

An aerial night view of a city, likely Riga, Latvia, featuring a prominent roundabout with a central fountain and several tall skyscrapers. The city lights are visible, and the sky is dark. The text is overlaid on the left side of the image.

# Sustainability Efficiency Resilience

**Denis Gacicha**

Industry 4.0, Smart Factory, Lexcel Plant, Riga

Life Is On

**Schneider**  
Electric

# Schneider Electric provides energy and automation digital solutions for efficiency and sustainability

## Key figures for 2019

**5%** of revenues devoted to R&D

**€27.2 billion**

2019 revenues

**41%**

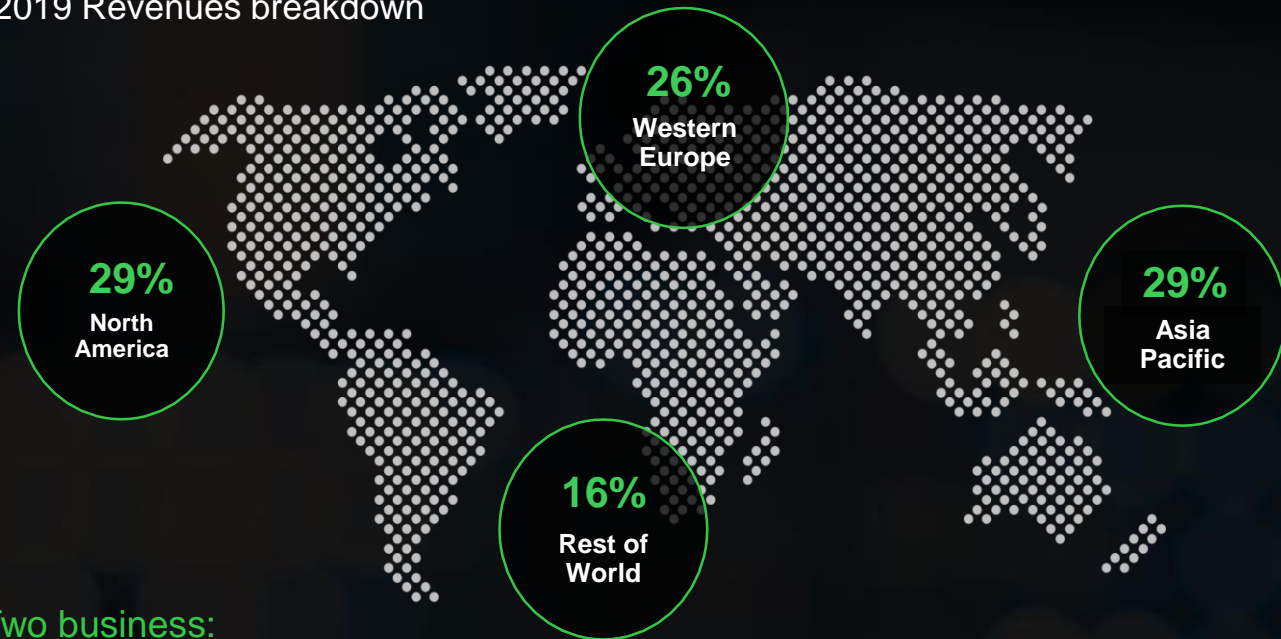
of revenues in new economies

**135,000+**

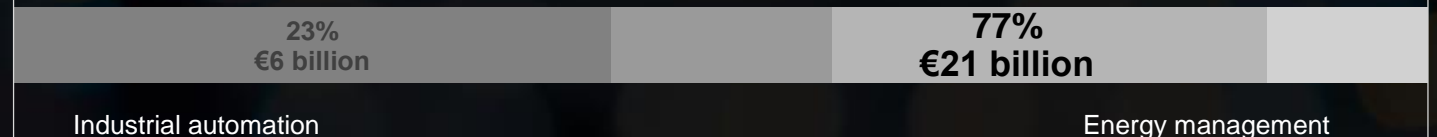
Employees in over 100 countries

## A well-balanced global presence

2019 Revenues breakdown



## Two business:



# Plant Data: Plant Overview



## GSC EMEA, Riga Plant LEXEL Fabrika Co., Ltd

56.5 M€ COGS(2019)

340 employess (MBC 67, DVC 206, Temps 67)

N of days without accident with DL : 201

SPS Score 2016 : 515

Founded: **1993**

Entered Schneider Electric: **1999**

**Our vocation:**

To manufacture electronics devices for EMEA market and Electronics Competencies Center.

**Certifications:**

**ISO 9001, 14001, 50001, 45001**

**Manufacturing operation (2019):**

PSBA SMT process 4-SMT lines: **253 M components**

PCBA – THT & Test process: **16 M components**

Semi-Automated assembling lines: **5.9M finished goods**

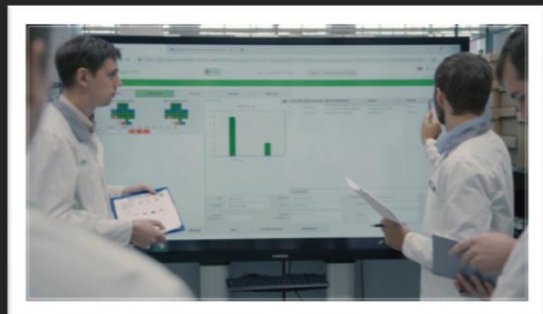
**Building:**

**11500 m<sup>2</sup>**

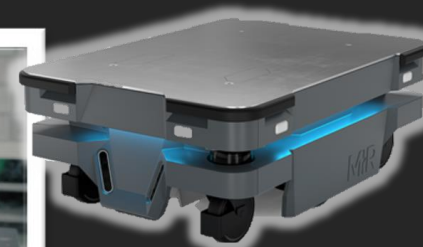
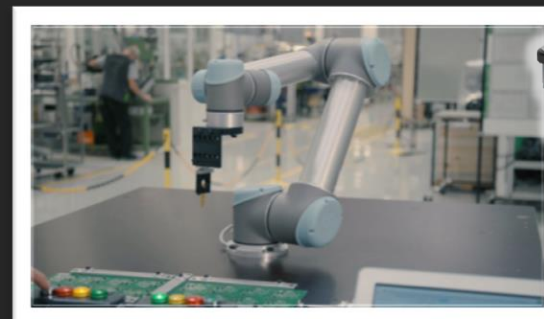
# Smart factory in Riga

Smarter for our customers, Leaner for our efficiency

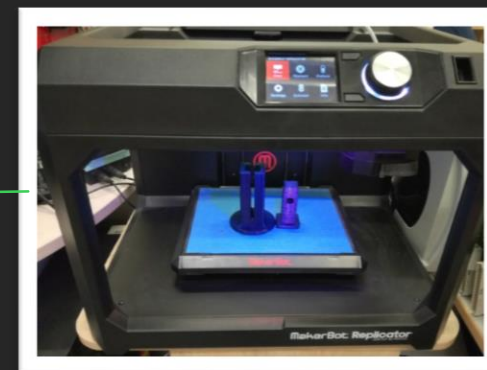
Manufacturing Operations Management



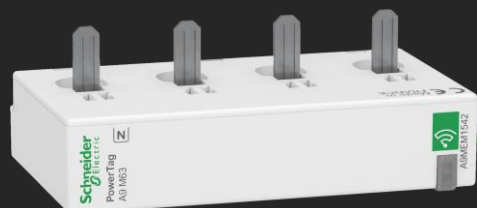
Advanced robotics



3D printing

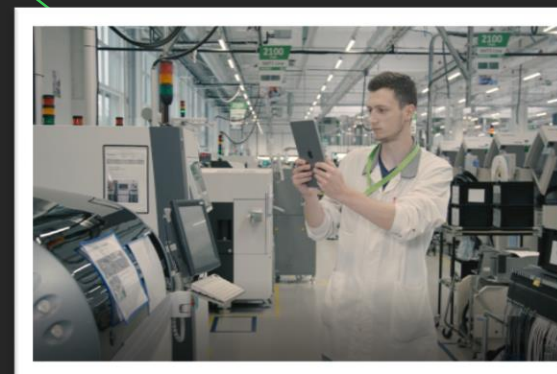


Traceability and Interlocking



S  
M  
L E A N  
R  
T

Augmented & Virtual Reality



IIoT & Analytics



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Schneider Electric

# Augmented Reality SMT-1

- 1 Minimise human errors by using Step-by-step guides
- 2 More efficient maintenance
- 3 Find correct information faster
- 4 Speed up training, changeovers and Maintenance procedures



Decreased search time



Guided and facilitated interventions



Reduce machine downtime



# IIoT & Analytics

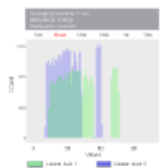
## DIAGNOSTIC ANALYTICS



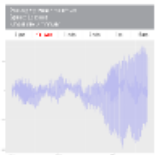
WHAT'S WRONG?



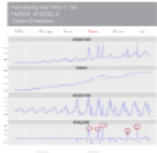
TREND ANOMALY DETECTION



DISTRIBUTION ANOMALY DETECTION



AMPLITUDE ANOMALY DETECTION



OUTLIER DETECTION



ROOT CAUSE ANALYSIS



COLLECT



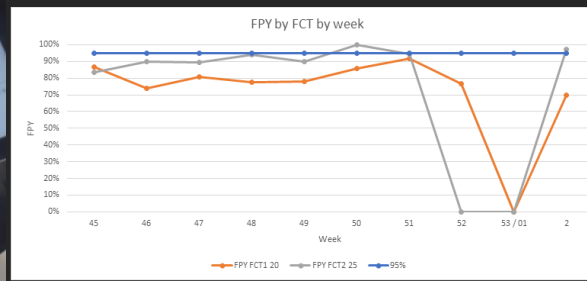
ANALYZE

after several retests.

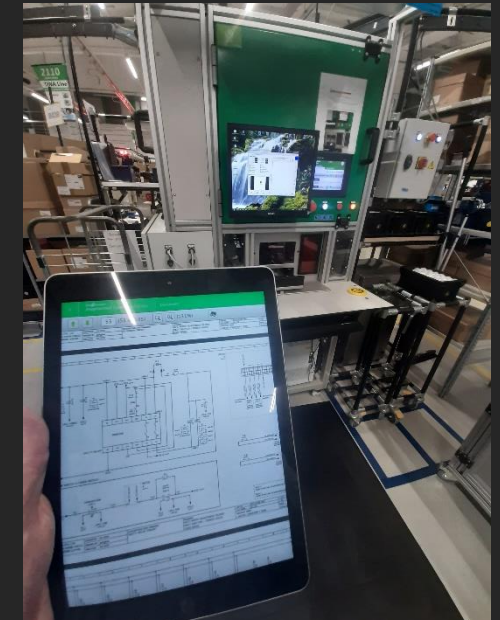
### Result by reference

Number of result for each reference in Progress & SPC databases (Last result)

REF.	GOOD	BAD	TOTAL	RATIO GOOD	RATIO BAD
QGH25046	37	1	38	9.74E-01	2.63E-02
QGH25050	216	4	220	9.82E-01	1.82E-02
QGH25103	0	1	1	0.00E+00	1.00E+00
QGH25105	514	7	521	9.87E-01	1.34E-02
QGH25107	0	1	1	0.00E+00	1.00E+00
<b>TOTAL</b>	<b>767</b>	<b>14</b>	<b>781</b>	<b>9.82E-01</b>	<b>1.79E-02</b>



ACT



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