

DIGITAL TRANSFORMATION IN INDUSTRY

A new era in the Smart Factory: Companies can now use around 400 well-known apps in manufacturing

- Innovative FORCAM Connector to the app ecosystem Microsoft Power Automate
- No matter the app Outlook, Salesforce, Skype, Trello or Twitter factory teams can easily configure real-time workflows or automated key figure control themselves
- React immediately to errors and minimize downtime without programming effort
- Work 4.0: "The first tangible means of digitally transforming manufacturing simply and quickly".

Ravensburg (Germany), October 2020 – Digital transformation in a new dimension: The smart factory specialist FORCAM now offers manufacturing companies for the first time an electronic bridge to the app ecosystem "Microsoft Power Automate". With the connector, factory teams can significantly improve tasks and workflows in production with minimal effort.

<u>Microsoft Power Automate</u> is an ecosystem of around 400 well-known apps, including Excel, Facebook, Outlook, Salesforce, Skype, Trello and many others. The goal is to empower users to automate repetitive business processes and set up smart workflows for a variety of purposes.

The new FORCAM connector "FORCE Bridge" on Microsoft Power

Automate builds the bridge between the Microsoft App ecosystem

and the production data of a manufacturing company. This enables

companies to drive the digital transformation towards Factory Work

4.0: Factory teams can use the apps to perform important tasks

through smart workflows and minimize downtime, among other things.

Video "New Manufacturing Experience"































Microsoft Power Automate – around 400 apps for smart workflows

New Manufacturing Experience with Factory Work 4.0

Oliver Hoffmann, Co-CEO of FORCAM, responsible for sales and digitization: "The digital transformation is in full swing in factories worldwide. Until now, what was missing was the simple use of apps, as we all know them from everyday office and private life. Our new connector bridges this gap between well-known apps and production. For the first time, companies have a tangible means of digitally transforming manufacturing simply and quickly".

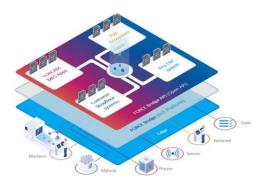
Dr. Andrea Rösinger, Co-CEO of FORCAM, responsible for Development and Service & Support: "Our connector enables manufacturing companies to take full advantage of the opportunities offered by digitalization. The connector ensures that factory activities can be made more efficient and less risky. Ultimately, the connector represents a new manufacturing experience with Factory Work 4.0: companies can empower their teams to work more easily, accurately and independently".



New factory workflows become possible – how the FORCAM connector works

The technological home port of the new connector is FORCAM's main product, the turnkey and cloud-based IIoT platform solution FORCAM FORCE™. Its central element is the platform 'FORCE Bridge' for real-time analysis in manufacturing. This platform is the bridgehead of the connector on FORCAM's side.

Dominik Amann, product manager of the FORCAM connector: "With our connector, manufacturing companies can use the Microsoft App ecosystem with simple configuration - without programming effort - to set up automated and event-driven workflows across departments and to digitally transform their organization in a targeted and rapid manner."



Turnkey and flexibly expandable: IIoT platform solution FORCAM FORCE™

Example: material shortage – logistics team is immediately alerted

A worker notices that there is insufficient or faulty material for a current production order. By clicking on the touch terminal, the person can send an e-mail, a Microsoft Teams message or an online ticket (JIRA, Trello etc.) to the members of a logistics team. They are called to a meeting ad hoc.

Dominik Amann: "The automated message transmits all relevant information such as required material, order, machine and location to the right person in real time. Valuable time is saved. The logistics team can directly initiate measures to remedy the current material bottleneck and avoid future material shortages".

Example machine defect: Downtimes can be reduced

A component breaks on a machine during production. A Trello ticket is automatically created for maintenance, for example. In addition, people directly involved are notified and fast and targeted action is possible. Result: Downtimes are reduced.



Take immediate action with digital workflows and minimize downtimes

Dominik Amann: "Thanks to the simplicity and flexibility of our connector to Microsoft Power Automate, a wide variety of workflows can be created by the workers themselves without programming. The 400 applications in the Microsoft ecosystem, such as Microsoft Outlook, Salesforce, Trello or JIRA, can be connected by any factory team to create the individually desired solution".

The FORCAM connector makes factory work smarter for many other central tasks

- Compare key performance indicators: Via e-mail, factory teams automatically and regularly obtain information on target and actual values, for example, of the overall plant efficiency.
- Process value violations: Even sensors that record process data such as fill levels, pressure and voltage in machines can trigger automated workflows.
- Material requirements: Sensors report via selected apps when new material is required.

Link to Press Release



The three core tasks in a Smart Factory: transparency, efficiency, flexibility

In the era of the Industrial Internet of Things (IIoT), new supply chains are emerging, new business models are displacing old ones. For the manufacturing industry, the following applies: Only those who work with technology for real-time analysis in production will participate in the business processes of the future.

FORCAM offers such a solution. The aim is to support manufacturing companies in securing their long-term competitiveness in the era of IIoT. The turnkey, freely expandable and cloud-based IIoT platform solution FORCAM FORCE™ delivers data-driven manufacturing. It enables companies to significantly increase their efficiency in production and planning.

FORCAM FORCE™ solves the three most important tasks of a Smart Factory:

TRANSPARENCY THROUGH CONNECTIVITY

In the factory of the future, transparency is the prerequisite for efficient processes. In FORCAM FORCE™ transparency in production and planning is ensured by horizontal and vertical connectivity. Firstly, the FORCE Bridge platform provides horizontal connectivity for industrial machines from a wide range of manufacturers and vintages, as well as for devices, sensors and orders. Secondly, the platform networks the systems of production (Shopfloor) with the systems of corporate planning (Topfloor).

EFFICIENCY THROUGH DIGITAL TWIN OF PRODUCTION

The factory of the future works with uniform data for production and planning. In the FORCAM solution, the central intelligence generates a production data model for real-time analysis. Every signal receives the correct meaning (semantics) every millisecond, creating the "digital twin" of production. It becomes the only source for analysis and planning ("single source of the truth") throughout the company. In addition, FORCAM FORCE™ offers all important factory IT apps with more than 70 analysis functions as turnkey solutions (MES − Manufacturing Execution System). Thus enterprises increase their efficiency significantly - in three months already by more than ten per cent (measured by the total plant effectiveness OEE).

FLEXIBILITY THROUGH FREE COMPOSITION AND COLLABORATION

In the factory of the future, companies can create their own IT architecture according to their individual needs. Integrated in the IIoT platform solution FORCAM FORCE™ is the first open web interface for Smart Manufacturing (OPEN API). It offers companies great freedom: They receive the possibility for the free composition and co-operation of IT systems. Enterprises can easily integrate both existing systems and third-party solutions on one platform and thus create their own individual IT architecture. Beyond that FORCAM offers a growing market place with solutions and applications for the industry.

Download ePaper: "Restart in Production"



About FORCAM - www.forcam.com

In the era of the Industrial Internet of Things (IIoT), manufacturing companies need a strong and flexible IT backbone in production. FORCAM supports companies in significantly increasing their efficiency in production and planning. FORCAM provides an open and fully flexible IIoT platform solution for intelligent manufacturing. It is rated by analysts as "best in class". The turnkey and freely expandable cloud platform solution is used by internationally active large and medium-sized companies alike - including BorgWarner, Dynomax Aerospace, Howmet Aerospace (formerly Arconic), Kostal, Krones, Lockheed Martin, Richards Industrials, Schaeffler. More than 100,000 machines worldwide are already monitored with FORCAM technology. FORCAM is headquartered in Ravensburg, Germany, with offices in USA (Cincinnati), England (Rugby) and China (Shanghai).

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