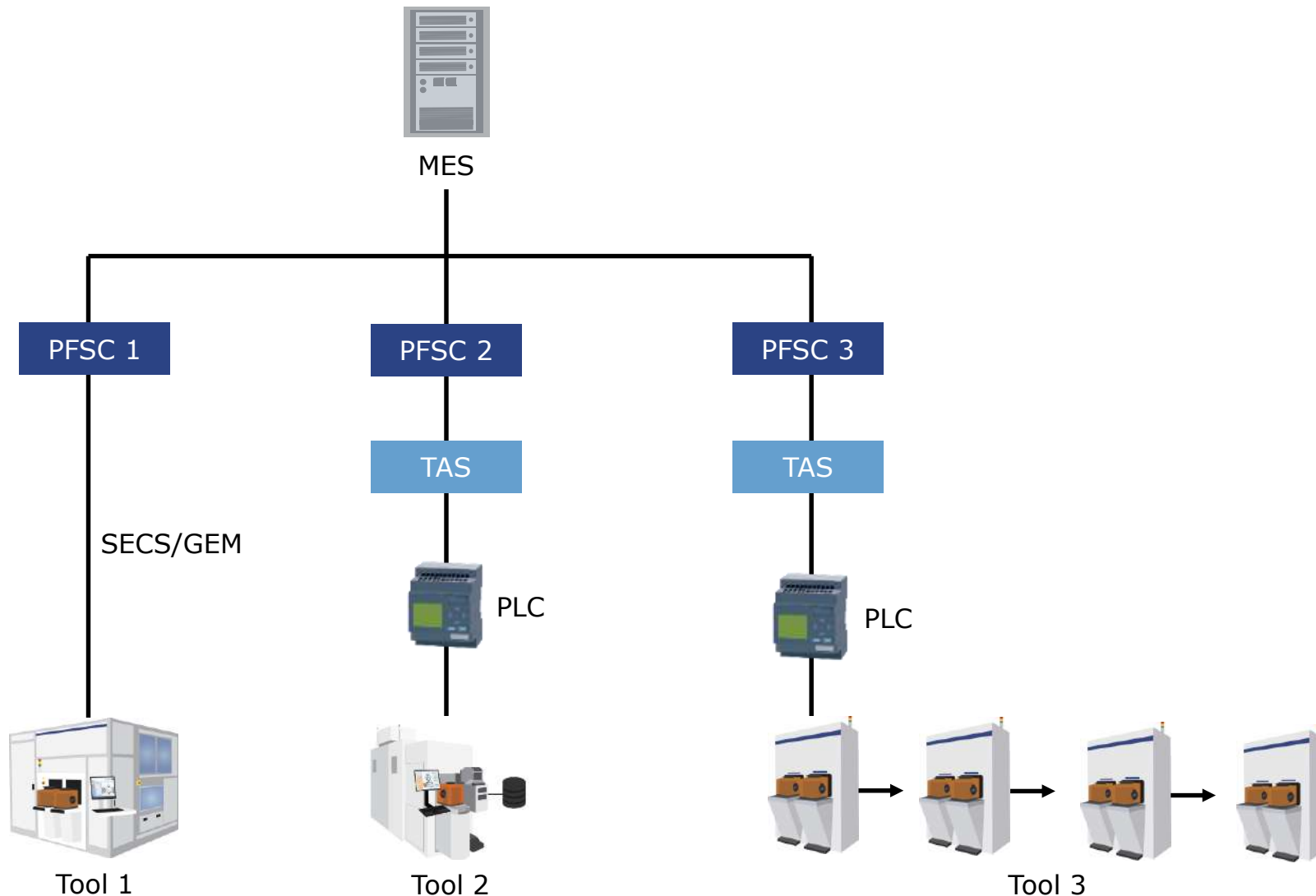
PEER FACTORY Station Controller Configurations (PFSC)



- SECS/GEM Message Bus
- EDA Message Bus
- Network Subscribers

- Tools 1,2 & 3 already have a digital twin from the OEM
 - Fastest integration time
- Tool 4 has external components coupled to it at the fab
 - Allows the fab to customize the tool without OEM intervention
- Tool 5 is a non-PEER solution that complies to the fab requirements
 - Standard fab integration

PFSC Connecting to PLC Tools



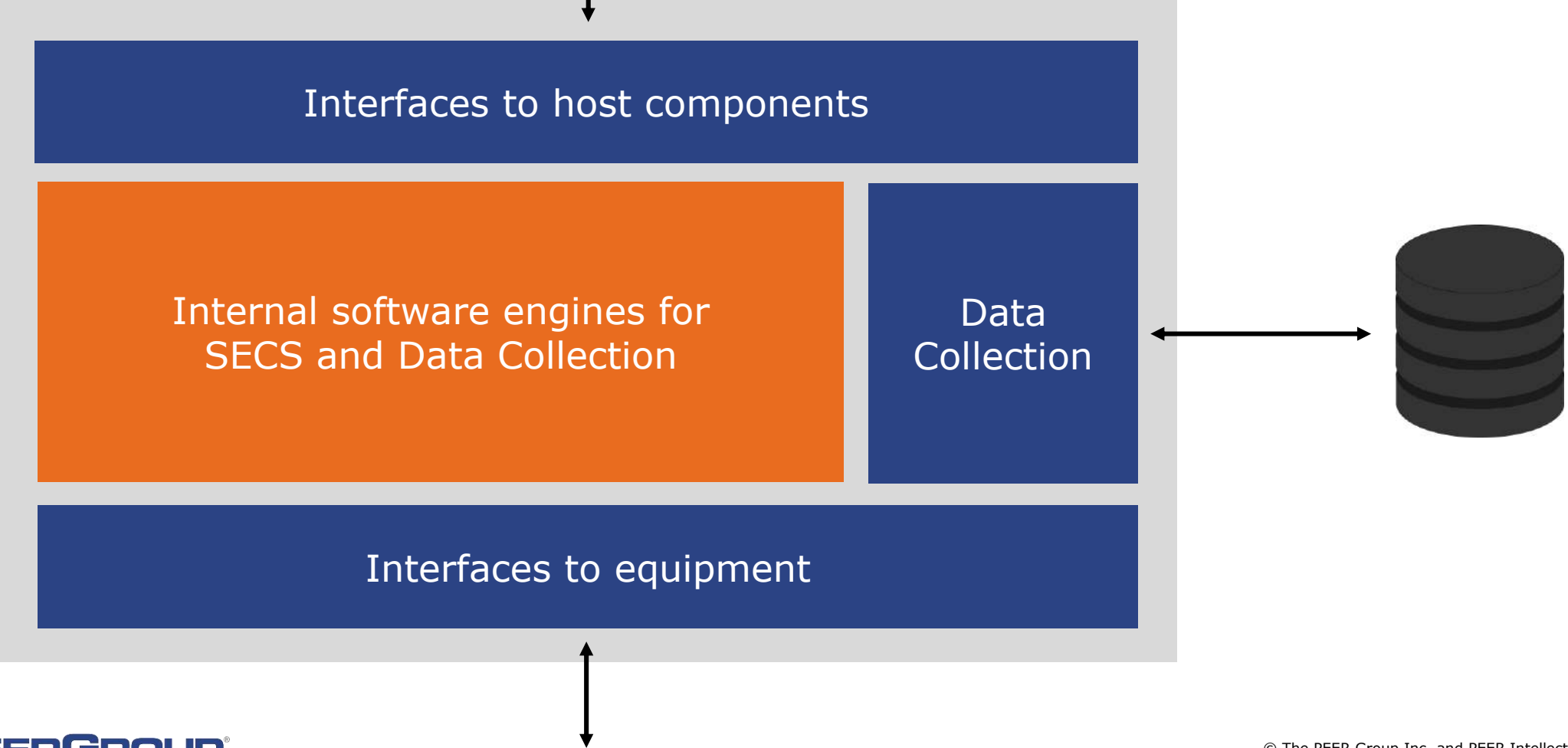
- Tool 1: Has a CIM PC that supports SECS/GEM
- Tool 2: Is driven by a PLC
- Tool 3: Is set of multiple tools, all controlled by a single master PLC
- The TAS (Tag Access Service) is a PFSC component that simplifies communicating with PLCs from multiple vendors

Equipment Information Bridge

EIB® is a product, providing SEMI Compliant SECS/GEM
host automation, and more

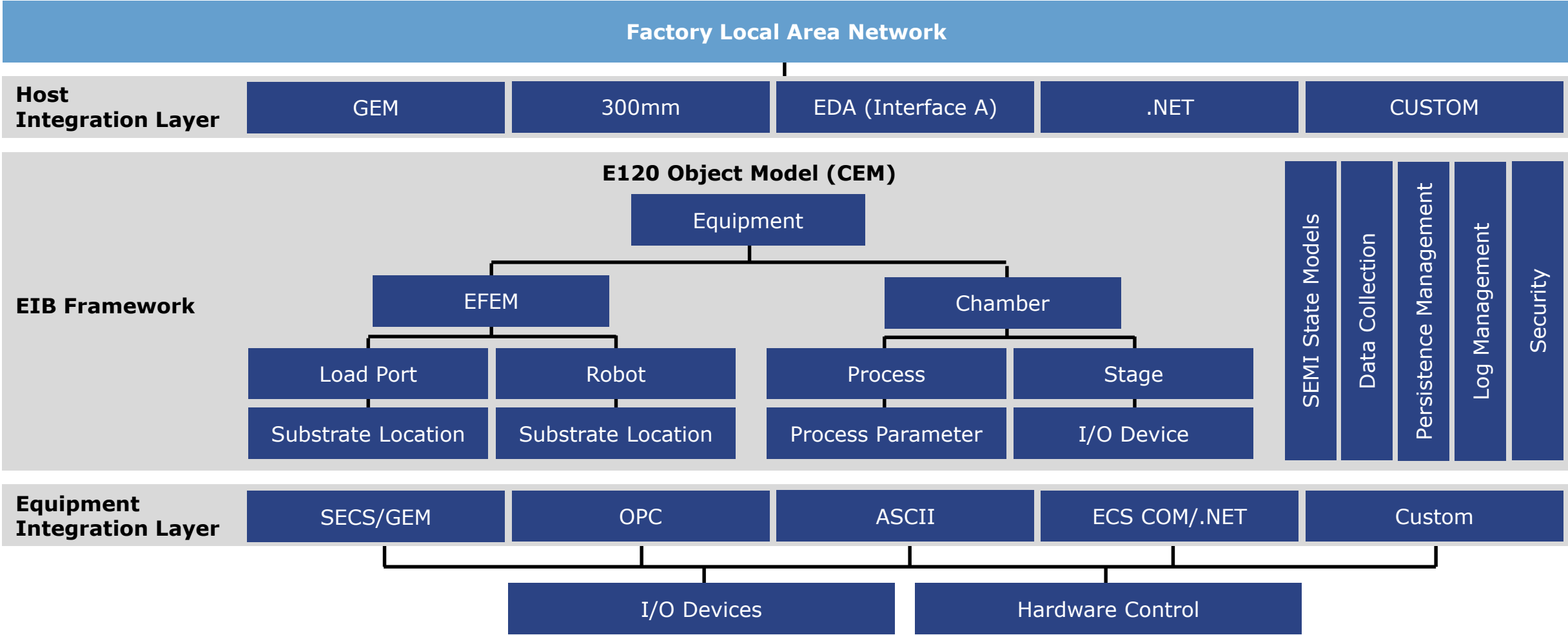
What is the Equipment Information Bridge (EIB)?

Engines and Interfaces



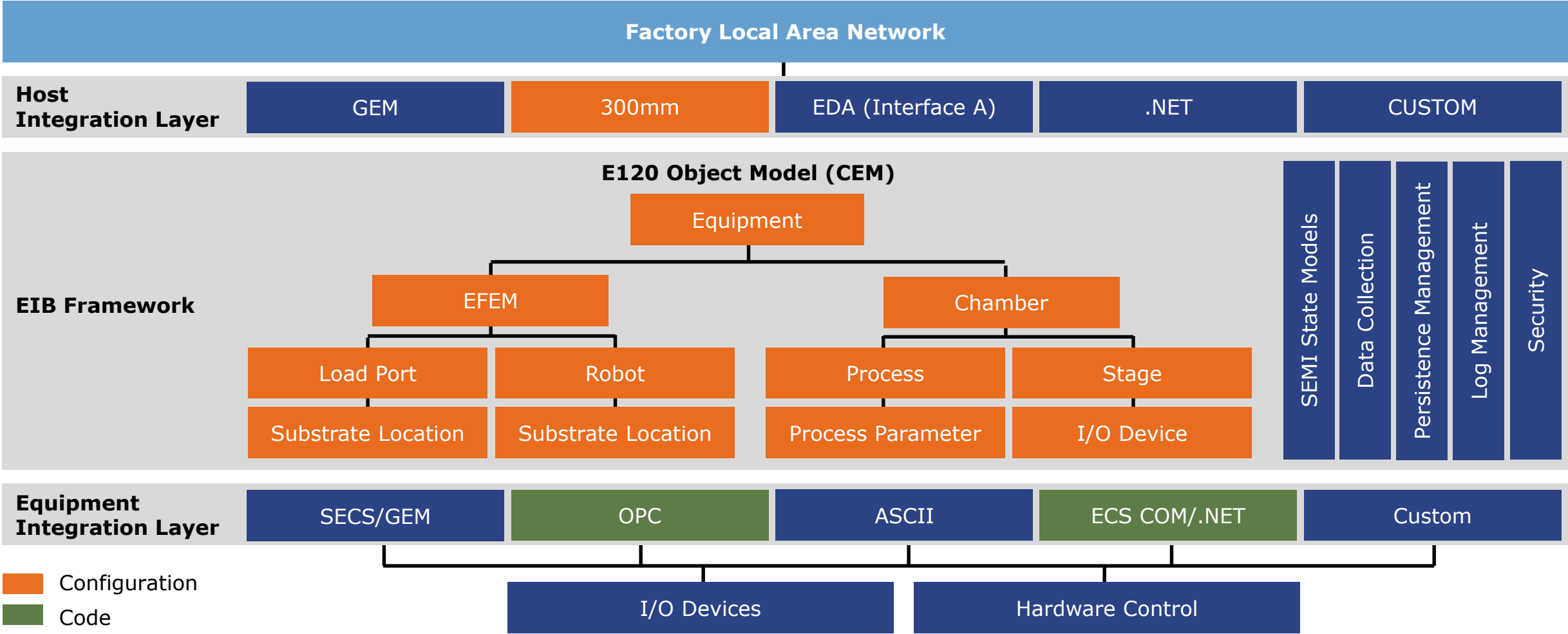
What is the Equipment Information Bridge (EIB)?

Engines and Interfaces



What is the Equipment Information Bridge (EIB)?

Engines and Interfaces





PEER FACTORY Station Controller

PFSC integrates tools to your MES faster than any other platform

PEER FACTORY Station Controller (PFSC)

PFSC integrates tools to your MES faster than any other platform

- Reduces time to market
 - Large library of existing tool models
 - PFSC software development kit
 - Team of professional services engineers
- Leverages the factory proven EIB data broker products
 - EIB Factory
 - EIB OEM
- Leverages the strong backbone of the PEER Tool Orchestrator product
 - GUI design tools

PEER FACTORY Station Controller

operator: admin Log Out
2/25/2019
9:45:48 AM

Overview Metrics

Equipment Status

Current Lot Information

Lot ID: D420T363
Description: Large lot of AX1054 product
Product: AX1054
Completed Trays: 1
Total Trays: 25
Progress: [Progress Bar]

Tray Stack In
Tray Stack Out

Tray Test in Progress

Tray Unit State

- Needs Testing
- Testing in Progress
- Passed
- Failed
- Retest

Lot Status

Lot ID	State	Recipe	Trays
D420T363	Active	MyRecipeId	Complete: 1, InProcess: 1, Absent

Start Lot
Stop Lot

Status Alarms Manual

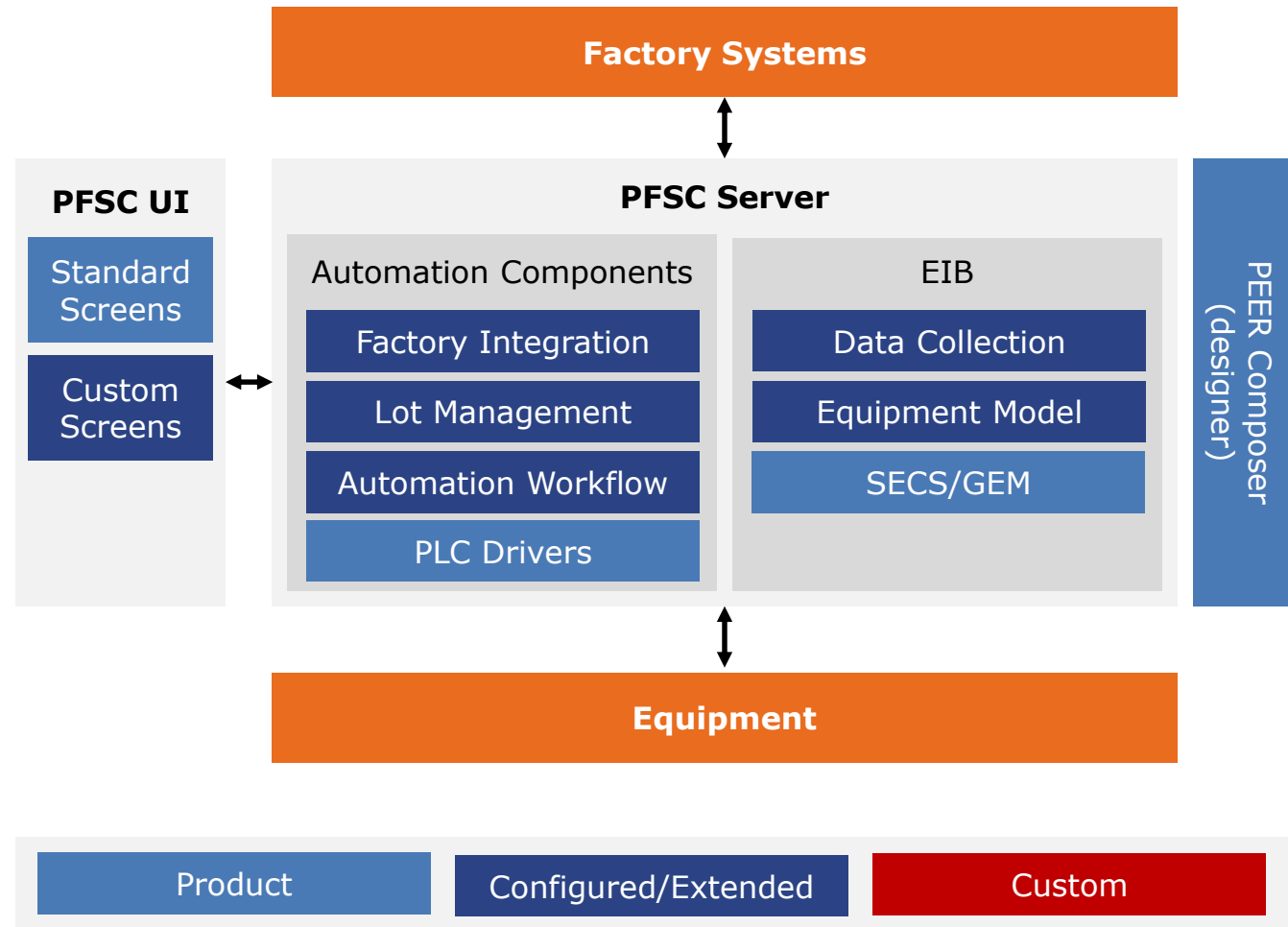
What is PFSC?

A complete equipment integration framework

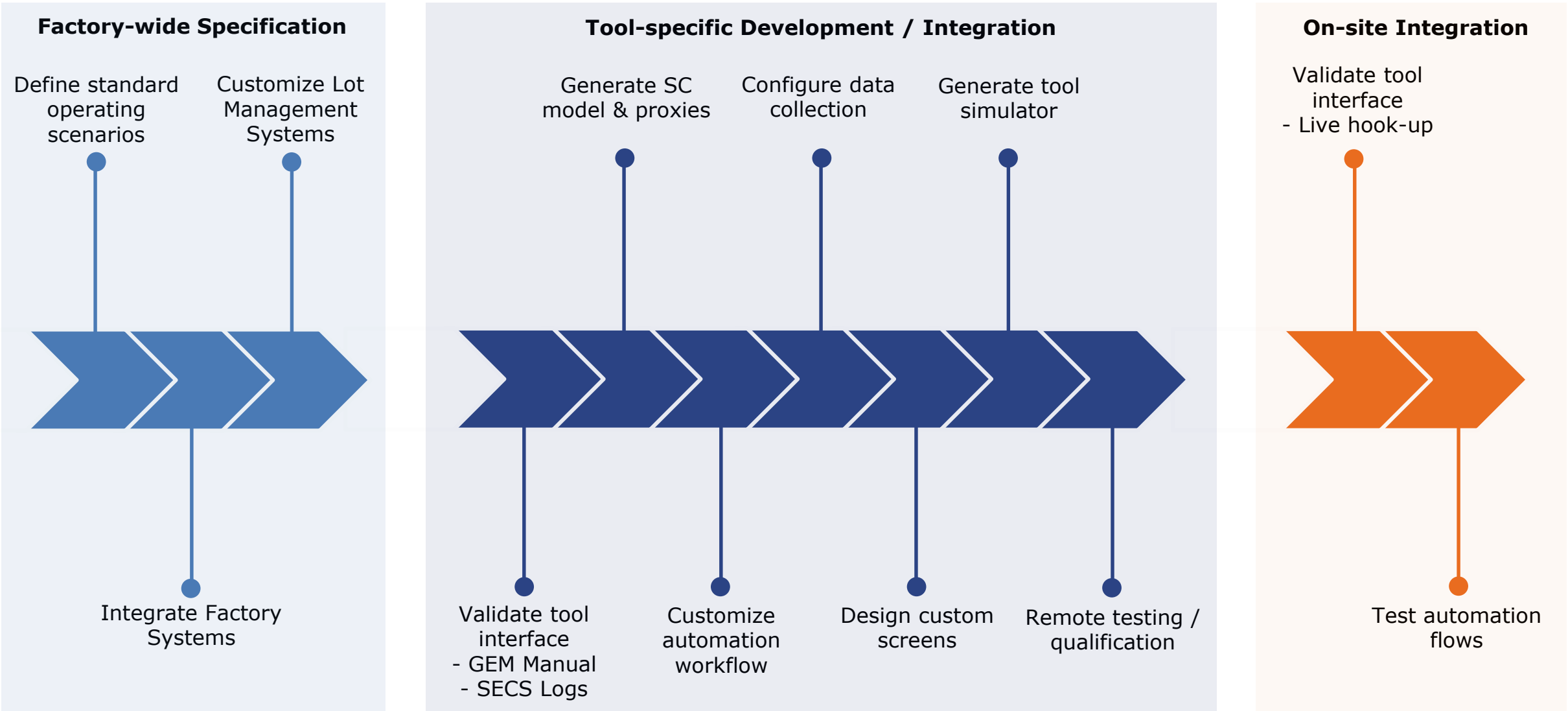
- Automation Components
- Equipment Information Bridge (EIB)
- PEER Composer
- PFSC User Interface

PFSC features overview

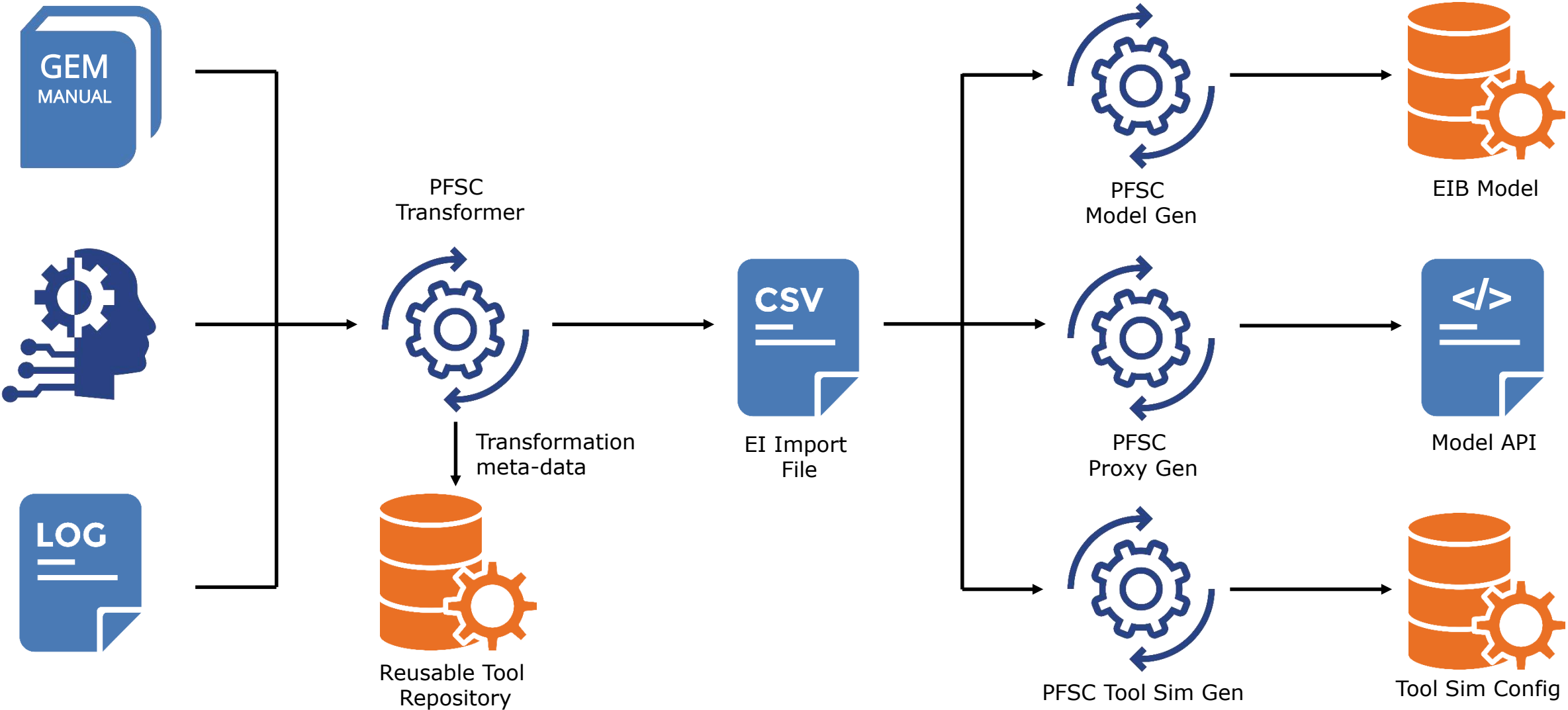
- GEM or 300mm SECS connectivity
- PLC drivers for non SECS/GEM equipment
- Library of common tool interfaces
- Standard automation workflows
- User-defined data collection
- Modular GUI framework
- HMI designer for custom screens
- Powerful data reporting and analysis
- Configurable security
- Seamless release management



A Typical PFSC Solution Lifecycle



A Smart Automated Integration Process





PEERGROUP

Integrating Automation & Information™

We are the largest SECS/GEM equipment automation software supplier in the world

- ~3X larger than the nearest competitor

Our products and team help customers get their tools to market fast and cost-effectively

- Several product options
- 200+ employees to help you succeed

We continue to grow year-over-year

- Organic growth
- Acquisitions
- Market share wins