



OSIsoft®

PIWorld

People, Planet & Profit

Sandvik Coromant, Gimo Sweden

People, Planet & Profit

Sandvik Coromant, Gimo Sweden

Who we are

The company



42,000
Employees

Sales In Over

160

Countries
Around The Globe

100

Billion Sek In Revenues

3.7
Billion Sek
Annual R&D
Investment

50

R&D Centers
Globally

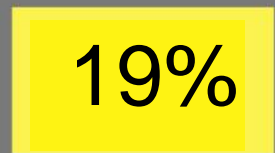
5,900
Active Patents

Figures refer to Group total 2018.

People



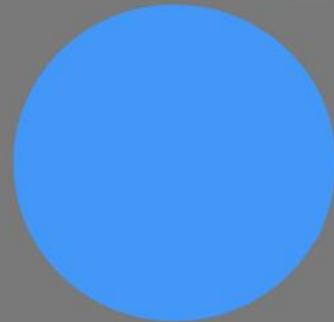
Total Workforce 2018



Women



Men



20%

Non-Europeans In Division Management Teams

19%



Talent Pool
28%



Group Executive Management



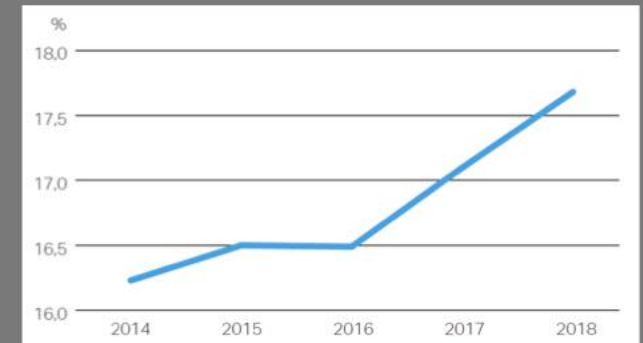
Women

Age-Spread

41-60

Share Of Women In Managerial Positions

17.7%



Figures refer to Group total 2018

Planet

We Are World-Leading In Recycling Cemented Carbide

- Raw materials are scarce and finite
- Making tools from recycled solid carbide:

requires **70%** less energy

means **40%** less CO₂ is emitted

- Secure source of a conflict mineral

The Sandvik logo is located in the top right corner of the slide. It consists of the word "SANDVIK" in a blue, sans-serif font, enclosed within a white rectangular box with a blue border. The background of the slide is a dark, textured surface with several circular containers filled with small, cylindrical metal carbide particles, arranged in a grid-like pattern.

Profit



Sandvik
Machining Solutions

40%

53%

Sandvik
Materials Technology

15%

7%

Figures refer to Group total 2018



Sandvik Mining And Rock
Technology

43%

39%

Share of revenues 2018

Share of adjusted operating profit 2018

Other operations (non-strategic assets)
contributed by 2% to revenues
and by 1% to adjusted operating profit



SANDVIKEN_
**PASSION FOR
EXCELLENCE**

8,000 employees and is represented in
150 countries



FAGERSTA_
**MAKING IT
EASIER**

has 5,600 employees with local offices
in 60 countries



TÜBINGEN_
**ENGINEERING
KOMPETENZ**

3,800 employees and around 50 subsidiaries and
distribution partners worldwide



MILAN_
**SIMPLY
RELIABLE**

1,700 employees and are represented in
100 countries



SANDVIK

SANDVIK
Coromant

Sandvik Group

Sandvik Mining and
Rock Technology

Sandvik Machining
Solutions

Sandvik Materials
Technology

Sandvik Coromant



150 countries



8000 employees



2500 new products/year



Re-invented for the future



SANDVIK
Coromant

1942

Luma - Hammarbyhamnen, STHLM



SANDVIK
Coromant

SANDVIK
COROMANT
SWEDEEN

HR 186-3

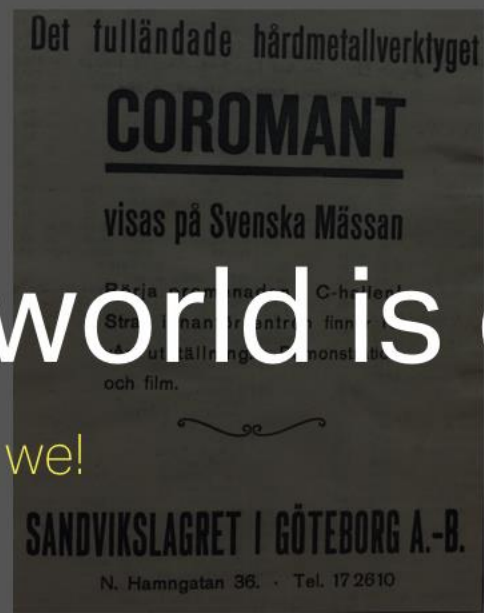
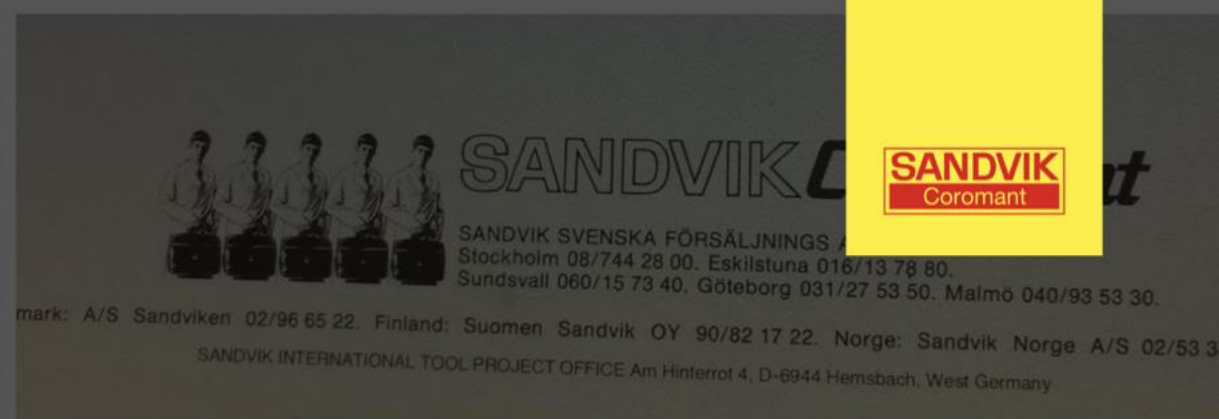
1951

Sven Wirfelt & Wilhelm Haglund



68 years of passion and change

The speed of change will never be this slow again



The world is changing

and so are we!



SKOLSTREJK

Greta Thunberg

School strike for climate

KLIMATET





Global Climate Strike for the future

The 22nd Annual GQ Awards Special Issue

BRITISH

GENTLEMEN'S QUARTERLY

OCTOBER 2019

Greta Thunberg





Green Factory & Facilities

Sustainability - Social, Environmental & Economic







Green Factory & Facilities





Supporting 7 of the United Nations' goals

SDG 3 - Good health and well-being

SDG 5 - Gender equality

SDG 7 - Affordable and clean energy

SDG 8 - Decent work and economic growth

SDG 9 - Industry, innovation and infrastructure

SDG 12 - Responsible consumption and production

SDG 13 - Climate action

GreenFactory & Sustainable Facilities

Safety First	Resources	People & Working environment	Emissions & Waste	Site, Building & Infrastructure	Production
Leadership and commitment	Water	Noise level	Emissions to Water	Energy efficiency	Process Water
Beliefs	Electricity	Air Temperatures	Emissions to Air	Building: Average thermal transmittance	Production Equipment/ Machines
Training, accountability & contractor management	Oil	Air Quality	Emissions to Soil and Ground Water	Building: Use of sustainable materials	Energy efficient production
Risk Management and observations	Natural Gas	Illumination (lux level and light temperature)	Waste	HVAC: Air Handling Units	Maintenance
Planning	Chemical products: Gases/ Liquids	Usage of chemicals	Carbon dioxide: Own operation	HVAC: Heating Systems	Spareparts
Implementation and monitoring	Machine Cutting and Grinding Oils	Health & Wellbeing		HVAC: Cooling Systems	LCC (Life Cycle Cost)
Audit	Fuel	Ergonomy		Compressed Air system	
Review	Steel	Contractors & Consultants		Process extraction ventilation	
	Tungsten carbide	Community involvement		Electrical system	
	Cobalt			Illumination	
				BMS: Building Management system	
				Maintenance	
				Site usage	
29 (max 48)	41 (max 60)	35 (max 54)	24 (max 30)	56 (max 78)	18 (max 36)

GreenFactory
and sustainable facilities

Level 6: Future stage
Level 5: Best practice
Level 4: Outstanding
Level 3: Established
Level 2: Structured approach
Level 1: Local initiatives exists





Green Factory & Facilities

A greater responsibility

Ongoing Activities

SDG 3 - Corporate health care

SDG 3 - 32 free training activities every week

SDG 5 - Women and men enjoy the same rights and opportunities

SDG 5 - Working with a female engineering program

SDG 7 - District heating and remote cooling

SDG 7 - Changing the company cars to electrical

SDG 8 - Decent work and economic growth

SDG 8 - Improving productivity every year

SDG 9 - Industry, innovation and infrastructure

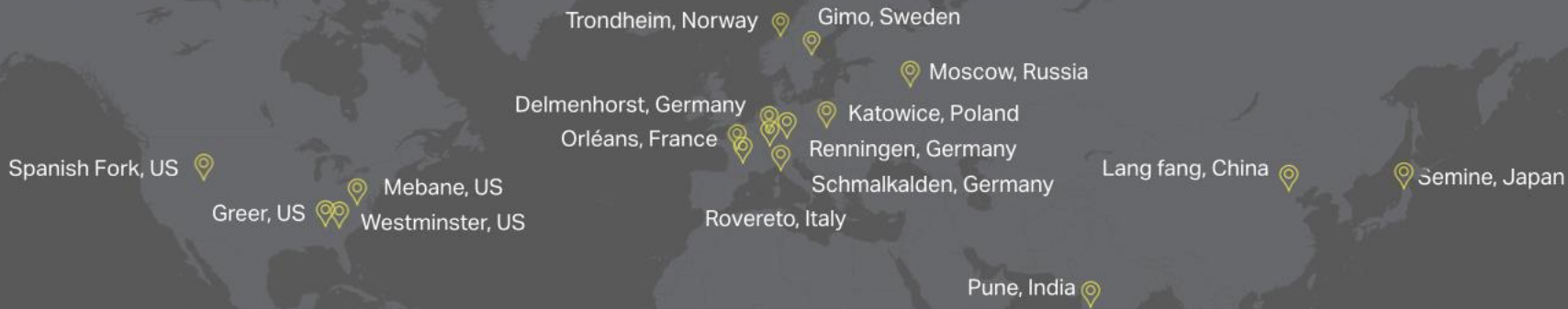
SDG 9 - Finding new ways of working

SDG 12 - Implementation of ECO mode

SDG 13 - Converting to LED lights

SDG 13 - DesiCool implementation





Sandvik Coromant Production

A "green" way of working

4300 

Employees

25 

Production Units on 16 sites

4 

Global Warehouses





Shaping the future together

How did it all start?



Mechanization

1.0 - Steam engines

Electrification

2.0 – Assembly lines and electricity

Automation

3.0 - IT and electronics

The background of the slide features a hand holding a globe. Overlaid on the globe is a network of black dots connected by thin lines, representing global connectivity. The globe is semi-transparent, showing the continents in a light blue and white color scheme.

Globalisation

3.5 - Offshoring and outsourcing



Digitalisation

4.0 - "Smart" technologies, Cloud computing etc

Personalization

5.0 - Co-operation between man and machine

The world is changing

Shaping the future together

Past

Desk Top Computers

Today

Hand Held Computing

Future

Human Imbedded Computing

Name: Claes Nord
Position: Senior Visitor Experience Specialist
Location: Gimo, Sweden
Contact info: claes.nord@sandvik.com



Past

Claes Nord

Today

Claes Nord NFC - Near Field Communication

Today

Batching

Today

Batching
Resources

Today

Batching
Resources

Unsustainable

Evolution

Automation

Evolution

Automation
Digitalization

Evolution

Automation

Digitalization

Virtual Reality / Mixed Reality / Augmented Reality

The background of the slide is a photograph of a person wearing a hat and a plaid shirt, seen from behind, looking out over a vast, misty mountain landscape. The foreground is filled with lush green tea bushes. The mountains in the distance are layered and shrouded in a soft, white mist, creating a sense of depth and tranquility.

Future

Sustainable

Future

Sustainable
Flexible

Future

Sustainable

Flexible

Artificial Intelligence

Manufacturing re-invented

Methods and ways of manufacturing

Manufacturing re-invented

Methods and ways of manufacturing
Additive manufacturing

Manufacturing re-invented

Methods and ways of manufacturing

Additive manufacturing

Post-processing and machining

Manufacturing re-invented

Methods and ways of manufacturing
Additive manufacturing
Post-processing and machining
People and new ways of working

A large, white, sans-serif text overlay that reads "Manufacturing re-invented". The text is centered horizontally and vertically over a dark, grayscale background of a factory floor. In the background, two men are visible: one in a dark t-shirt and another in a light-colored work jacket, both looking down at a small object they are holding together. Industrial machinery and overhead lights are also visible in the background.

Industry 4.0

Big Data and People

Industry 4.0

Big Data and People
Advanced robotics

Automation
machine

Industry 4.0

Big Data and People
Advanced robotics
Smart factory

Industry 4.0

Big Data and People
Advanced robotics
Smart factory
Internet of Things

Industry 5.0

Cobot - companion and collaborator



Industry 5.0

Cobot - companion & collaborator
Artificial Intelligence



Industry 5.0

Cobot - companion & collaborator

Artificial Intelligence

Safety wearables

Industry 5.0

Cobot - companion & collaborator

Artificial Intelligence

Safety wearables

Digital twin

Sandvik Coromant Gimo

Gimo Production System

Safety First

Continuous Improvement

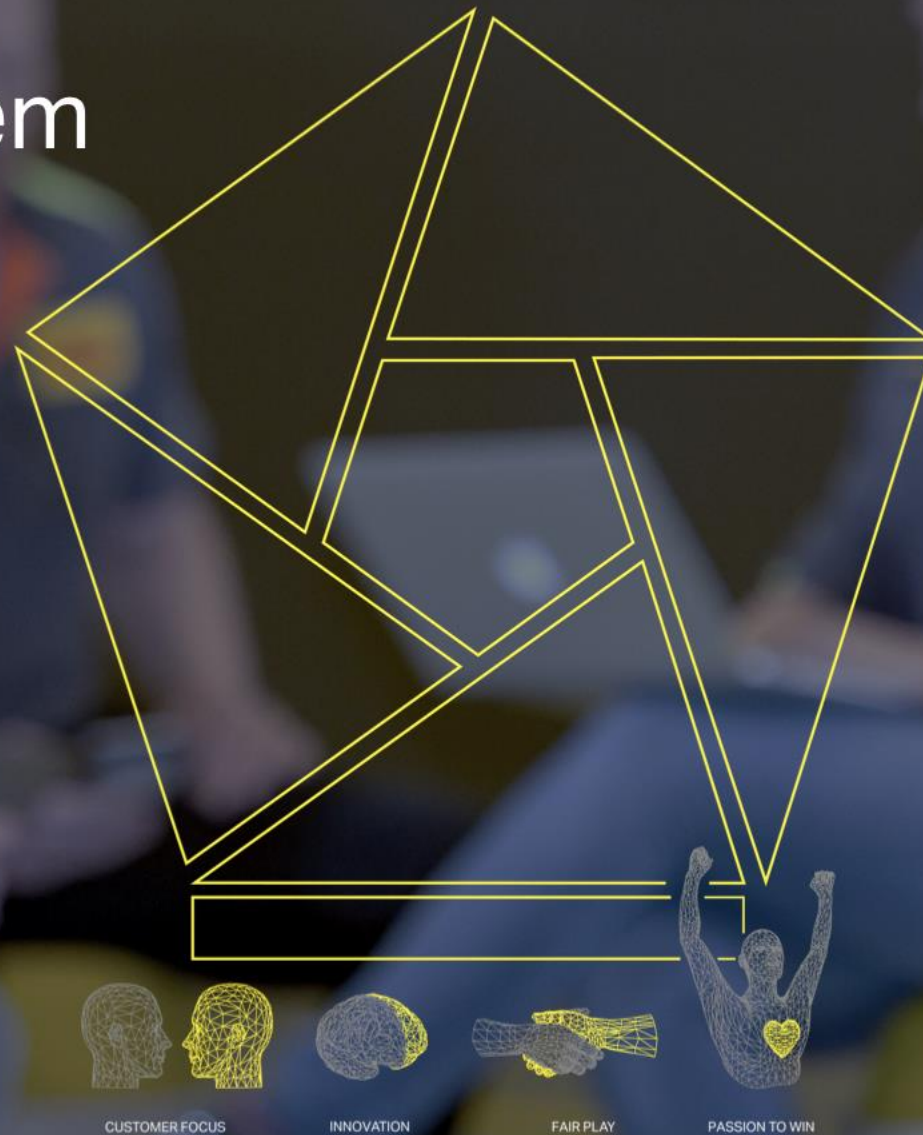
People Involvement

Process Stability

Quality from me2you

Flow Production

Industrial Design





SANDVIK
Coromant

Safety First

In everything we do!



Continuous Improvement

Structure, Culture and Data



Continuous Improvement

Your imagination is your only limitation





Wilhelm Haglund

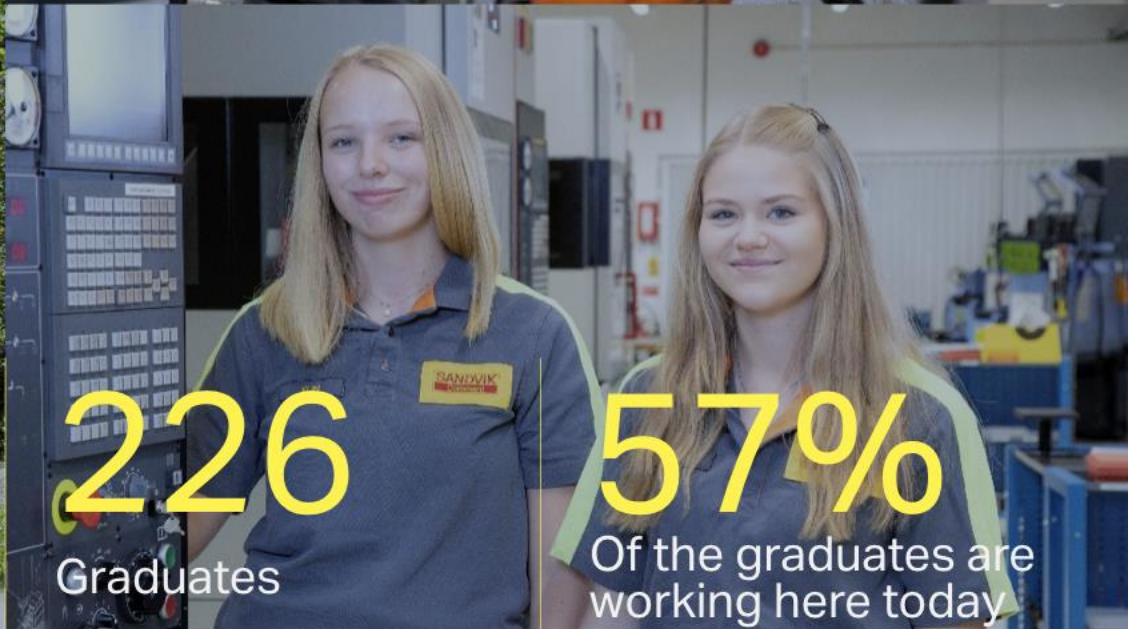
Senior high school for future employees

2007

Founded

90

No of students



226

Graduates

57%

Of the graduates are working here today



SANDVIK
Coromant

People Involvement

Communication, Teamwork and Data



People Involvement

Skill Building, Flexibility and understanding Data



People Involvement

5S, Visualization, Standardization and Data

Process Stability

Big Data & Analysis

+400.000.000

Data collection / day

1200

Analysis / second



Quality from me2you

Ownership, Mindset and Data



SANDVIK
Coromant

Flow Production

Automation & elimination of waste



Industrial Design

Production Technology Center



Digitalization

The right data at the right place and time



Equipment

To be able to produce 29.700 articles we need:

>500

CNC-machines

>50

Measuring machines

>15

AGV:s

>400

Robots

Employees

Our most important asset, our people!

1450

Employees

22%

Women

17

Average employment time years

34

Average age

McKinsey&Company

WORLD ECONOMIC FORUM

1000

Investigated

16

Selected

9

European

1

Swedish

Lighthouse

Parametric design and manufacturing
Digital thread through production process
BI Analytics and data collection
Real-time process control system

WORLD
ECONOMIC
FORUM

PI Coresight PI Vision

2010 for **proactive** maintenance



Wendt Duolift 13

När någon av dessa lampor är gula eller röda, tänds en lampa ute vid maskin för spindel/skärpmotor.

Bitar sedan början **10659 Antal**
 Upptid senaste 24h **46,34 %**

25,15 C° Kylvatten temp
 2,30 m3/h Luft flöde

Obj: 600312

O-Spindel	
Varvtal	623 rpm
Ström	1,09 A

Skärpmotor fastvarvtal	
Varvtal	3313 rpm

U-Spindel	
Varvtal	-2 rpm
Ström	0,00 A

Hydraulolja nivå **69,50 %**

O-Spindel	
Effektivvärde	19,56 mg
Vibration	0,18 mm/s RMS
Obalans	0,10 mm/s RMS
Lagerskada	4,29 mg

Skärpmotor	
Effektivvärde	14,01 mg
Vibration	0,22 mm/s RMS
Obalans	0,02 mm/s RMS
Lagerskada	2,02 mg
Glapp	0,12 mm/s RMS

U-Spindel	
Effektivvärde	13,62 mg
Vibration	0,19 mm/s RMS
Obalans	0,09 mm/s RMS
Lagerskada	3,31 mg

Wendt Duolift 14

När någon av dessa lampor är gula eller röda, tänds en lampa ute vid maskin för spindel/skärpmotor.

Bitar sedan början **12414 Antal**
 Upptid senaste 24h **38,60 %**

26,33 C° Kylvatten temp
 1,80 m3/h Luft flöde

Obj: 600313

O-Spindel	
Varvtal	618 rpm
Ström	1,01 A

Skärpmotor fastvarvtal	
Varvtal	3313 rpm

U-Spindel	
Varvtal	-2 rpm
Ström	0,03 A

Hydraulolja nivå **88,92 %**

O-Spindel	
Effektivvärde	28,96 mg
Vibration	0,30 mm/s RMS
Obalans	0,15 mm/s RMS
Lagerskada	3,29 mg

Skärpmotor	
Effektivvärde	15,16 mg
Vibration	0,17 mm/s RMS
Obalans	0,02 mm/s RMS
Lagerskada	2,31 mg
Glapp	0,07 mm/s RMS

U-Spindel	
Effektivvärde	16,34 mg
Vibration	0,15 mm/s RMS
Obalans	0,09 mm/s RMS
Lagerskada	4,12 mg

Wendt Duolift 15

När någon av dessa lampor är gula eller röda, tänds en lampa ute vid maskin för spindel/skärpmotor.

Bitar sedan början **2843 Antal**
 Upptid senaste 24h **17,52 %**

25,14 C° Kylvatten temp
 0,99 m3/h Luft flöde

Obj: 600314

O-Spindel	
Varvtal	581 rpm
Ström	1,92 A

Skärpmotor fastvarvtal	
Varvtal	3313 rpm

U-Spindel	
Varvtal	577 rpm
Ström	1,47 A

Hydraulolja nivå **84,83 %**

O-Spindel	
Effektivvärde	23,54 mg
Vibration	0,22 mm/s RMS
Obalans	0,08 mm/s RMS
Lagerskada	4,49 mg

Skärpmotor	
Effektivvärde	15,86 mg
Vibration	0,22 mm/s RMS
Obalans	0,05 mm/s RMS
Lagerskada	11,77 mg
Glapp	0,07 mm/s RMS

U-Spindel	
Effektivvärde	15,96 mg
Vibration	0,18 mm/s RMS
Obalans	0,08 mm/s RMS
Lagerskada	2,64 mg

Wendt Duolift 16

När någon av dessa lampor är gula eller röda, tänds en lampa ute vid maskin för spindel/skärpmotor.

Bitar sedan början **25437 Antal**
 Upptid senaste 24h **0,00 %**

24,86 C° Kylvatten temp
 1,49 m3/h Luft flöde

Obj: 600315

O-Spindel	
Varvtal	0 rpm
Ström	0,00 A

Skärpmotor fastvarvtal	
Varvtal	3313 rpm

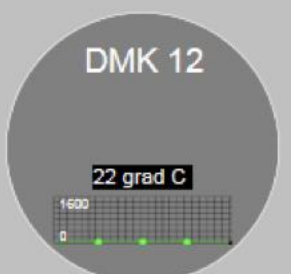
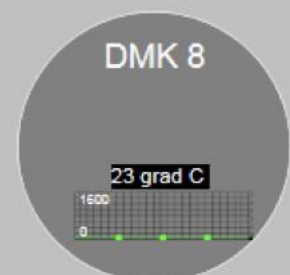
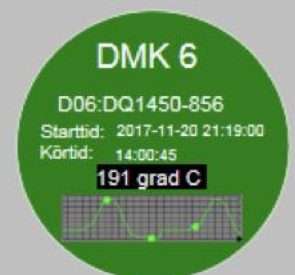
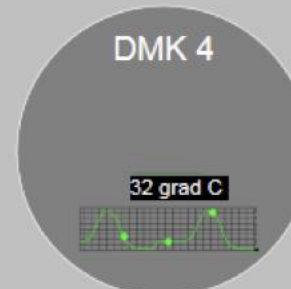
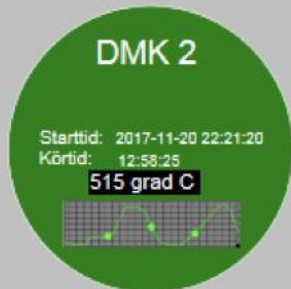
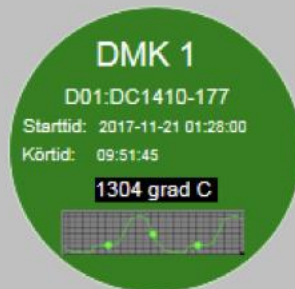
U-Spindel	
Varvtal	0 rpm
Ström	0,00 A

Hydraulolja nivå **84,35 %**

O-Spindel	
Effektivvärde	15,80 mg
Vibration	0,18 mm/s RMS
Obalans	0,07 mm/s RMS
Lagerskada	50,90 mg

Skärpmotor	
Effektivvärde	9,90 mg
Vibration	0,14 mm/s RMS
Obalans	0,02 mm/s RMS
Lagerskada	2,02 mg
Glapp	0,07 mm/s RMS

U-Spindel	
Effektivvärde	12,00 mg
Vibration	0,15 mm/s RMS
Obalans	0,10 mm/s RMS
Lagerskada	45,04 mg





Overview Gimo Pressing

50 Ton

Fette:MP 500 G1:NR 578 Production 2019-04-11 15:43:51	Fette:MP 500 G1:NR 579 Idle 2019-04-11 15:44:00
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Line 4

Fette:MP 120 G1:NR 540 Unloading 2019-04-11 15:44:00	Fette:MP 120 G1:NR 541 Idle 2019-04-11 13:00:18	Fette:MP 120 G1:NR 542 Cleaning 2019-04-11 15:43:41	Fette:MP 120 G1:NR 543 Unloading 2019-04-11 15:43:57	Fette:MP 120 G1:NR 544 Cleaning 2019-04-11 15:43:57	Fette:MP 120 G1:NR 545 Cleaning 2019-04-11 15:43:54	Fette:MP 120 G1:NR 546 Production 2019-04-11 15:43:59	Fette:MP 120 G1:NR 547 Idle 2019-04-11 15:25:53
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Line 5

Fette:MP 120 G1:NR 551 Idle 2019-04-11 15:37:05	Fette:MP 120 G1:NR 553 Production 2019-04-11 15:43:54	Fette:MP 120 G1:NR 556 Idle 2019-04-11 15:44:00	Fette:MP 120 G2:NR 550 Idle 2019-04-11 14:36:24	Fette:MP 120 G2:NR 552 Idle 2019-04-11 14:43:26	Fette:MP 120 G2:NR 554 Idle 2019-04-11 14:33:50	Fette:MP 120 G2:NR 555 Production 2019-04-11 15:43:57	Fette:MP 120 G2:NR 557 Inspection 2019-04-11 15:38:53
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Line 6

Fette:MP 120 G1:NR 560 Unloading 2019-04-11 15:44:00	Fette:MP 120 G1:NR 561 Production 2019-04-11 15:43:57	Fette:MP 120 G1:NR 562 Idle 2019-04-11 15:44:02	Fette:MP 120 G1:NR 563 Production 2019-04-11 15:43:57	Fette:MP 120 G1:NR 564 Idle 2019-04-11 15:22:02	Fette:MP 120 G1:NR 565 Production 2019-04-11 15:43:57	Fette:MP 120 G1:NR 566 Production 2019-04-11 15:44:00	Fette:MP 120 G1:NR 567 Production 2019-04-11 15:43:59
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Line 8

Fette:MP 120 G2:NR 580 Unloading 2019-04-11 15:43:51	Fette:MP 120 G2:NR 581 Production 2019-04-11 15:43:57	Fette:MP 120 G2:NR 582 Cleaning 2019-04-11 15:43:57	Fette:MP 120 G2:NR 583 Idle 2019-04-11 15:43:59	Fette:MP 120 G2:NR 584 Production 2019-04-11 15:44:00	Fette:MP 120 G2:NR 585 Idle 2019-04-11 15:39:06	Fette:MP 120 G2:NR 586 Production 2019-04-11 15:43:57	Fette:MP 120 G2:NR 587 Unloading 2019-04-11 15:43:56
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Line 9

Fette:MP 120 G1:NR 590 Cleaning 2019-04-11 15:43:45	Fette:MP 120 G1:NR 591 Cleaning 2019-04-11 15:43:57	Fette:MP 120 G1:NR 594 Idle 2019-04-11 15:25:15	Fette:MP 120 G1:NR 595 Idle 2018-11-04 11:50:08	Fette:MP 120 G2:NR 592 Production 2019-04-11 15:43:57	Fette:MP 120 G2:NR 593 Idle 2018-12-10 11:07:03	Fette:MP 120 G2:NR 596 Idle 2019-04-11 11:15:57	Fette:MP 120 G2:NR 597 Idle 2019-04-11 15:11:15
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- 
- StartPage
- Signal2insight
- Machine Details
- Cell Overview
- Flow Group
- QEE
- Power BI

Sandvik Coromant Gimo

A World Economic Forum Lighthouse

Overview - Flowgroup

Equipment Description from EAM Stama:MC 533/TWIN:14_1_1	Equipment Description from EAM Stama:MC 533/TWIN:14_1_2	Equipment Description from EAM Stama:MC 734/M:11_1_1	Equipment Description from EAM Stama:MC 734/M:11_1_2	Equipment Description from EAM Stama:MC 734/M:11_3_1	Equipment Description from EAM Stama:MC 734/M:11_3_2
					
MDC_ProcessStage Production	MDC_ProcessStage Production	MDC_ProcessStage Idle	MDC_ProcessStage Production	MDC_ProcessStage Production	MDC_ProcessStage Production
ItemNo 60000127-2-10	ItemNo 60000501-2-6	ItemNo 10000555-2-7	ItemNo No Data	ItemNo 10000722-1-2	ItemNo 10000275-1-2
Current Tool 2635 	Current Tool 9450 	Current Tool 601 	Current Tool 242 	Current Tool 724 	Current Tool 513 
InCut Current 2 s	InCut Current 8 s	InCut Current 19 s	InCut Current 23 s	InCut Current 17 s	InCut Current 72 s
Total InCut for current Tool 2 562 s	Total InCut for current Tool 1 568 s	Total InCut for current Tool 0 s	Total InCut for current Tool 1 248 s	Total InCut for current Tool 0 s	Total InCut for current Tool 1 821 s
Downtime Reason No or Unable to classify Stop Loss	Downtime Reason No or Unable to classify Stop Loss	Downtime Reason No or Unable to classify Stop Loss	Downtime Reason No or Unable to classify Stop Loss	Downtime Reason No or Unable to classify Stop Loss	Downtime Reason No or Unable to classify Stop Loss
Previous Tool 5 401	Previous Tool 2 254	Previous Tool 244	Previous Tool 98	Previous Tool 617	Previous Tool 98
Usage previous tool 25,09 s	Usage previous tool 14,273 s	Usage previous tool 26,361 s	Usage previous tool 63,504 s	Usage previous tool 37,357 s	Usage previous tool 47,303 s
Speed 100 %	Speed 100 %	Speed 100 %	Speed 100 %	Speed 100 %	Speed 100 %
(A) Previous Minute 100 %	(A) Previous Minute 100 %	(A) Previous Minute 0 %	(A) Previous Minute 100 %	(A) Previous Minute 100 %	(A) Previous Minute 100 %
Vibration Stream 3 496,4 Hz	Vibration Stream 4 558,1 Hz	Vibration Stream 0 Hz	Vibration Stream 4 224,7 Hz	Vibration Stream 4 604,6 Hz	Vibration Stream 3 687,9 Hz
Alarm 1007	Alarm 72	Alarm 0	Alarm 2070	Alarm 0	Alarm 2072

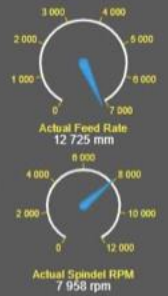


Sandvik Coromant Gimo

A World Economic Forum Lighthouse

From sensor to Insight

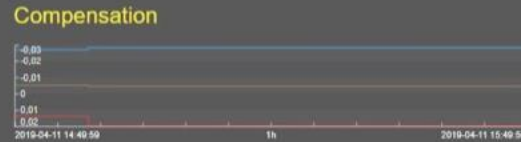
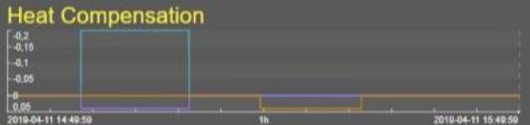
SAP EAM ID
Stama:MC 533/TWIN:14_1_1



Tool Information	
Active Tool nbr	Previous Tool nbr
9600	5 602
In Cut	Tooltime In Machine
3 108 s	14,292 s
Remaining Tool Life	
2 892 s	
NC	
N1082X16.517Y93.521	
N1080X-.746Y82.953	

- Collect, Store and real-time streaming analytics from machines and sensors
- All raw and calculated machine / sensor data is stored forever.
 - This is the base for Machine Learning and AI
- All machines states is calculated and contextualized from machine /sensor signals
- Volumes
 - 200 M signals values processed per day
 - 1200 evaluation / calculations per second
 - 12000 events tagged for deeper analytics and moved to Cloud

StopReason
No or Unable to classify Stop Loss



Its not about collecting data, its about creating value from engineering knowledge

Gantt
 Table
 Both
 Show events
 Show orders
 Show details
 Select several

- Breakdown / Unplanned Mainten...
- Production
- Unclassified Losses
- Performance Losses
- Adjustment Losses
- Consumable Losses
- Scheduling Losses
- Idling Losses

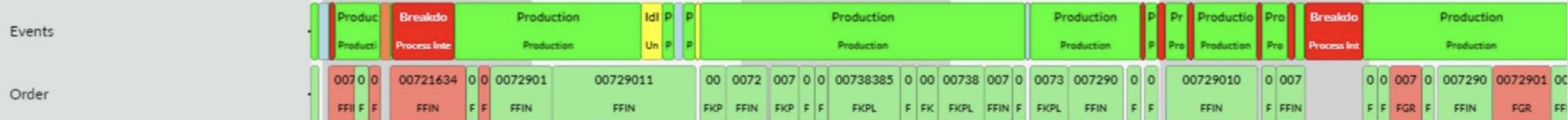
Stama:MC 833/MT TWIN:17_1



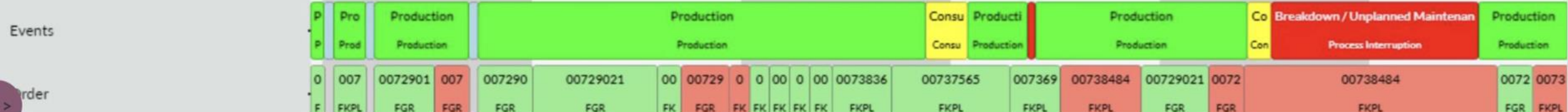
Schautd:Flexgrind M1000N:Schautd 2



Stama:MC 531/TWIN:6_2_1



Stama:MC 531/TWIN:6_2_2



Most Used Tools

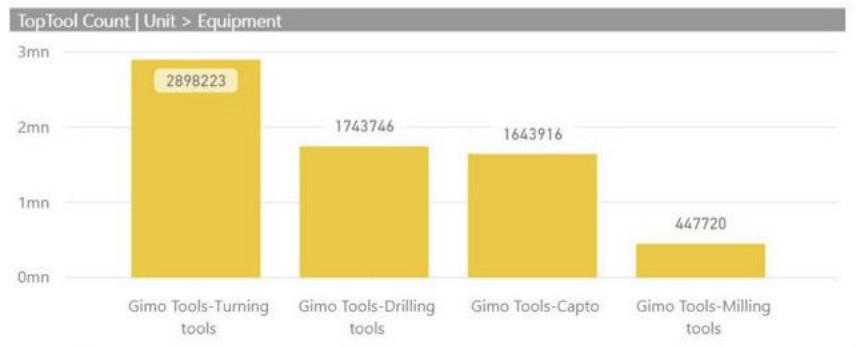
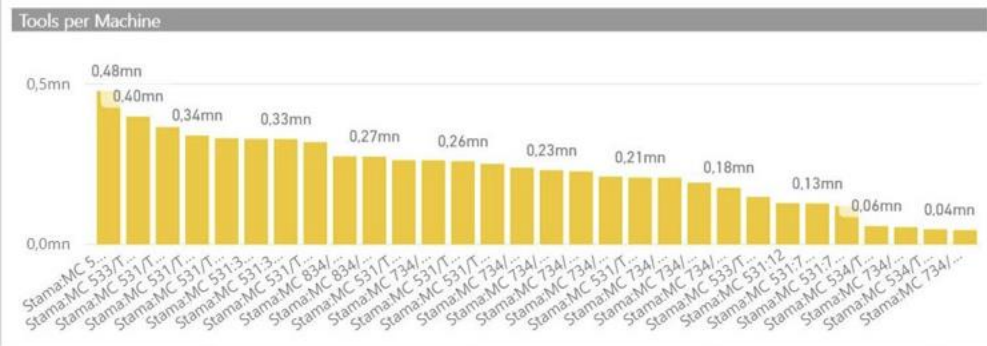
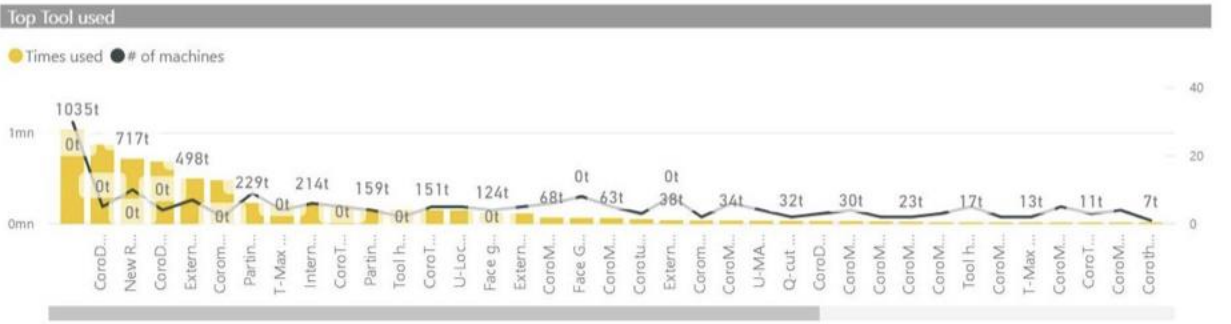
Slicers



Tool Number: Alla
Work Order: Alla

First Event	Last Event	# Unique Tools	# Tool Events	Running Equipments
2018-05-10 21:15:38	2019-04-06 23:28:08	926	6 649,43t	30 / 35

#	Tool Nbr	Machine	ME
27782	98	Stama:MC 734/M:11_1_2	Cor
24833	98	Stama:MC 734/M:11_1_1	Cor
23993	98	Stama:MC 734/M:11_3_1	Cor
21104	98	Stama:MC 734/M:11_3_2	Cor
20260	9000	Stama:MC 533/TWIN:14_1_2	Cor
20152	98	Stama:MC 734/M:13_1_2	Cor
19745	6160	Stama:MC 531/TWIN:6_4_1	Ext



Production Report - F31 Tool Breakages

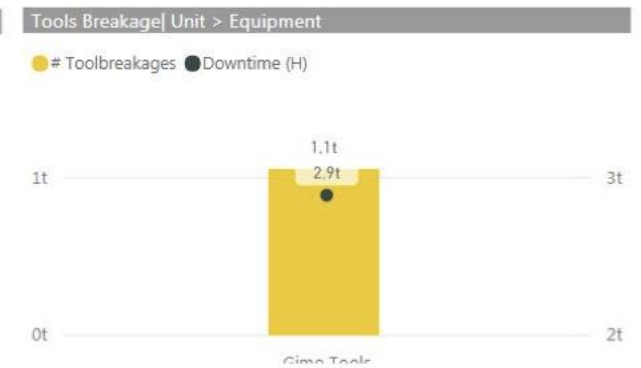
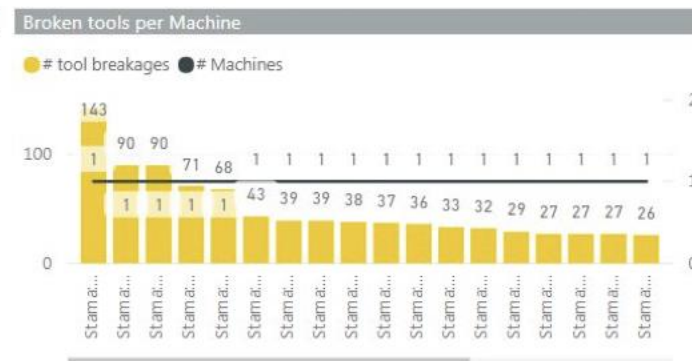
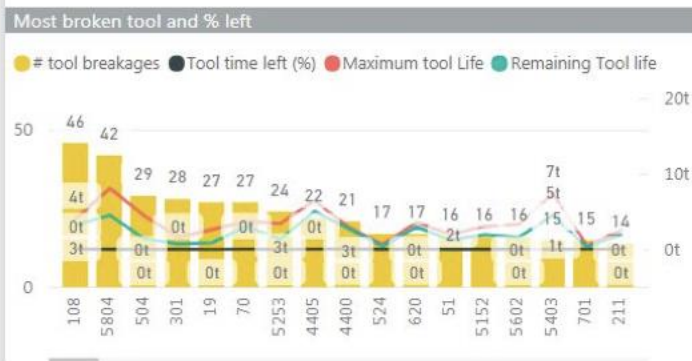
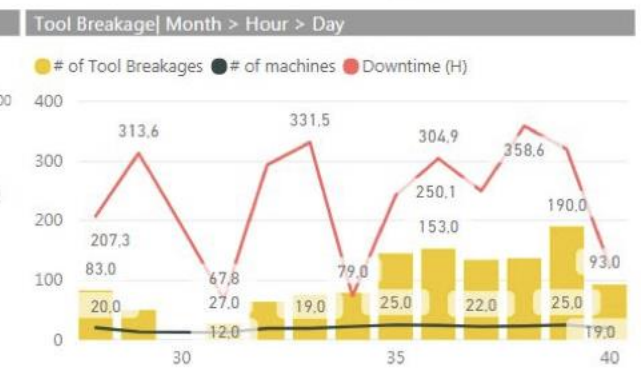
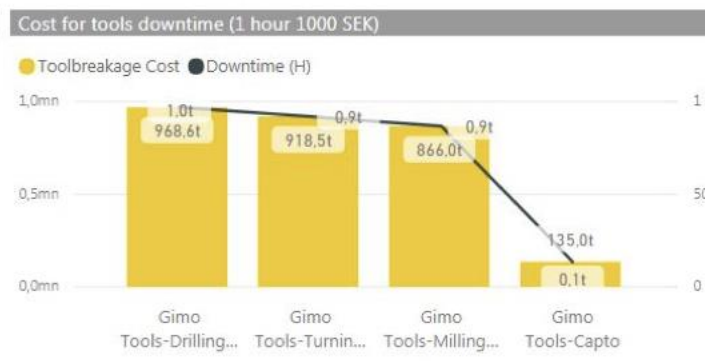
Tool Number Alla **Month** Alla **Date** 2018-07-09 2018-10-08 **Control System** Alla
Unit Alla **Area** Alla **Machine Group** Alla **Equipment** Alla **Product** Alla **Work Order** Alla



First Event	Last Event	Total Downtime (Hours)	Average downtime (min)	Average Tool Time left (%)	Total Tool Breakages	Running Equipments
2018-07-06 19:52:10	2018-10-04 05:30:41	2,89t	140,77	63,13	1055	27 / 35

Summary (Less than 20 % time consumed = RED)

% Left when broken	Tool Number	Machine	Max To
100,00	2182	Stama:MC 533/TWIN:14_1_1	
100,00	2182	Stama:MC 533/TWIN:14_1_1	
100,00	2182	Stama:MC 533/TWIN:14_1_1	
100,00	2182	Stama:MC 533/TWIN:14_1_1	
100,00	2182	Stama:MC 533/TWIN:14_1_1	
100,00	2182	Stama:MC 533/TWIN:14_1_2	
100,00	2254	Stama:MC 533/TWIN:14_1_1	
63,13			



Global Production overview

Completed standard quantity / Production plan (Current week)

Most recent workorder
2019-04-11 12:58:37

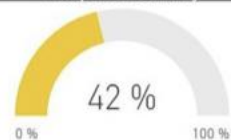
Report updated
2019-04-11 13:45:15



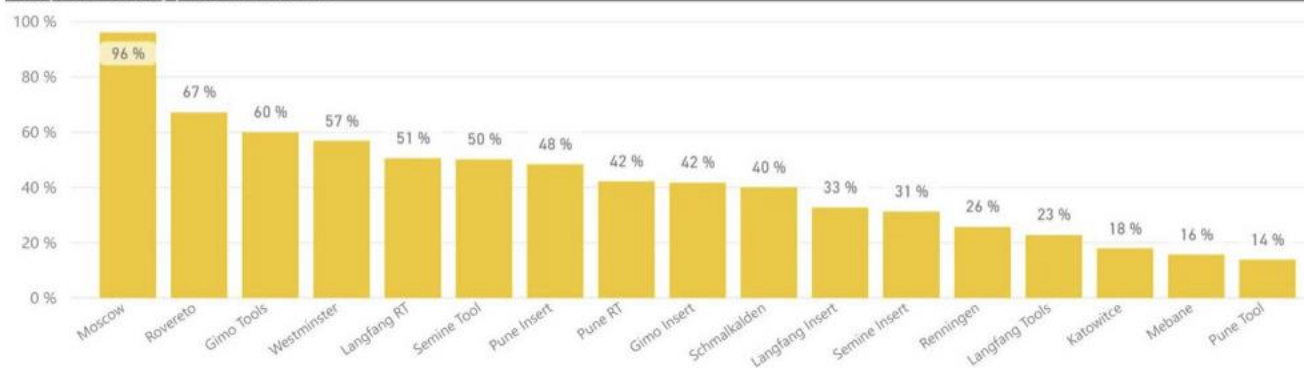
Production Unit Selection

Name	Country
Fondette	France
Gimo Insert	Sweden
Gimo Tools	Sweden
Katowitce	Poland
Langfang Insert	China
Langfang RT	China
Langfang Tools	China
Mebane	USA
Moscow	Russia
Pune Insert	India
Pune RT	India
Pune Tool	IN
Renningen	Germany
Rovereto	Italy
Schmalkalden	Germany
Semine Insert	Japan
Semine Tool	Japan

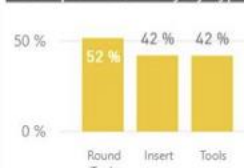
Completed Quantity



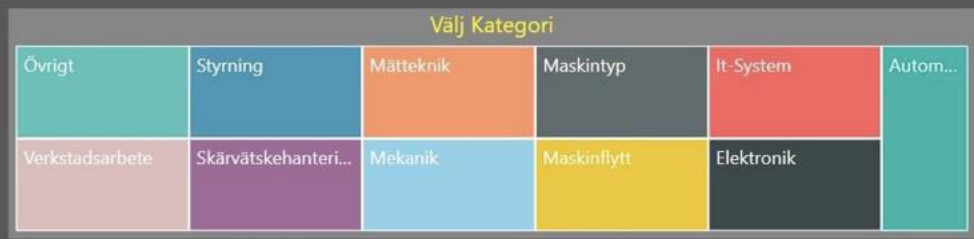
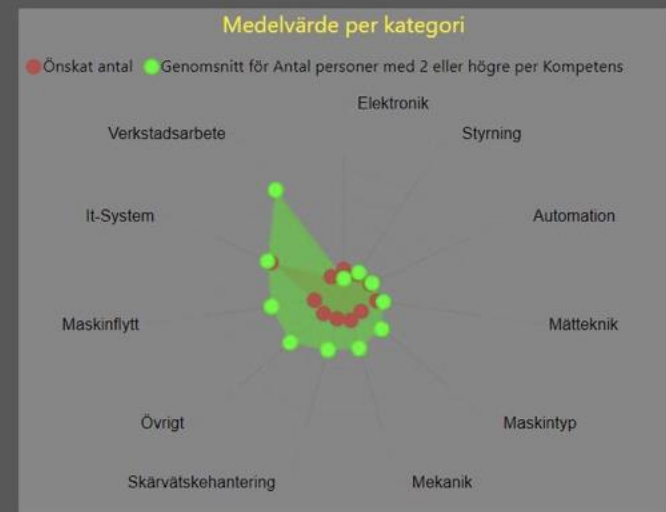
Completed Quantity per Production Unit



Completed Quantity by Type

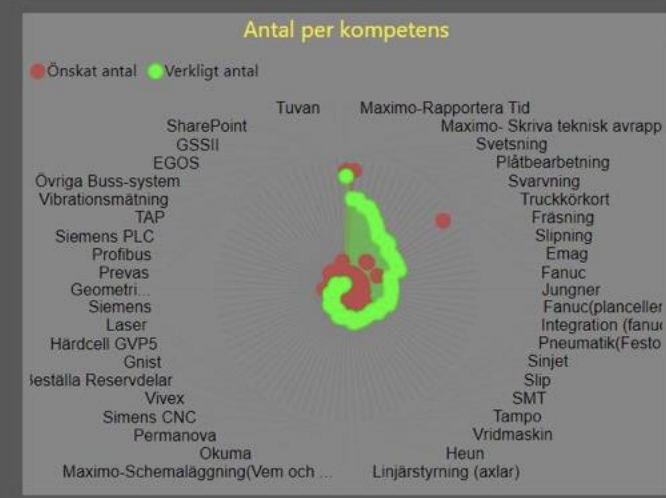


Kompetensmatris



Kompetenser

Kategori	Kompetens	Antal personer med 2 eller högre	Önskat antal	Diferens Verkligt - Önskat
Verkstadsarbete	Plåtbearbetning	15	1	14
Verkstadsarbete	Svetsning	16	3	13
Verkstadsarbete	Svarvning	15	3	12
Maskinflytt	Truckkörkort	14	3	11
Verkstadsarbete	Fräsning	13	3	10
Verkstadsarbete	Slipning	12	3	9



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Navigation sidebar: FILTER



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 TEŞEKKÜR EDERİM GRÁCIÉS OBRIGADO شكرا SALAMAT
 DANKIE TERIMA KASIH DANKON TANK TAPADH LEAT
 KÖSZÖNÖM СПАСИБО MULTŪMESC
 PAKMET CIZGE OSi soft. HVALA FAAFETAI
 GO RAIBH MAITH AGAT PI World ESKERRIK ASKO
 БЛАГОДАРЯ GRACIAS HVALA ХВАЛА ВАМ
 МАHAДСАНИД THANK YOU TEŞEKKÜR EDERİM
 ТИ БЛАГОДАРАМ DANK JE EΥΧΑΡΙΣΤΩ GRATIAS TIBI
 TAK DANKE MAHALO IĀ 'OE TAKK SKALDU HA
 RAHMAT MERCI AČIŪ SALAMAT GRAZZI PAKKA PÉR
 HATUR NUHUN PAXMAT CAĠA FАЛЕМІNЕРІТ
 ありがとうございました ДЗЯКУЙ GRAZIE
 MATUR NUWUN
 CẢM ƠN BẠN UA TSAUG RAU KOJ
 TI БЛАГОДАРАМ
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