



19-21 September / Eylül 2024
Istanbul Expo Center, **Istanbul - Türkiye**

12. Uluslararası Döküm Kongresi **12th International Foundry Congress**



«IIoT Veri Toplama ve Analizi ile Dökümhanede Verimlilik ve Karlılık Artışı»

«How IIoT Data Centralization and Insight Transforms Foundry Efficiency and Profitability»

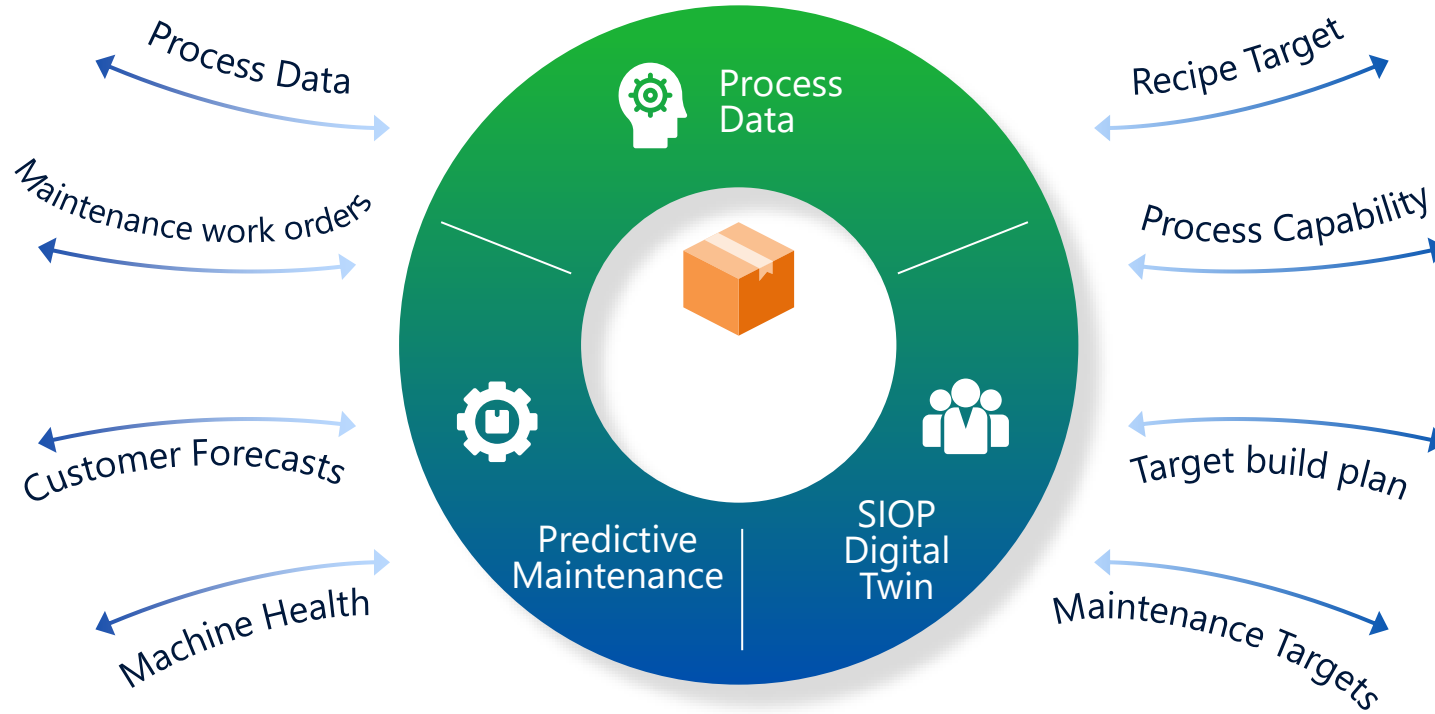
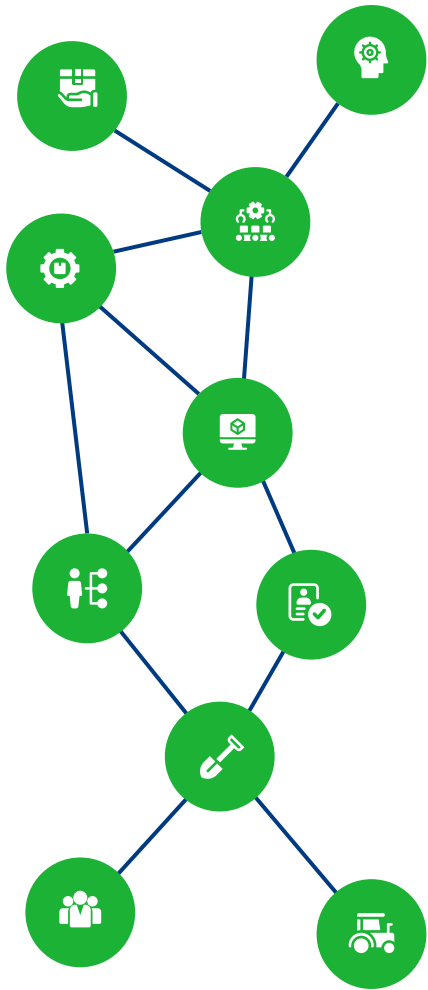
Carsten Nielsen
(DISA)

4. Oturum / 4th Session

Oturum Başkanı / Session Chairman: Doç. Dr. Ekrem Altuncu
(Sakarya Uygulamalı Bilimler Üniversitesi)



Industry 4.0: What is the vision?



A.I. recipe targets drive a reduction in scrap and improved operational efficiency.

ERP acts as the key integrator of enterprise data management.

A.I. SIO allows for real time production control to drive down past dues and inventories.

Common Challenges: BEFORE Industry 4.0

CHALLENGE: Lack of Data Transparency

- Past and biased data
- Labor-intensive

OPPORTUNITY: Improve Efficiency

CHALLENGE: Data Lives in Different Silos

- ERP, Scada, Excel, Power BI etc.
- Manual data collection

**OPPORTUNITY: All Data in One Place:
Faster Data-based Decision Making**

CHALLENGE: Dependency on Experts

- Decision based on experience
- Labor and time consuming

**OPPORTUNITY: Captures Expert Knowledge,
Builds & Collects Reliable Actions for All to Use**

CHALLENGE: Lack of Holistic Optimization

- Reactive analysis in silos
- Expert intensive analysis
- Constrained by team's skills and time

**OPPORTUNITY: Optimize
Costs and Labor Cost Savings**

Industry 4.0: Why do we need it?



Data availability real-time for fast reactions.



Data transparency for 24/7 access.



Trend analysis and improvement focus areas.



Overview of the plants combined on key KPIs.



Industry 4.0: What does it take to be successful?

Culture

- Embrace Change / Adaptive
- Collaborative
- Executive Buy-in.
- Strong Digital Fluency
- Cross-functional Teams vs. Silos.
- Risk-Friendly.
- Continuously Measure & Improve

Technology

- Cloud
- API based
- Automation
- Continuous Integration & Delivery
- Service Oriented Architecture
- Analytics
- Social
- Mobile



Strategy

- Clearly Defined Vision
- Business Outcomes / Goals Strategy
- Digital Strategy
- Decision Frameworks
- Optimized Governance
- Big Change vs. Discrete Solutions
- Ability to Digitally Re-imagine

St. Cloud Foundry: A success story in real time...

Higher Productivity | Less Downtime | Improved Efficiency



We can now access all manufacturing process data in one standardized database, this will make it easier to discover lapses, such as recurring machine downtime or other production bottlenecks, while pinpointing opportunities for improvement.



*Of the 5 foundries that have launched our digital solution in the sand function, **100% of them have seen a scrap reduction reading in the last 4 months, 100%!***

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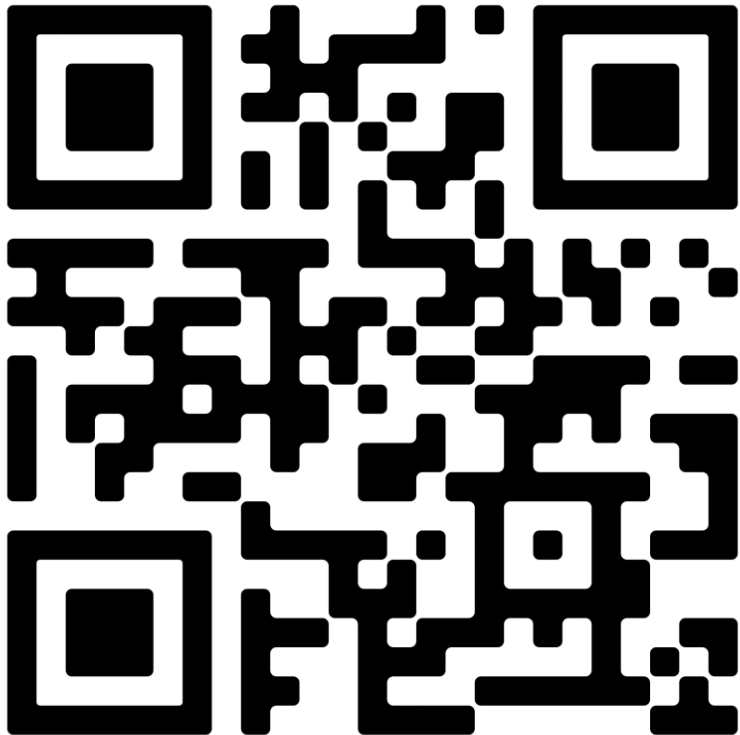
You do not need to be a technical expert to use the information or the system.

*We use automatic notifications with simple charts to read if the system is running in or out of tolerance or if a piece of equipment is going to fail, we can react quickly to prevent that failure from happening-
All in real time!*



– Mike Meyer, Grede

Grede video



Scan the QR code to watch the Grede video!

Data at your fingertips. No matter where you are!

DRIVING OPTIMIZATION AND EFFICIENCY.

