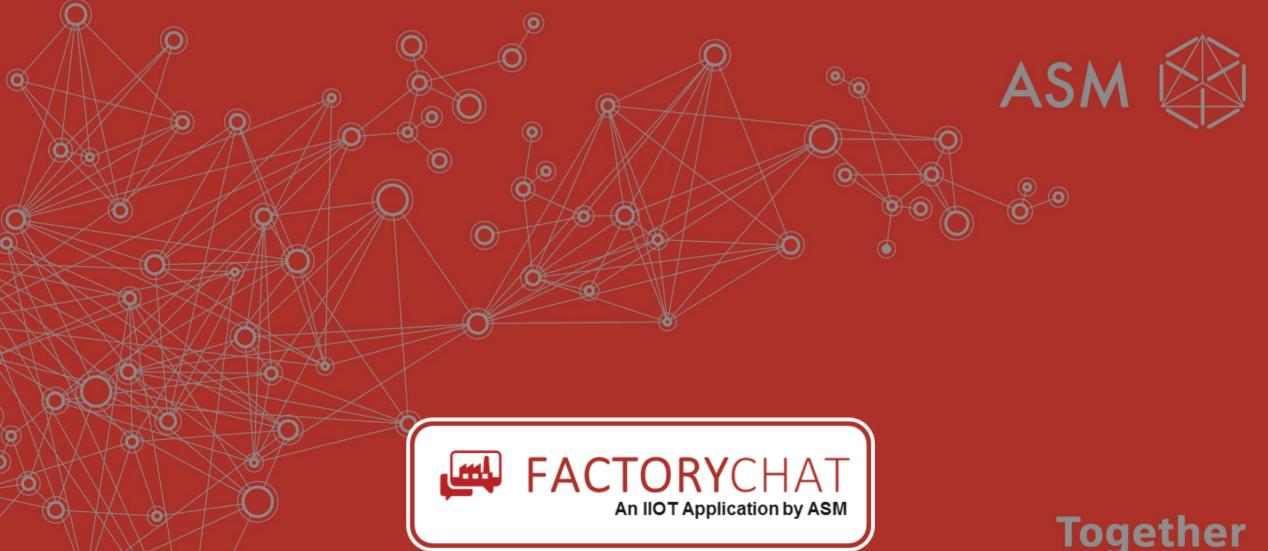


Advanced Tools for Shopfloor Collaboration in the Smart Factory





Summary



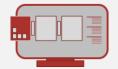
# FactoryChat - Enabling Industry 4.0 Manufacturing Collaboration

### **Key Questions:**

- Do you struggle to effectively communicate across manufacturing lines, shifts, factories, globally?
- Do you suffer with the same issues and mistakes over and over again?
- Do you have information spread out over multiple locations?
- Can you easily find answers to complex issues?
- Does the manufacturing expertise reside in a few individuals heads?
- Do you have high turn-over and untrained staff issues?
- Do you wish you could speed the response to manufacturing issues and reduce downtime?
- Do you wish the machines could "talk" to your technicians and engineers?

If you say "Yes" to any of these questions, FactoryChat may be your solution.

# FactoryChat – What You Get When You Get it



## An Asset Management tool:

The bottom line for any efficient IIOT Application: Define your line equipment assets according to ISA 95 in an easy to view format.



#### A "Downtime Minimizer" -

tool: The FactoryChat database becomes the repository for your manufacturing expertise, easily searchable for solutions and fixes.



#### A Data-Protection tool:

Many companies use WhatsApp or WeChat for team communication, leave all confidential issues open to facebook & Co. With factory chat, all information remains company property and is protected from the outside world.



# An Information Management tool: Centrally collect and store all important information on your manufacturing assets.



## An "Accelerated Learning"

tool: Making sure, that experience is evenly shared by a tool that is convenient to use, operators learn faster, better, and more sustainable.



## A Knowledge-Management Tool:

Combining all of the above, FactoryChat can even work as a plant wide knowledge management system.

FactoryChat by ASM: So many things but not "just another tool". Global. Intuitive. Secure.









# **FactoryChat – Features and Use Cases**

### **Machine log book**

- All machine log books in the factory are in one tool
- Suitable for all equipment due to customization
- Easy creation of shift reports

### Service log book

- Technician logs his activities as services posts
- Later it can easily be queried which action where taken where and when

### **Distribute Tipps & Trick**

- Broadcast posts to all machines of a specific type
- Send out new work instructions

### **Defect logging / analyses**

- Defect categories reduce reporting errors
- Query for defects without solution
- By analyzing defect / solution a best practice to overcome problems can be derived

#### Posts can be used in other applications

 Posts could be a part of automatically generated shift report



# **FactoryChat: A Global Tool**

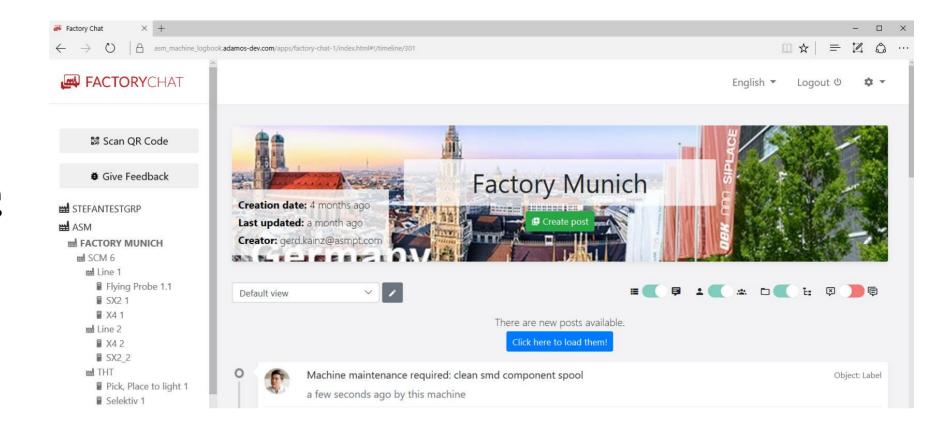
# Data can be securely collected and searched:

- on each machine,
- on every line,
- in any factory.

Want to know what happened on 2nd shift at the factory in China? Just pull up the shift report!

Want to see what caused the down time on a specific line? Search on that line!

And do this from anywhere in the world at any time for any period of time.



Overview of what is happening at all of your factories / lines / machines and shifts in real-time from anywhere!



# **FactoryChat: An Asset Management Tool**

#### Your ticket to the Industrial IoT:

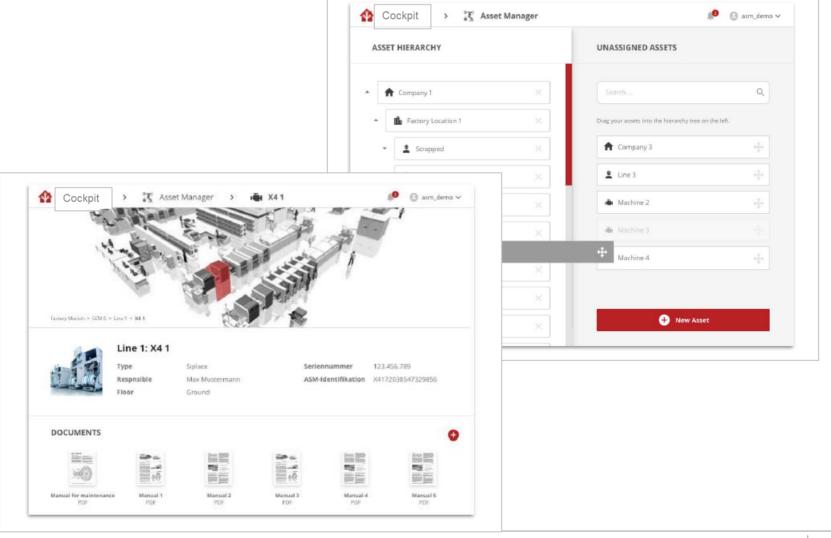
 Cloud Based "Self Service" Asset Management.

# Define assets of your entire factory

- enjoy an easy to view format
- Take advantage of the "dragand-drop" style.

# Supports ASM as well as any 3rd party equipment!

 Structure your whole site based on ISA-95





# FactoryChat - The intuitive collaboration tool in the cloud

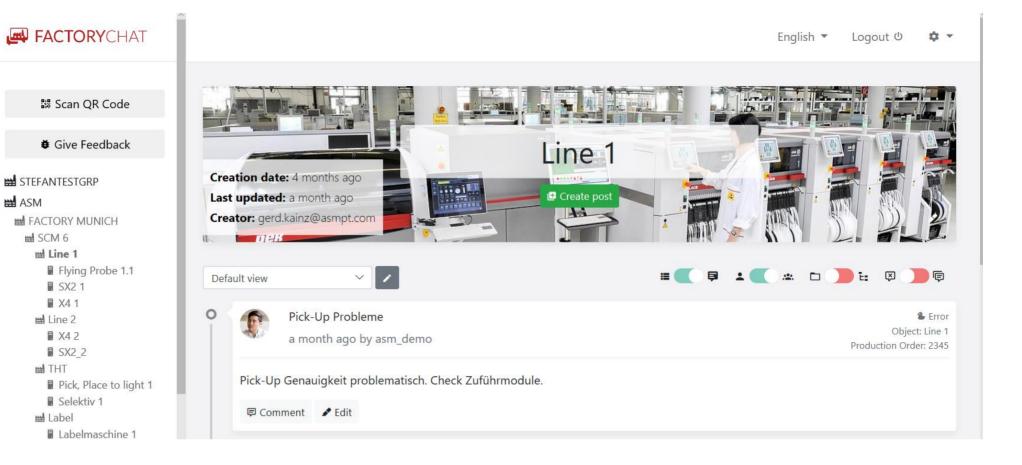
### What is FactoryChat?

- It is an Asset Management tool Layout your entire factory in an easy to view format. Supports ASM as well as any 3rd party equipment!
- It is an Information Management tool Centrally collect and store all important information on your manufacturing assets. Posts are collected in a timeline by your operators and by connected equipment.
- It is an Accelerated Learning tool Issues and fixes are posted by operators and equipment over time creating a database of solutions. This database becomes the repository for your manufacturing expertise. Easily search this database for answers and resolve your issues faster reducing your downtime, improving quality, and lowering costs of ownership.
- It is a Global tool Data can be securely collected and searched on every machine, on every line, in every factory. Want to know what happened on 2nd shift at the factory in China? Just pull up the shift report. Want to see what caused the down time on a specific line? Search on that line. And do this from anywhere in the world at any time for any period of time.



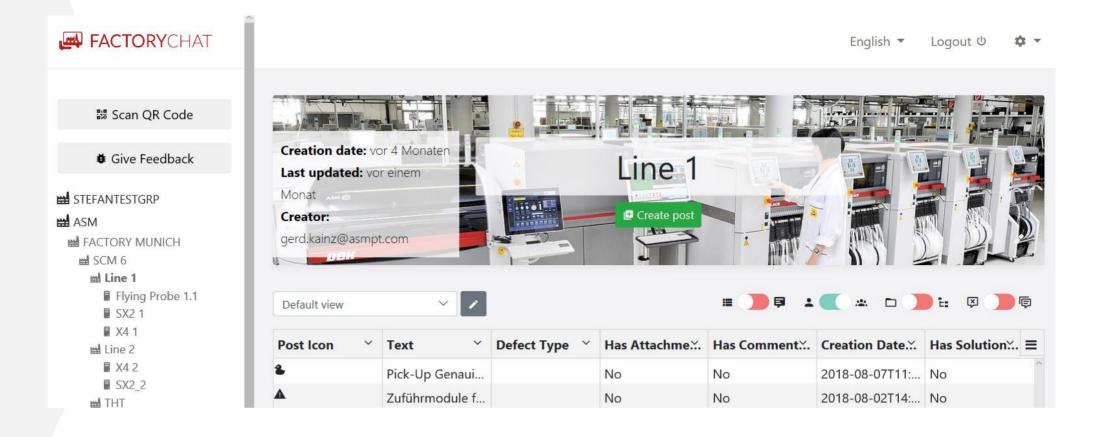
## FactoryChat: An Asset Management Tool that optimizes collaboration

 Collaborate on Your Factory
 Tree Structure
 via Posts per
 Factory / Line /
 Machine



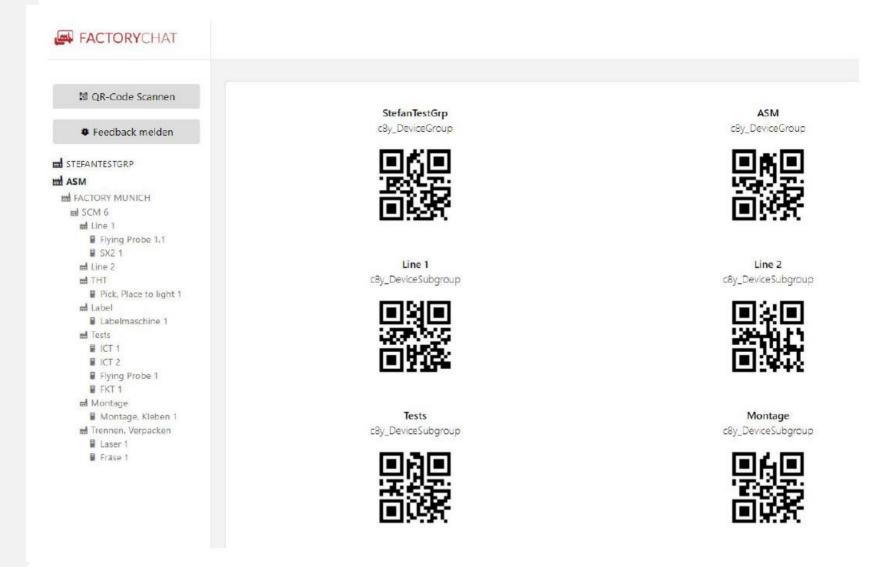


# All Posts Arranged in a Table – Ready to be Analyzed





# Easy to Use: QR Code Generation and Scan for Direct Posting per Machine



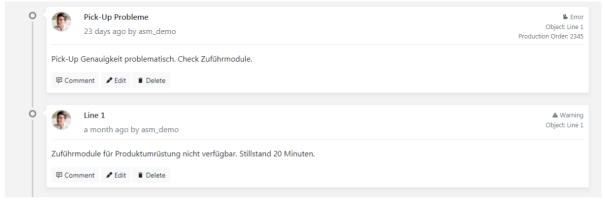


# **Posts by Operators**

#### **FactoryChat in depth:**

- an Information Management tool –
   Centrally collect and store all important information on your manufacturing assets.
   Posts are collected in a timeline by your operators and by connected equipment.
- an Accelerated Learning tool Issues and fixes are posted by operators and equipment over time creating a database of solutions. This database becomes the repository for your manufacturing expertise. Easily search this database for answers and resolve your issues faster reducing your downtime, improving quality, and lowering costs of ownership.

#### **Posts by Operators**



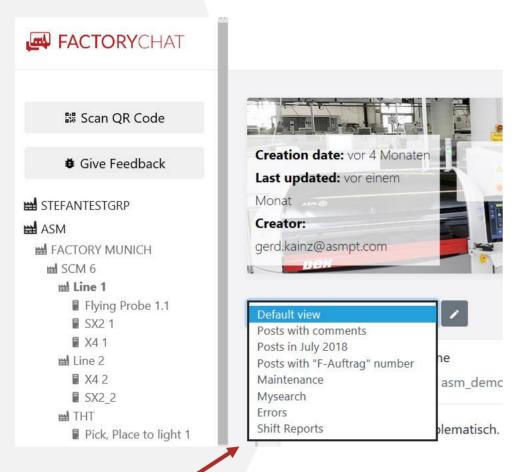
#### **Search and Filter Function**



ASM Assembly Systems Page 13



**Customized Reporting for any Information Needs and Analysis Challenges** 

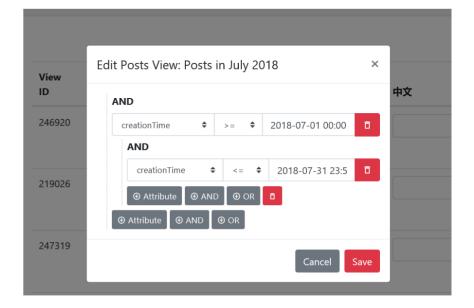


Reporting:

Shift reports / Error lists / Posts in time period /
Posts with Solutions / ...

				<b>■</b> Save
View ID	Deutsch	English	中文	
246920	Posts mit Kommentaren	Posts with comments		
219026	Posts von Juli 2018	Posts in July 2018		/
247319	Posts mit F-Auftragsnumme	Posts with "F-Auftrag" numl		

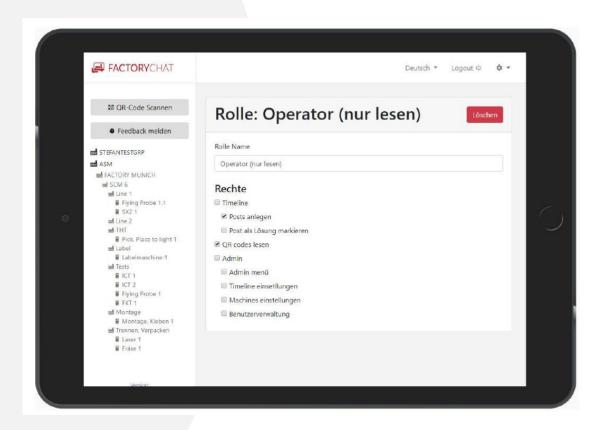
Set your own adaptable reporting boundaries:



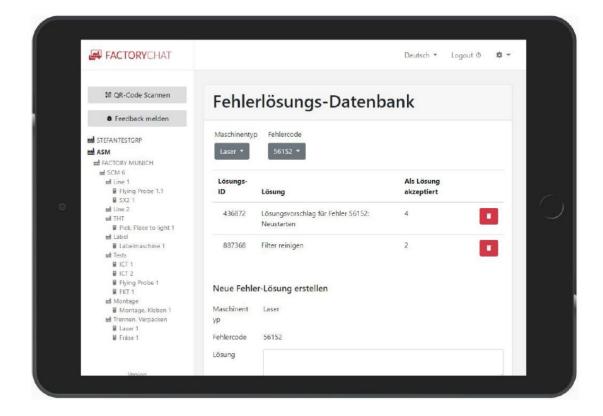


# Coming soon ...

## Roles and Rights per Machine and User



## **Data Base and WIKI for Machine Errors**



# FactoryChat – Easy Start and Adding Features

#### 1. Collaboration

WeChat/WhatsApp Features – manual posts, upload pictures and videos per incident (machine connectivity not necessary at first)

## 2. Reporting

Shift reports / error filter functionality

#### 3. Solutions

Show solution of problems per error / attach pictures and videos

#### 4. Machine Connection

Allow automatic machine posts to show timeline per machine / line for data analysis

### 5. Information Channel per machine

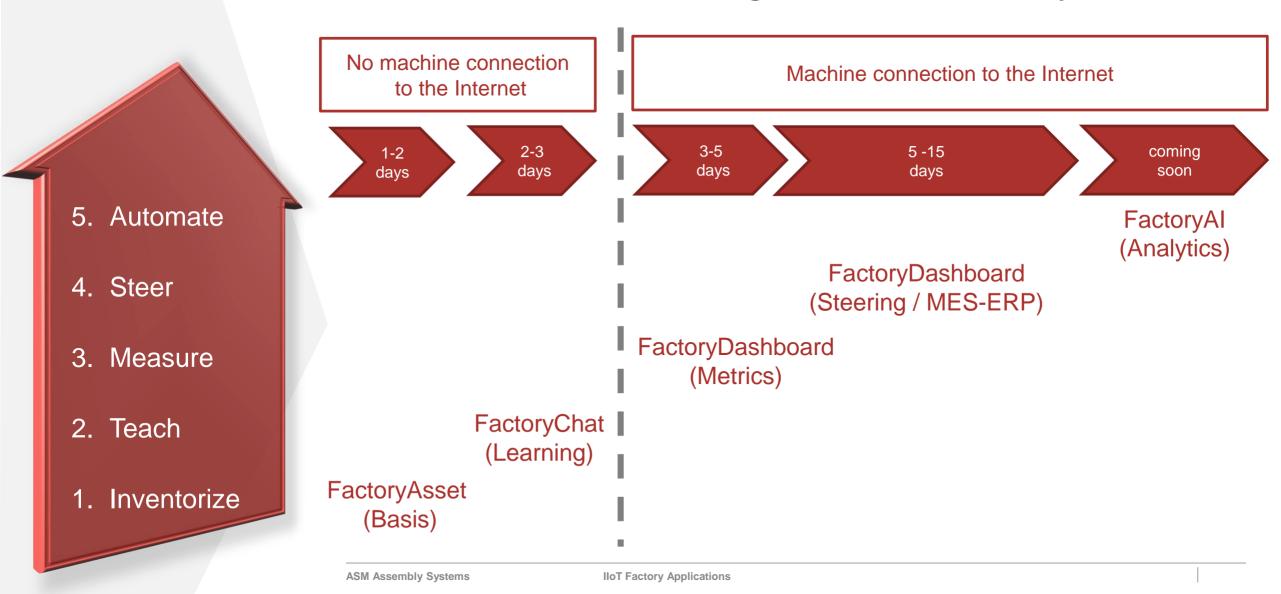
Use application as Marketing Channel per machine or line for new ASM releases and tipps for process optimizations

#### 6. Platform

Allow foreign machine suppliers access to dedicated machines and bring them onto the ASEMO platform



## Quick-Start with ASM into the Industrial Internet of Things within maximum 5 Days



# FactoryChat - The Roadmap to Industry 4.0

## Where can this go?

- Post pictures and videos Pictures are worth a 1000 words. Machine issues, production issues, facility issues....what ever you want to quickly and easily communicate! And it is saved for future reference!
- Connect the factory when an issue occurs, pull up the manual, drawing, or on line learning video with automatic reference to the issue. Identify the replacement part needed and pull up the online parts ordering tool automatically. Connect to the equipment vendor help desk and stream live video with real time communication.
- Artificial Intelligence Once a knowledge base is created, use that knowledge to automatically suggest solutions. The system will learn the best practices and make informed decisions for fastest issue resolution.



# **Cockpit for IIoT Factory Applications**

