

Swiss Smart Factory Lighthouse Industry 4.0 production ecosystem



Switzerland Innovation Park

Founded: 2017

Location: Biel, Switzerland

Technology: IoT, Industry 4.0

Industry: MedTech, Watch

Industry, small production

Website: <https://www.sipbb.ch/en/>



SWITZERLAND INNOVATION PARK

Switzerland Innovation Park Biel/Bienne (SIP-BB) is a multidisciplinary non-profit R&D organisation (SME) that operates the Swiss Smart Factory (SSF). Swiss Smart Factory (SSF) is Switzerland's leading and internationally recognized competence center in application-oriented research on "Industry 4.0" and "Internet of Things". The SSF has been created in May 2017 as the first and only Digital Innovation Hub (DIH) in Switzerland. SSF acts as a regional and national multiplier and facilitator for digital innovations. It supports technology development and transfer from the first idea to the market introduction. Special focus is set on supporting SMEs and start-ups with the uptake and introduction of ICT innovation – both from technology and business perspective

SWITZERLAND INNOVATION PARK PILOT LINE

3D Printer Farm

The 3D Printer Farm shows how to digital retrofit existing machines, different technologies like, OPC-UA, REST-API, IO-LINK, Low-Code are in use here and can be experienced. Here the standardized OPC-UA Datamodel is used as an CIM. Each of the nine 3D printer modules have their AAS, and are connected to the DIMOFAC Platform thanks to their OPC-UA servers.

Manual workstation

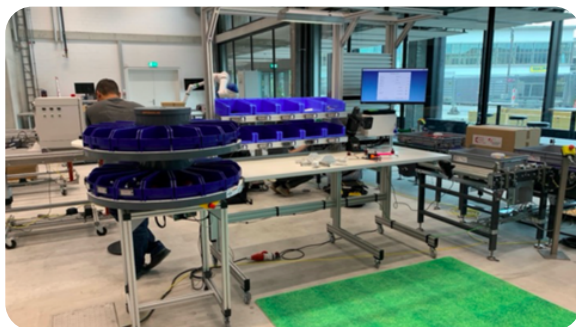
Our manual workstation is helping the worker in their daily production tasks, it allows to keep the quality at a high level and allows fast introduction to new product configuration. Thanks to the product AAS the manual workstation can reconfigure automatically following the specification of the lot sized one product.



Swiss Smart Factory Lighthouse Industry 4.0 by SSF (CH) represents an IoT-based, end-to-end production scenario addressing the requirements of high-wage, high-value manufacturing in Switzerland.



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SERVICES OFFERED

1

Consultancy

- Smart Worker Guidance - How can my organization help employees to be more efficient
- OPC-UA Datamodelling - How can I develop an OPC-UA datamodel (CIM) for my machines, and its AAS
- Digital retrofit- How can my organization get data out of "old" machines
- Low-code - What are the possibility with Low-code application in my organisation
- Cobotic- Where can my organisation use a cobot
- RFID - Where can my organisation use digital logistic

2

Process development

- On-site analysis and development of digital strategies

3

Pre-series

- Support during the development of prototype IoT Integration
- Support during the development of prototype automation system

4

Training

- Low-Code programming
- Digital Lean Production
- Big Data and Data Analytics
- Cobotic automation

VALUE PER SERVICE



- Consultancy – 10k EUR
- Process development – 80k EUR
- Pre-series - 35k EUR
- Training – one day 5kEUR