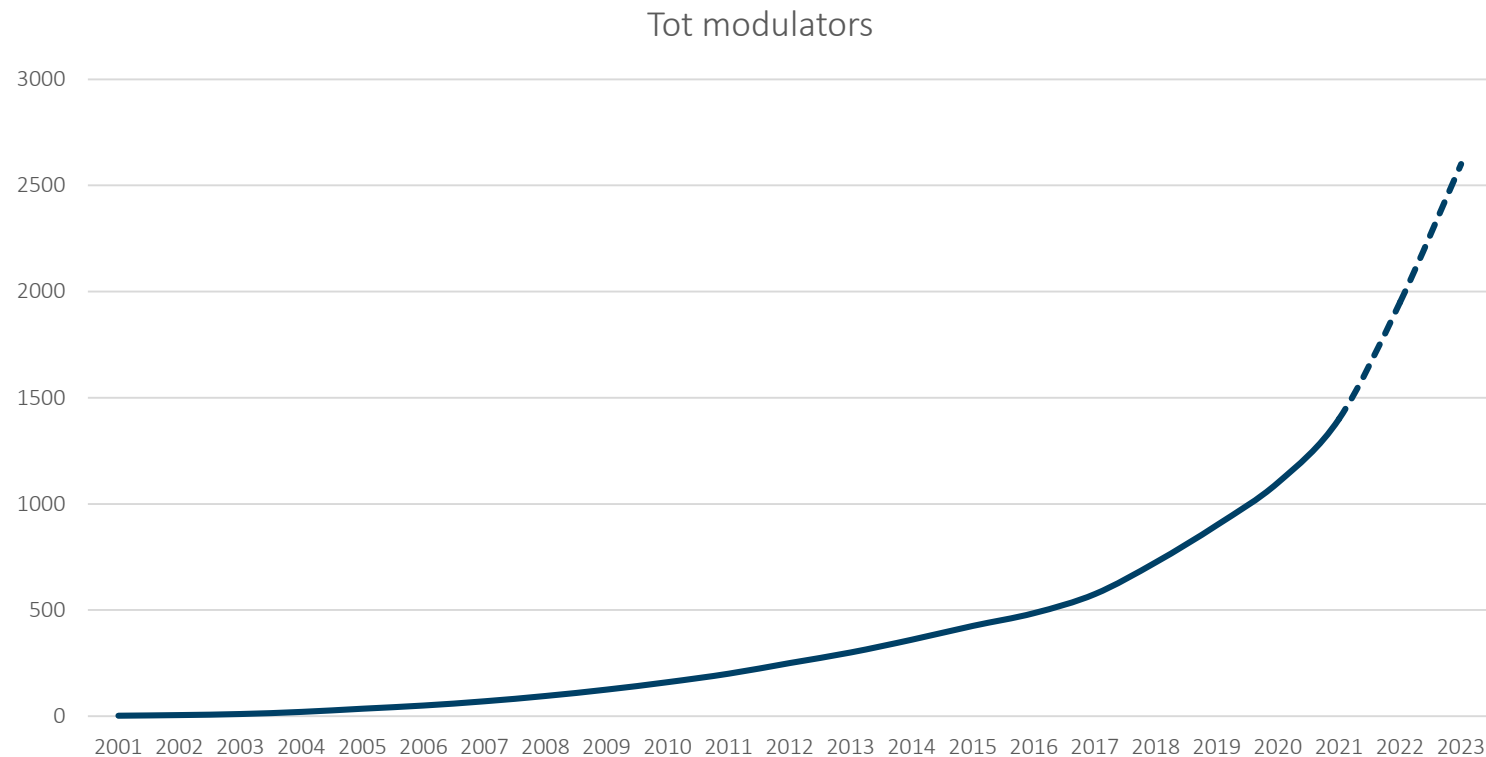


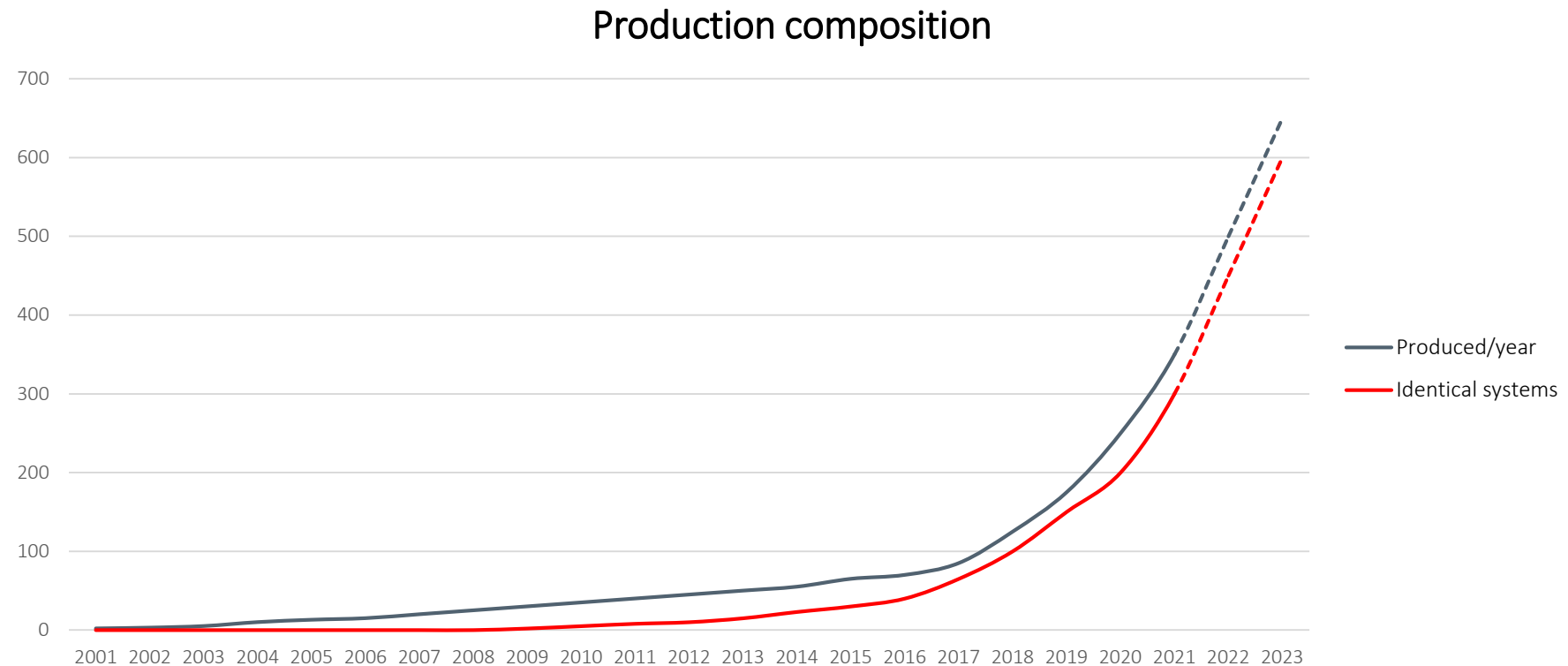
# NEW FACILITY AND FUTURE PRODUCTION PHILOSOPHY

Andréas Wallner - COO

# SCANDINOVA, A COMPANY IN TRANSITION



# SCANDINOVA, A COMPANY IN TRANSITION



# EVER SINCE THE START OF SCANDINOVA...

- Standardized modules
- Modular system
- Combine modules to meet costumers specific specifications
- The next step → Standardize production in a new facility

# NEW FACILITY





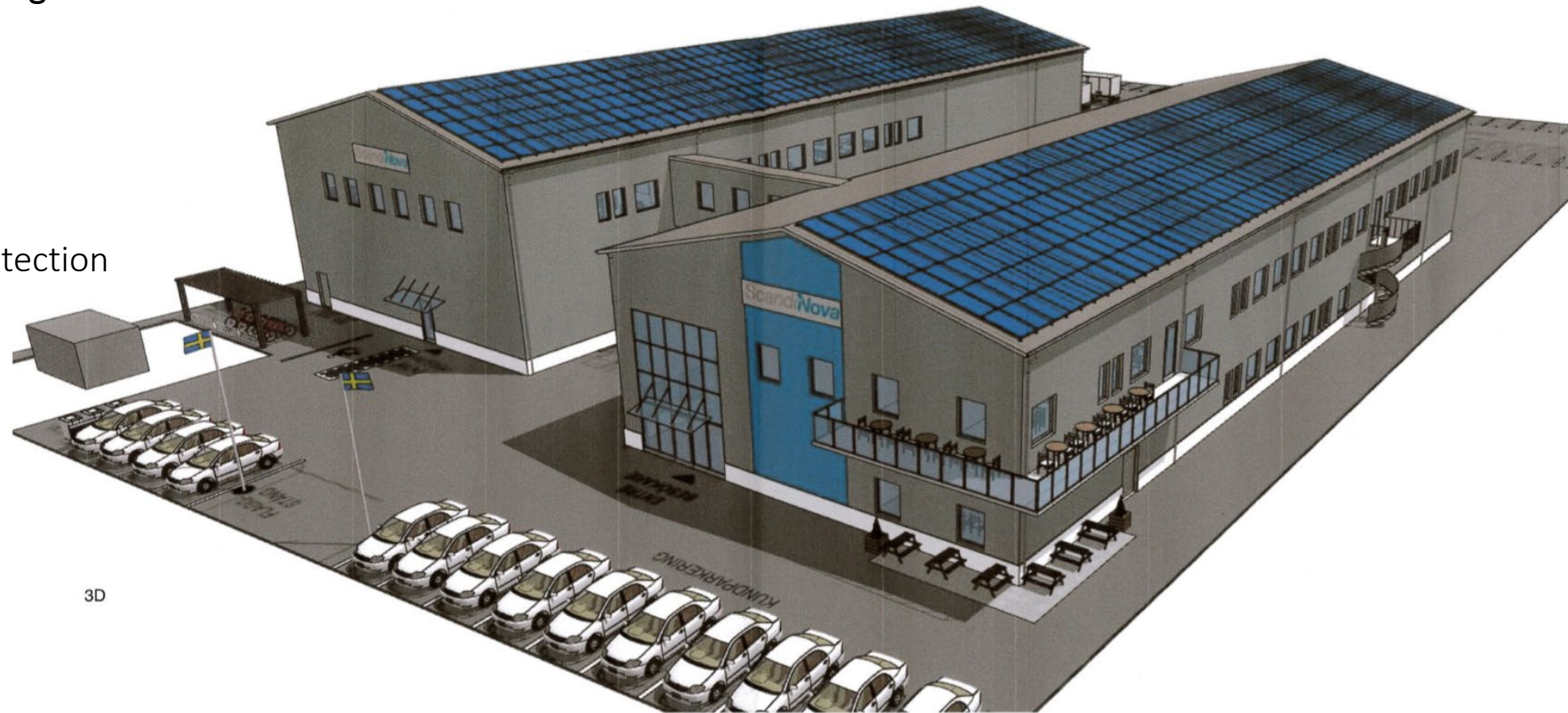
# NEW PREMISES



# NEW PREMISES

2 independent buildings

- Electricity
- Cooling
- Ventilation
- IT
- Security/Fire protection



3D



# NEW PREMISES

## 2 independent buildings

- Right hand building
  - Visitor entrance
  - Offices
  - Serial production
  - Storage
- Left hand building
  - Offices (primarily R&D)
  - Project/One-off production
  - Storage

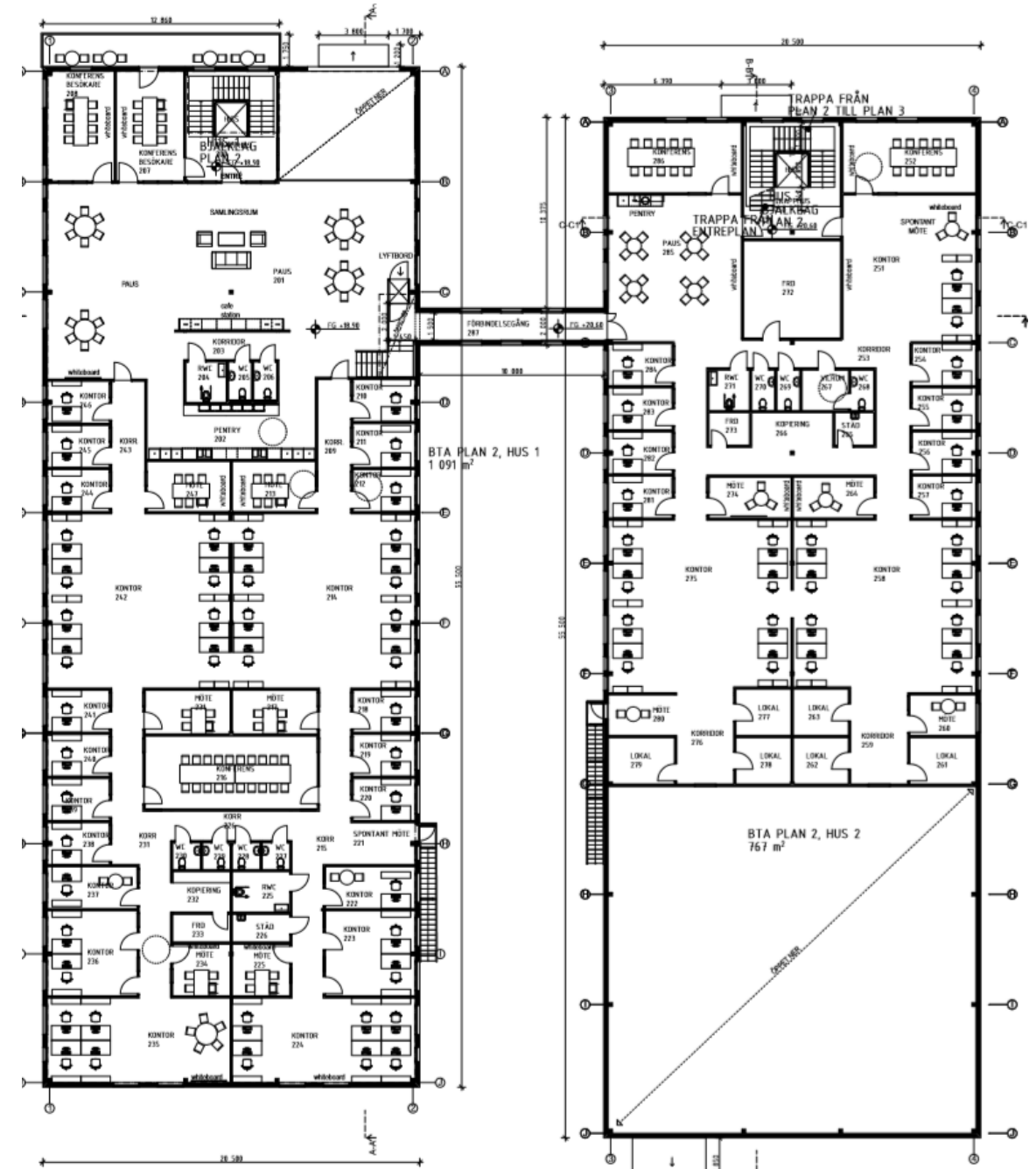




# NEW PREMISES

## 2 independent buildings

- Both buildings will be ETL certified
- Both buildings are considered independent from a fire point of view due to the distance.





# VISUAL FACTORY



# VISUAL FACTORY

A software that lets you assemble and test without using drawings and schematics.  
All steps are instruction based.

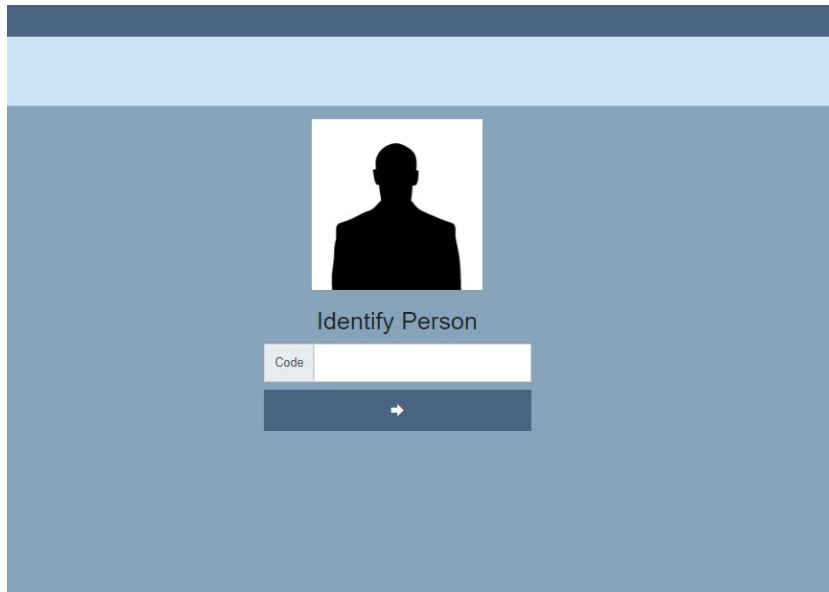
- In use for two years on the M100-line, building several hundred modulators
- Implementing M100D, E110 and M050 during this year and the next

Great leap in production quality and delivery precision.

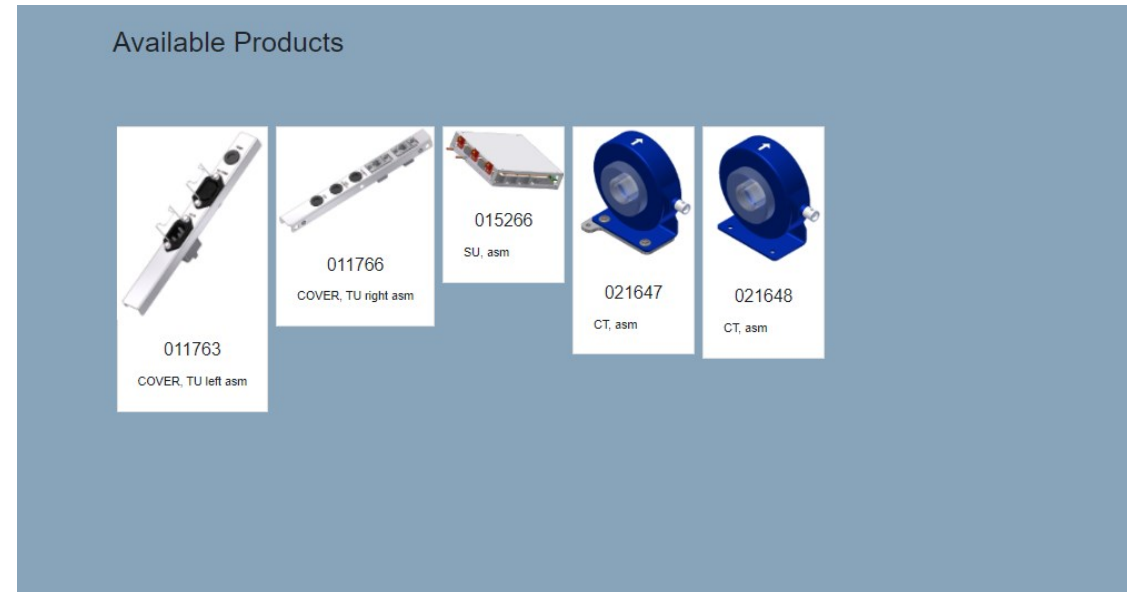


# VISUAL FACTORY

- User identification
- Workstation identification/allowed assemblies



The interface shows a user identification screen. At the top, there is a dark blue header bar. Below it, a light blue bar contains a silhouette of a person. Under the silhouette, the text "Identify Person" is displayed. Below this, there is a label "Code" followed by a white input field. At the bottom, there is a dark blue button with a white right-pointing arrow.



# VISUAL FACTORY

- Personnel competence tracking
- Adaptive verification depending on personnel

visualfactory.net VisualFactory / Skills Matrix

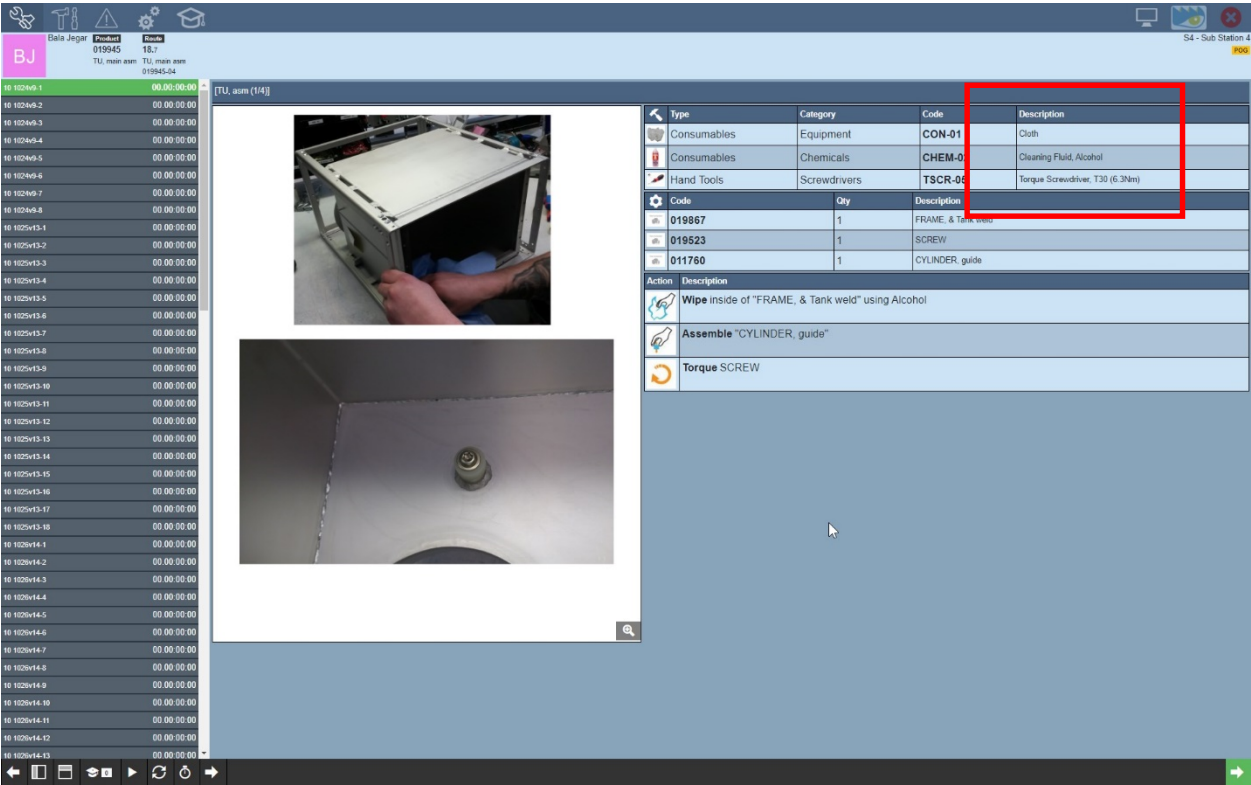
Dept: Production / Test Work Team: Search Search Expert ☒ Assembly Skills ☐ Test Skills

Type	Cat	Skill	AA Andreas Axelson	DL Daniel Eriksson	DK David Koivumaa	FN Fredrik Nordborg	JK Jan Kallin	JB Jasmin Becirovic	JK Joacim Koivumaa	LA Linus Åbrink	LK Linus Kroon	ME Michael Eriksson	PB Per Bendixen	PG Philip Grund	SF Sarhez Fara
Assembly Skills	PU	011808	○	-	◐	-	-	○	-	○	-	-	-	-	●
Assembly Skills	PU	011812	○	-	○	-	-	○	-	○	-	-	-	-	○
Assembly Skills	PU	015119	○	-	○	-	-	○	-	○	-	-	-	-	●
Assembly Skills	PU	015123	●	-	○	-	-	●	-	○	-	-	-	-	●
Assembly Skills	PU	015266	○	-	○	-	-	○	-	○	-	-	-	-	○
Assembly Skills	PU	015587	○	-	○	-	-	○	-	○	-	-	-	-	○
Assembly Skills	PU	017211	○	-	○	-	-	○	-	○	-	-	-	-	○
Assembly Skills	PU	022056	○	-	○	-	-	○	-	○	-	-	-	-	○
Assembly Skills	TU	011755	○	-	○	-	-	○	-	○	○	-	-	-	○
Assembly Skills	TU	011763	○	-	○	-	-	○	-	○	○	-	-	-	○
Assembly Skills	TU	011766	○	-	○	-	-	○	-	○	○	-	-	-	○
Assembly Skills	TU	019890	○	-	○	-	-	○	-	○	○	-	-	-	○

Home vScreen LiveView 15 items per page 1 of 25 items

# VISUAL FACTORY

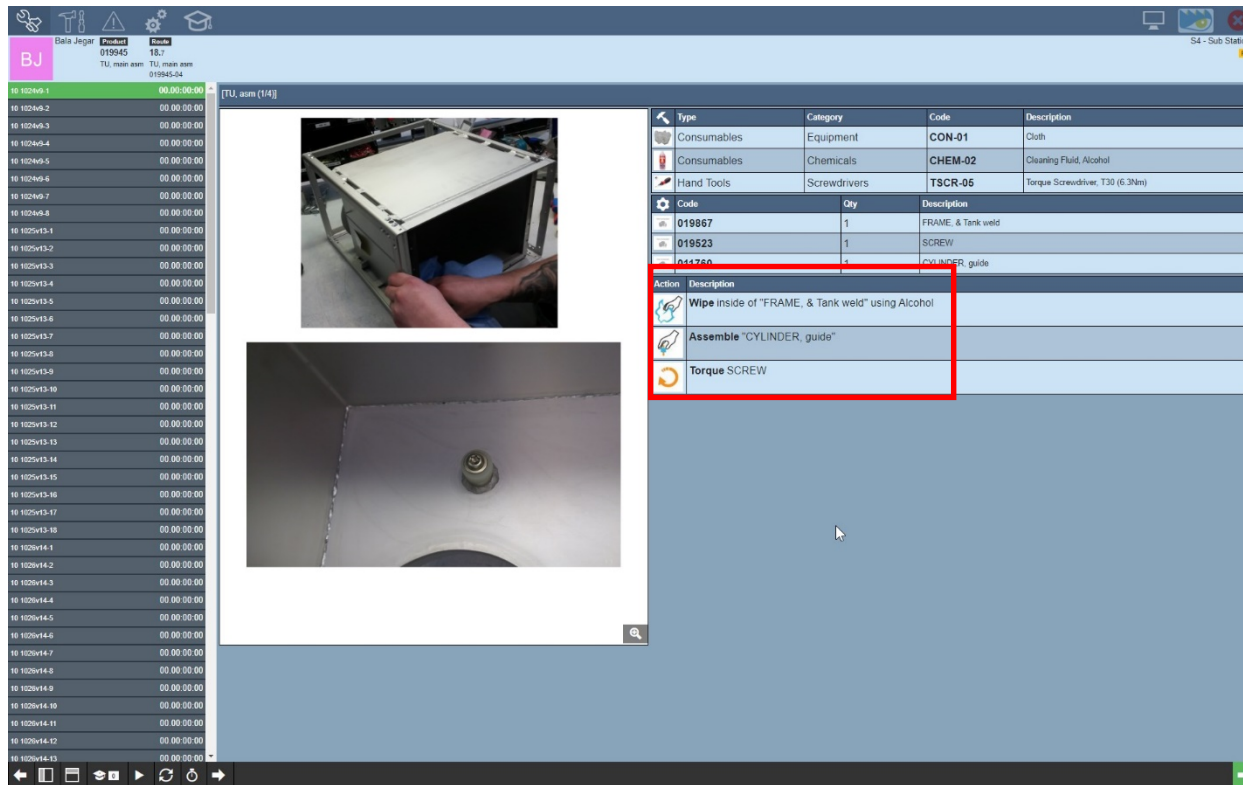
- Identification of tools
- Identification of consumables



	Description
1	Cloth
02	Cleaning Fluid, Alcohol
05	Torque Screwdriver, T30 (6.3Nm)
n	

# VISUAL FACTORY

- Clear identification of work order and standardized work description

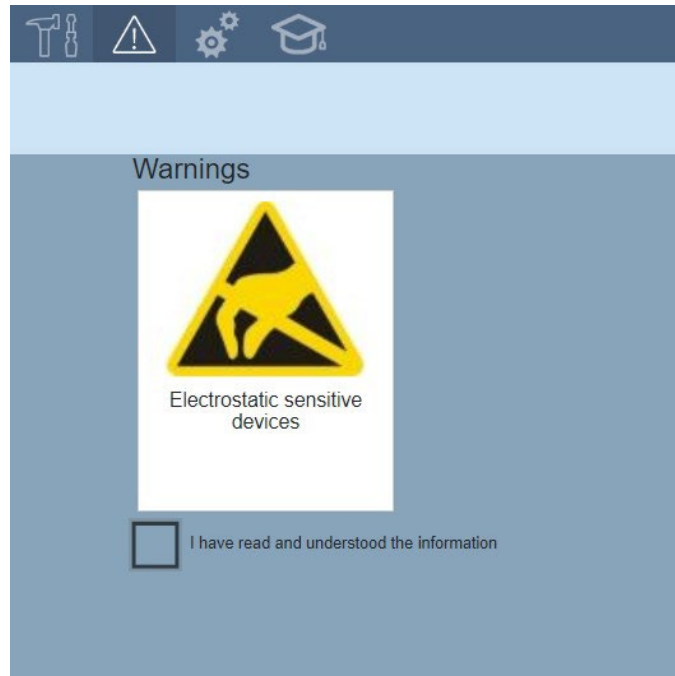


Action	Description
	Wipe inside of "FRAME, & Tank weld" using Alcohol
	Assemble "CYLINDER, guide"
	Torque SCREW



# VISUAL FACTORY

- Extra caution to sensitive components or parts needing special treatment/attention



# VISUAL FACTORY

- Check boxes for critical tasks
- Traceability built in with inputs via keyboard input or barcode scanner

The screenshot displays the Visual Factory software interface. On the left, a task list shows steps 1005v12-1 through 1005v12-7, with step 1005v12-5 highlighted in green. The main area shows a visual inspection of a circuit board with a yellow circle highlighting a specific component. Below this, a close-up image of a switch assembly is shown. On the right, a checklist table is visible.

Action	Description	Check
	<b>Visual Check</b> Switch Setting: SW1-1 = OFF SW1-2 = ON SW1-3 = OFF SW1-4 = OFF	<input type="checkbox"/>
	<b>Computer Input:</b> CONTROL BOARD Mac-address (xx:xx:xx:xx:xx:xx) Mac address for 011610 <input type="text"/>	<input type="checkbox"/>

# VISUAL FACTORY

- **Improved efficiency**

All workbenches are equipped with only the tools, fasteners and consumables needed for the assembly and also labelled and identified in the instructions.

-> No more searching for tools or the risk of using the wrong type.

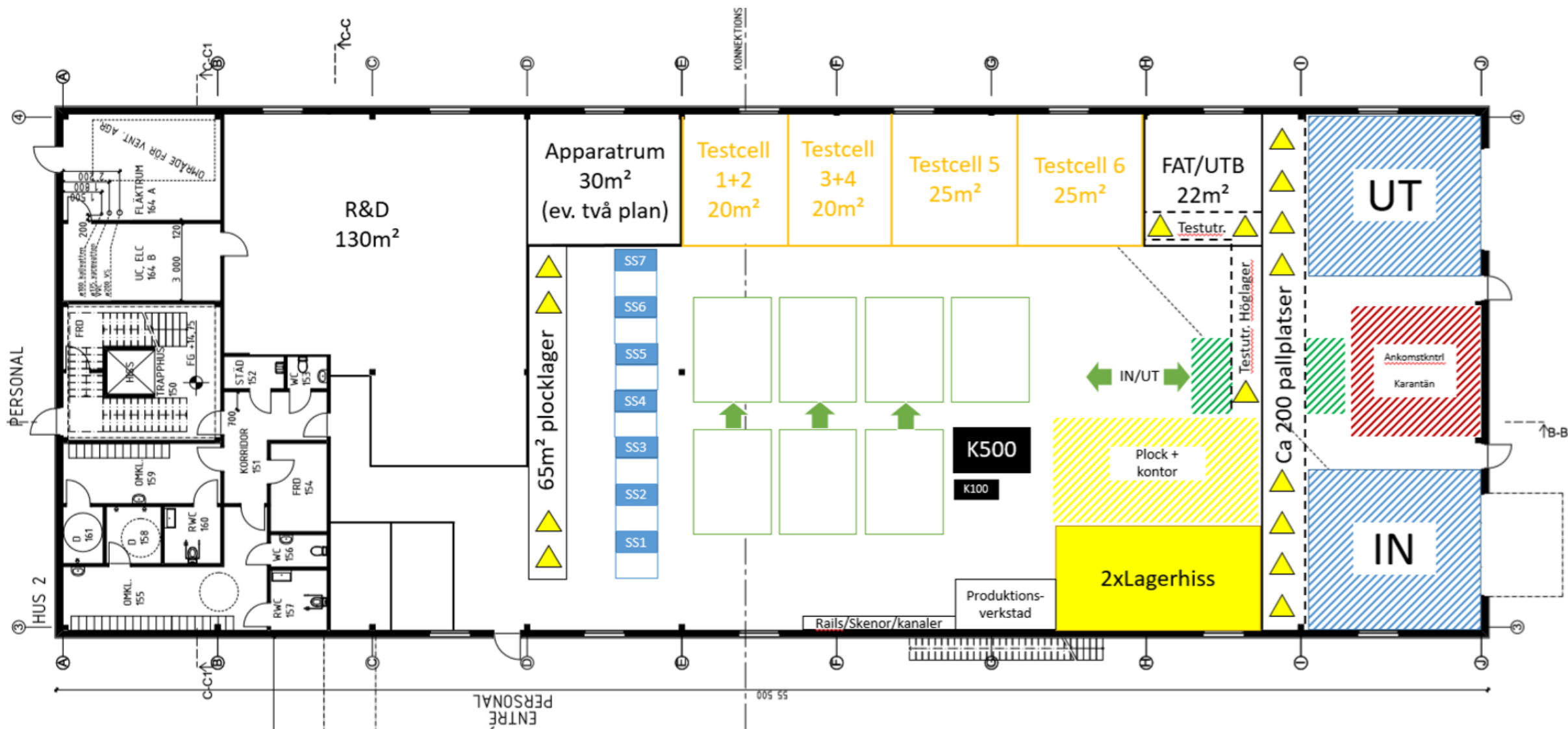
- **Workload balancing**

All tasks have a estimated time and since multiple assemblies can be done at each workbench the utilisation of each workbench can be balanced to reduce bottle necks.

- **Scalability**

Very easy to scale up production and introduce new employees

# STANDARDIZED PRODUCTION FOR PROJECTS AND ONE-OFFS





# BENEFITS FOR YOU AS A USER

## New premises

- You as a customer can be assure that ScandiNova can scale its production “regardless” of your needs with these new premises
- Substantially more R&D-capacity
- We will be able to deliver even in a catastrophic event due to the 2 independent buildings.

## Visual factory

- Even more consistent quality
- Easily scalable and not operator dependant
- Even custom designs often have at least a few standard sub-systems and will partly, or in whole, benefit from a standardized production process