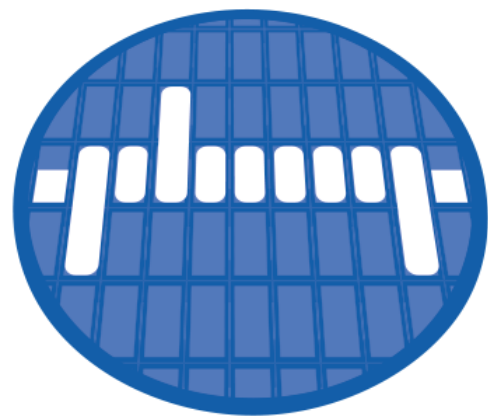




# INFICON

Inspired by visions. Proven by success.



# plessey

microLEDs



*Driving Semi's Industry 4.0 Smart Factory Revolution*

# **Intelligent Manufacturing Systems**

**Collaborative Success: Supplier-Customer**

**Dynamics in Semiconductor Smart Manufacturing**

# INFICON Global Presence & Software Deployments

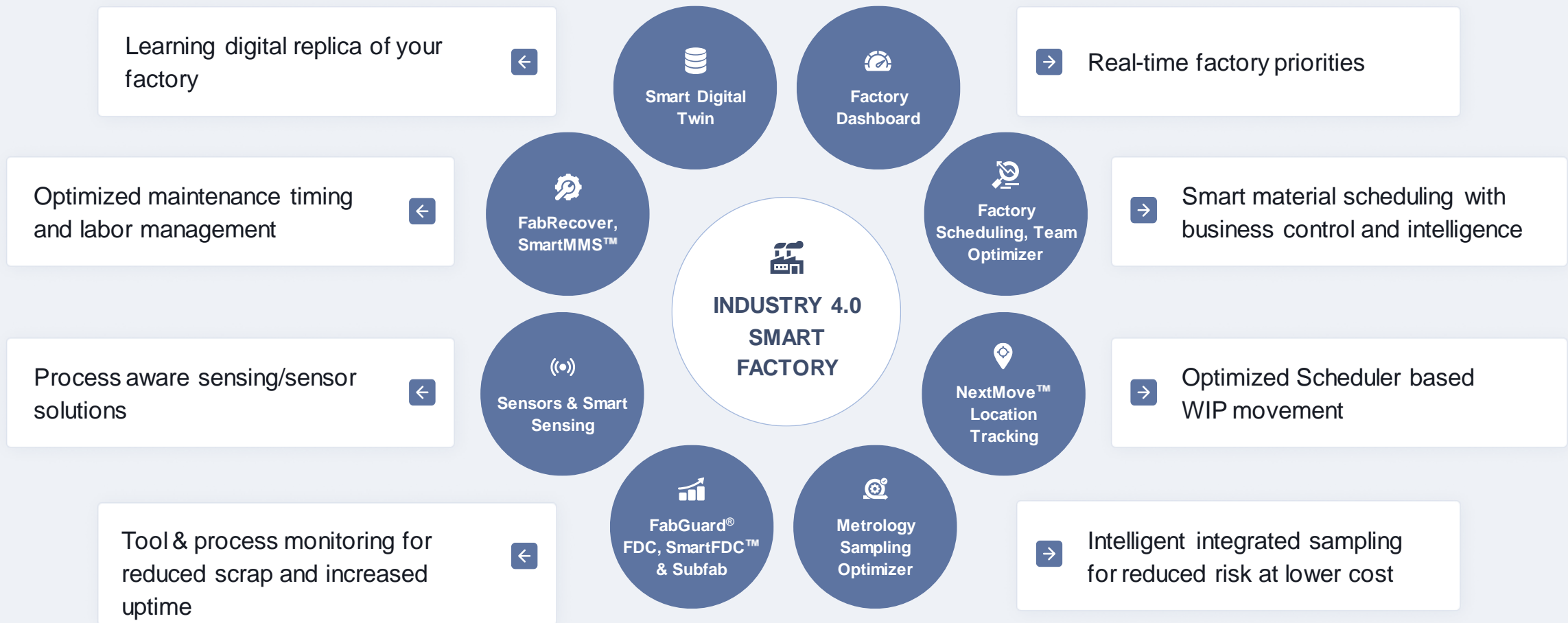


● IMS Software Offices    
 ● Sales and Offices    
 ● Manufacturing Site

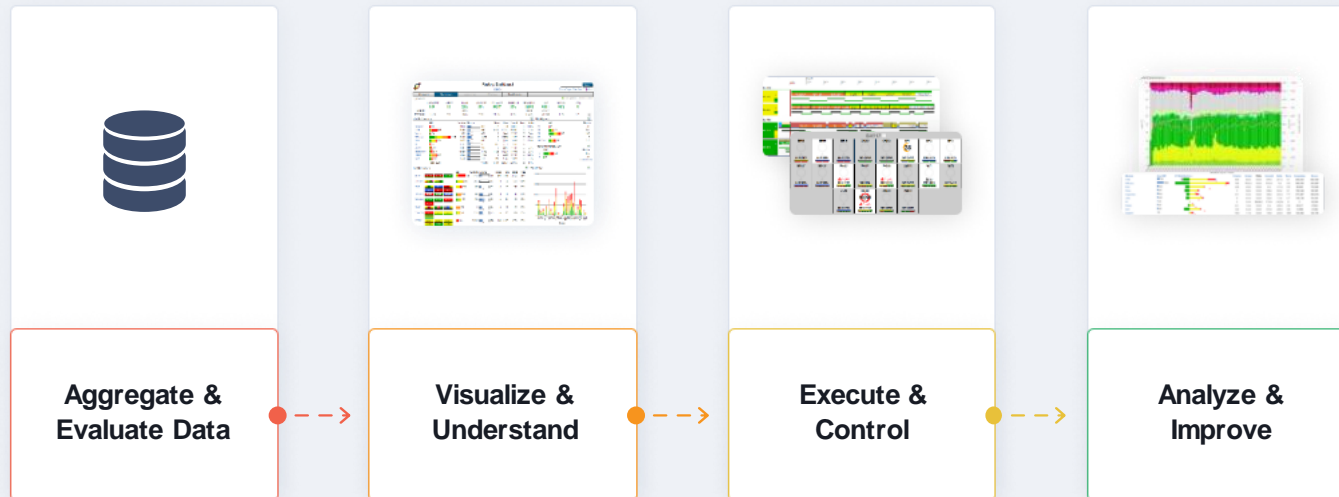
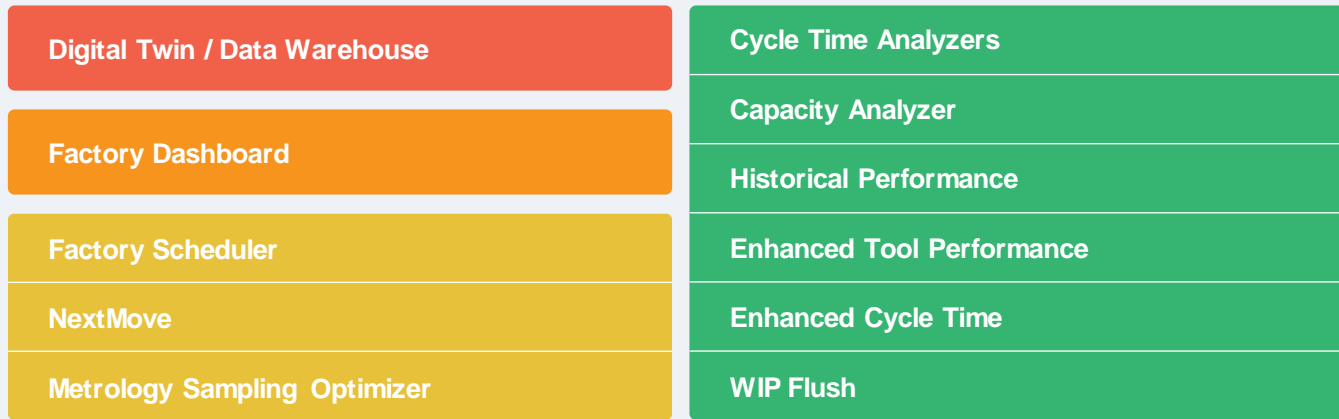
↑
**FPS - Most commercial fully scheduled fabs in the world**

**FPS**     **50+ Fabs (5 Backend)**  
**FabGuard**     **40+ Fabs (5 Backend)**

# Integrated Smart Product Value Propositions

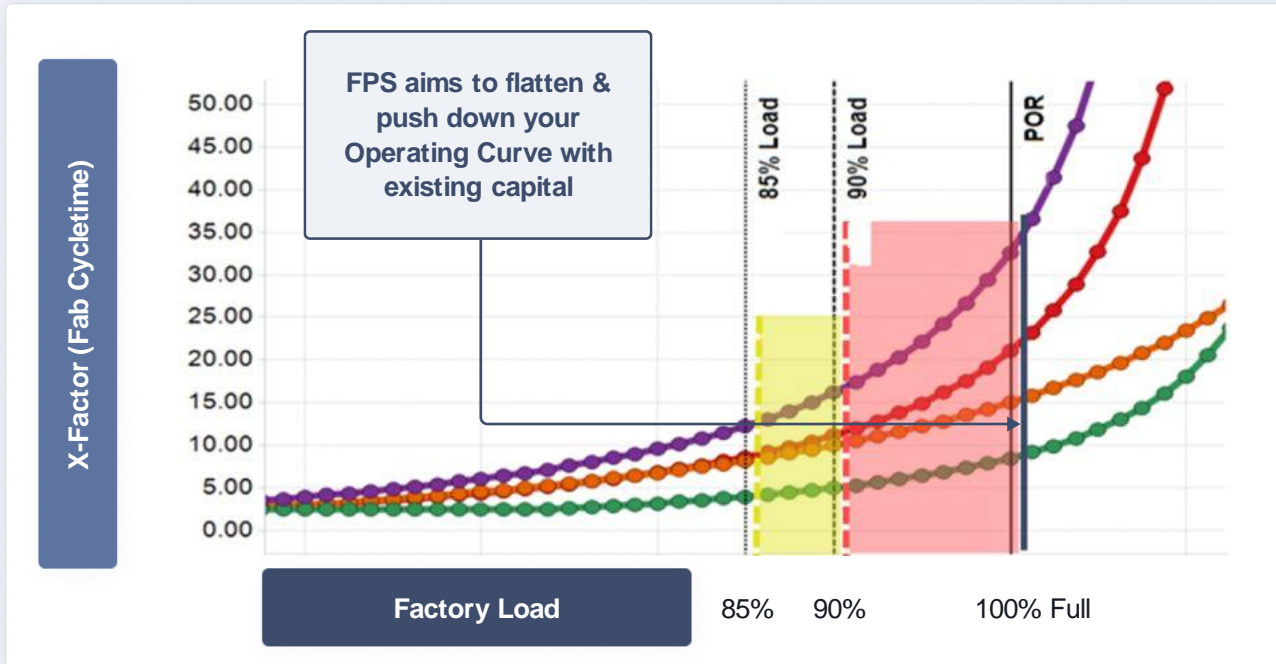


# INFICON FPS Products



# Factory Operating Curves

- ➔ Describe each of your factory's performance efficiency
- ➔ Driven by # of like tools, factory systems, factory variation, reentrant steps, etc.
- ➔ Smart solutions improve an operating curve for: improved output/OTD, reduced cycle-time/inventory thereby reducing COGS by 5 - 20%



X-Factor is the multiple of raw processing time.

(Cycle Time / Raw Processing Time)

$$CT_q = V * U * T$$

(Kingman's Equation)

$V = \text{Variability}$

$U = \text{Utilization}$

$T = \text{Time}$

## Factory Operating Curve Types

- **Low X-Factor**

Favorable Capacity / Non-Bottleneck.

- **Medium X-Factor**

Has a single unfavorable capacity factor, results in flatter curve and higher X-Factor at lower loads.

- **High X-Factor**

Minimal buffer capacity results in exponentially increasing X-Factor at >85% Load.

- **Very High X-Factor**

Multiple unfavorable capacity factors + High % Capacity Used.

# Successful Collaboration Starts with a Trusted Partnership

## Target Goals

1. Shared Vision and Goals
2. Trust and Transparency
3. Clear Communication
4. Complementary Capabilities
5. Flexibility and Adaptability
6. Mutual Benefit and Value Creation
7. Effective Governance and Management
8. Continuous Improvement and Learning

## Ideal Performance

Alignment, accountable and regularly monitored  
Open communication on deliverables  
Timely and ideal to align expectations  
Leveraging strengths and mitigating weaknesses  
Important for int teams, agile to accommodate change  
Deliver on ROI, generate benefits for all  
Exceptional Project Man (PM), frameworks/processes  
Support contracts and training, future innovation (UGM)



# Plessey Requirements

- We are a low volume, high mix, high complexity fab
- Requirements to:
  - Increase learning cycle speed (reduce X-Factor)
  - A single source of truth for data driven decision making
  - Full visibility of fab operations
  - Reduce the burden of reporting
  - Visibility for our customers





# Successful Collaboration Examples

- Not just being on site but also understanding the operation.



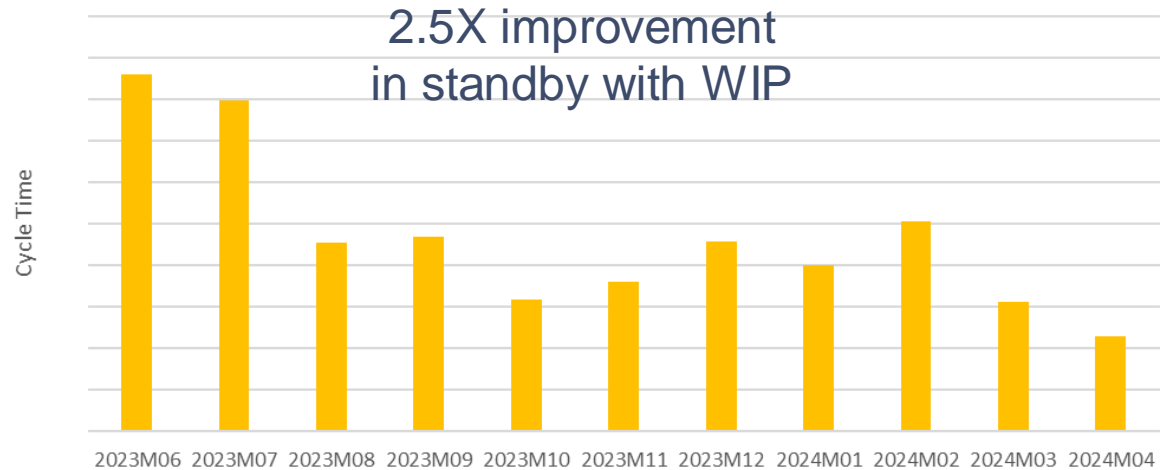
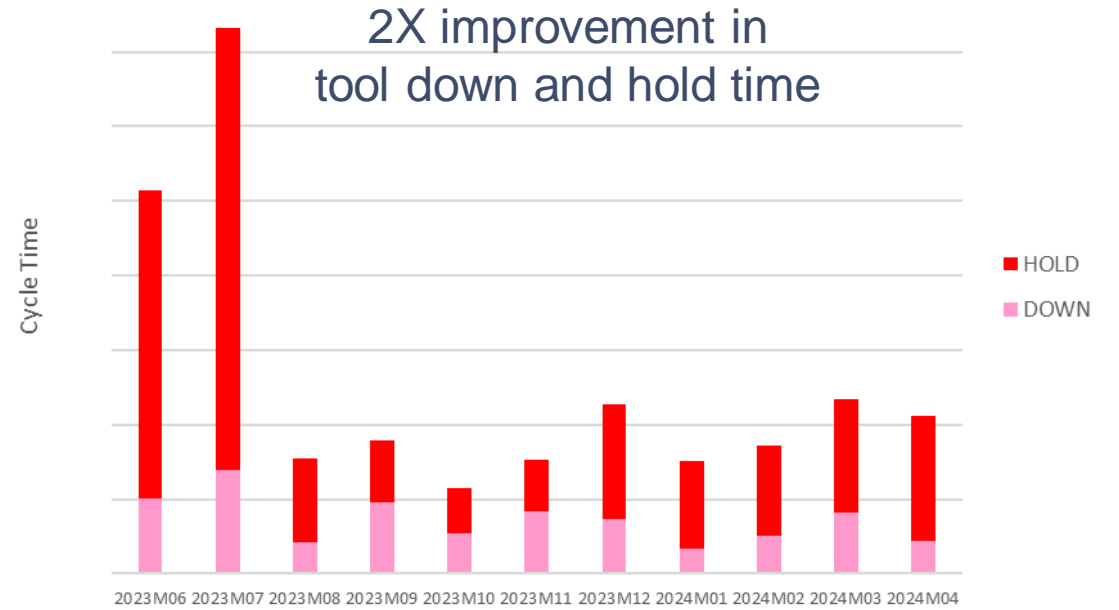
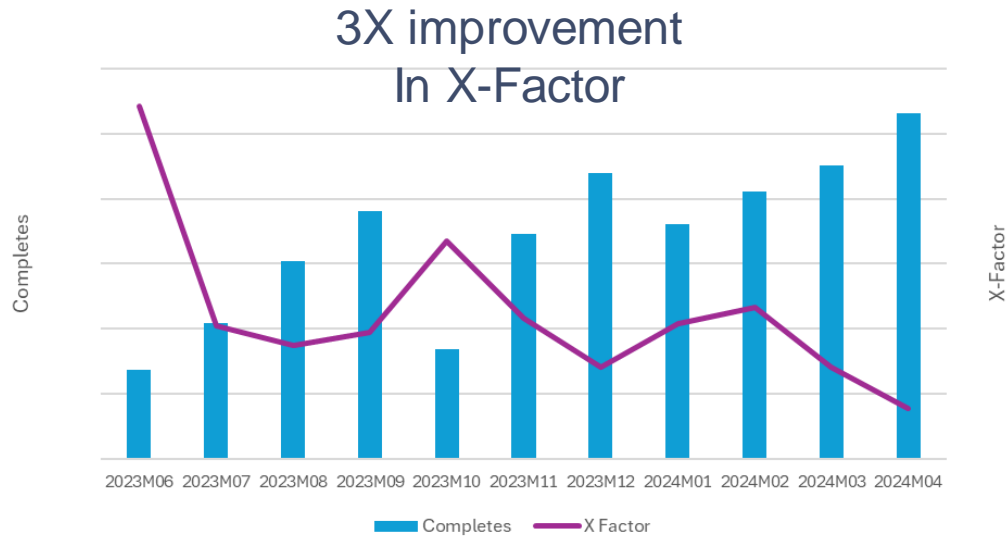
- Governance on both sides. Someone who really owns it and wants to get as much value as possible.



- Being flexible to work within each other's hours.



# Since Collaboration



# Conclusion

Working with an experienced partner that understands the needs of both parties deliver

Exceptional and timely project results

Create mutual benefit and value creation

Sustainable growth

Open future business opportunities



## Your input is needed!

The Semi Smart Manufacturing European group has created a survey to understand the current “state of the union” in regard to End to End Smart Manufacturing.

We are looking for your input to our survey

[SEMI Pulse-E2E Smart Manufacturing Survey 2024 \(lamapoll.de\)](https://lamapoll.de)

In return you can request special insights about your company positioning vs the market average



## Connect with us!

