



Capital Markets Day

Stefan Widing
President and CEO

Global trends in our favor

- Growing middle-class and rapid urbanization
- Green transition towards electrification
- Demand for increased productivity, efficiency and sustainability through new technology, digitalization and automation

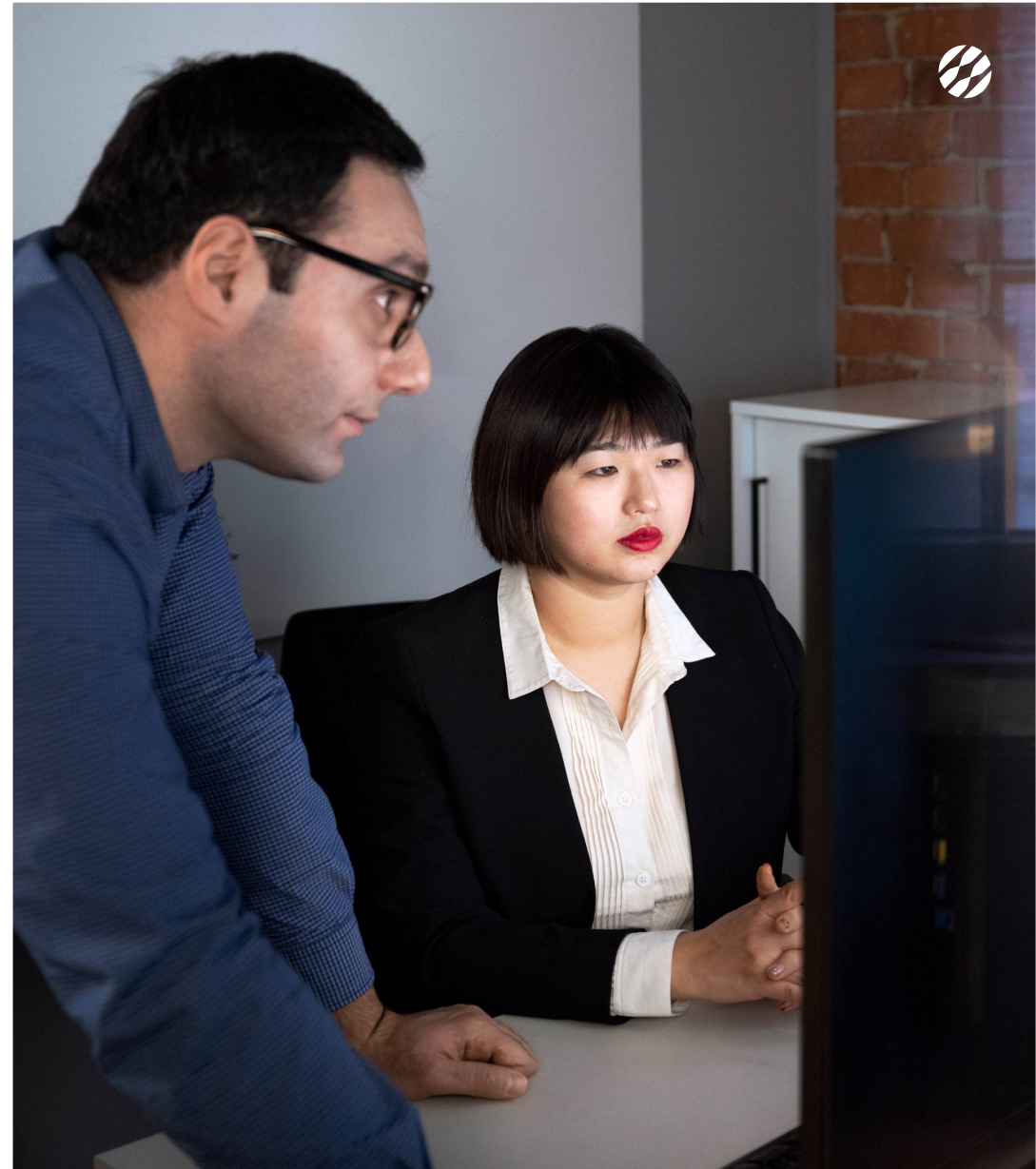


Value creating strategy for all stakeholders



Strong platform

- World leading positions and brands
- Winning culture
- Innovation at core
- Leading digital and software platform
- Sustainability embedded in business model
- Financial strength and resilience

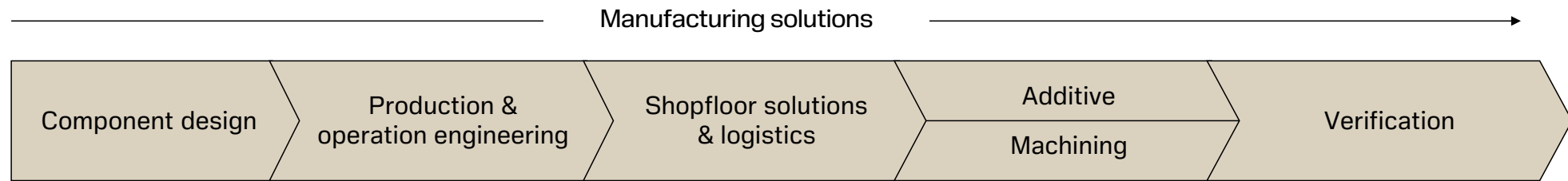




Well positioned to capture growth opportunities

Leading positions throughout customers' value chain

- World leading in for example CAM software, cutting tools and additive manufacturing powder
- Towards end-to-end optimization and automation
- Agnostic offerings enabling further growth
- Manufacturing of the future is digitalized and automated, from design to finished product

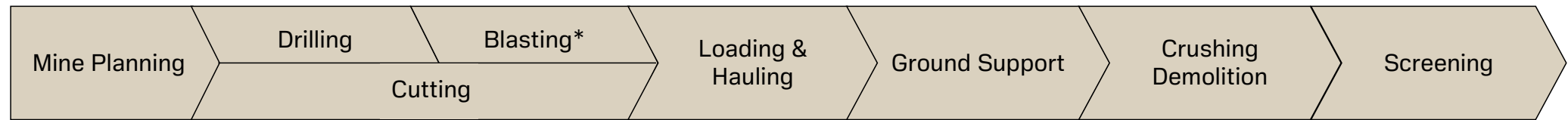




Well positioned to capture growth opportunities

Leading positions throughout customers' value chain

- World leading in for example mine planning software, underground mining equipment and automation
- Leading technology in rock processing to reduce energy and water consumption
- Offering end-to-end optimization and automation
- Mining of the future is electrified, automated and sustainable



————— Parts, services, licenses and consumables —————>

————— Integrated digital platform —————|



AutoMine®



* Blasting optimization

Strong growth

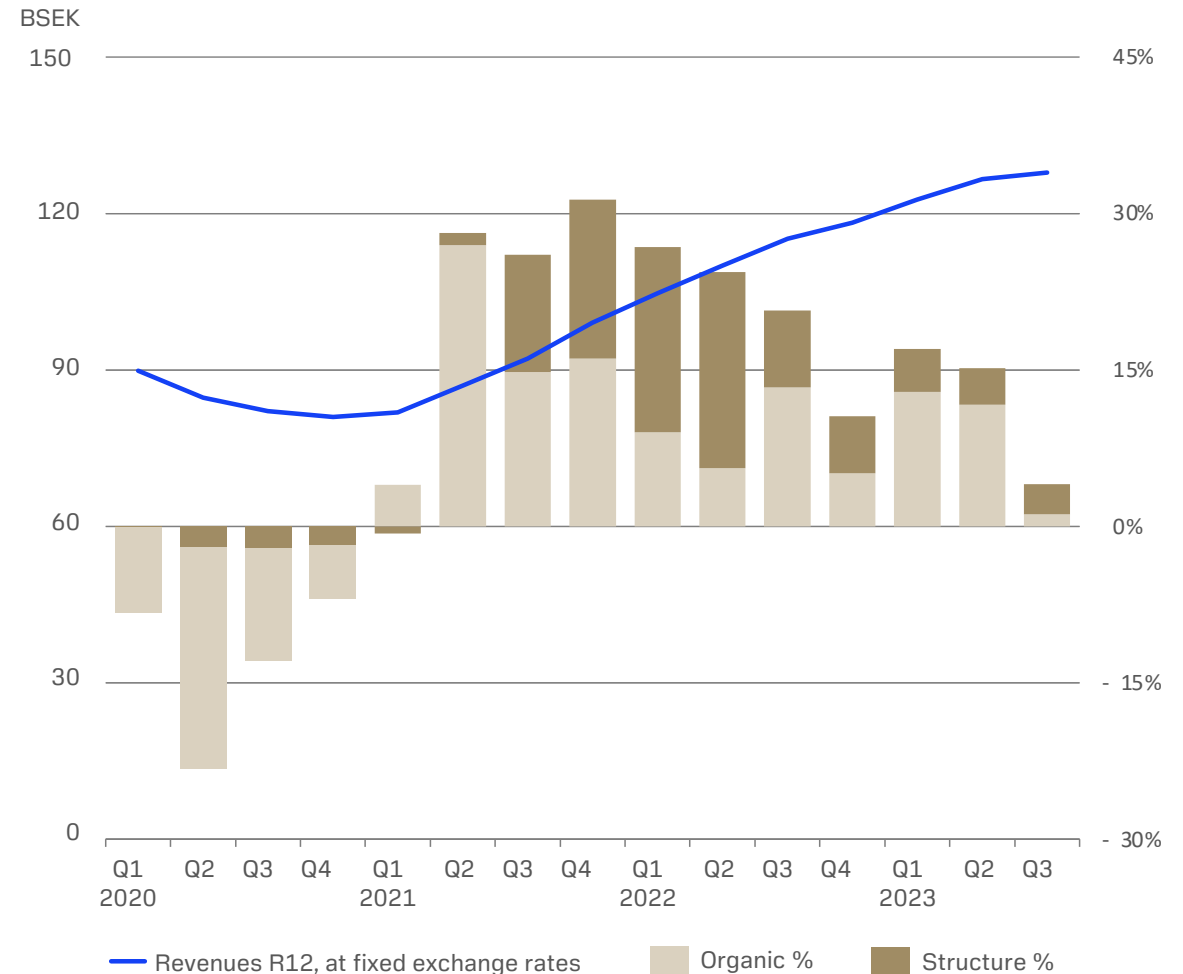
Total ex. currency
(CAGR since 2019)

+9%

Organic
(CAGR since 2019)

+5%

- Exceeding growth target of 7%
- 11 consecutive quarters of organic growth
- Added SEK 19 billion through strategic acquisitions
- Solid organic growth from acquisitions



Innovation at core

New Sales Ratio*:

25%

- Maintain leadership positions
- Support organic growth
- Value based pricing on productivity and sustainability improvements

* Revenue from products younger than 5 years



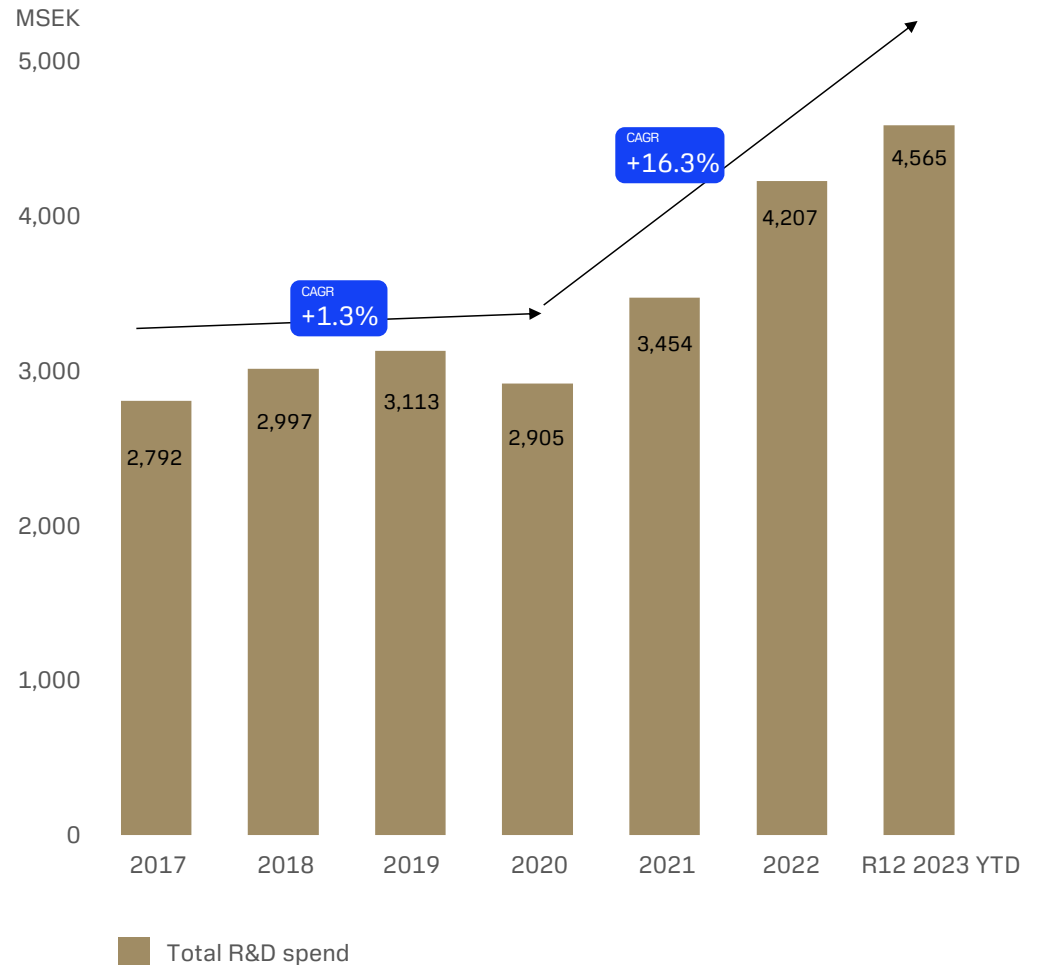
Making the shift in R&D supports innovation

New Sales Ratio*:

25%

- Maintain leadership positions
- Support organic growth
- Value based pricing on productivity and sustainability improvements

* Revenue from products younger than 5 years



Leading in digital

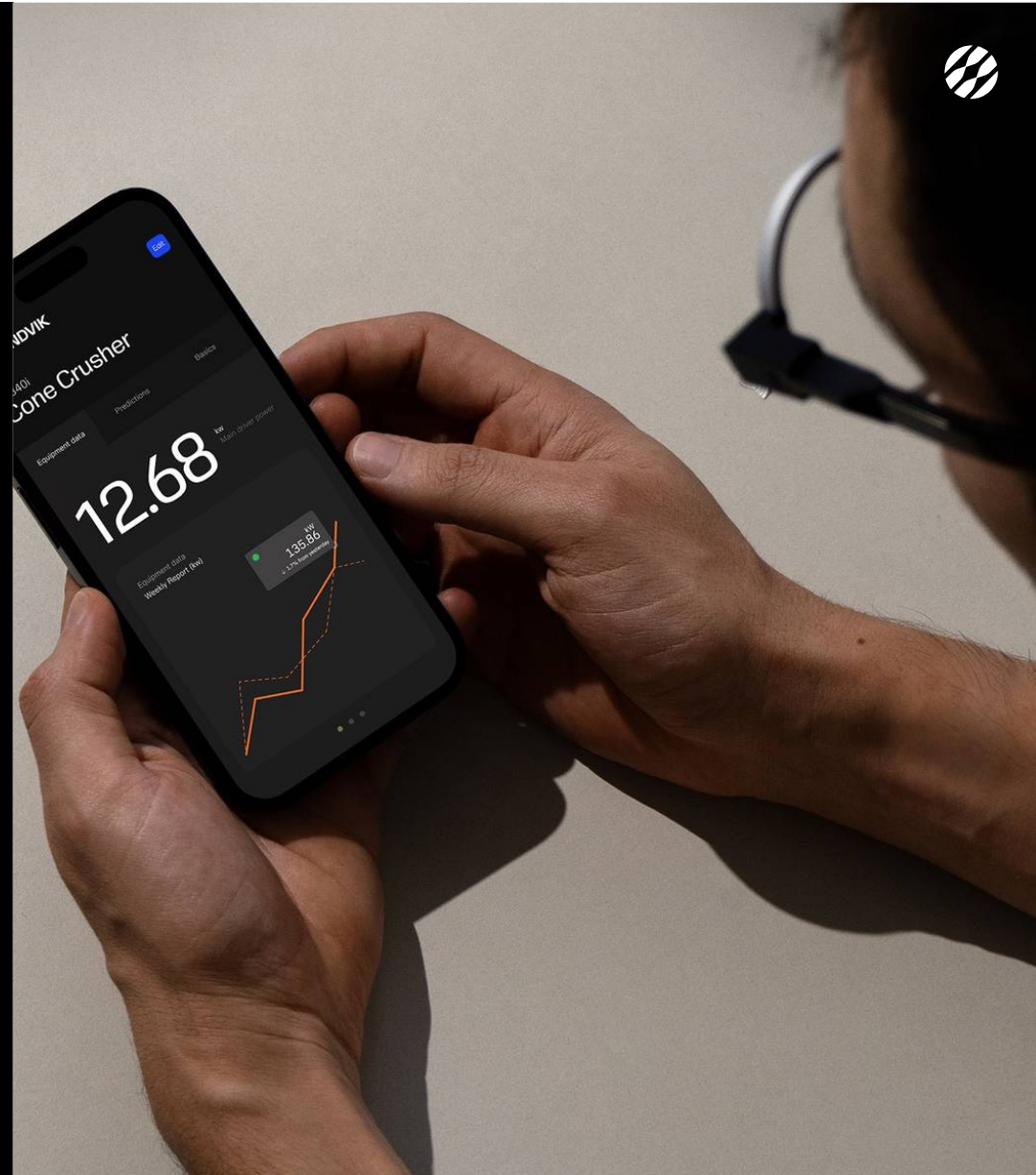
Digital offering
(SEK)

4.8 bn

On track towards
2025 target of (SEK)

6.5 bn

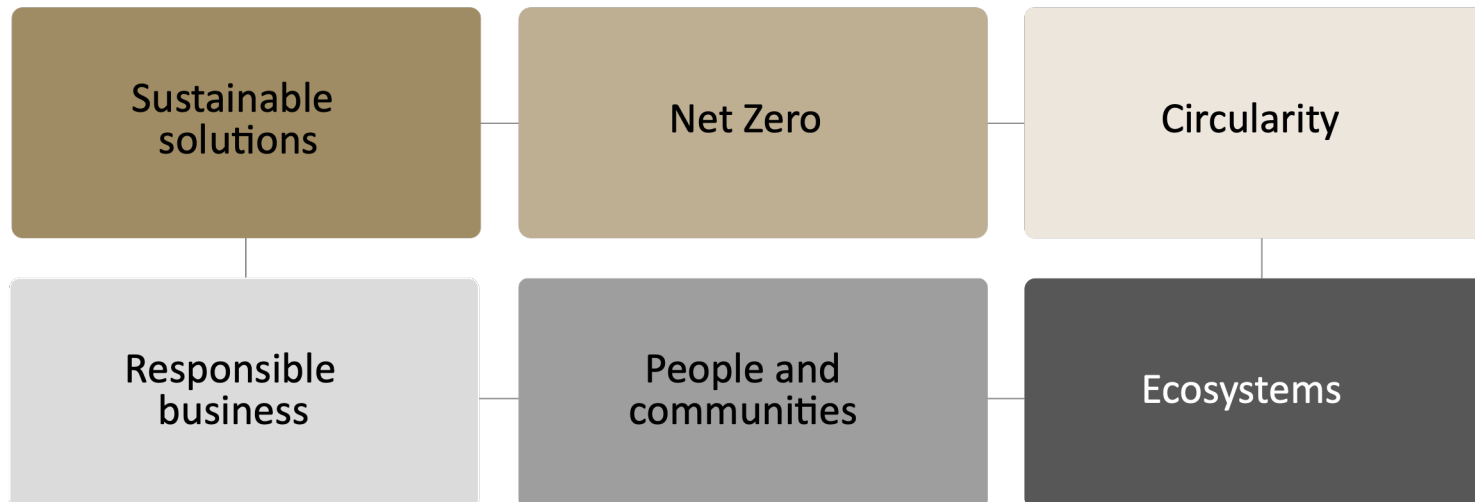
- Manufacturing: leader with over 400,000 installed seats
- Underground mine automation: clear leader with over 50% market share
- Mine planning software: clear leader with more than 600 sites connected





Sustainable business

- Approved science-based targets for net-zero 2050
- 90% greenhouse gas reduction by 2040 (scope 1 and 2)
- 90% waste circularity by 2030



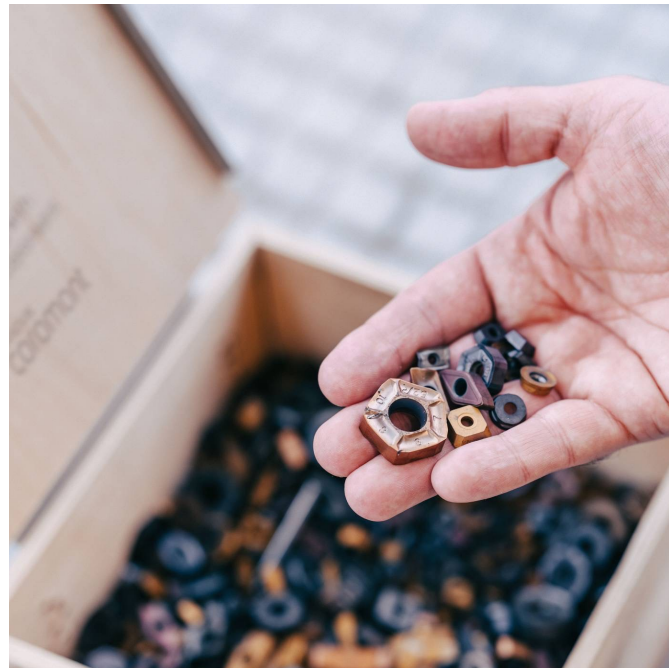


Sustainable solutions

Leader in electric, automated mining equipment



Over 50% recycled material in cutting tools



Leading technology reduce energy and water consumption in rock processing



Solid execution on strategy

- Strong growth organically and through acquisitions
- Leading in digital and making the sustainability shift
- Increased software, services and consumables
- Strong margin with proven resilience





Transformation of Sandvik

Portfolio optimization completed through Alleima spin-out

Evolved management culture – performance, agility, the *how*

Strengthened the Sandvik platform and our market positions

Enabler in customers' shifts with a leading digital and sustainability offering

Successful strategy execution with strong growth and proven resilience



Capital Markets Day Group financials

Cecilia Felton
CFO



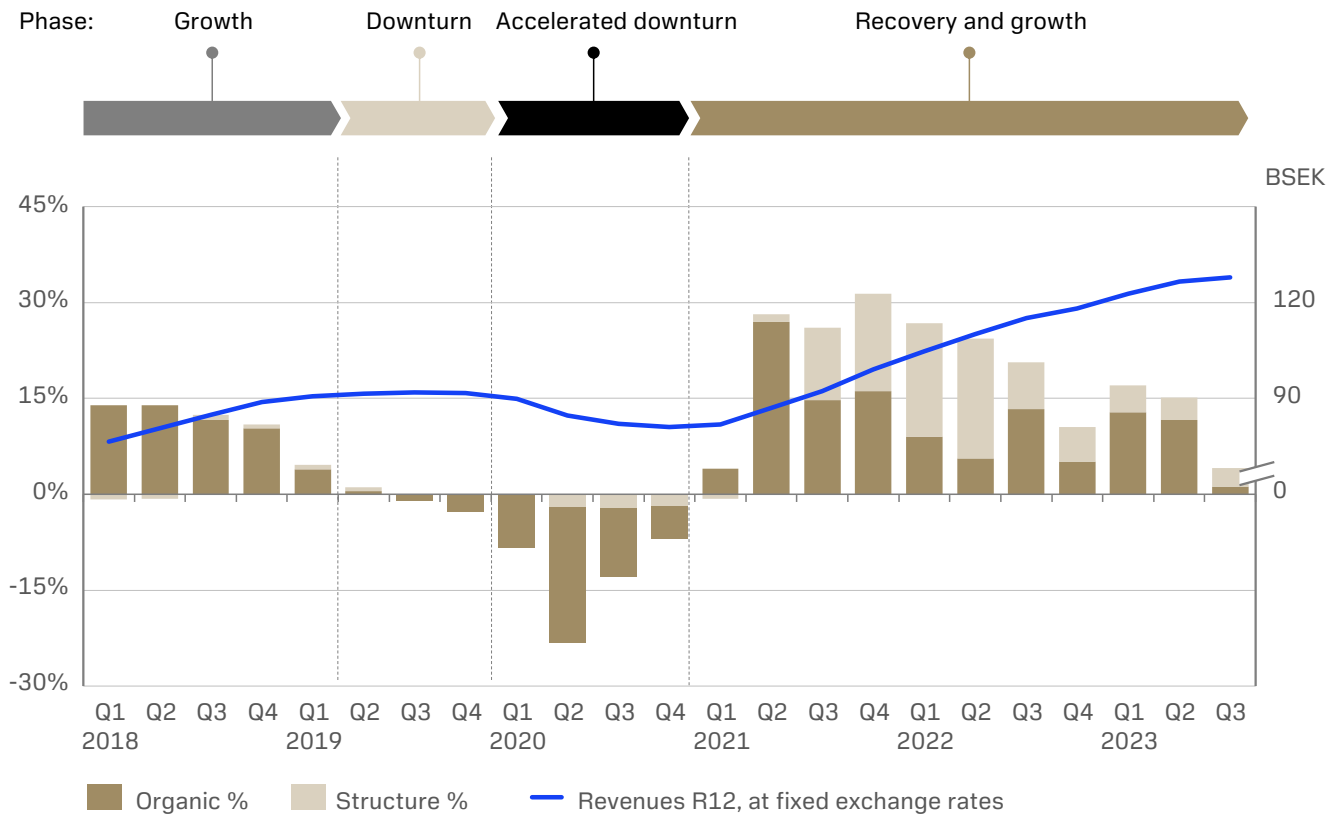
Financial targets

Growth	7% Through a business cycle
Adjusted EBITA margin range	20-22% Through a business cycle
Financial net debt/EBITDA	<1.5
Dividend payout ratio	50% Through a business cycle





Executing on the shift to growth

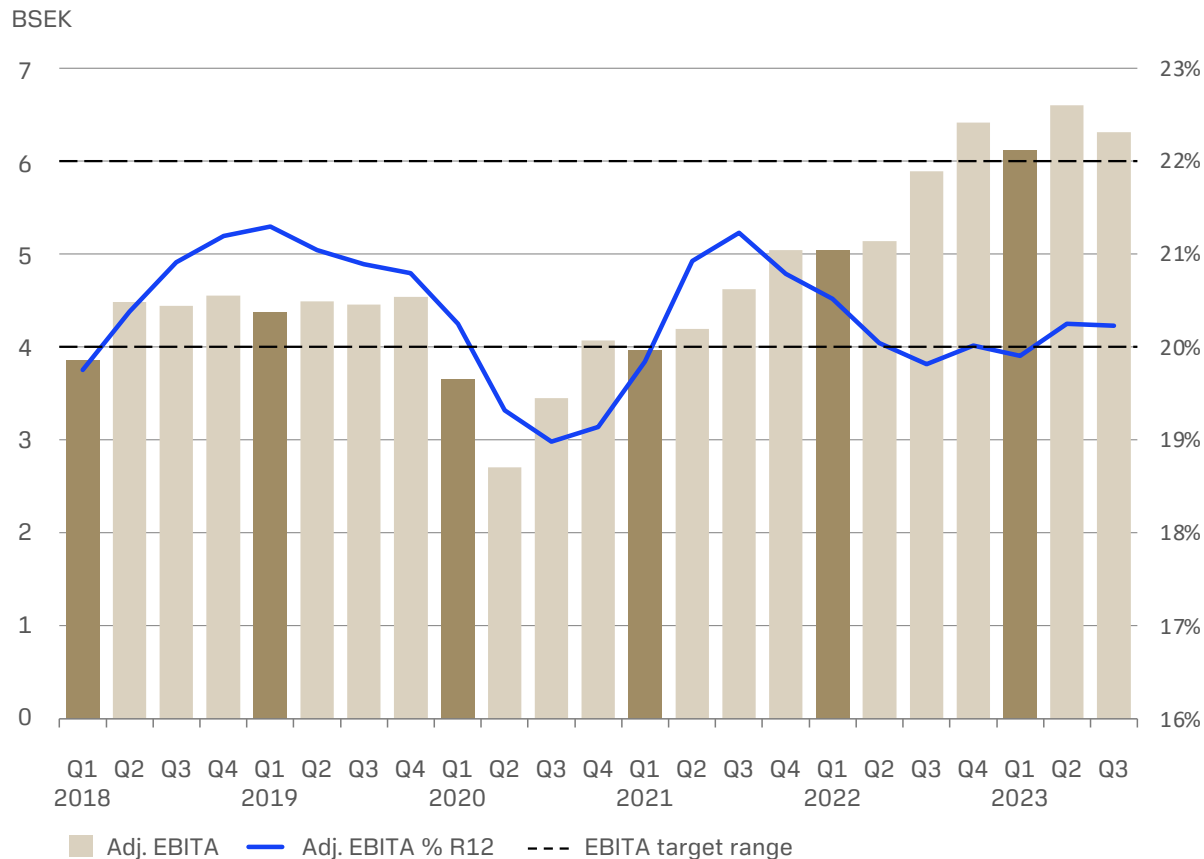


- Accelerated start to Shift to Growth strategy launched in 2020
- Double-digit growth for nine consecutive quarters
- 24 acquisitions adding SEK 19 billion of annual revenue
- Total growth excl. currency 9% CAGR 2019 to Q3 2023
 - Organic 5%
 - Acquired growth 4%

Note: Continuing operations, excluding SMT, Other Operations and Mining Systems



Agile business model and strong EBITA margin

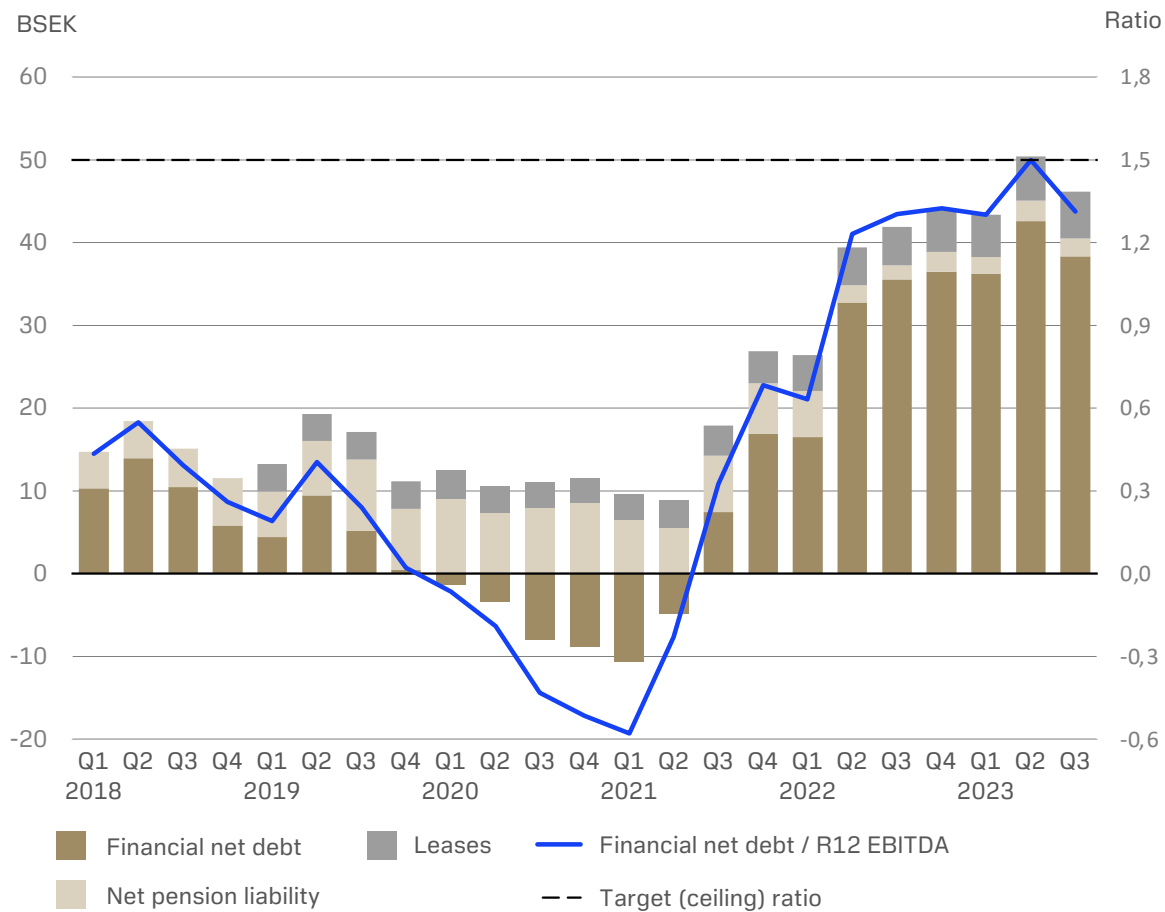


- More resilient topline
 - Higher share of aftermarket and software
 - Pricing power to mitigate inflation
- Higher share of variable costs
 - Outsourcing and third-party personnel
- Optimizing fixed costs – structural savings program to generate SEK 785 million of run-rate savings
- Proven margin resilience during Covid-19 and Q3 2023
- 2022 and 2023 YTD within the target range of 20-22%

Note: Continuing operations, excluding SMT, Other Operations and Mining Systems



Balance sheet for growth



- Solid balance sheet for growth
- Financial net debt / R12 EBITDA at 1.3
- S&P credit rating: A- negative outlook. Plan to retain a strong investment grade rating
- Accelerated start to the shift to growth strategy
- Going forward our Shift Strategy will be financed by generated cash flow

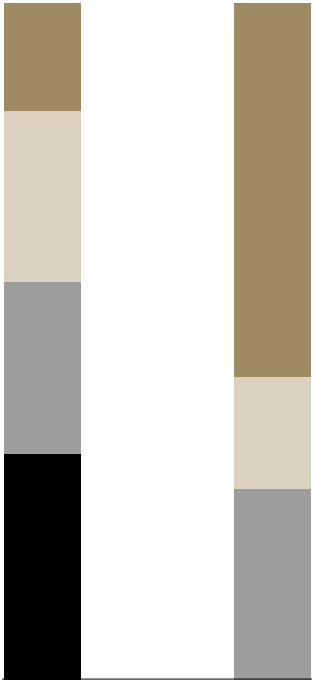


Capital allocation supporting shift strategy

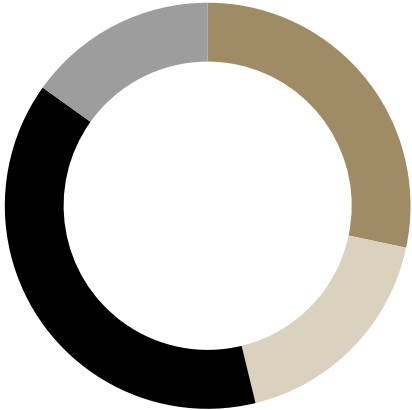
Stabilization
2016-2020

Shift to Growth
journey 2021-

M&A spend
2021 Q1 - 2023 Q3



- Acquisitions
- CAPEX
- Dividend
- Debt repayment



- SMF: CAD/CAM software and metrology
- SMS: Acquisitions to strengthen position in inserts, round tools and mid-market, expand outside Europe, and master automotive shift
- SMR: Mine planning and operations software, ground support
- SRP: Screens and feeders

- Solid cash flow generation to support shift to growth strategy
- Capital allocation priorities:
 - Capex
 - Dividend
 - Debt target
 - M&A
 - Share buy-backs



Shareholders rewarded

Adj. EPS growth
2018-2022

20%

Average payout
ratio

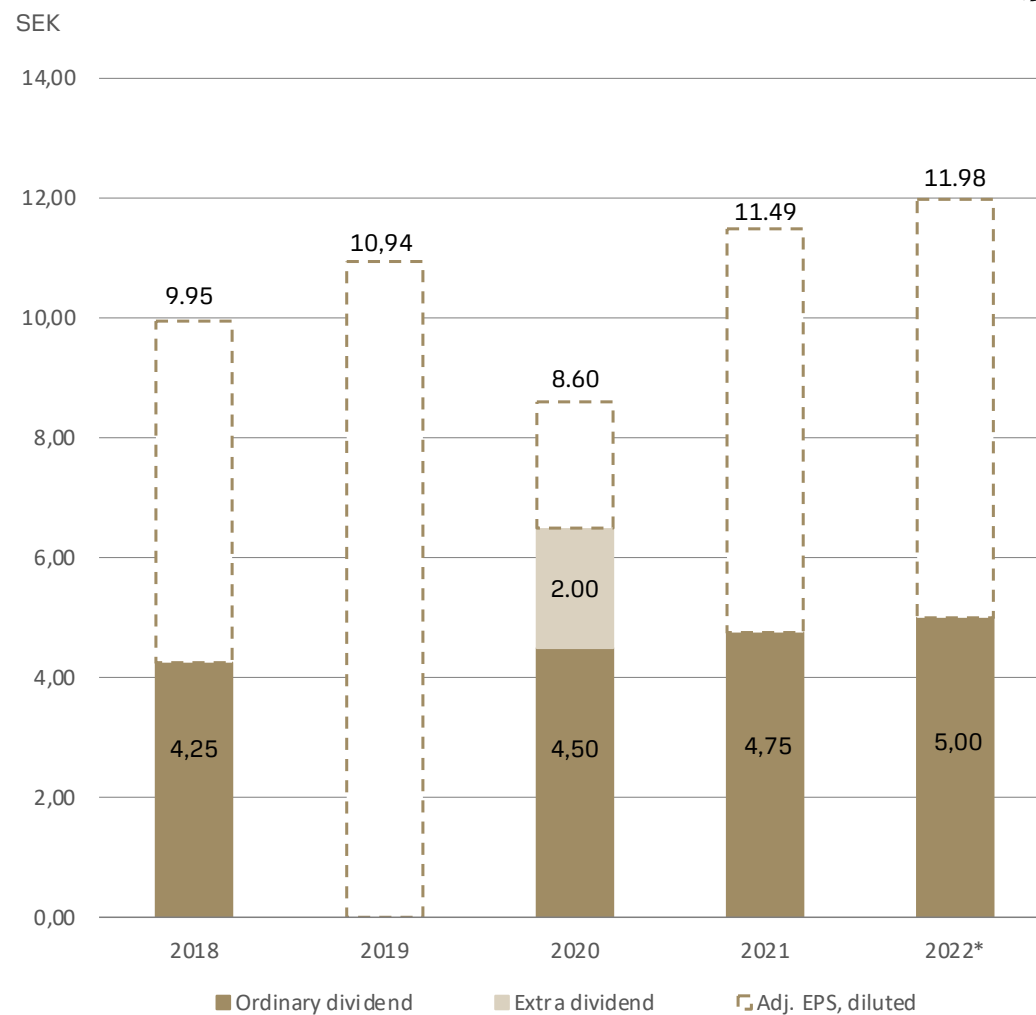
39%

Target average
payout ratio

50%

Distributed to
shareholders

Alleima



* Excluding the distribution of Alleima to shareholders



Delivering on our targets

Growth

9% (7%)

Revenue CAGR 2019-2023 Q3
R12, at fixed exchange rates

Adjusted EBITA
margin range

20.2% (20-22%)

2023 Q3 R12

Financial net
debt/EBITDA

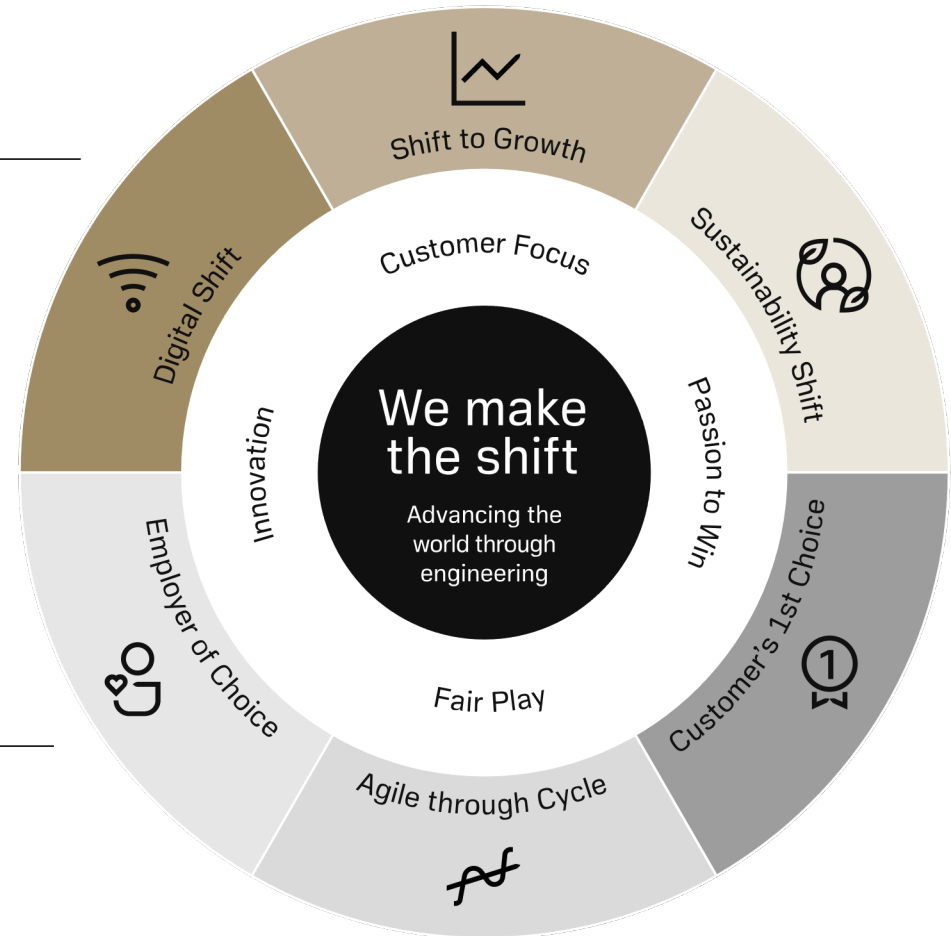
1.3 (<1.5)

2023 Q3

Dividend
payout ratio

39% (50%)

Average 2018-2022





Sandvik Mining & Rock Solutions

Mats Eriksson
President

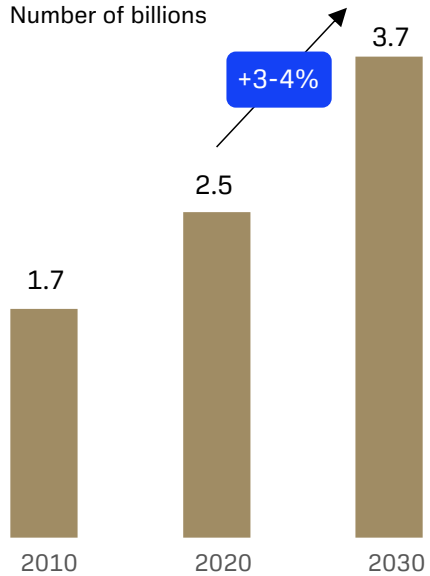




Healthy long-term fundamentals in mining

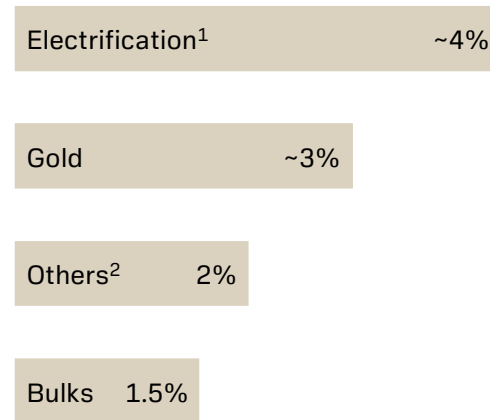
Growing global middle class

Number of billions



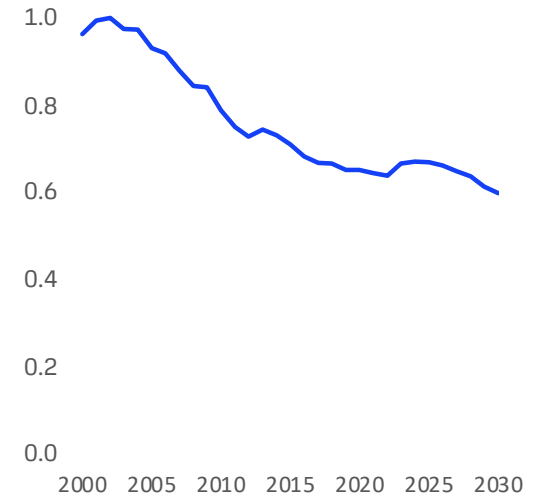
High demand of electrification metals

Expected growth rates 2023-2026



Lower ore grades – more material moved

Annual average copper ore grade (%)



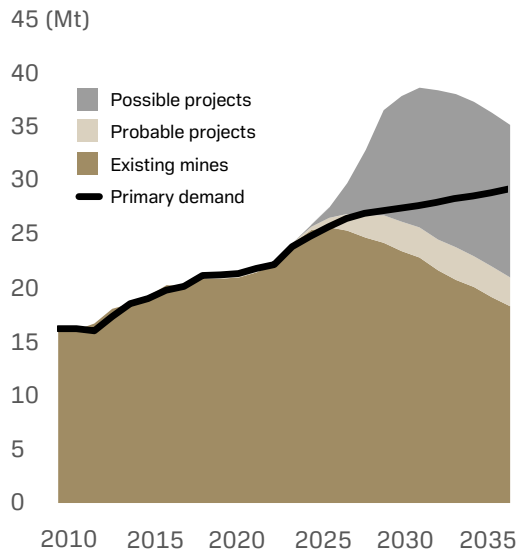
Source: PEW Research Center, United Nations, Brookings Institute, Wood Mackenzie, Fitch and Internal Analysis
Note: 1. Electrification metals: Nickel, Copper, Zinc, Lithium, Cobalt, 2. Diamonds, other metals and minerals



Upcoming supply gap increases focus on technologies to unlock future supply

Supply demand balance

(Copper example)

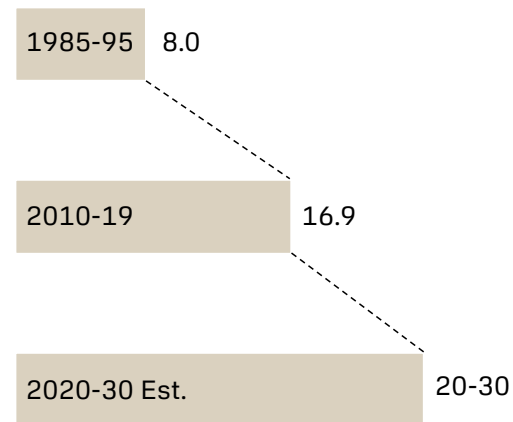


Source: Wood Mackenzie, S&P Global and Internal Analysis

Lead times continue to rise

(Copper example)

Total time from discovery to production, years



Technologies to unlock future supply

- **Automation** to operate efficient and safe in challenging environments
- **Mine planning and operations management software** to optimize operations
- **BEVs** (Battery Electric Vehicle) to enable faster ramp-up times and total load cycle time

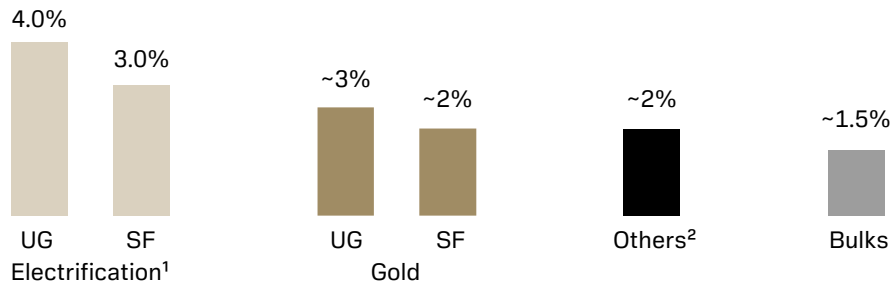


SMR is well positioned to capture the growth

Market

Expected ore volume growth rates

2023-2026

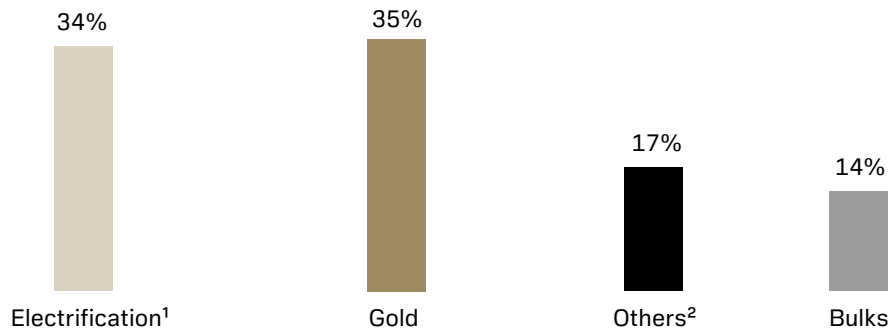


Mining industry total
~2%

Sandvik

Sales commodity exposure

2022



SMR weighted ore exposure growth outlook
~3%

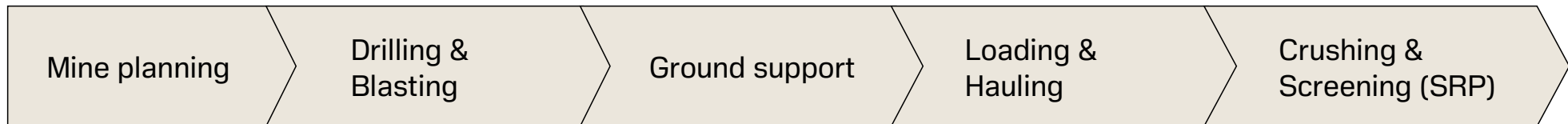
Source: Fitch, Wood Mackenzie, S&P Global and Internal Analysis

Note: 1. Electrification metals: Nickel, Copper, Zinc, Lithium, Cobalt, 2. Diamonds, other metals and minerals

Well positioned to capture growth opportunities



Sandvik is the customer partner throughout the value chain



Parts, services, licenses and consumables

Digital optimization solutions

Well positioned to capture growth opportunities



The future of mining

Electrification

Sustainable Shift in safety, productivity and efficiency

Automatic execution

Fully autonomous operations

Data and analytics

Increased productivity with powerful data collection, AI and analysis

The future of mining is net zero, circular and efficient – supporting the transition to a safer and more sustainable world



Enabler in the customer shifts



Enabler in the customer shifts

Electrification



Automation



Digitalization





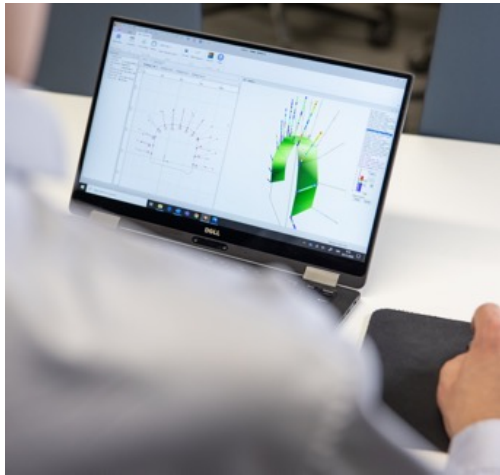
Sandvik's unique BEV portfolio enabling customers shift – productivity and sustainability

Preparation

Solutions

Support

Circularity



Trans4mine®

Load and Haul BEVs

Site readiness

Battery down-cycling

Simulations

Underground Drilling BEVs

Parts and services

2nd life applications

Case studies

Batteries/BaaS

Remote monitoring

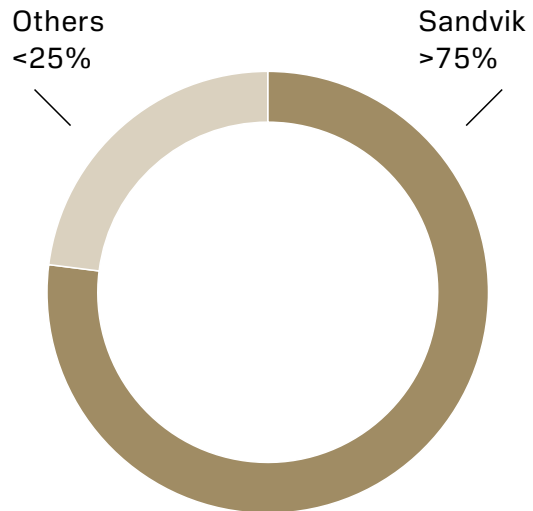
Battery recycling

Note: Including diesel-electric

Enabler in the customer shifts – BEV

Sandvik winning the majority of BEV orders

Load and Haul BEV order intake
(Jan - Oct 2023)



Source: Internal analysis



Examples of success

World's largest BEV truck on customer site for test

>15%

BEV share of load and haul order intake YTD 2023

Enabler in the customer shifts – BEV

Investing in our BEV leadership

Widening our electrified offering

Battery-electric



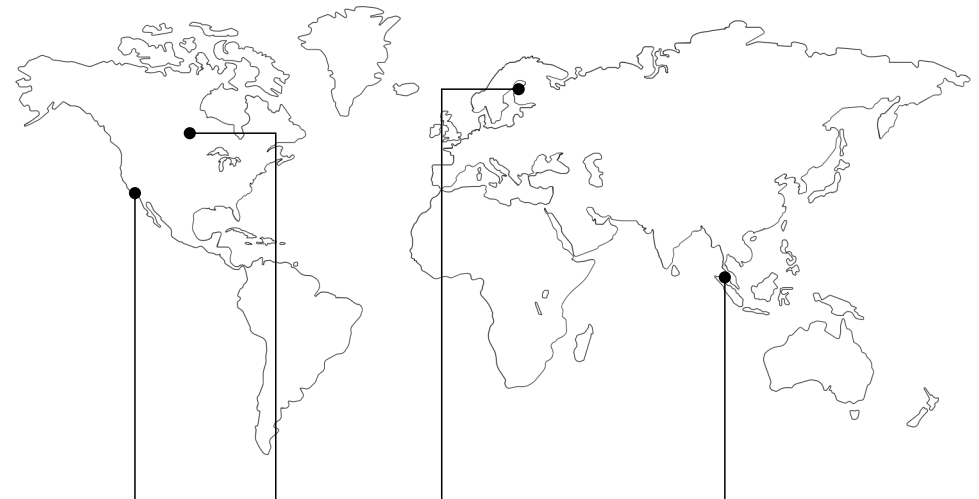
Diesel-electric



Batteries and chargers



Expanding production capacity



Camarillo
USA

Winnipeg
Canada

Turku / Tampere
Finland

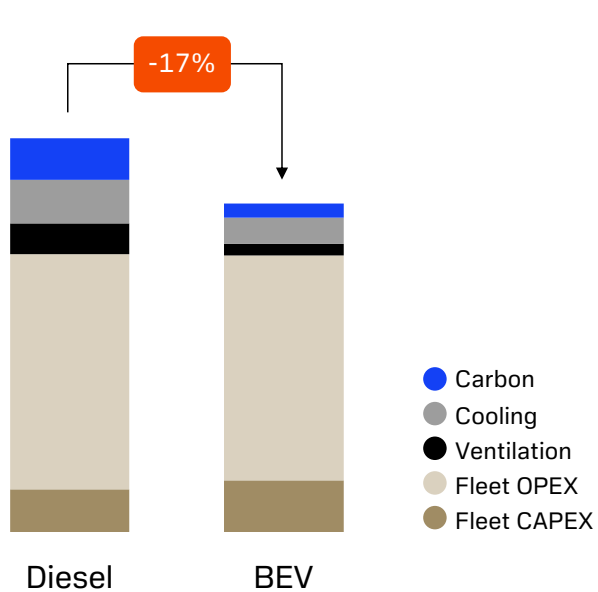
Seremban
Malaysia



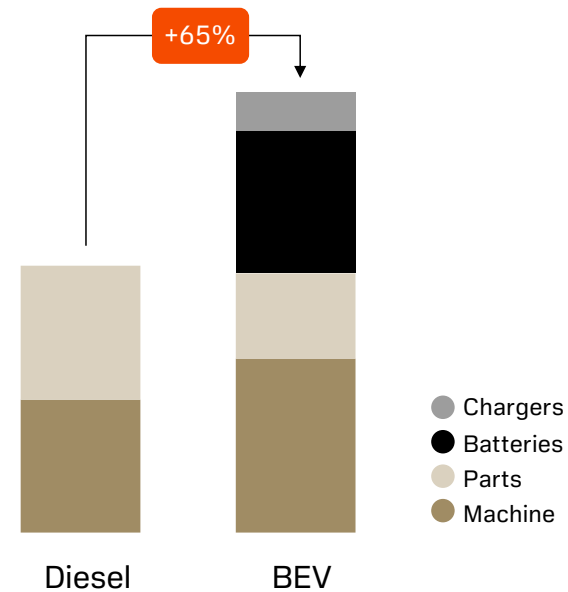
BEV is a win-win proposition

Customer: total cost of ownership savings

Net present cost¹, Selected upramp haul truck scenario²



Sandvik: lifecycle revenue potential



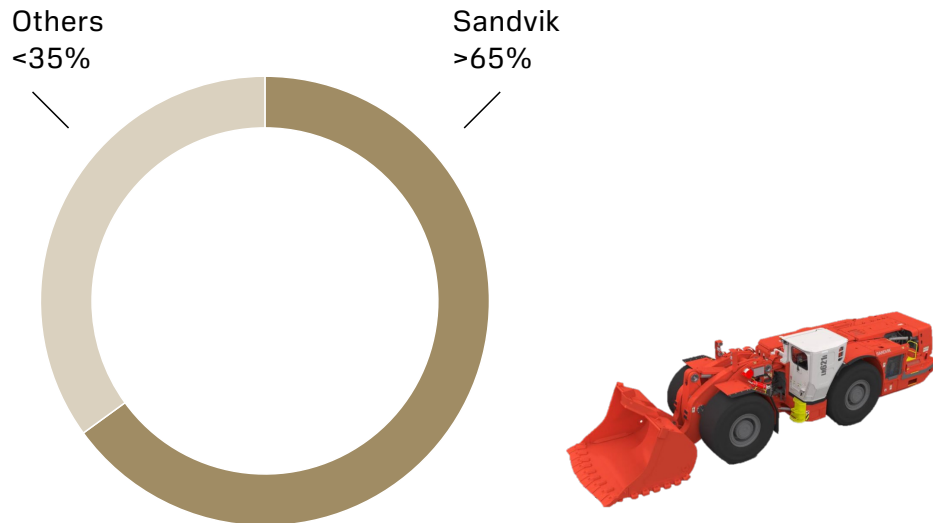
Source: Internal analysis

1) Based on BEV customer on BaaS 2) Large size truck, 5yrs, 27,000hrs

Enabler in the customer shifts – Automation

Value creation through leading autonomous offering

Global installed fleet of autonomous / tele-remote underground load and haul units



Source: GlobalData, (Global population of tele-remote/autonomous UG LOHA equipment), Internal Analysis



Our technology fosters long-term engagement with verified customer value

55%
productivity increase
New Gold, New Afton

>65%
more productivity
North American Palladium,
Lac des Iles

30%
increase in effective
production hours
Glencore, Kidd Operations

80-100%
of production via AutoMine
Boliden, Garpenberg



Only provider of large-scale underground automation

AutoMine®	Fleet size	Deal size	Sandvik proven capability	Competition proven capability	Sandvik orders received: Automation systems and equipment ¹ : (MSEK, R12)
Level 3 Large-scale Production systems	> 5 units	100-300 MSEK	✓	–	720
Level 2 Mid-scale Autonomous systems	3-5 units	20-40 MSEK	✓	–	525
Level 1 Tele remote automation	1-2 units	< 20 MSEK	✓	✓	355
					Total BSEK: 1.6
					Customer value and Sandvik business impact

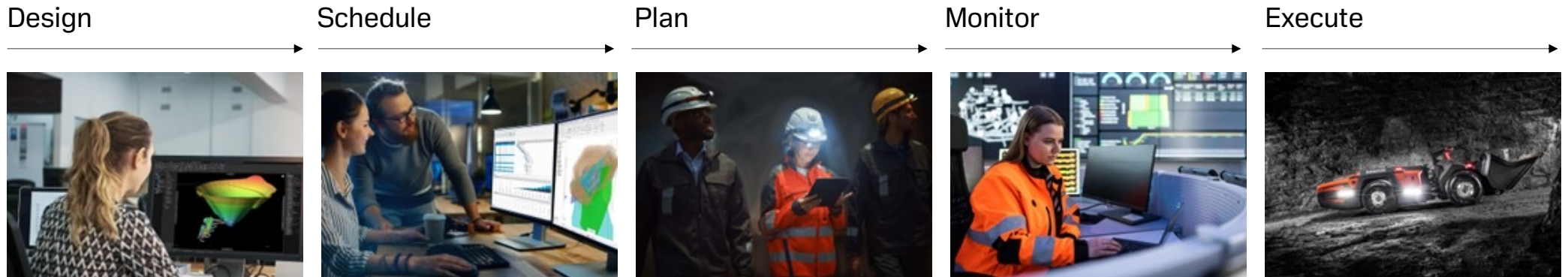
¹Underground unmanned Sandvik equipment



Integrated digital and AI platform supports customer needs across the value chain

Mine planning

Operations



Deswik

NEWTRAX

AutoMine®

Data feedback and automated end-to-end process optimization

Polymathian
Industrial Mathematics

Optimize with AI

Simulate

Verify outcome



Leading the way across the three technology shifts underground

Electrification

Technology leader

#1



Automation

Largest installed fleet

#1



Digitalization

Only provider of a full end-to-end offering

#1





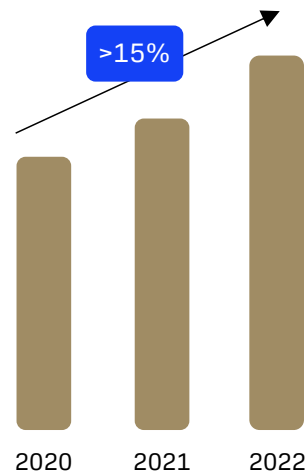
Proven track record of value creation through M&A

High performing quality acquisitions

DSI Underground

- World leading in ground support
- Stable revenue growth
- Improved EBITA

Revenue growth CAGR
From acquiring year



Deswik & Polymathian

- Often perceived as industry standard
- Revenue growth above business case
- Successful transition to subscriptions

Revenue growth CAGR
From acquiring year



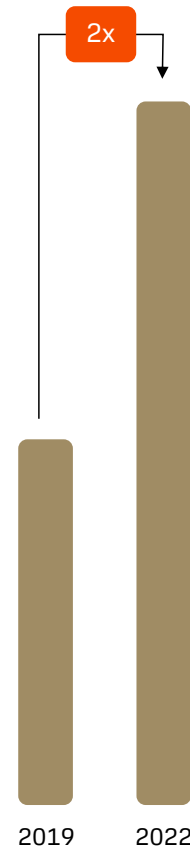


A surface product portfolio able to tap into the large and growing open pit mining market

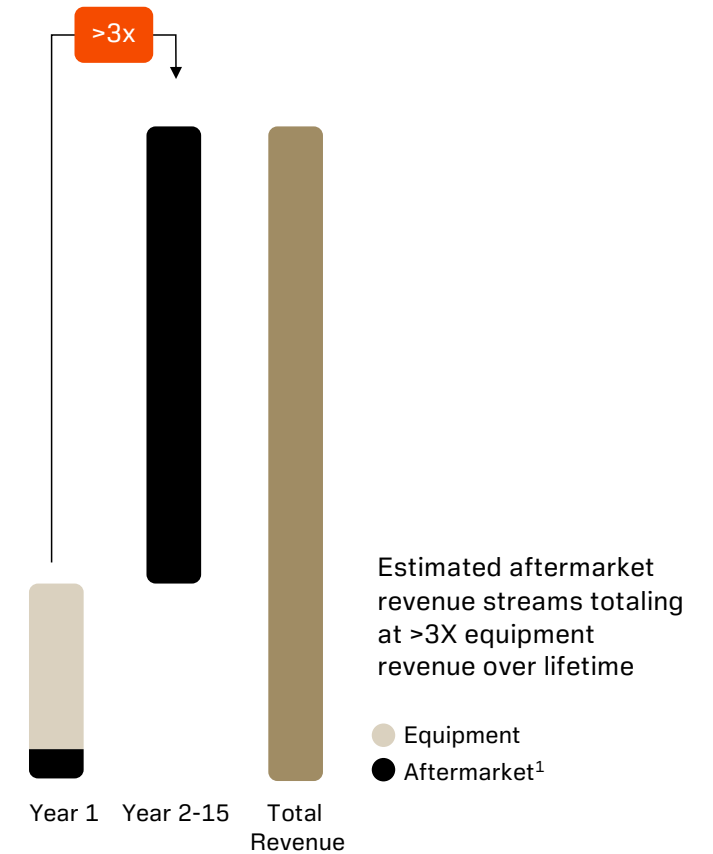


Source: Internal analysis
Note: 1. Estimated revenue stream from Parts & Service, Rock Tools, Automation

Rotary OI development (MSEK)



Growing rotary fleet secures long-term aftermarket revenue (BSEK)



Further growth opportunities

Starting a new chapter in battery electric surface mining

The vision:

Electrified drilling solutions in all hole sizes
and surface drilling applications
by 2030

Bringing the most advanced sustainability technologies already
proven in underground to the surface mining world



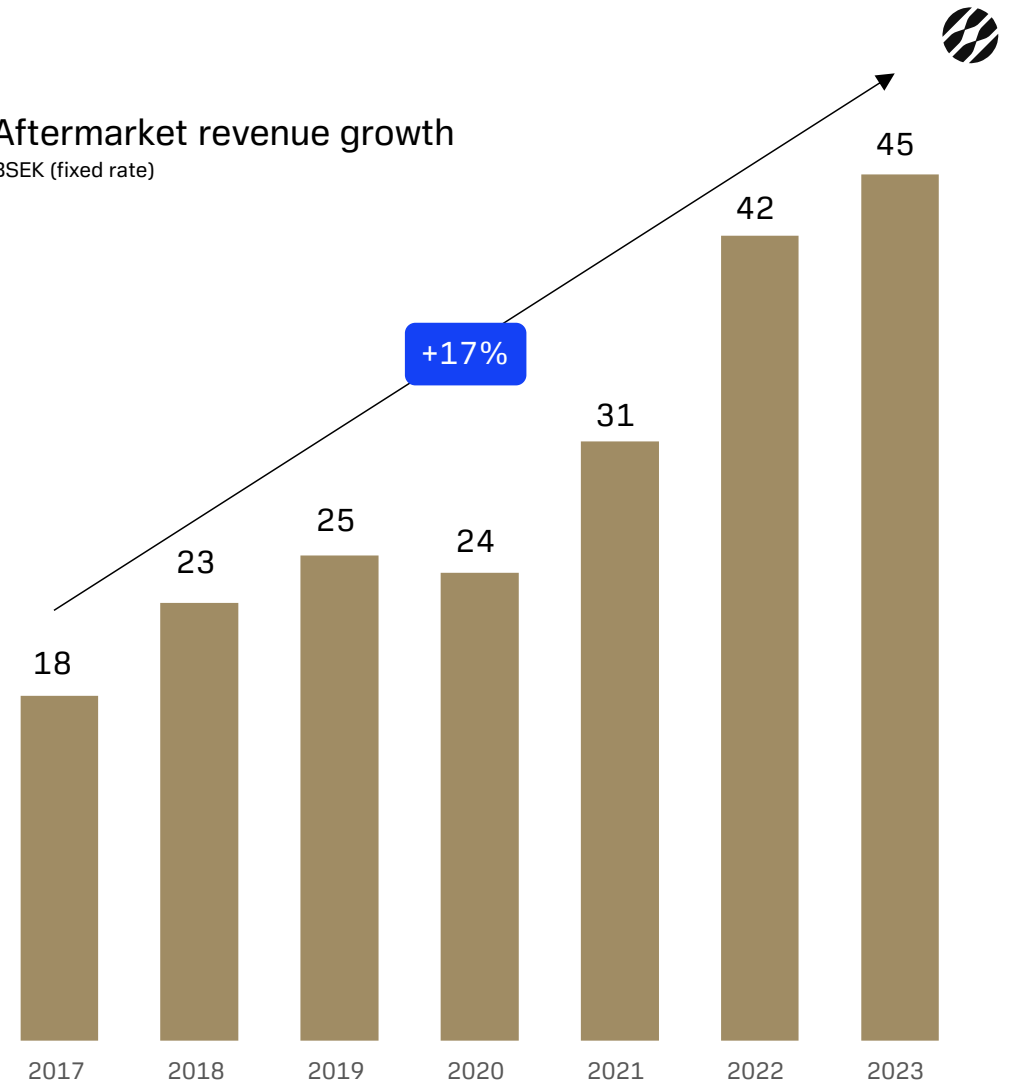
Further growth opportunities

Strong growth of the resilient aftermarket business

- Aftermarket accounts for 66%¹ of revenues
- Continued growth expected:
 - Growth of fleet increases long-term revenue for Parts & Service
 - Larger share of recurring revenues through software licenses
 - Increased demand for advanced Ground Support as mines go deeper
 - Long term Rock Tools contracts enable deeper customer relationships

Note: 1. Q3 2023

Aftermarket revenue growth
BSEK (fixed rate)





Profitability journey – SMR

- Margin expansion from 18.3% to 21.2%
- Dilution of c. 200 bps from DSI ground support
- Normalized leverage target of ~30% on incremental volume
- Margin resilience through higher share of aftermarket business and decentralized action plans
 - Increased aftermarket (58% – 66%, 2017-Q3 2023)
 - Outsourced production of components in aftermarket & utilization of outsourced assembly for equipment

Revenue CAGR
17-22

14.9%

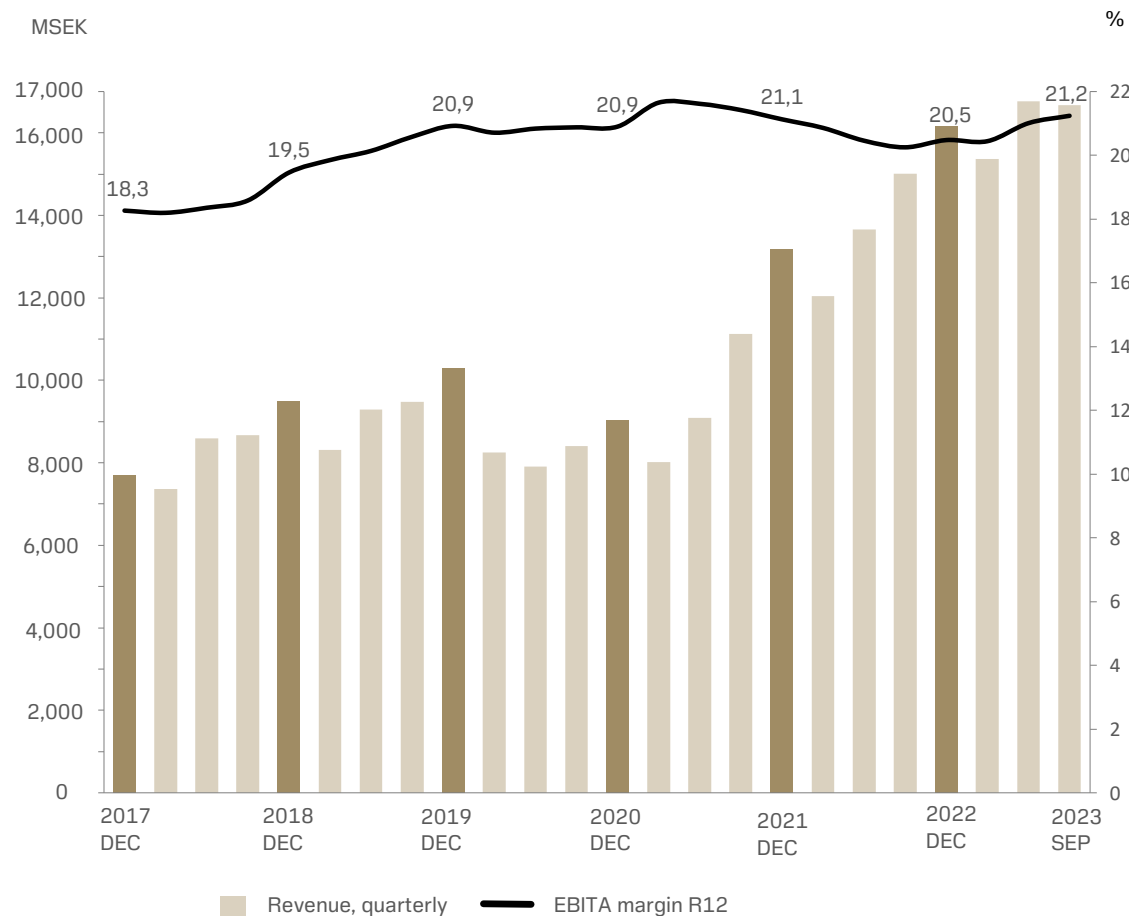
EBITA CAGR
17-22

17.5%

Margin
R12, Q3 2023

21.2%

Revenue and EBITA margin development





Targets

Strategy execution



Revenue
CAGR

2019-2025

10%

BEV share of underground
hard rock equipment sales

2030

>50%

Surface
Revenue

2022-2028

>2x

Sandvik Mining & Rock Solutions

- Strong market fundamentals
- SMR is making the shift
 - Enabler in the customer's journey
 - Maturing BEV business with recurring fleet orders
 - Only OEM for large scale advanced UG mining automation
 - Strong aftermarket with leading edge technology and stable long-term revenues
 - Continued leadership in automation, digitalization and electrification
 - Strong growth in surface drilling providing resilience
- Long term growth through leading positions in the sustainable underground mine of the future and technology leading positions in surface mining





Sandvik Rock Processing Solutions

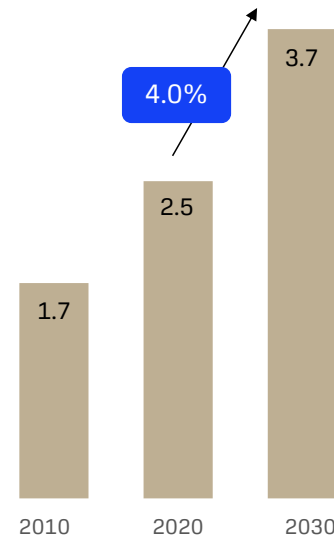
Richard Harris
President



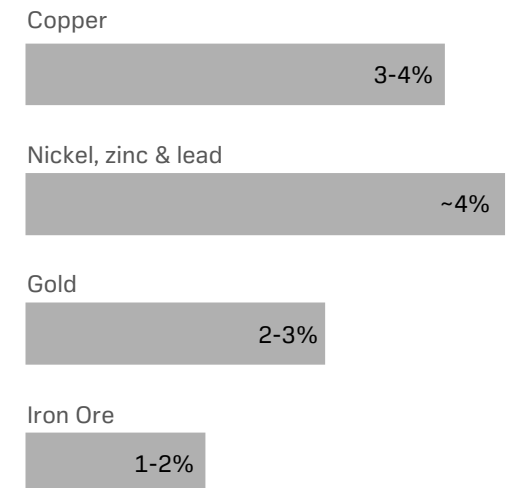
Mining (minerals)

- **Growing middle class** drives demand for copper, iron ore, & gold
- **Electrification & energy transition** major driver for demand for gold and copper
- **Lower ore grades** drive accelerated need for productivity, optimization, automation, digitalization and aftermarket solutions
- Need for **processing capacity** will increase equipment demand

Global middle class
Number of billions / CAGR %



Expected growth rates
2022-2026 (%)



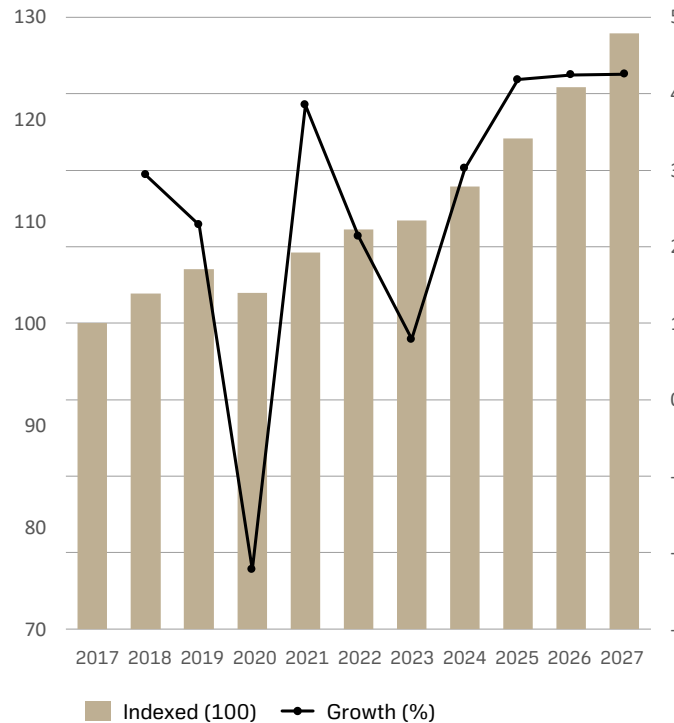


Infrastructure (aggregates, demolition and recycling)

- **Growing urbanization** drives need for infrastructure projects with specialized equipment
- Maintaining current infrastructure along with a **growing middle class** generates further investment needs
- **Steady long-term growth** led by emerging economies and positive GDP development

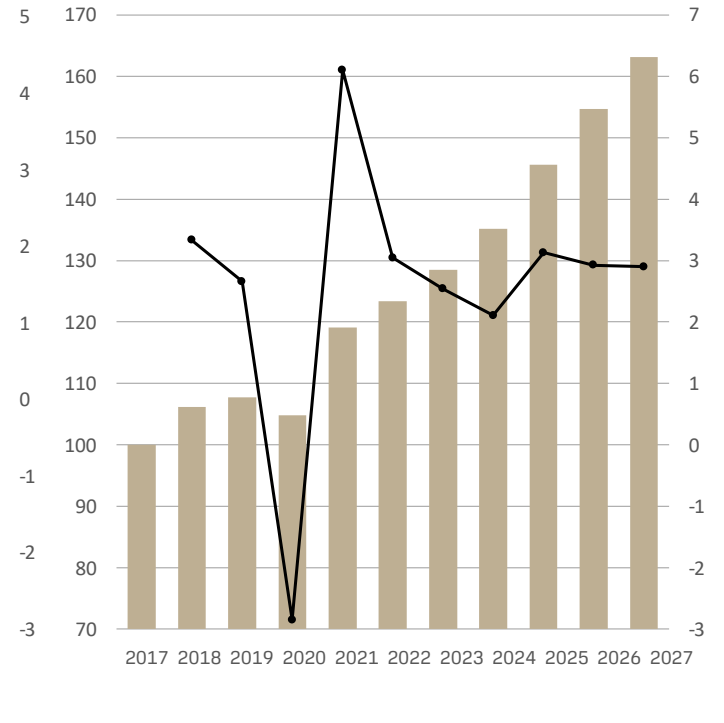
Expected growth rates -
Global Construction Output

2017-2027 (indexed & %)



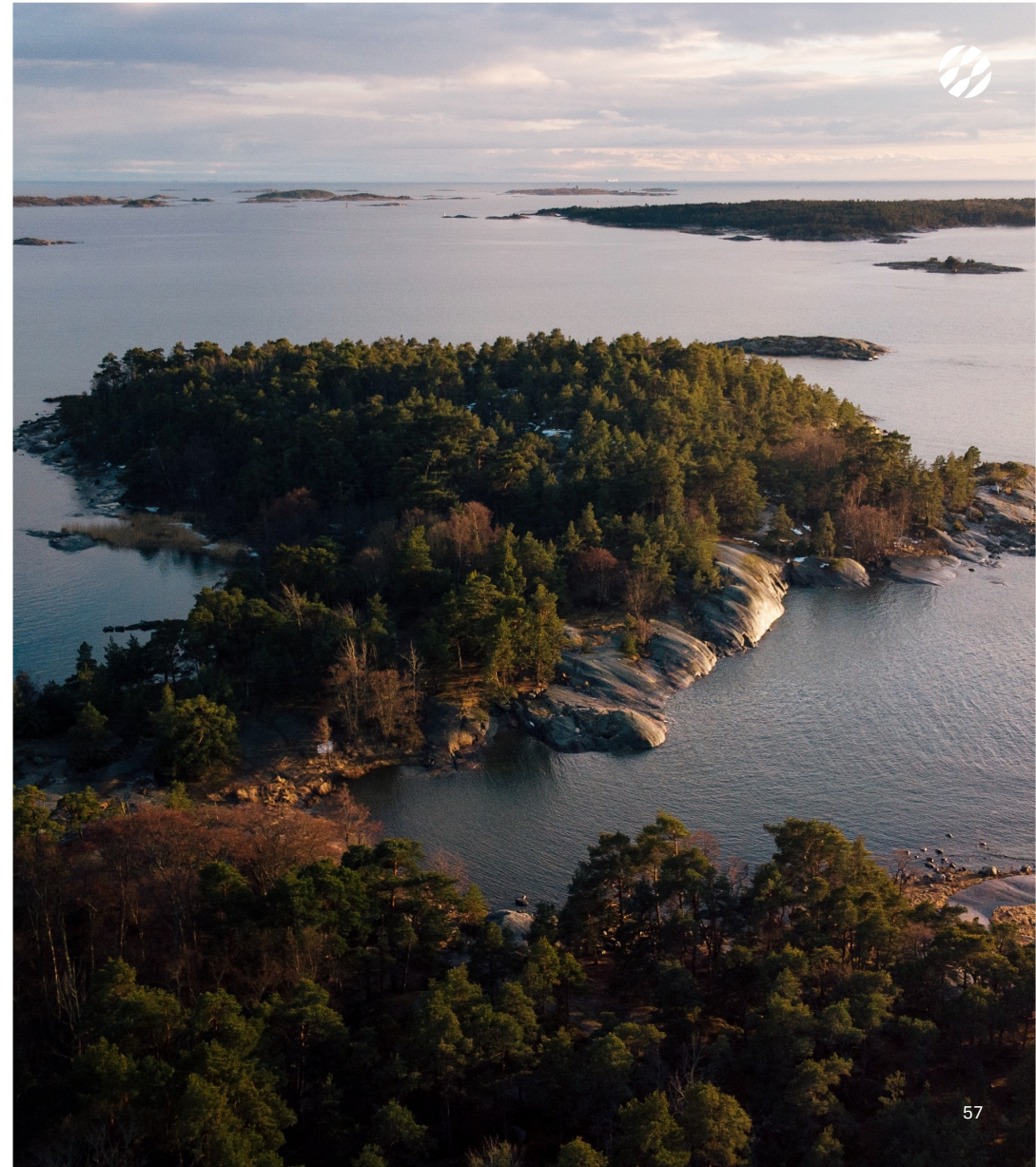
Expected growth rates -
Global GDP development

2017-2027 (indexed & %)



Sustainability driven changes in our industry

- The green transition towards electrification and renewable energy
- Energy- and water consumption
- Reduction of green house gases
- Technology, automation, digitalization



Well positioned to capture growth opportunities



Industry leading solutions



High-productivity crushers for any rock crushing application



High-capacity screens for rock & mineral processing



Powerful, agile and fully mobile crushers & screens



Market leading hydraulic hammer and attachment tools offering



SAM

Power tomorrow's data-driven operations

Well positioned to capture growth opportunities



Expanded geographic reach

Balanced revenue split 50 / 50 between Northern and Southern hemisphere

- Sandvik
- Acquired



Moving our positions forward in mining

- Leverage on our strengthened position in mining
- Grow our aftermarket business
- Making the sustainable shift by leveraging on our superior crushing technology and know how





Transforming into crushing & screening leadership

Crushing



Screening



Share of
mining

33%

Share of
aftermarket

49%



Transforming into crushing & screening leadership

Crushing



Screening



We make
The shift

Crushing



Screening



Share of
mining

33%

Share of
aftermarket

49%

Digitalized
solutions

Electrified
offering

100%

Share of
mining

58%

Share of
aftermarket

57%



Increased number of touch-points in the mineral process value chain

Before acquisitions

Gyratory crushers
Jaw crushers
Rock breakers

Cone crushers

Cone crushers

Legacy offering focused to the primary and secondary/tertiary crushing process



After acquisitions

Screens
Feeders

Screens
Feeders
Weighing and feeding

Screens
Weighing and feeding

Train loadout

The addition of screening, feeding and weighing significantly increases Sandvik's offering in the mining comminution and classification cycle

Increased number of touch points enabling process optimization

Well positioned to capture growth opportunities



How we drive growth

One face to the customer

Common sales and service organizations to drive superior customer experience, sales synergies and capitalize on strengths

Strengthened portfolio

Make the most of our combined offering.
Streamline overlaps and develop selected white spots

Eyes on the ball

Focus on speed in execution on the key initiatives



Well positioned to capture growth opportunities

Delivering synergistic growth

Screening solutions revenue

4x

MEUR synergies identified

>150

Combining the offering

Selling crushing to screening customers

Selling screening to crushing customers



The energy challenge in mining

The mining sector's consumption of the world's total energy

~6%

The need for more minerals grows with the green transition, larger population and declining ore grades

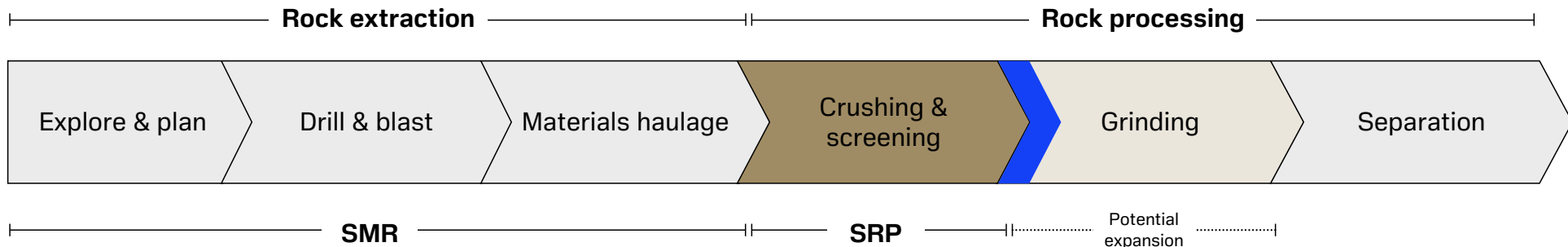
Source: US DOE Industrial technologies program



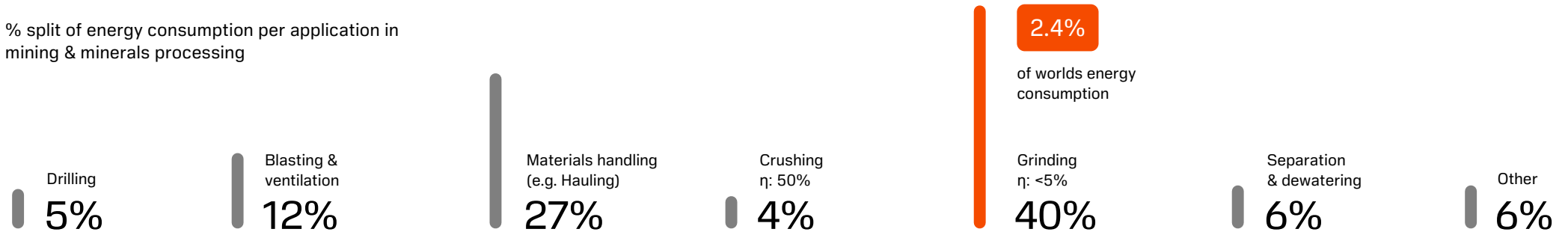


Add efficiency at the core of the challenge

Crushing is 10 times more energy efficient vs. conventional grinding



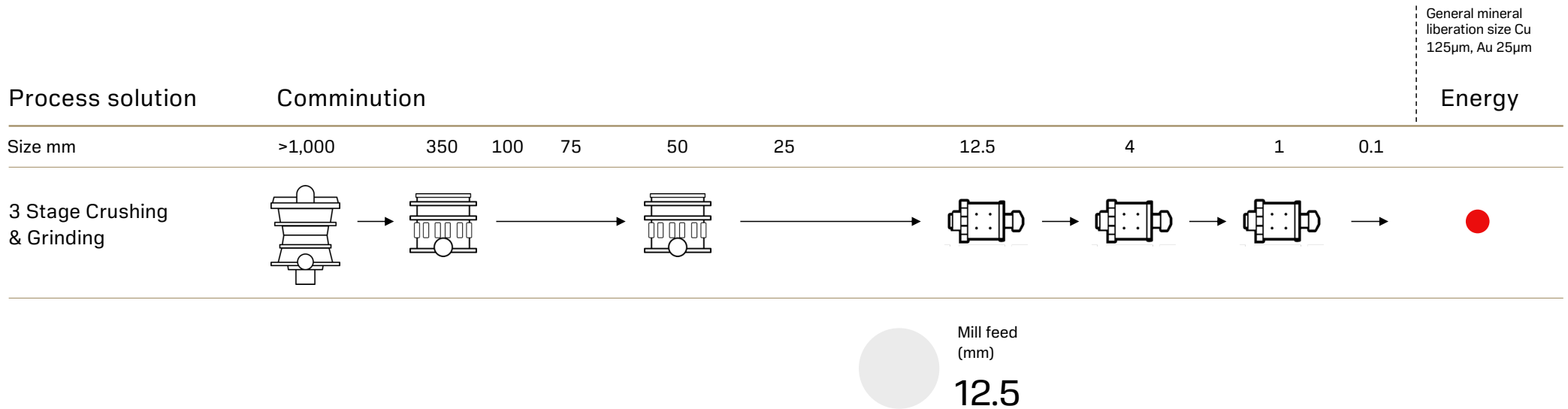
% split of energy consumption per application in mining & minerals processing



Source: US DOE Industrial technologies pgm. Energy efficiency, η

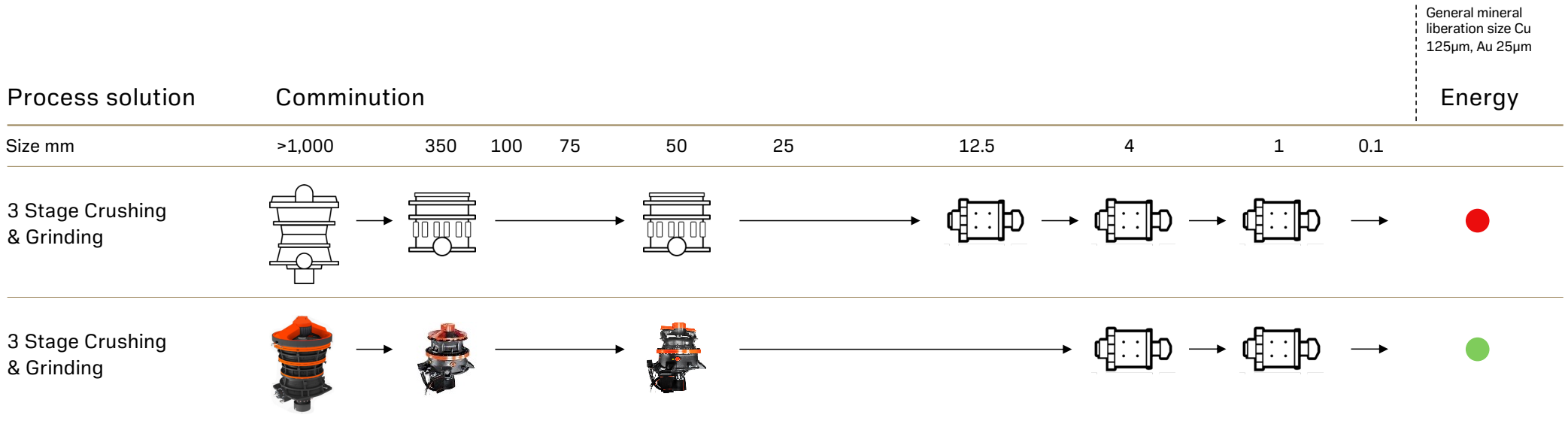


Efficiency applied where needed the most



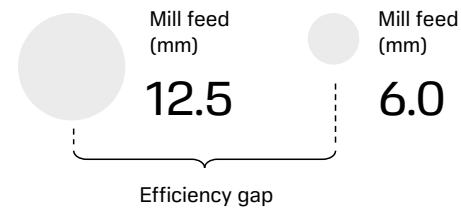


Efficiency applied where needed the most



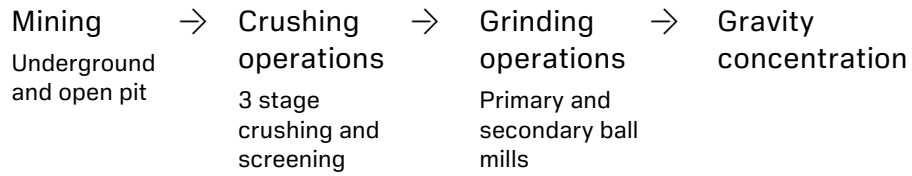
General mineral liberation size Cu 125µm, Au 25µm

- Increased downstream throughput
- Increased energy efficiency
- Reduced operation cost





Plant upgrade Agnew Gold, Goldfields



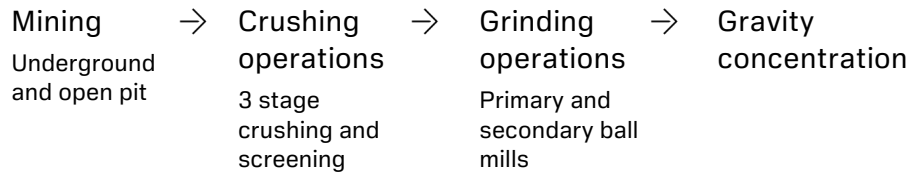
Upgrade 2020

- Improve efficiency and availability
- Sandvik Primary crusher, secondary and tertiary CH800i Cone crushers and Schenck SLD3061 Screening solutions





Plant upgrade Agnew Gold, Goldfields



Following the upgrade

- Finer mill feed, 6 mm
- Increased total throughput by ~10%
- Energy saving 10-15% per produced ton
- Annual OPEX savings of USD 1.5 million
- 3y investment payback time



Energy saving: Parameters based on actual particle size and Bond's energy equation acc. to industry practice

Enabler in customer shifts

Addressing the installed inefficiency

Today

Installed inefficiency in

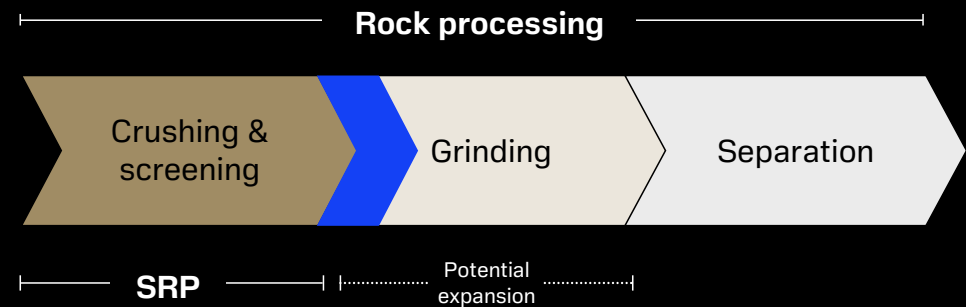
>600

operating mines globally


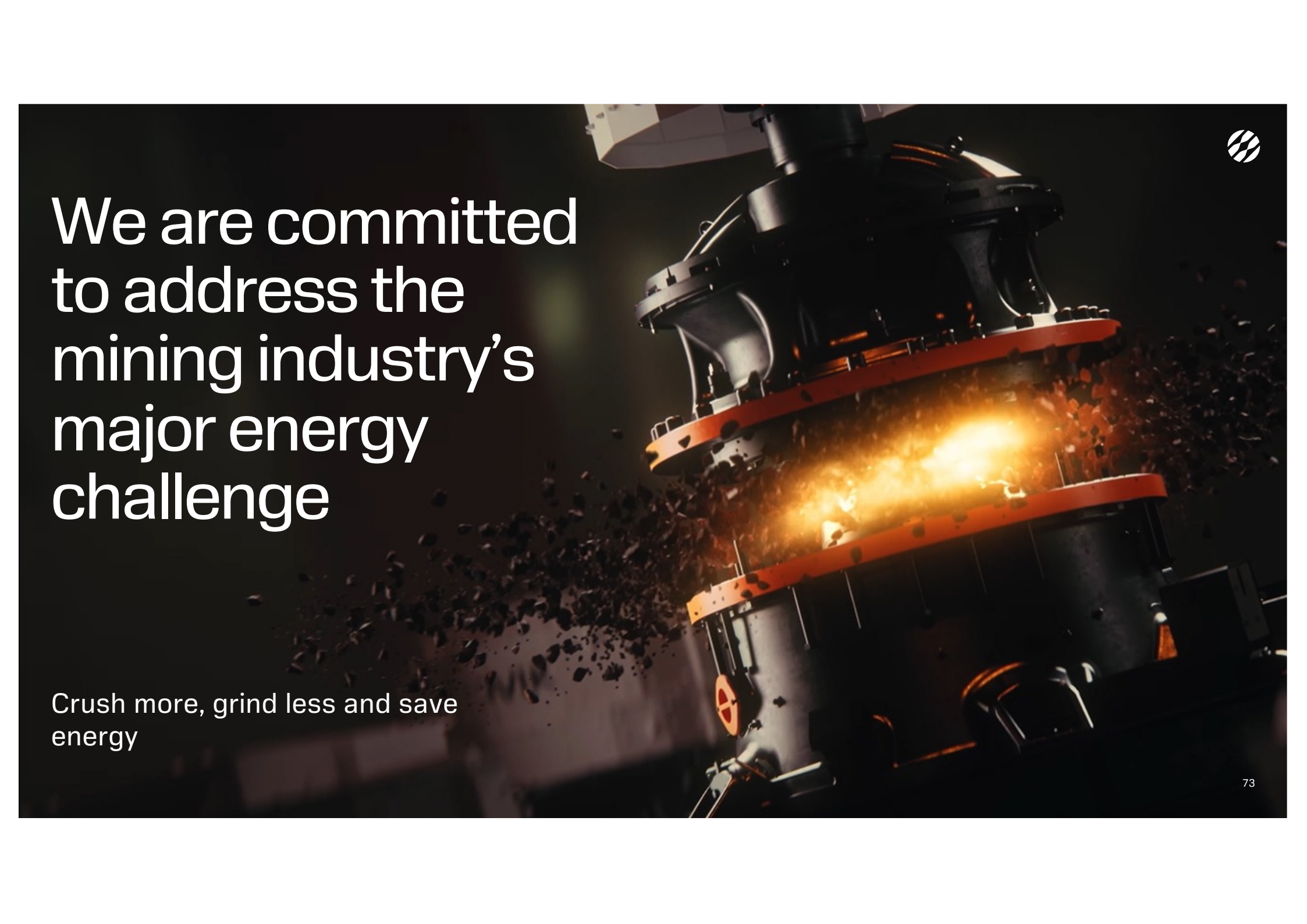
Mines operating with conventional tumbling mills and untapped crushing and screening efficiency

Source: Globaldata.com for Sandvik

Going forward



Address global grinding market.
2.4% of the world's energy



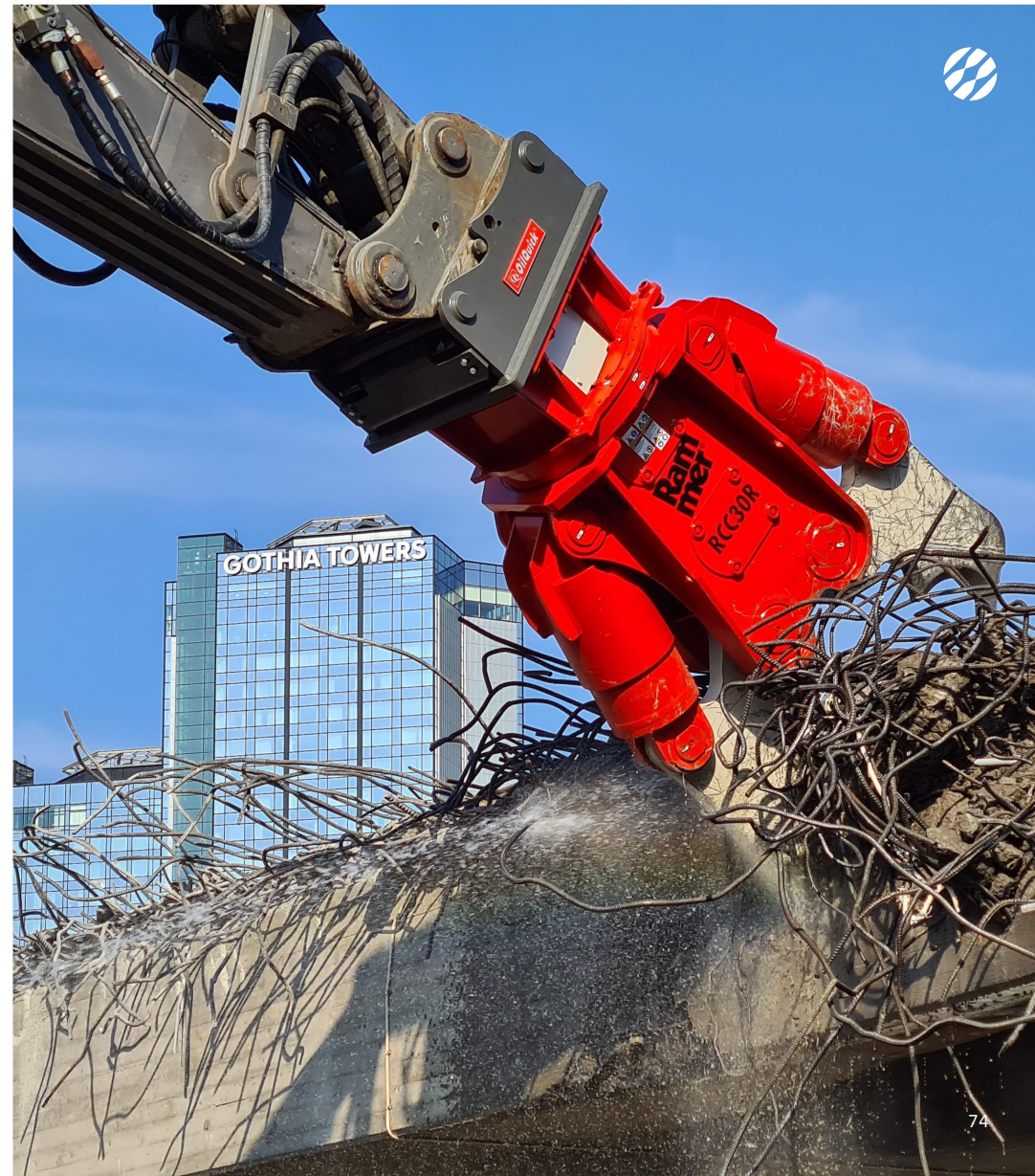
We are committed to address the mining industry's major energy challenge

Crush more, grind less and save
energy

Further growth opportunities

Demolition and recycling creates big opportunities

- Much of the material used in the world is not recycled today – this will change
- Regulations and environmental impact will drive the change
- We have a well developed offering to meet the demand and customer requirements



Further growth opportunities

The annual use of aggregates in Europe is 4.2 billion tonnes – only 7% is part of the circular economy

SWECO - Circular materials in infrastructure



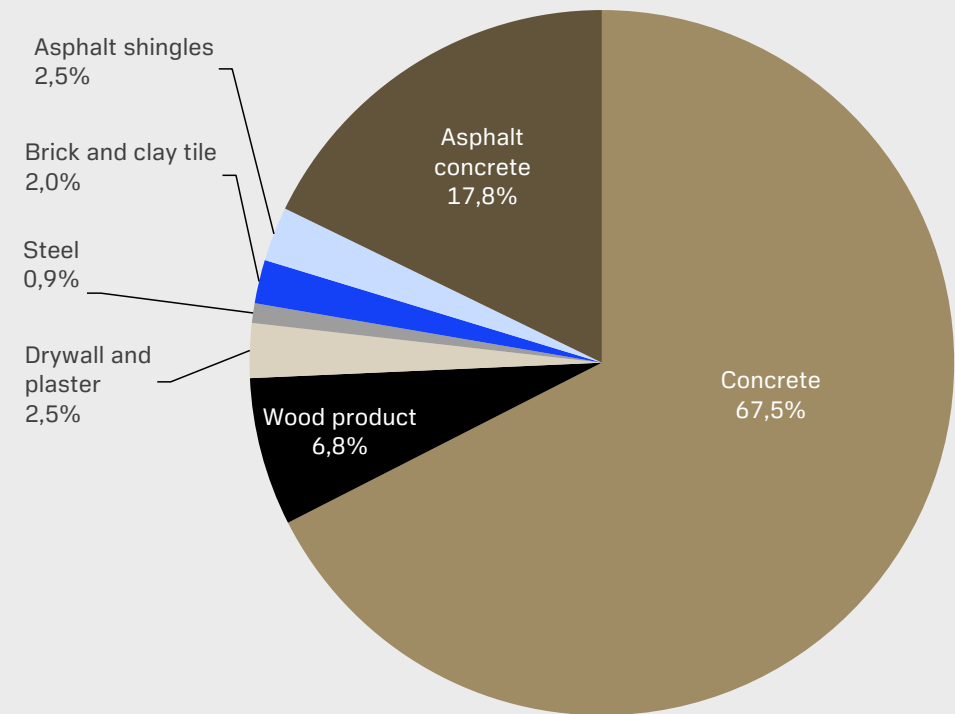


Recycling landscape

Key recycling target areas

- Concrete and asphalt
- Over 85% of construction and demolition waste generated
- Reduce landfill waste

C&D debris generation composition by material (before processing) 2018, 600 million tonnes



Source: EPD United States Environment Protection Agency

SRP is well positioned



Mobiles

- Developed with quarrying and recycling in mind.
- Enhanced mid mid-sized crushers and screens ideal for recycling.
- Proven ability to perform
- >90% available as an electric offering 2025

**REDUCE,
REUSE,
RECYCLE.**

**Ram
mer®**



Attachment Tools

- 'One - Stop - Shop' for demolition and recycling customers
- Peak performance at right cost of ownership
- Become full assortment provider via strategic acquisitions



Profitability journey – SRP

- Significant growth delivered since 2020
- Margin increases from 11% in 2021 to an average 16% 2019 to 2022
- Margin resilience delivered through
 - Increased aftermarket (50% – 60%, 2019-H1 2023)
 - Supply chain in-out sourcing
 - Hired labor and flexible hour
- Normalized leverage target of ~25% on incremental volume

Revenue CAGR
17-22

7.5%

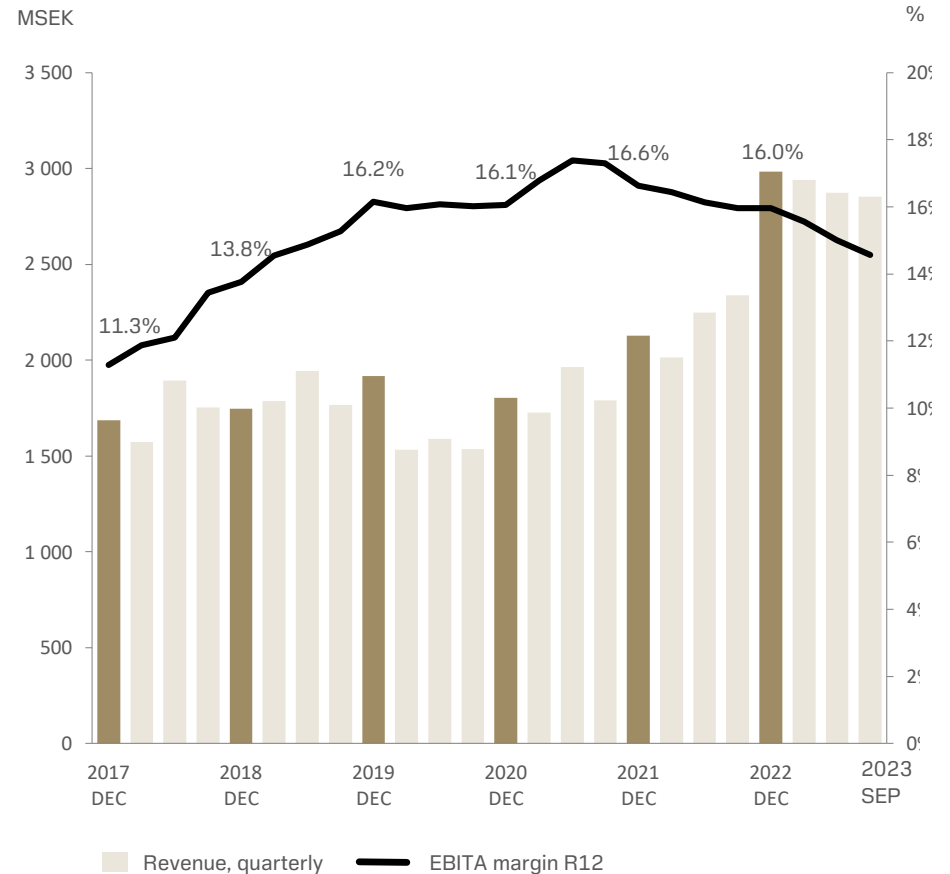
EBITA CAGR
17-22

15.2%

EBITA
2022

16.0%

Revenue and EBITA margin development



Targets

The strategy execution
from 2019 to 2025



Revenue CAGR

2019-2025

~10%

Increased aftermarket
penetration

2019-2025

>30%

Of our mobile products
available as an electric offering

2025

>90%



Strong growth ambition supported by a customer centric offering

- **Leverage screening acquisitions** to grow the mining business
- **Continue electrify** and strengthen our infrastructure offering
- **Capture larger portion** of the aftermarket
- **Expand downstream** in the mining process
- **Productivity and performance** supported by digital solutions
- **Drive sustainability** with eco efficient rock processing solutions





Sandvik Manufacturing and Machining Solutions

Nadine Crauwels
President Sandvik Machining Solutions

Mattias Nilsson
President Sandvik Manufacturing Solutions

NLX 2500

Efficient and sustainable manufacturing

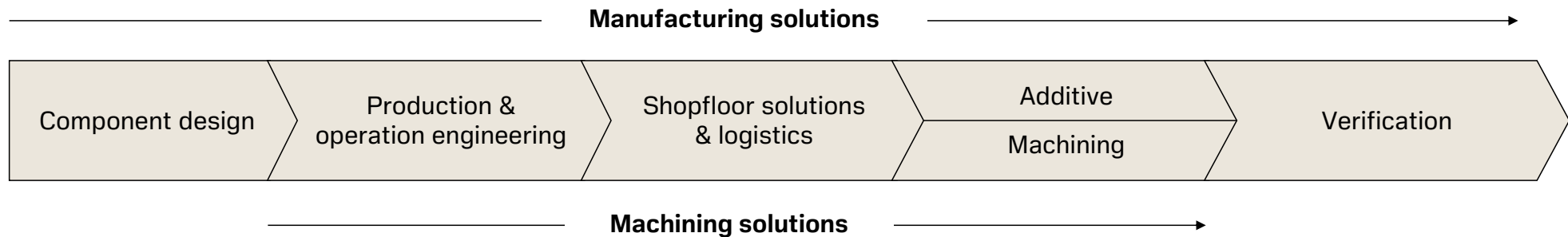
Manufacturing of the future is digitalized and automated, from design to finished product – supporting the transition to a sustainable world





Strong presence in the customer value chain

- Leading offerings – efficiency and sustainability
- Possibility for end-to-end optimization and automation
- Agnostic offerings enabling further growth



Well positioned to capture growths



Strengthening our capabilities for the manufacturing industry

Sandvik Machining Solutions



Machining solutions - subtractive manufacturing

Sandvik Manufacturing Solutions



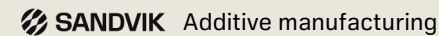
Verification



Production and operation engineering



Shop floor solutions and logistics



Additive manufacturing

Well positioned to capture growth opportunities



Strengthening our capabilities for the manufacturing industry

Sandvik Machining Solutions



Machining solutions - subtractive manufacturing

Tool Flow Solutions



Shop floor solutions and logistics

Powder Solutions



Additive manufacturing, metal injection molding, metal powders

Sandvik Manufacturing Solutions



Verification



Production and operation engineering

Enabler in customer shifts



Shop floor solutions and logistics

Automated shop floor logistics

tdmsystems CRIBWISE

Machining, Additive

Data driven component shaping

SANDVIK COROMANT WALTER Seco
DORMER PRAMET wolfram SANDVIK

Verification

In-line metrology

Metrologic group DCS
DWFRIITZ PRECISION AUTOMATION

Production and operation engineering

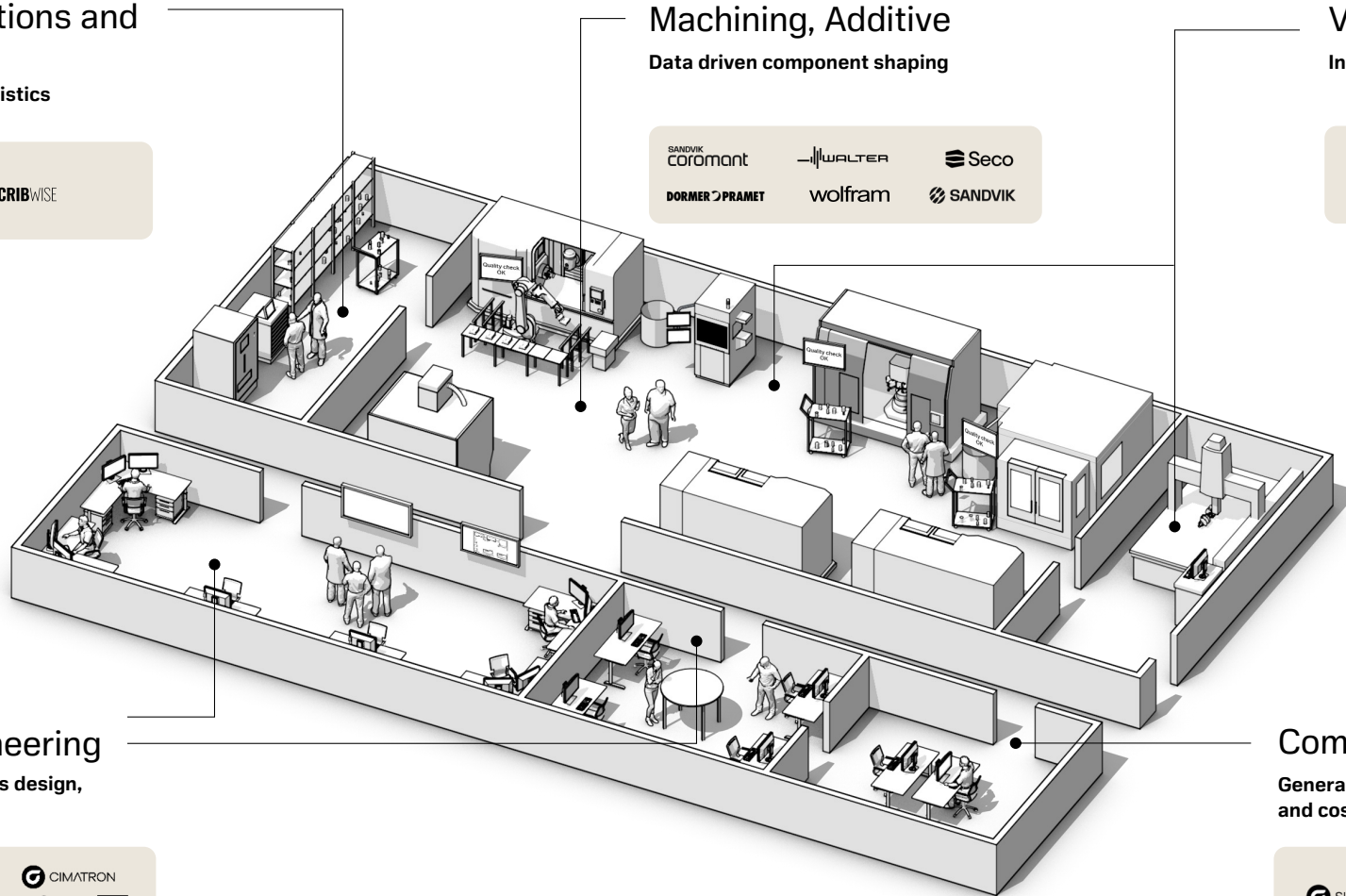
Knowledge driven process design, planning and simulation

CGTECH SIGMANEST CIMATRON
Mastercam GIBBSCAM POSTABILITY JCAM

Component design

Generative design to optimize functionally and cost

SIGMANEST CIMATRON DCS





Shop floor solutions and logistics

Automated shop floor logistics

tdmsystems CRIBWISE

Machining, Additive

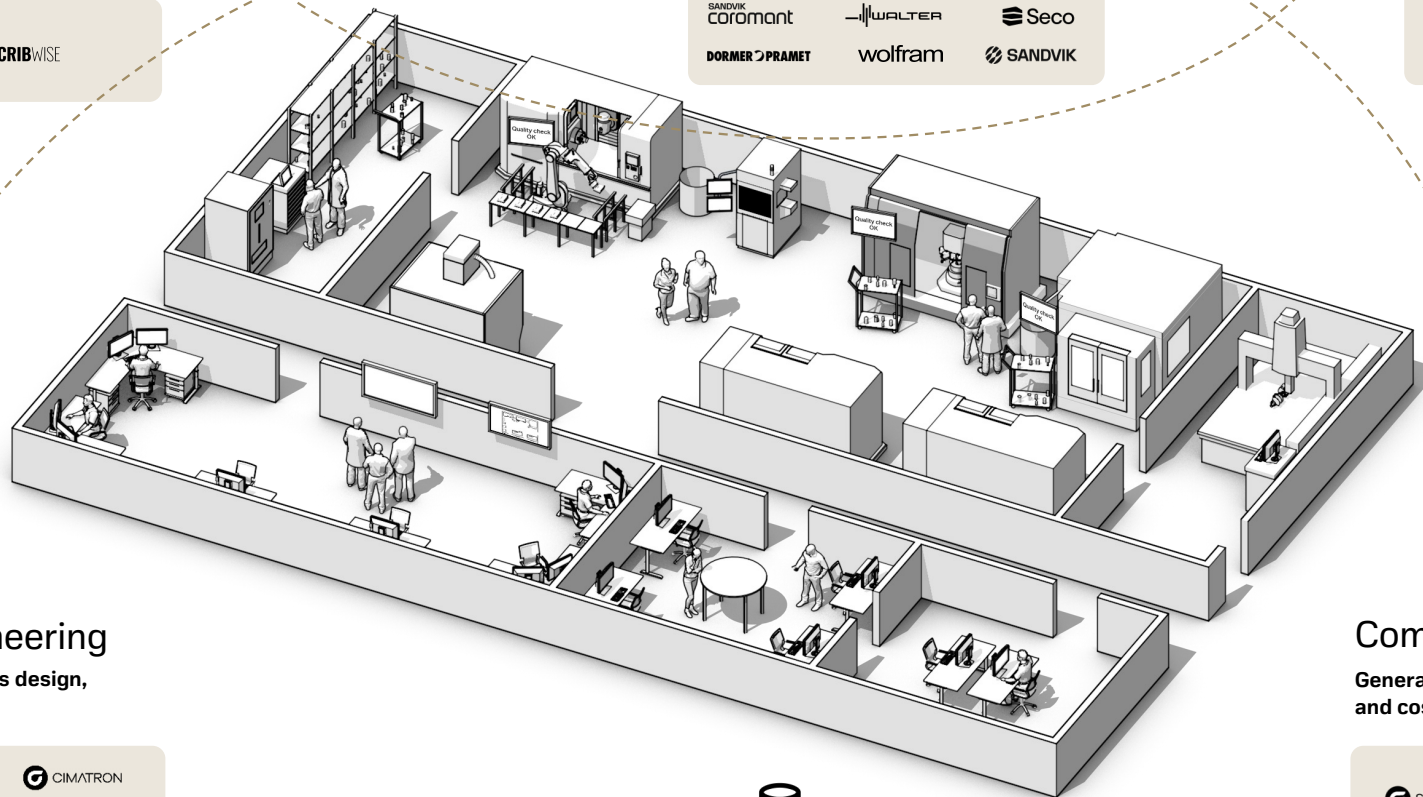
Data driven component shaping

SANDVIK COROMANT WALTER Seco DORMER PRAMET wolfram SANDVIK

Verification

In-line metrology

Metrologic group DCS DWFRITZ PRECISION AUTOMATION



Production and operation engineering

Knowledge driven process design, planning and simulation

CGTECH SIGMANEST CIMATRON Mastercam GIBBSCAM POSTABILITY JCAM

Component design

Generative design to optimize functionally and cost

SIGMANEST CIMATRON DCS

Data



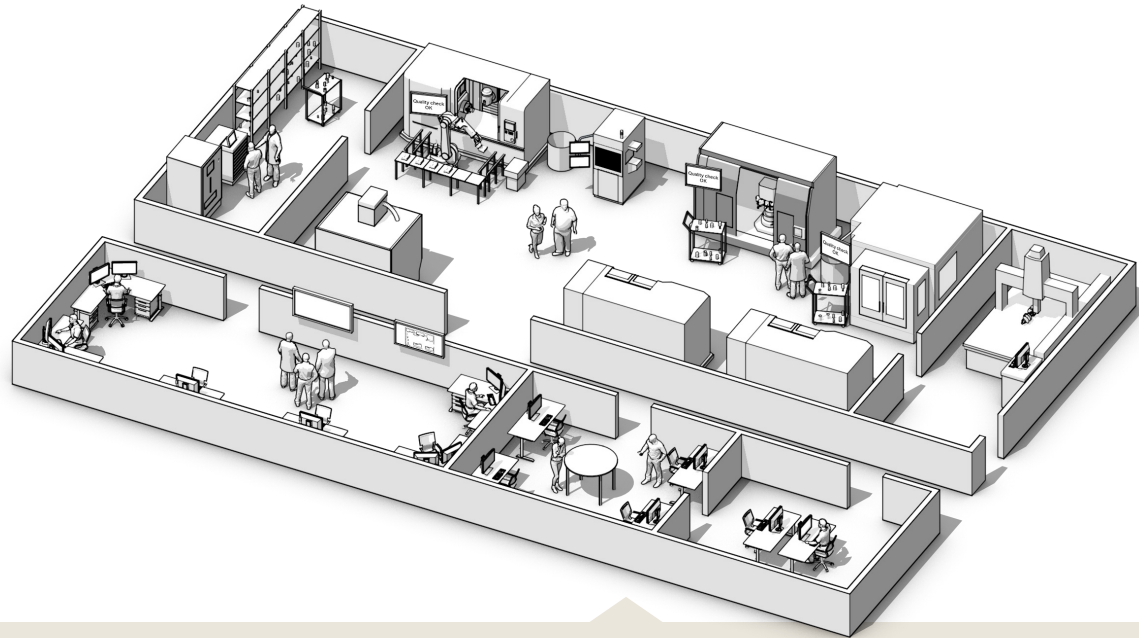
Market access and customer benefits drive value

Software seats (SMF)

400,000

Direct customers (SMS)

100,000



Large customer and user base enables synergies

Large brand portfolio provides multiple choices for customers

Product integration and lead-generation enables cross-selling

Combined benefits at customer builds loyalty and stickiness



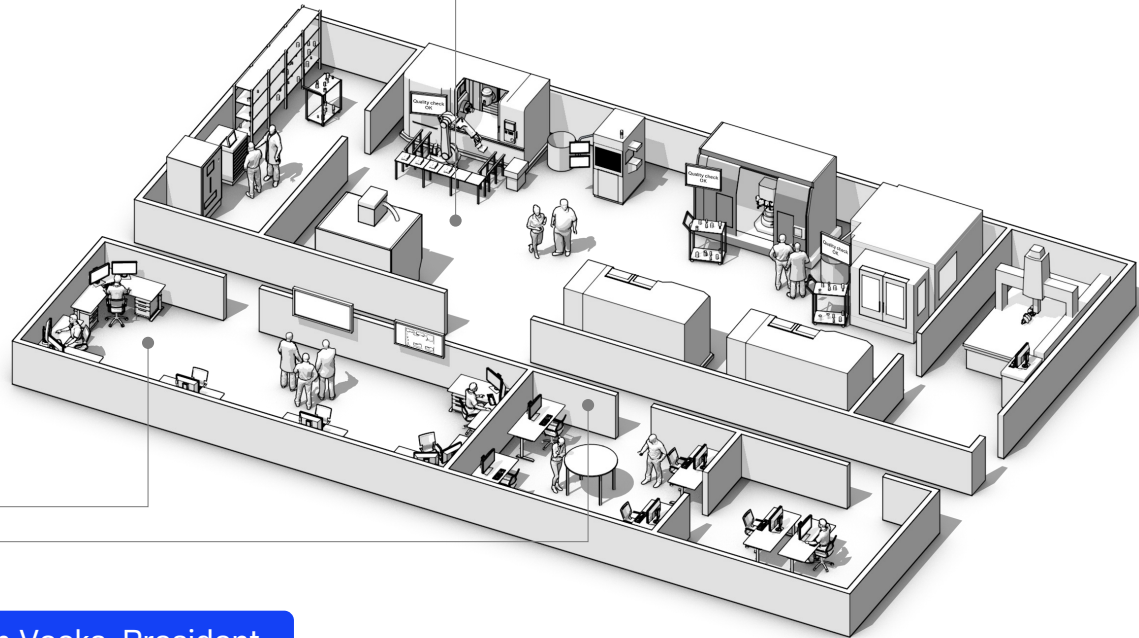


Welcome!

Machining

**SANDVIK
COROMANT**

Helen Blomqvist, President



Production and operation engineering

CGTECH

Shin Voeks, President

Mastercam

Alexander Moffat, Chief Market Officer

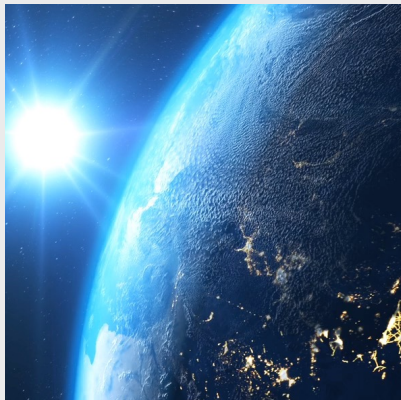


Sandvik Machining Solutions

Nadine Crauwels
President

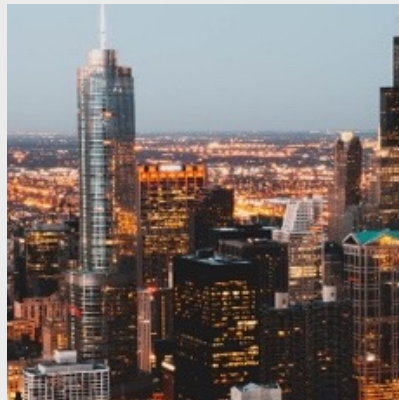


Demand trends and impact on SMS



Slowing globalization

- China and US protectionism
- Regionalization of supply chains
- Customers demand more local/regional offer



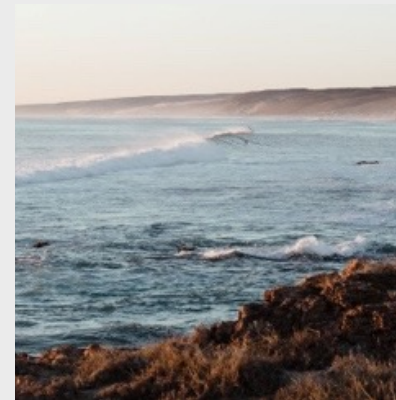
Urbanization and growing wealth

- High demand for quality infrastructure
- Growth shift in Asia
- Increased competition from local players in Asia



Challenging demography

- Reducing workforce due to aging population
- Increased focus on health
- Increased demand for automation to address skill gaps and productivity needs



Sustainability

- Sharp focus on carbon footprint reduction
- Demand for concrete, measurable sustainability impacts
- Change in cutting tool products mix due to EV shift



Digitalization

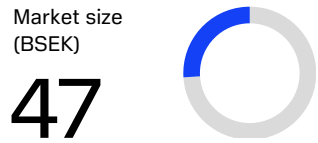
- Manufacturing industry embracing Industry 4.0
- Increased demand for digital solutions for efficiency and productivity
- Customers demand holistic perspective



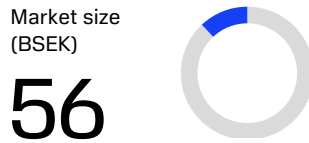
Top segments

General engineering

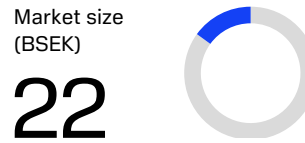
Market size vs. market share



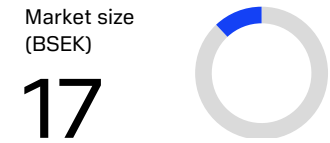
Automotive



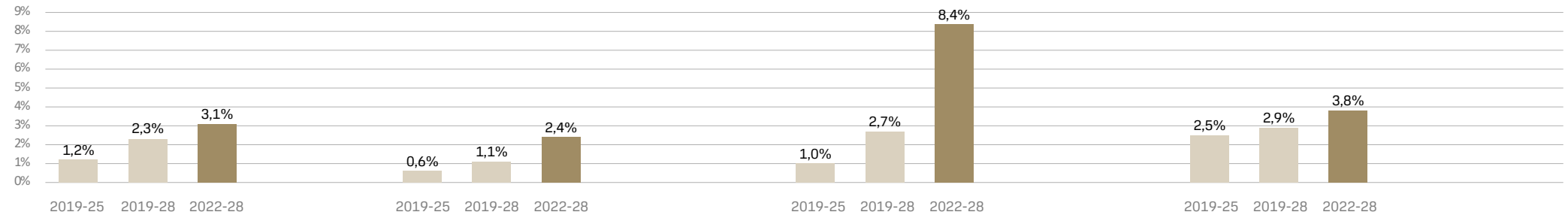
Aerospace



Energy



CAGR



- Increased component demand
- New type of machineries

- Supply constraints easing
- Slight production volume growth
- Shift to electric / hybrids continues
- Heavy vehicles EV shift minor

- Recovery in international travelling
- Asia-Pacific leading demand
- Shift to more fuel-efficient aircraft
- Increased defense spending

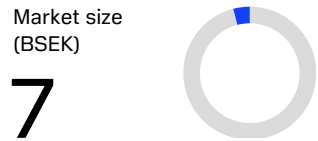
- Low-carbon goals pushing renewables
- Higher industrial activity still demands oil
- High activity in power generation



Further segments

Medical

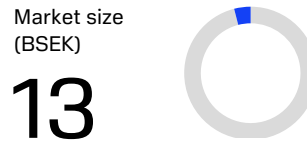
Market size vs. market share



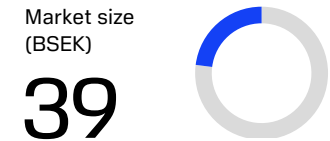
Electronics



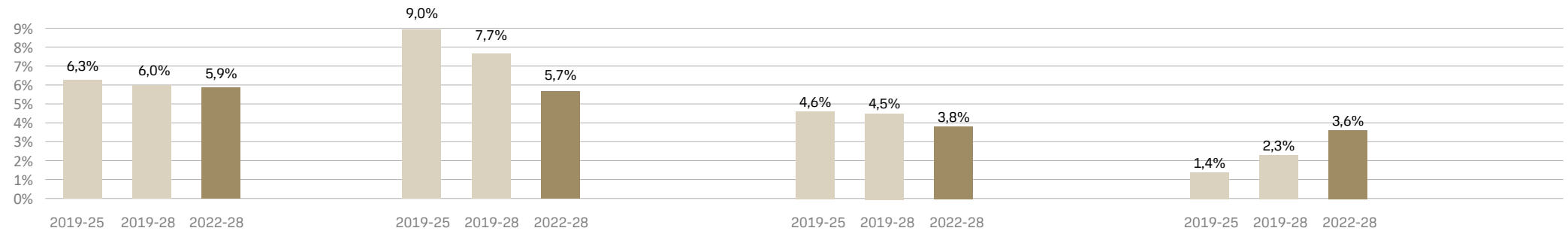
Die & mold



Other



CAGR



- Aging population
- Improved standard of living

- New technologies (AI, voice)
- Growth in connected devices
- Short product life cycles

- Auto components demand
- Growth in consumer electronics

- Increased investment in capacity
- Demand for eco-friendly products
- Increased non-aero defense spending

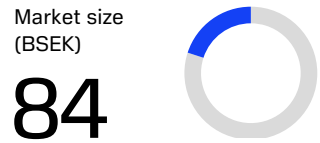
Other segments include Pump & Valve, Rail, Ship building, Machine Tool Builders, etc.



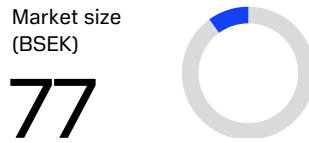
Regions

Europe

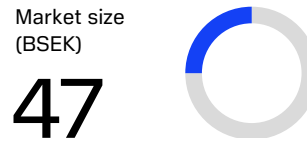
Market size vs. market share



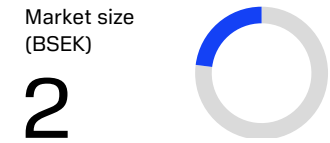
Asia



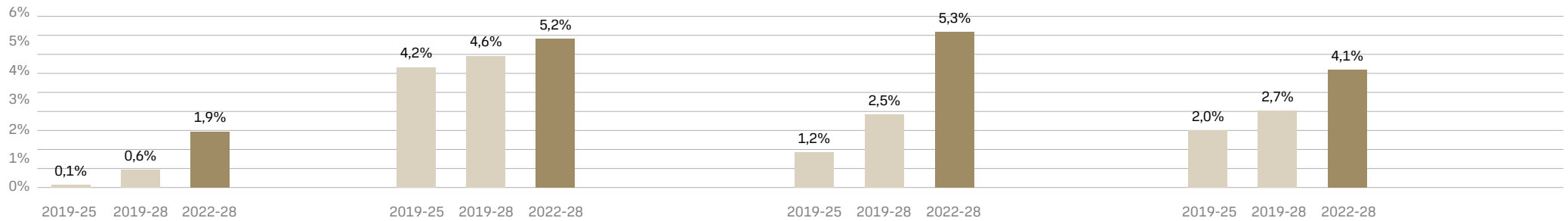
Americas



Rest of world



CAGR



- Slower local growth
- Faster transition to renewables
- Increased digitalization

- Continued GDP growth
- Growth in all segments
- China – an opportunity and challenge

- Resilient GDP growth
- Manufacturing near-shoring
- Increased automation

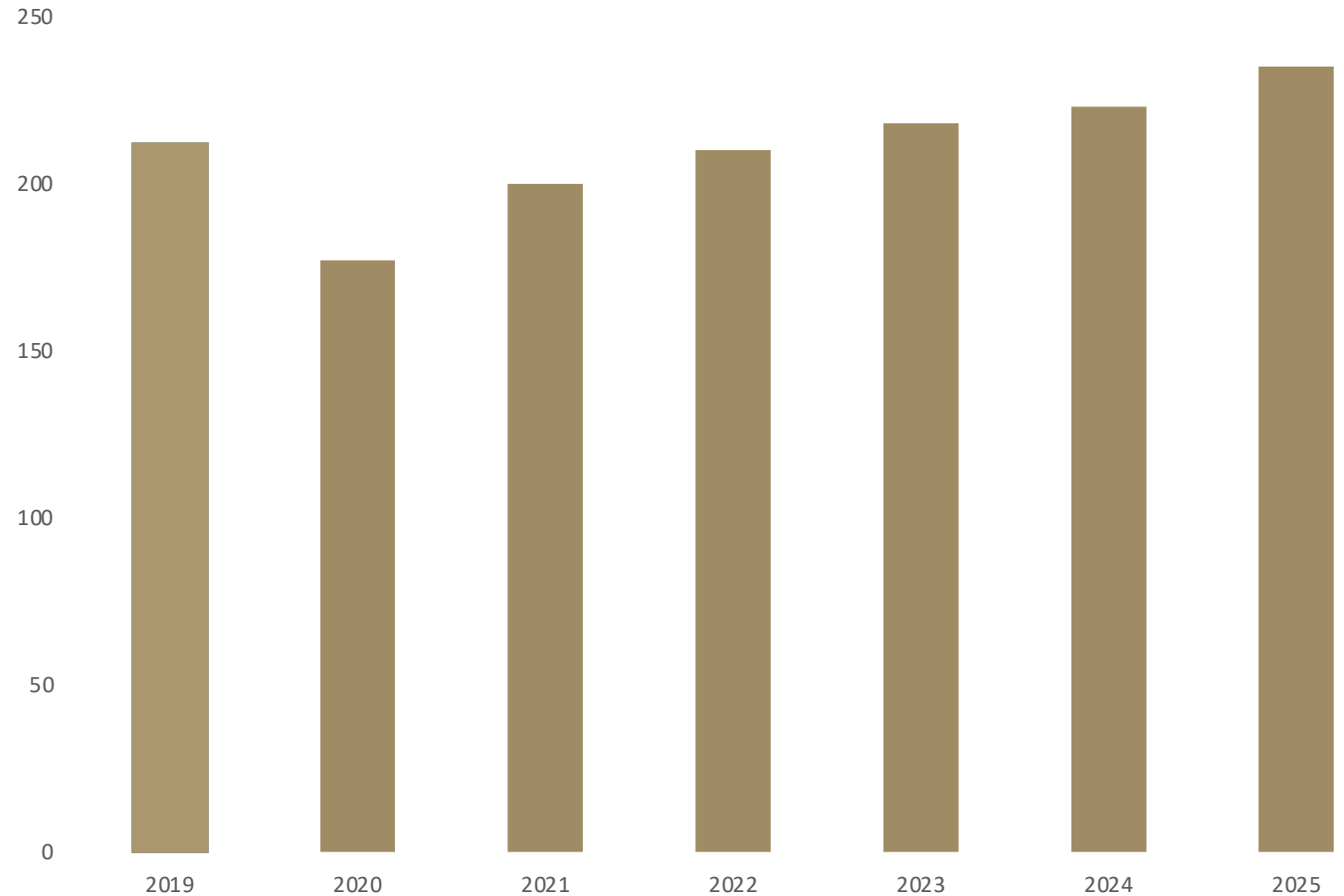
- High GDP growth from lower levels
- Increasing industrialization
- Energy and metal driven growth



Global cutting tool market

- In 2019-22, SMS grew faster than the market (1.1% vs 0%)
- Volume growth affected by uneven sector recovery (aerospace, auto) from the pandemic and market slowdown
- Cutting tool market forecasted to rebound
 - ~2% CAGR 2019-25
 - ~4% CAGR 2022-25
 - ~4% CAGR 2022-28

Cutting tool market (BSEK)



* Cutting tool market in fixed currency.

Well positioned to capture growth opportunities

World leader in the industry of metal cutting

Active patent families

780

Parcels shipped to customers per day

17,000

Sales engineers worldwide

5,000

New products per day

8

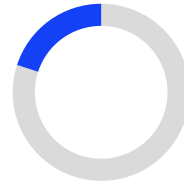




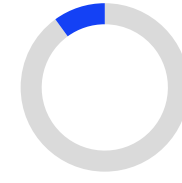
A global market leader with local presence



Americas
Market size 47 BSEK
~25% market share
16 production sites
5 R&D centers
3,460 employees



Europe
Market size 84 BSEK
~20% market share
12 production sites
10 R&D centers
1 powder site
11,800 employees

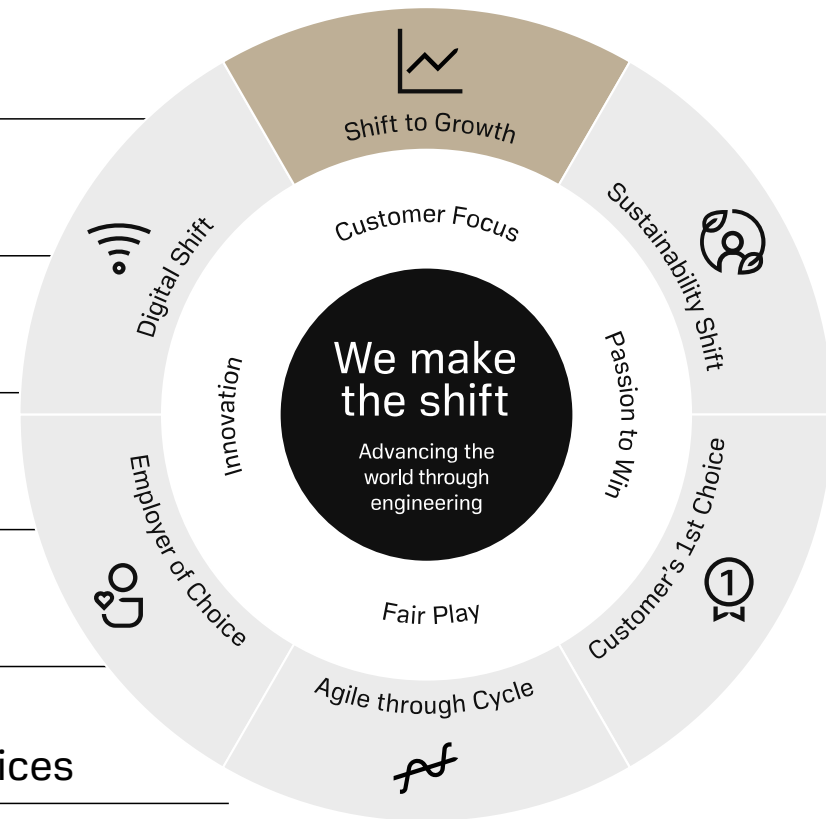


Asia
Market size 77 BSEK
~10% market share
7 production sites
4 R&D centers
1 powder site
5,050 employees



Shift to growth

- 01 Strengthen our position in inserts
- 02 Take a leading position in round tools
- 03 Become a market leader in mid-market
- 04 Grow outside Europe
- 05 Master the automotive shift
- 06 Industry leadership in digital products and services

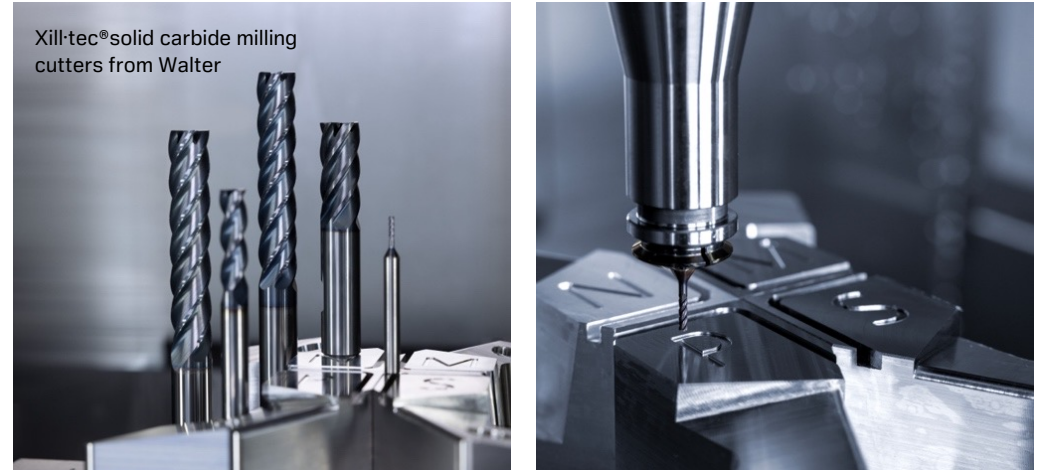


Strengthen our position in inserts & take a leading position in round tools

Double Turbo, a square shoulder milling concept from Seco



Xill-tec® solid carbide milling cutters from Walter



CoroCut 2 – a versatile parting and grooving concept from Sandvik Coromant

Global top 3 in round tools

Global round tool market share growth (2021-2022)

> 2% points

SMS round tool revenue growth (2021-2022)

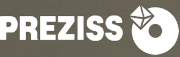
> 20%

SMS outgrowing the round tools market growth

> 4x



PETERSON TOOL COMPANY
The Cutting Edge of Perfection



FREZITE



SPHINX•TOOLS



Regional plans



US

- Stronger position in mid market / local premium (GWS)
- Enhanced local production capabilities, incl local powder supply

Mexico

- Focus on near-shore manufacturing for US
- Strengthened local production capabilities (QCT)

Europe

- Focus on growth pockets – Auto aluminum, Medical
- Full assortment production capabilities, incl powder supply

China

- Mid market/local premium push
- Strong position in round tools
- Local production capabilities

Rest of Asia

- India – enhanced mid market footprint (Miranda) Strong production capabilities, incl powder supply
- Japan - local production capabilities
- South-east Asia (Vietnam, Indonesia, Thailand) – beneficiaries of China+1 sourcing. Focus on fast-growing mid-market

Grow outside of Europe



North America



Market size
2022, BSEK

44

CAGR
2022-2028

~5%

Market share SMS
2019

~20%

2022

~25%

Master the automotive shift

The difference

Light vehicles (LV)

CAGR (2022-30)	EV 2030	Share of production volume	Machine intensity ratio
2%	47%	96%	x1



Medium heavy commercial vehicles (MHCV)

CAGR (2022-30)	EV 2030	Share of production volume	Machine intensity ratio
3%	13%	4%	x5



Master the automotive shift

The difference

Light vehicles (LV)

CAGR (2022-30)	EV 2030	Share of production volume	Machine intensity ratio
2%	47%	96%	x1
% of SMS sales	Market share		
60%	10%		



Medium heavy commercial vehicles (MHCV)

CAGR (2022-30)	EV 2030	Share of production volume	Machine intensity ratio
3%	13%	4%	x5
% of SMS sales	Market share		
40%	25%		

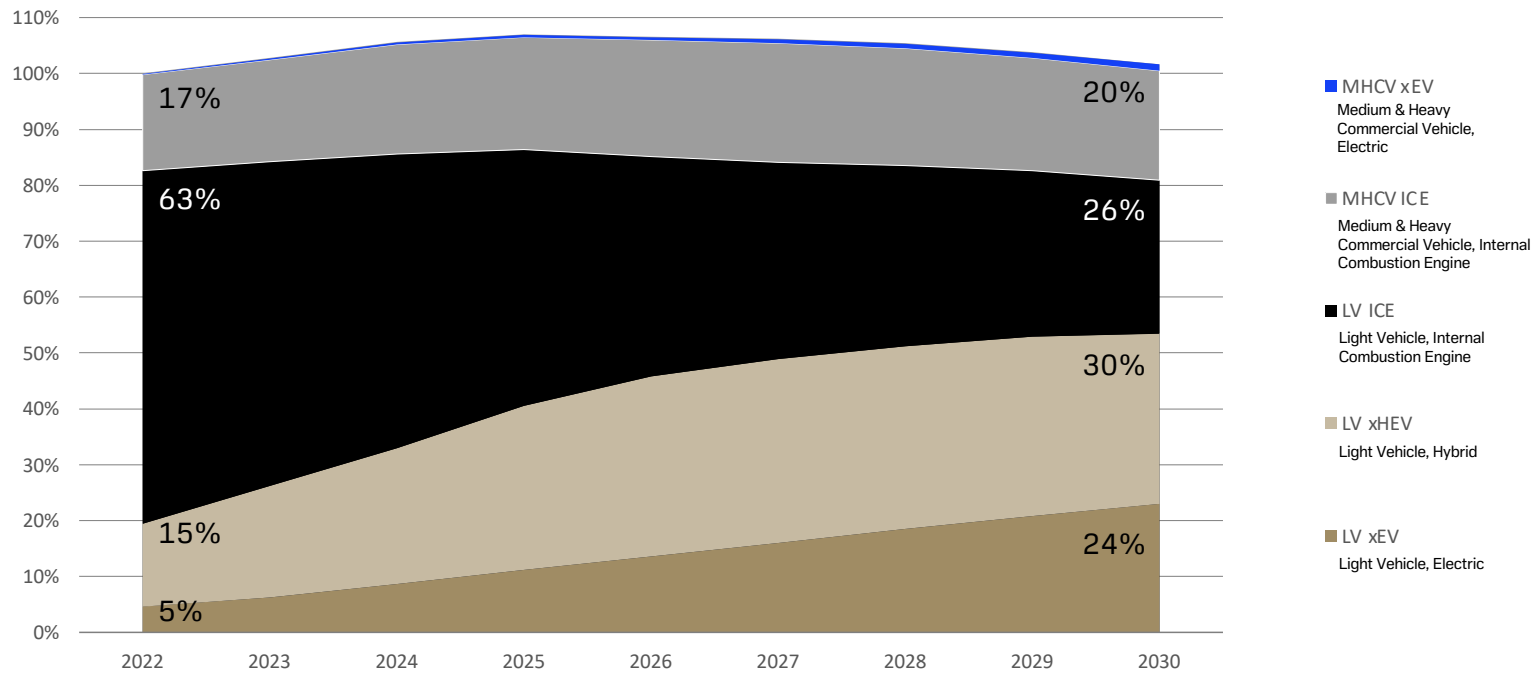




Shift to EVs and aluminum

Electrical vehicles development

Cutting tool market volume, indexed. CAGR 2022-2030 = 0.2%

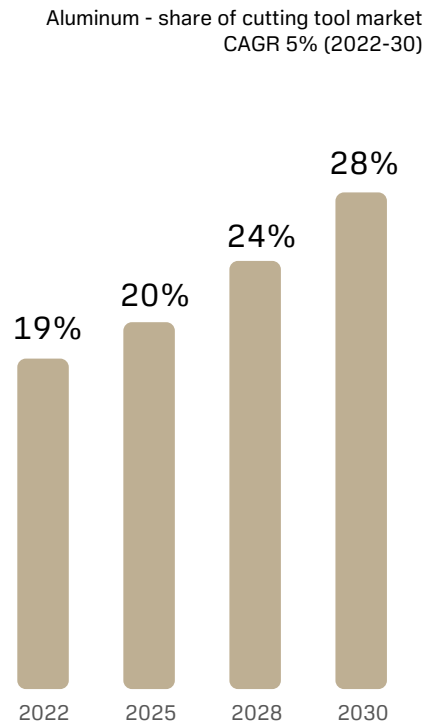


Master the automotive shift

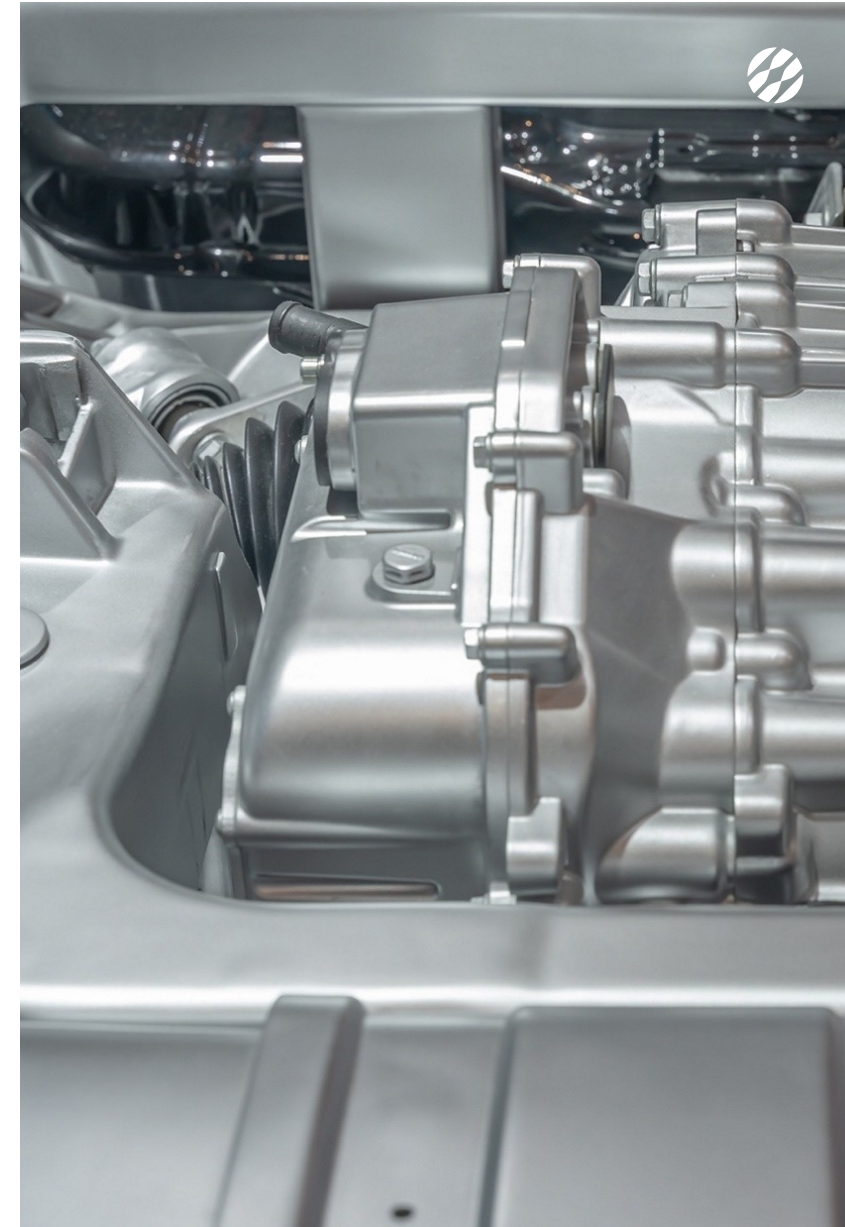
Shift to EVs and aluminum

Aluminum growth and drivers

- Sizeable market, strong growth
- Minimizing weight – a key driver in automotive and aerospace segments
- Hybrids – additional aluminum components in electric motor and battery housing
- EVs – additional aluminum components for electric motor, reduction gearboxes and electrical units housing



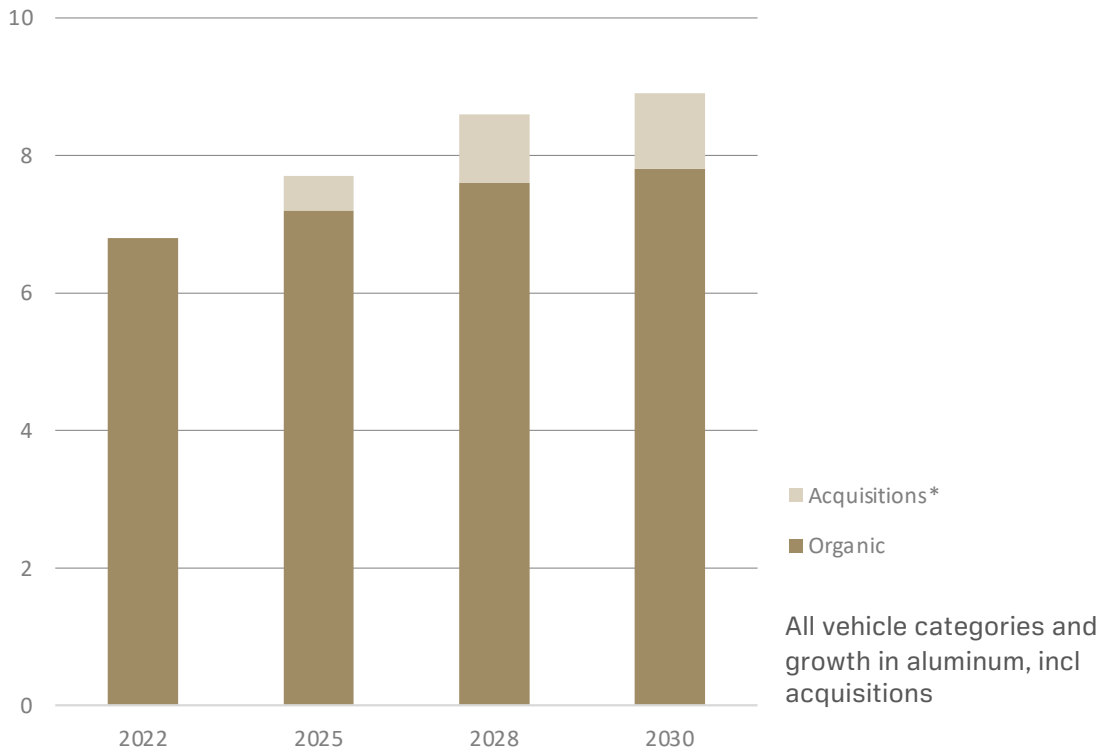
Source: S&P Global, Aug 2023 -Light Vehicle production forecast -Aluminum content in passenger cars (2022-30). Sandvik internal data and analysis.



Master the automotive shift

Addressing the EV shift

SMS revenues from automotive (BSEK)

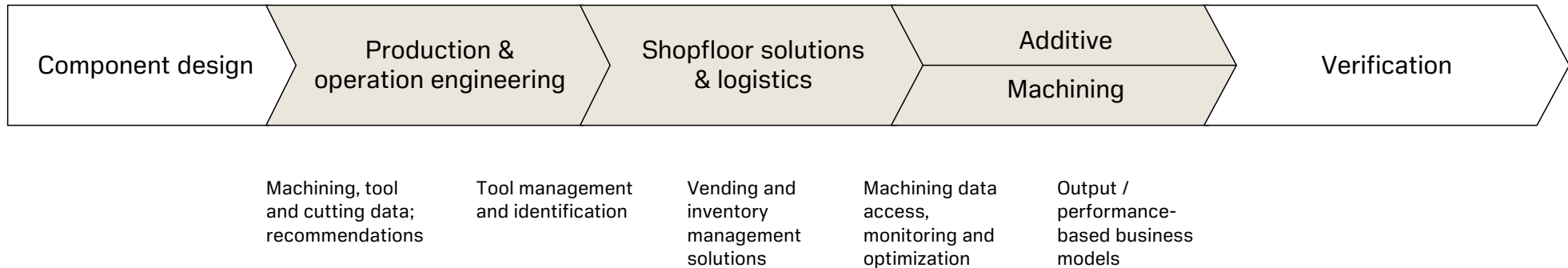


* incl. subsequent organic growth of acquired companies





Digital products and services



Industry leadership in digital products and services

Investing in tool flow solutions

Customer's pain points

Tool preparation failures

Failures in NC programming

High tool stocks

Weak capability-to-promise performance

Productivity losses

Wrong tool selection

Scrap & rework



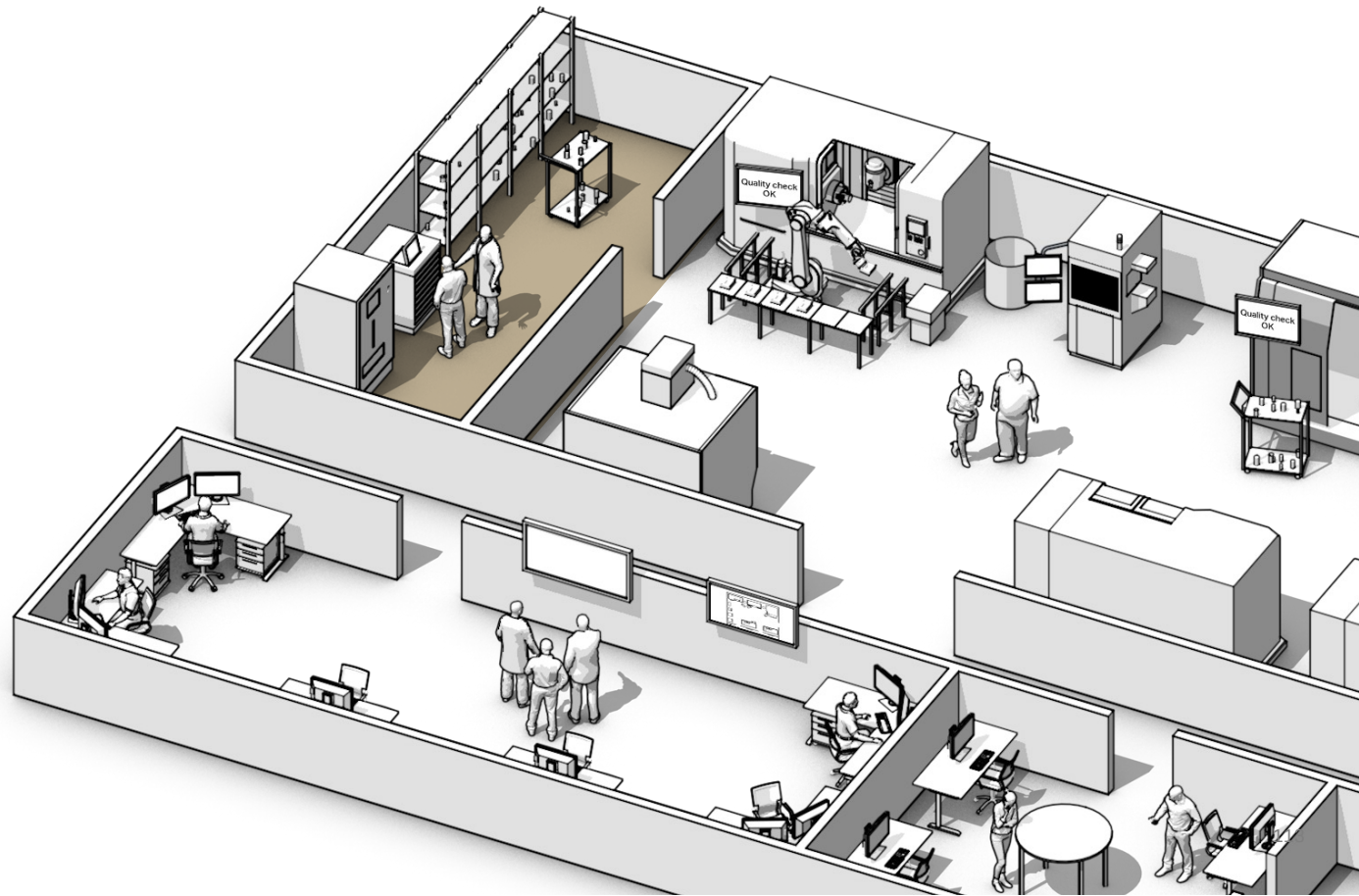
Industry leadership in digital products and services

Investing in tool flow solutions

Benefits for customer and us

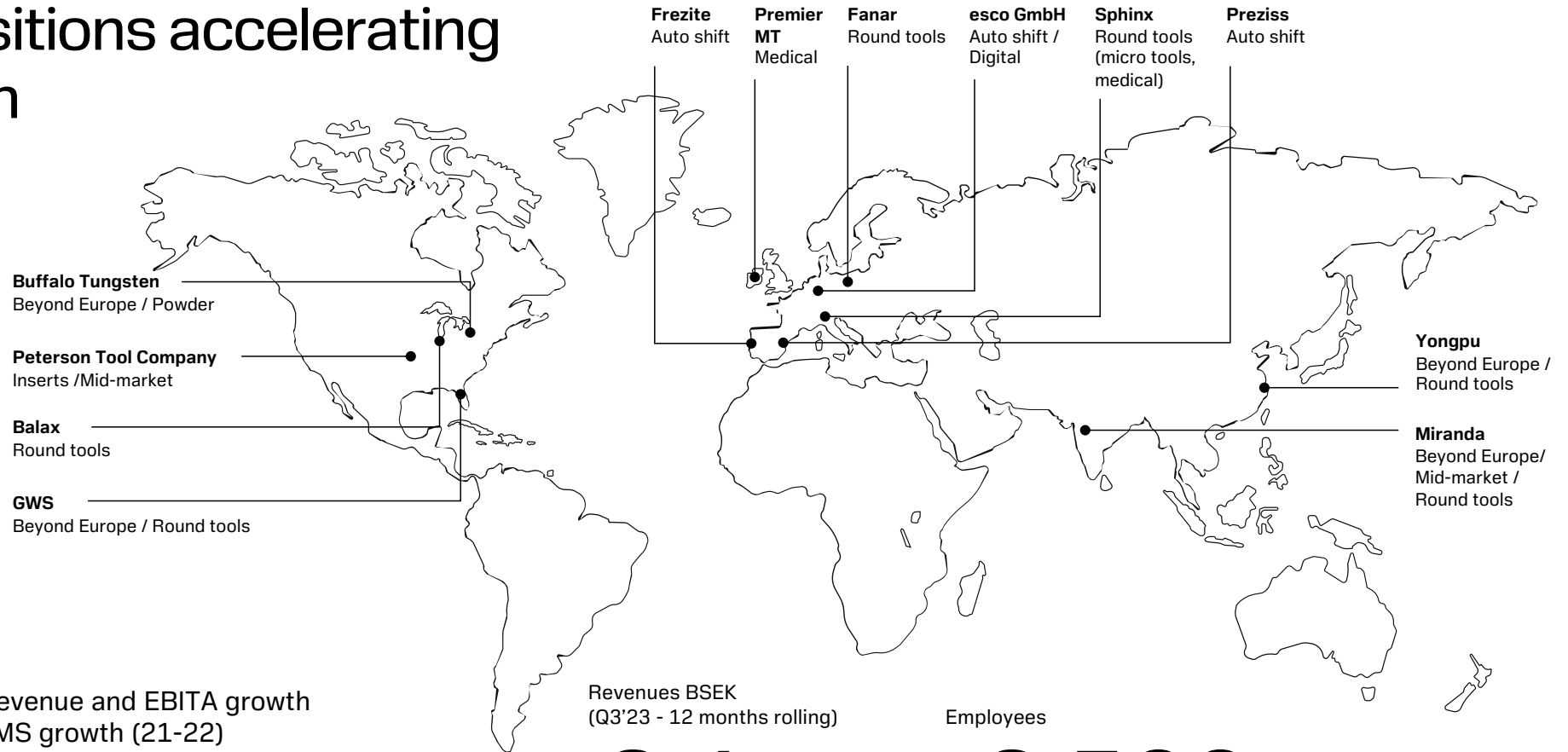
- Structure and order
- Efficiency through time savings and less scrap
- Enables automated processes
- Support sustainability targets
- Stickiness with customers
- Increased tool sales

tdmsystems 





Acquisitions accelerating growth



Acquisitions revenue and EBITA growth higher than SMS growth (21-22)

Acquisitions EBITA growth faster than their revenue growth (21-22)

3.6

~2,500

Enabler in customer shifts

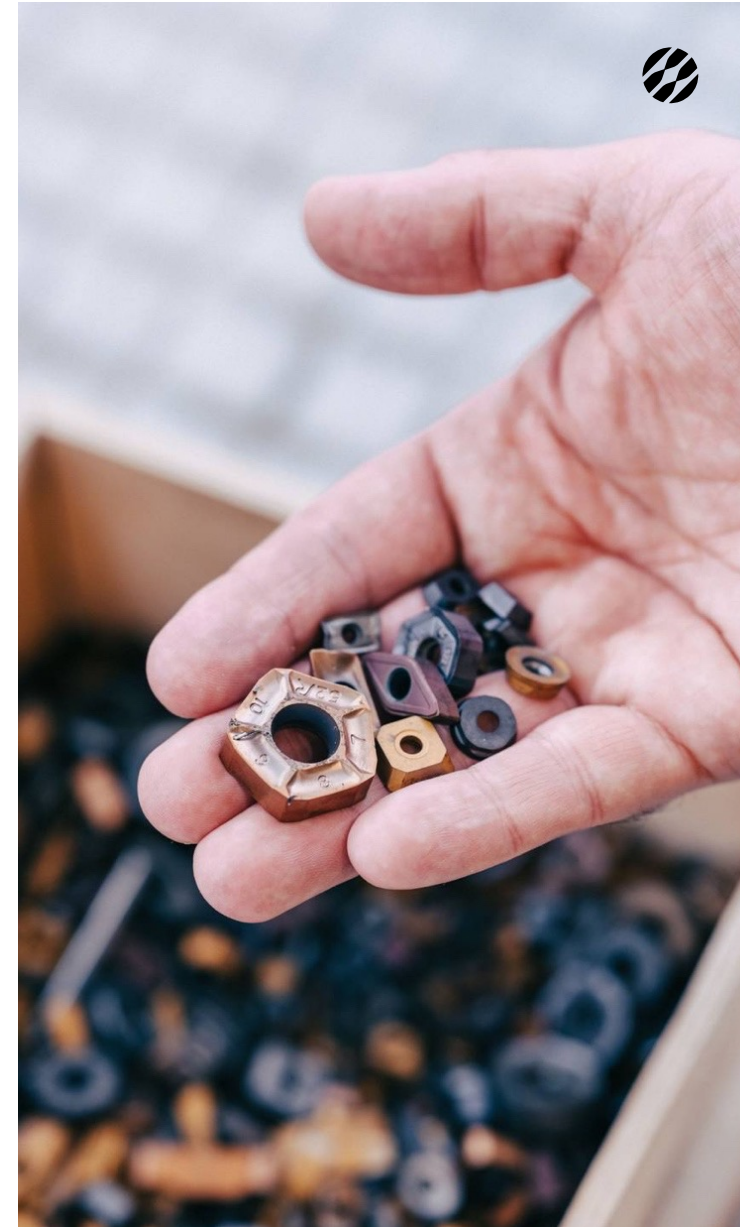
Sustainability shift

Customer needs

- Increase circularity to eliminate waste
- Ensure a sustainable value chain
- Reduce energy consumption and thereby CO₂ footprint

Our solutions

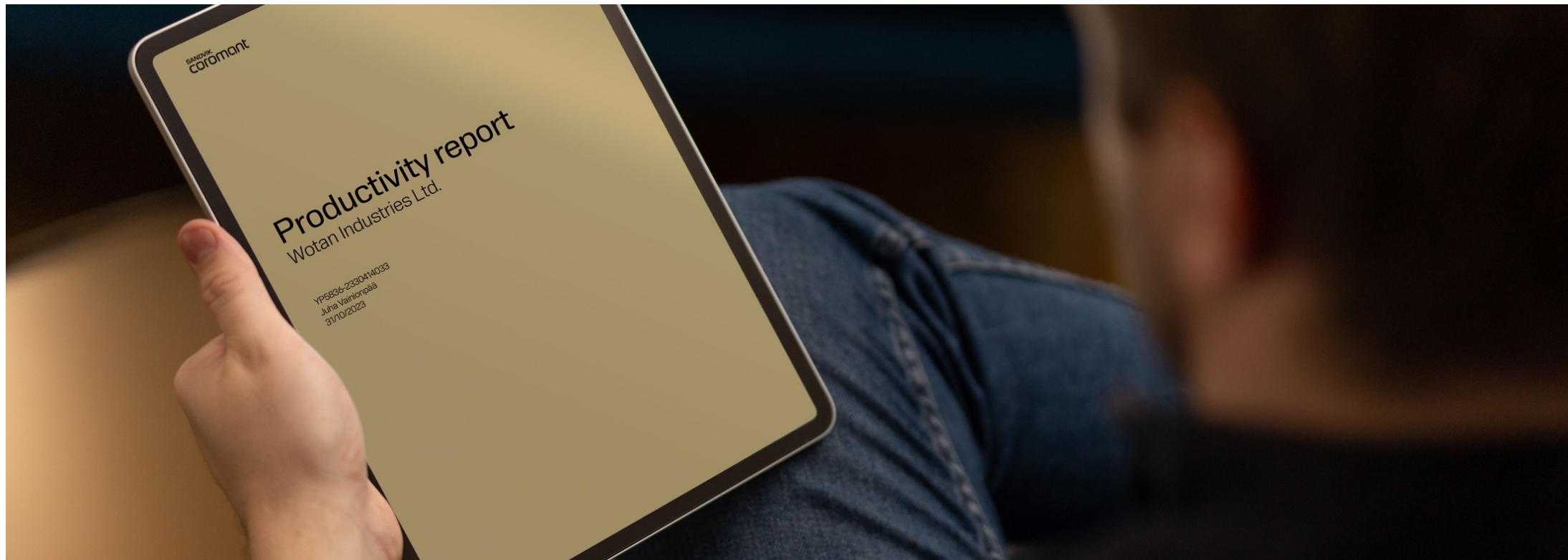
- High tool performance and reliability for material and energy efficiency
- Increased solid carbide round tools reconditioning
- Recycle with our leading buy-back program
- Sustainability services





Sustainability Analyzer

Minimizing emissions and climate impact

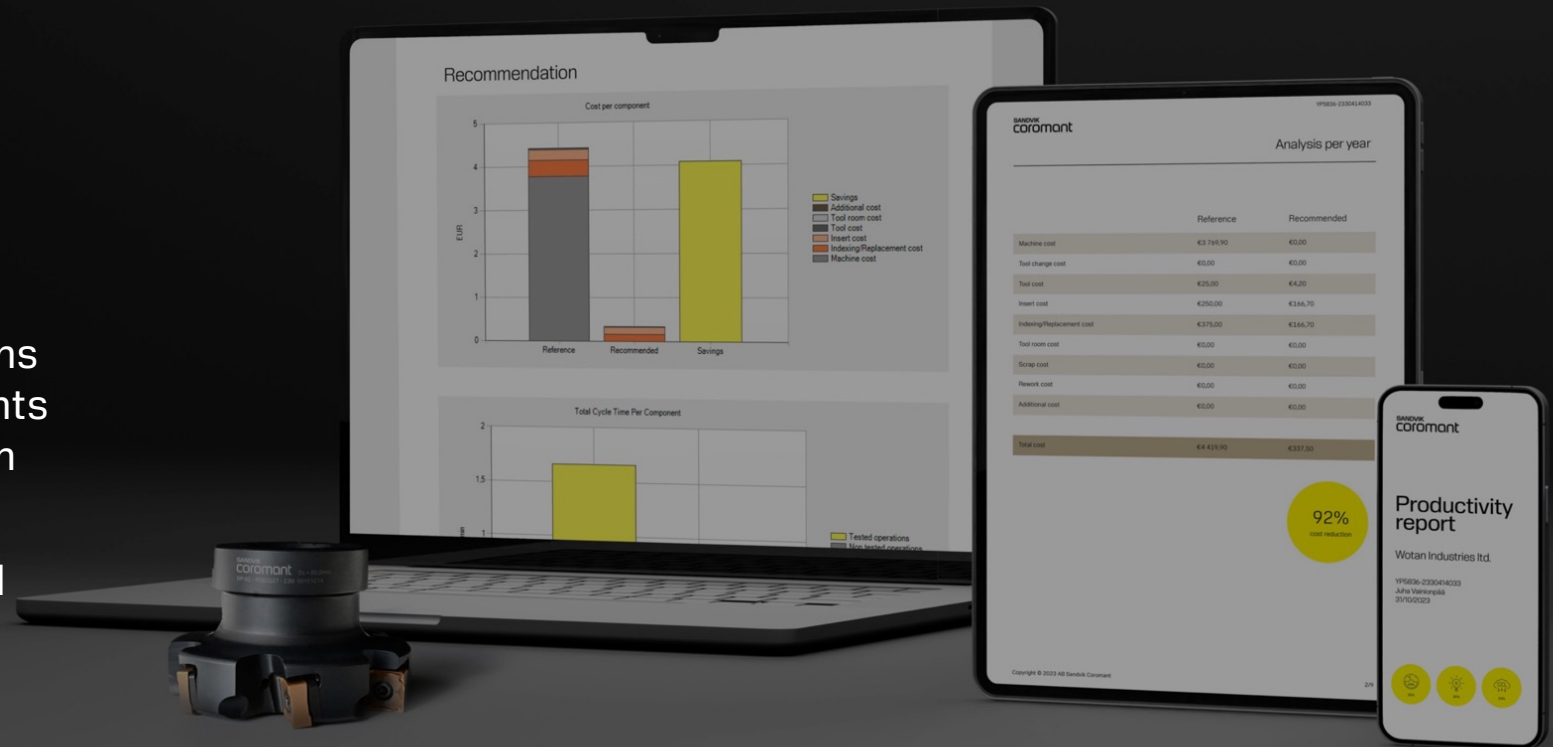




Sustainability Analyzer

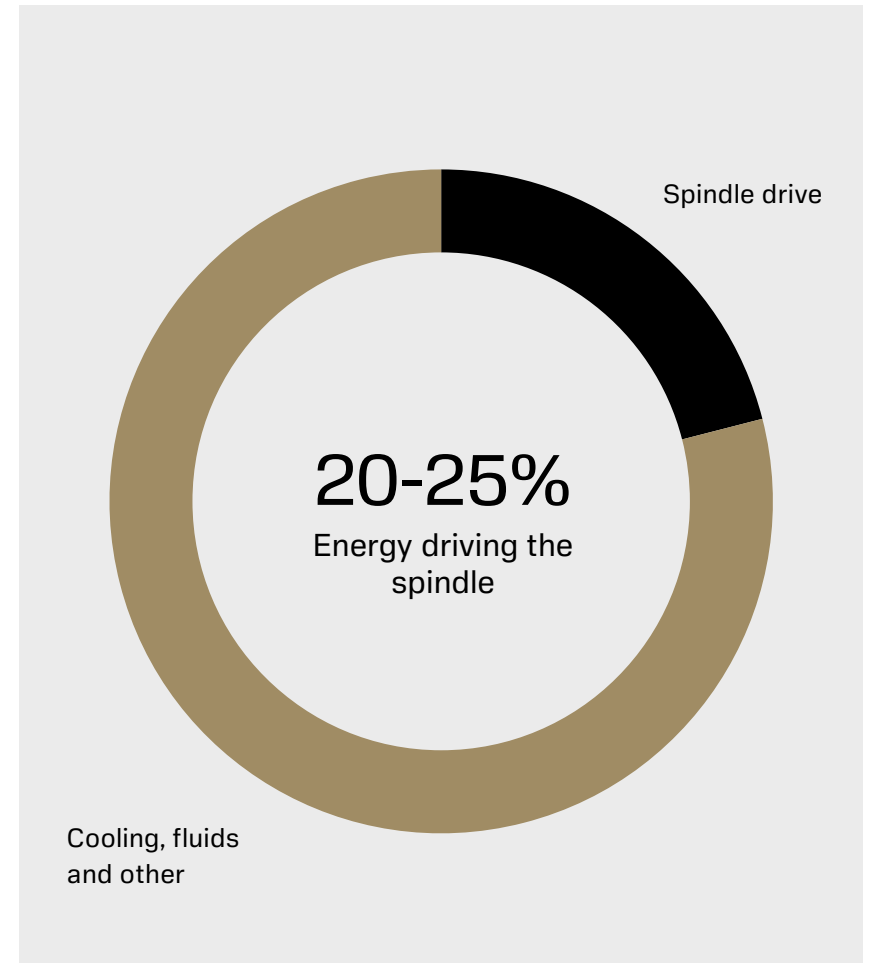
Minimizing emissions and climate impact

- Using our tooling solutions and process improvements we unlock the potential in the CNC machine
- Increasing efficiency and decreasing the environmental impact



Sustainability solutions for customer demands towards net zero

- Data driven approach
- Tool efficiency
- Waste reduction
- Energy savings



Automotive customer cases

1. Introduction of new grade for steel turning

- New coated cemented carbide grade – GC4415
- Customer producing 215,000 components per year
- Optimized tool life
- Energy savings of 12.5 MWh/Year corresponding to 20% of total consumption

2. Optimization of milling operation

- New tool path and machine setting
- Customer producing 80,000 components per year
- Energy savings of 50 MWh/year corresponding to 23% of total consumption
- SEK 0.1 million in savings and investment of one machine avoided



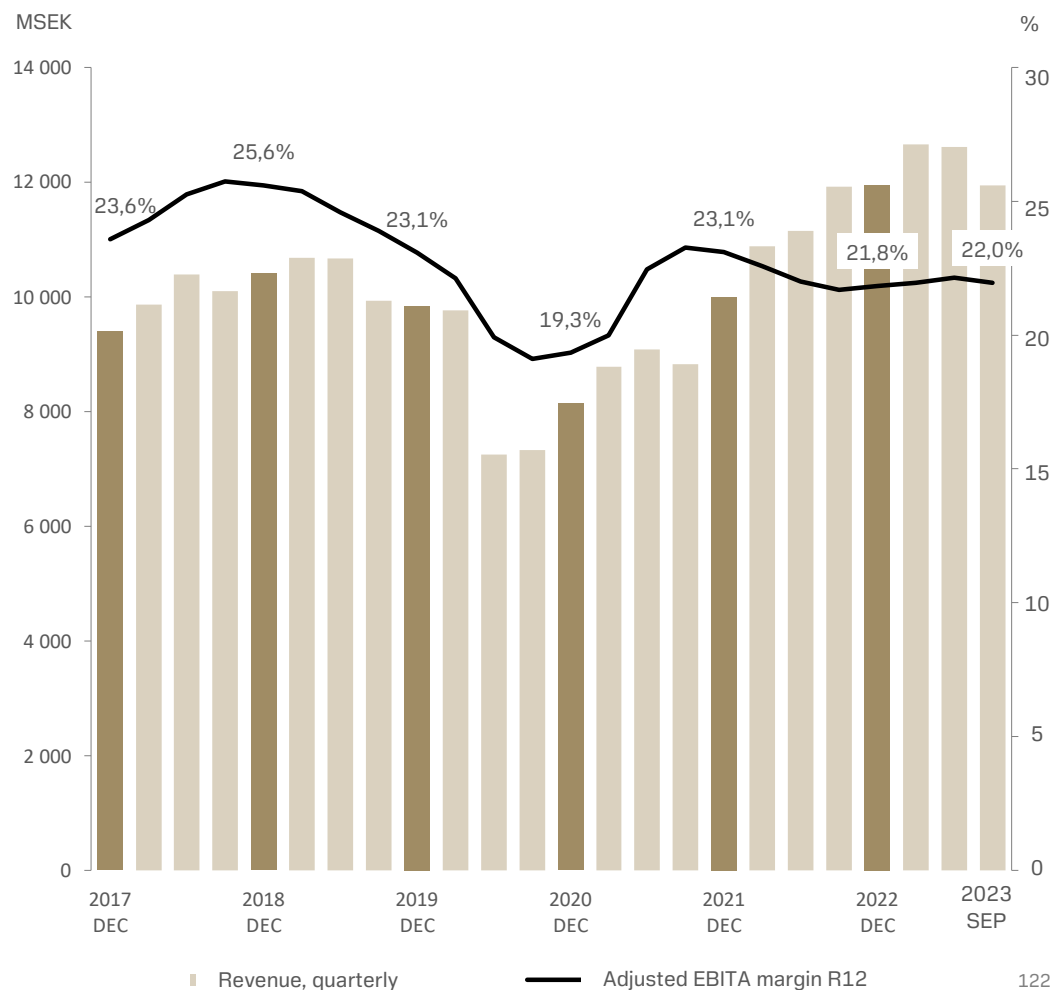


SMM maintains leading profitability

Stable and strong adjusted EBITA margin

- EBITA margin managed in a strong way during volatile volume situations caused by changes in the global business environment
- SMS good and stable leverage level throughout cycle of around 40%
- Strong and proactive execution of structural measures, which have strengthened the mid- and long-term margins

Revenue and adjusted EBITA margin development





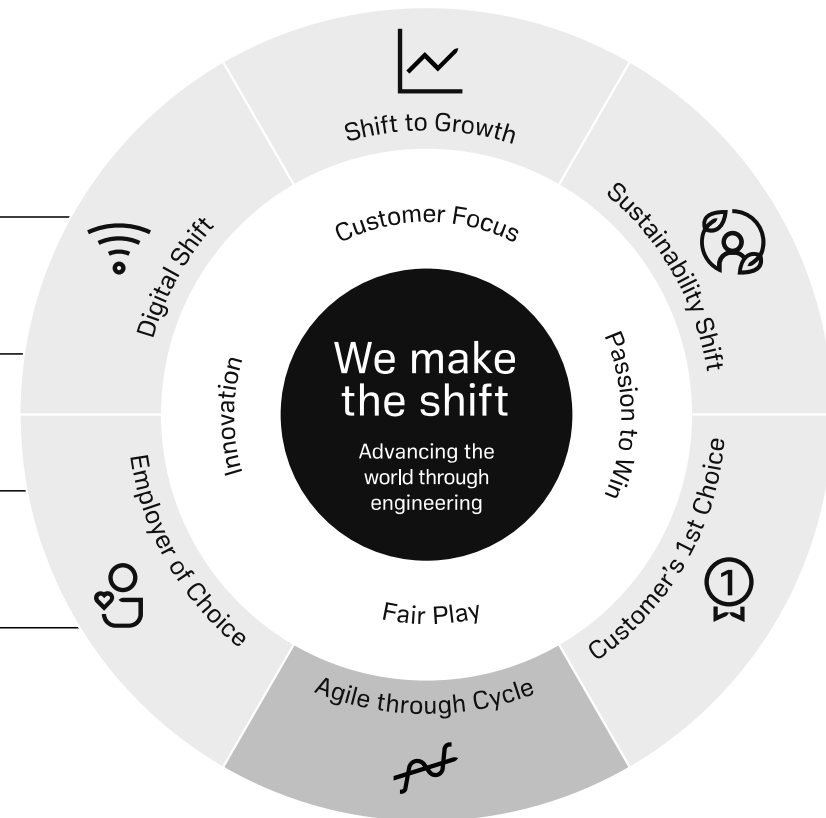
Agile through cycle

Agile planning process with support of AI

Footprint optimization - reduction of fixed assets

Workforce flexibility

Exploration of new revenue streams



Targets

The strategy execution
from 2019 to 2025



Core business growth

Organic growth ~50%
> market growth from M&A

Revenue CAGR

2019-2025

5%



Sandvik Manufacturing Solutions

Mattias Nilsson
President





Customer needs



Changed customer behavior...

- Decisions are made earlier in the value chain
- Increased skill-gap
- Simulation and digital twin

...and demands on components & assembly...

- More complex shapes and light-weight components
- Sustainability and resource efficiency

...enabled by technology...

- Inspection integrated in the manufacturing feedback-loop
- Connected, automated self-learning processes, AI
- Five axis machining and hybrid manufacturing

...in ever evolving industrial landscape

- Point-solutions integrates into turn-key solutions
- Industrial consolidation and software offer expansions

Structural growth drivers

Our response?

Simplify
manufacturing



Well positioned to capture growth opportunities



Sandvik Manufacturing Solutions

From October 1, 2023



Well positioned to capture growth opportunities

World leading software solutions

Share of software [2022]

70%

Software
CAGR 2021-2022

7%

Software seats

400,000

Recurring software revenue

60%

EBITA% in software business

29%

Employees in R&D

30%

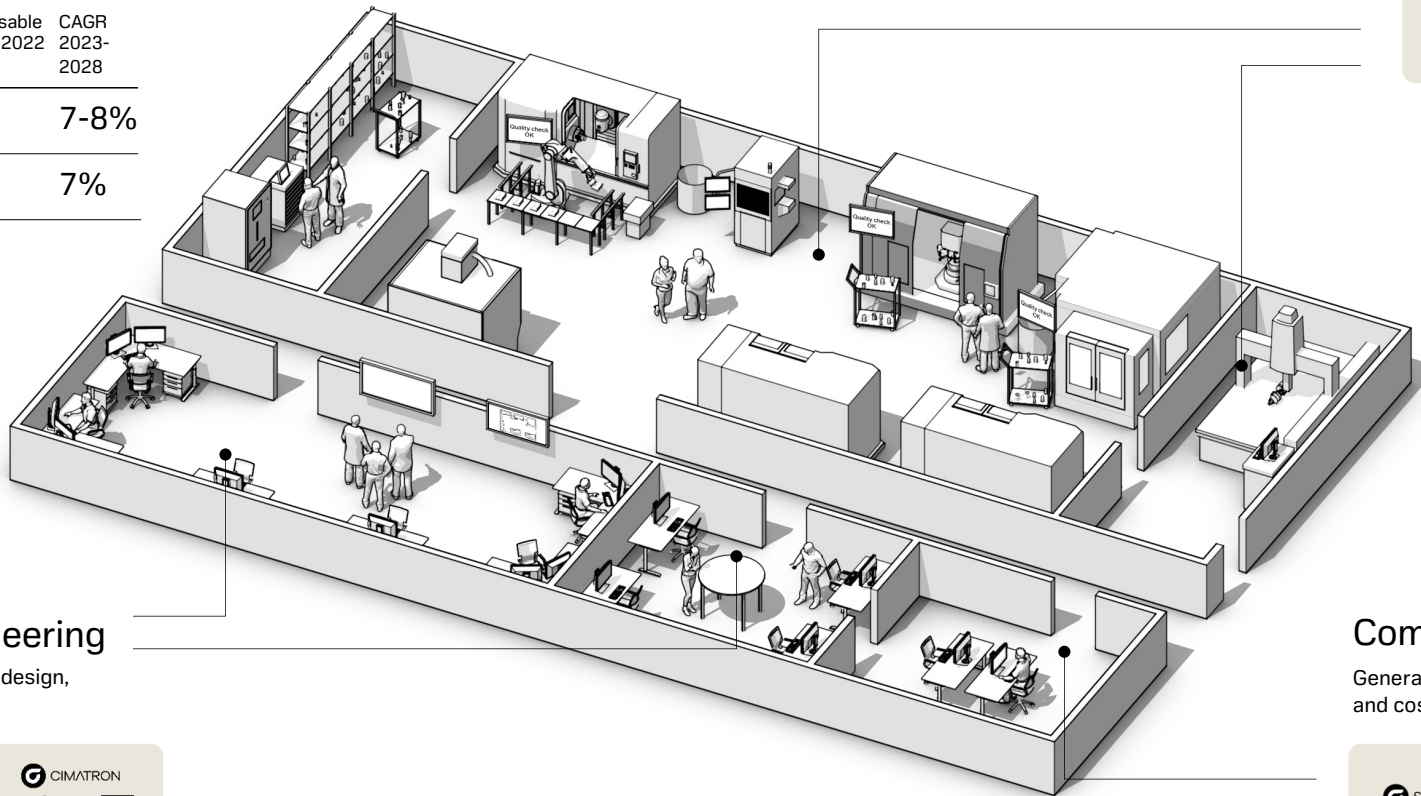


Well positioned to capture growth opportunities



Strong position

	Addressable market 2022 (BSEK)	CAGR 2023-2028
Computer Aided Manufacturing (CAM)	30	7-8%
Computer Aided Inspection & Quality	18	7%



Verification

In-line metrology



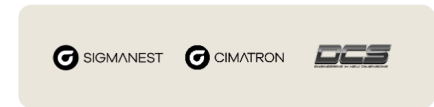
Production and operation engineering

Knowledge driven process design, planning and simulation



Component design

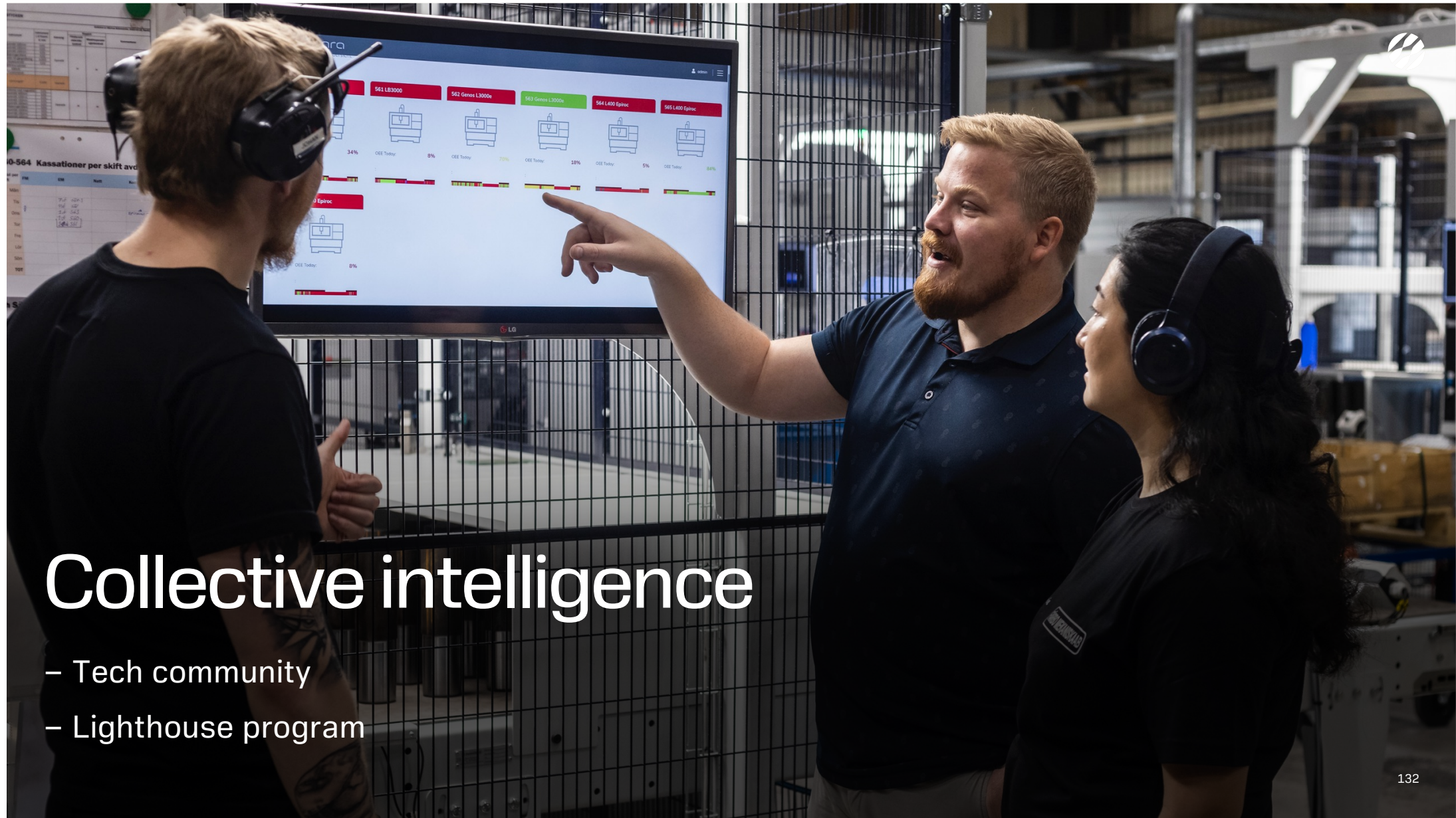
Generative design to optimize functionally and cost



A man with a beard and curly hair, wearing a grey polo shirt with a yellow stripe on the sleeve, is smiling and looking at a woman. The woman is seen from the back, wearing a grey shirt with a yellow stripe on the sleeve. They are in a warehouse or industrial setting, looking at a document held by the man. In the background, there are metal racks with labels like 'HG0302' and 'MATCON'.

Our competitive advantage

- Combining hardware and software
- Part of the industry we serve
- Agnostic solutions



Collective intelligence

- Tech community
- Lighthouse program



Shop floor solutions and logistics

Automated shop floor logistics

tdmsystems CRIBWISE

Machining, Additive

Data driven component shaping

SANDVIK COROMANT WALTER Seco
DORMER PRAMET wolfram SANDVIK

Verification

In-line metrology

MetrologX4 GOM
ZeroTouch



Production and operation engineering

Knowledge driven process design, planning and simulation

VERICUT SIGMANEST CIMATRON
Mastercam GIBSCAM POSTABILITY

Data

Component design.

Generative design to optimize functionally and cost

SIGMANEST CIMATRON



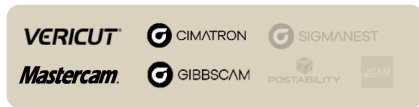
Shop floor solutions and logistics

Automated shop floor logistics



Production and operation engineering

Knowledge driven process design, planning and simulation



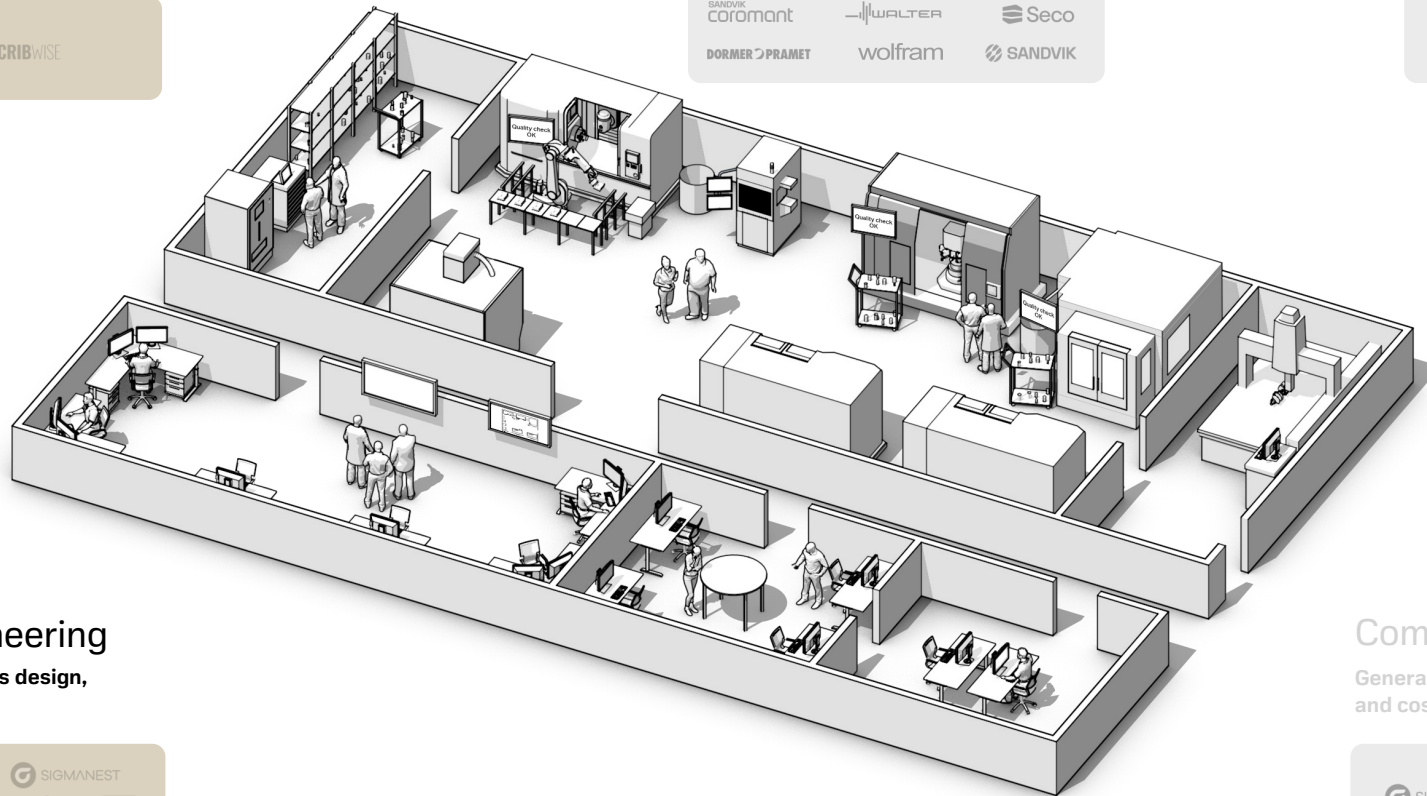
Machining, Additive

Data driven component shaping



Verification

In-line metrology



Component design.

Generative design to optimize functionally and cost





Shop floor solutions and logistics

Automated shop floor logistics

tdmsystems CRIBWISE

Machining, Additive

Data driven component shaping

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DORMER PRAMET wolfram SANDVIK

Verification

In-line metrology

MetrologX4 GOM
ZeroTouch



Production and operation engineering

Knowledge driven process design, planning and simulation

VERICUT SIGMANEST CIMATRON
Mastercam GIBBSCAM POSTABILITY CAM

Component design.

Generative design to optimize functionally and cost

SIGMANEST CIMATRON 3D



Shop floor solutions and logistics

Automated shop floor logistics

tdmsystems CRIBWISE

Machining, Additive

Data driven component shaping

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Tool Library
Tool Paths

Verification

In-line metrology

MetrologX4 GOM
ZeroTouch



Production and operation engineering

Knowledge driven process design, planning and simulation

VERICUT CIMATRON SIGMANEST
Mastercam GIBSCAM POSTABILITY

Component design.

Generative design to optimize functionally and cost

SIGMANEST CIMATRON



Shop floor solutions and logistics

Automated shop floor logistics

tdmsystems CRIBWISE

Machining, Additive

Data driven component shaping

SANDVIK coromant WALTER Seco
DORMER PRAMET wolfram SANDVIK

Verification

In-line metrology

MetrologX4 QDM Quality Data Manager
ZeroTouch



Production and operation engineering

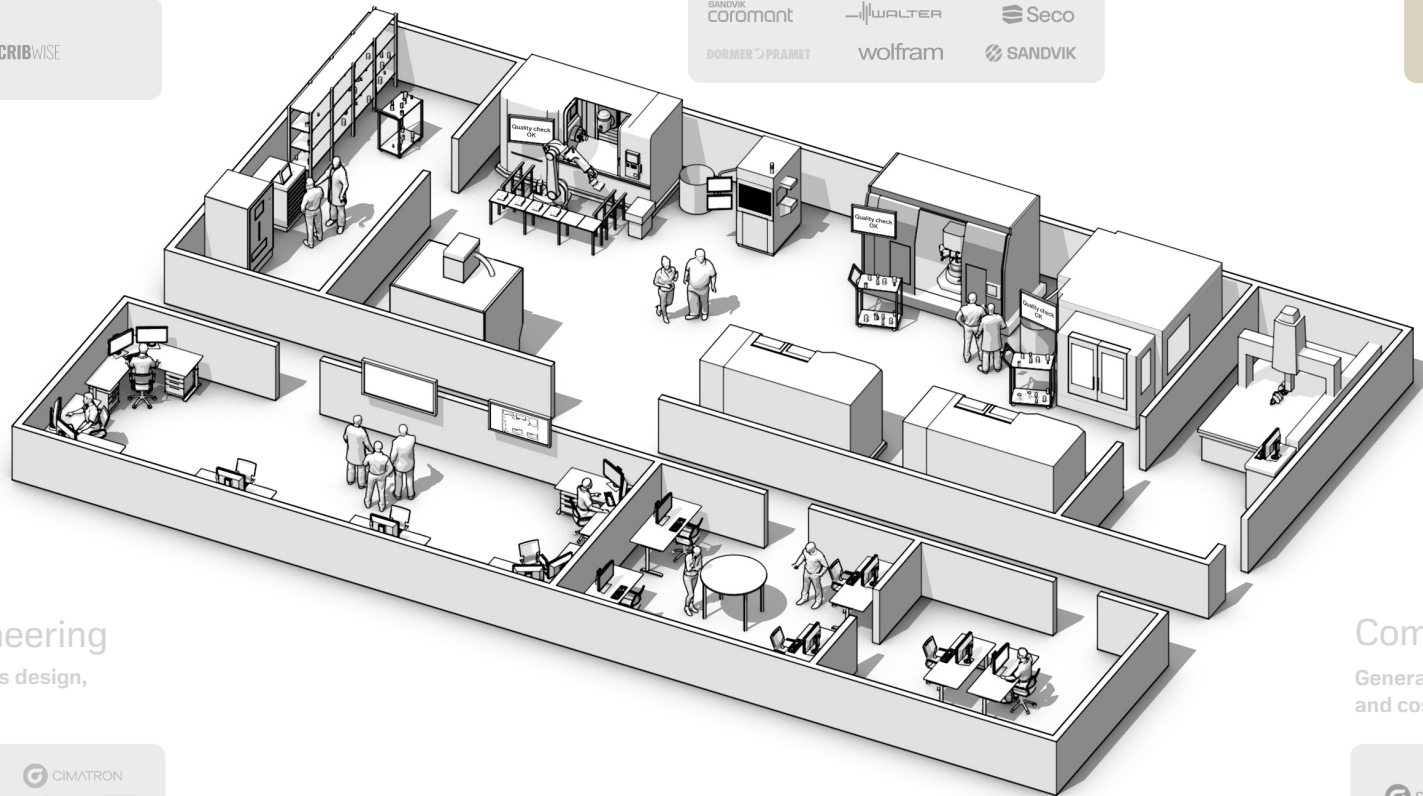
Knowledge driven process design, planning and simulation

VERICUT SIGMANEST CIMATRON
Mastercam GIBBSCAM POSTABILITY

Component design.

Generative design to optimize functionally and cost

SIGMANEST CIMATRON





Shop floor solutions and logistics

Automated shop floor logistics

tdmsystems CRIBWISE

Machining, Additive

Data driven component shaping

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DORMER PRAMET wolfram SANDVIK

Verification

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MetrologX4 QDM
ZeroTouch



Production and operation engineering

Knowledge driven process design, planning and simulation

VERICUT CIMATRON SIGMANEST
Mastercam GIBBSCAM POSTABILITY JCAM

Component design.

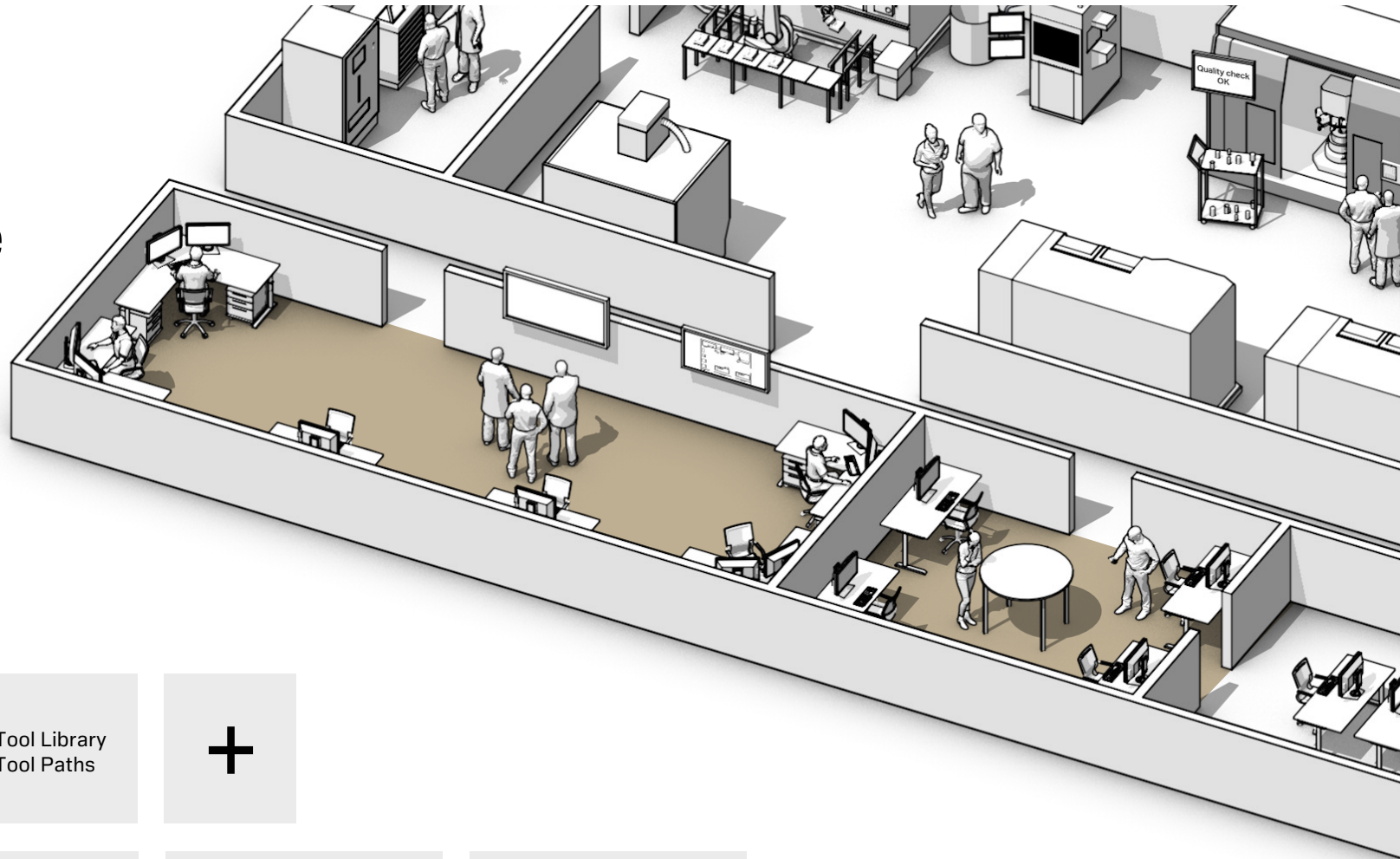
Generative design to optimize functionally and cost

SIGMANEST CIMATRON

Data

Enabler in customer shifts

Connecting the user-experience



SANDVIK
coromant

CoroPlus® Tool Library
CoroPlus® Tool Paths



 GIBBSCAM

 CIMATRON

Mastercam

VERICUT®



Verification



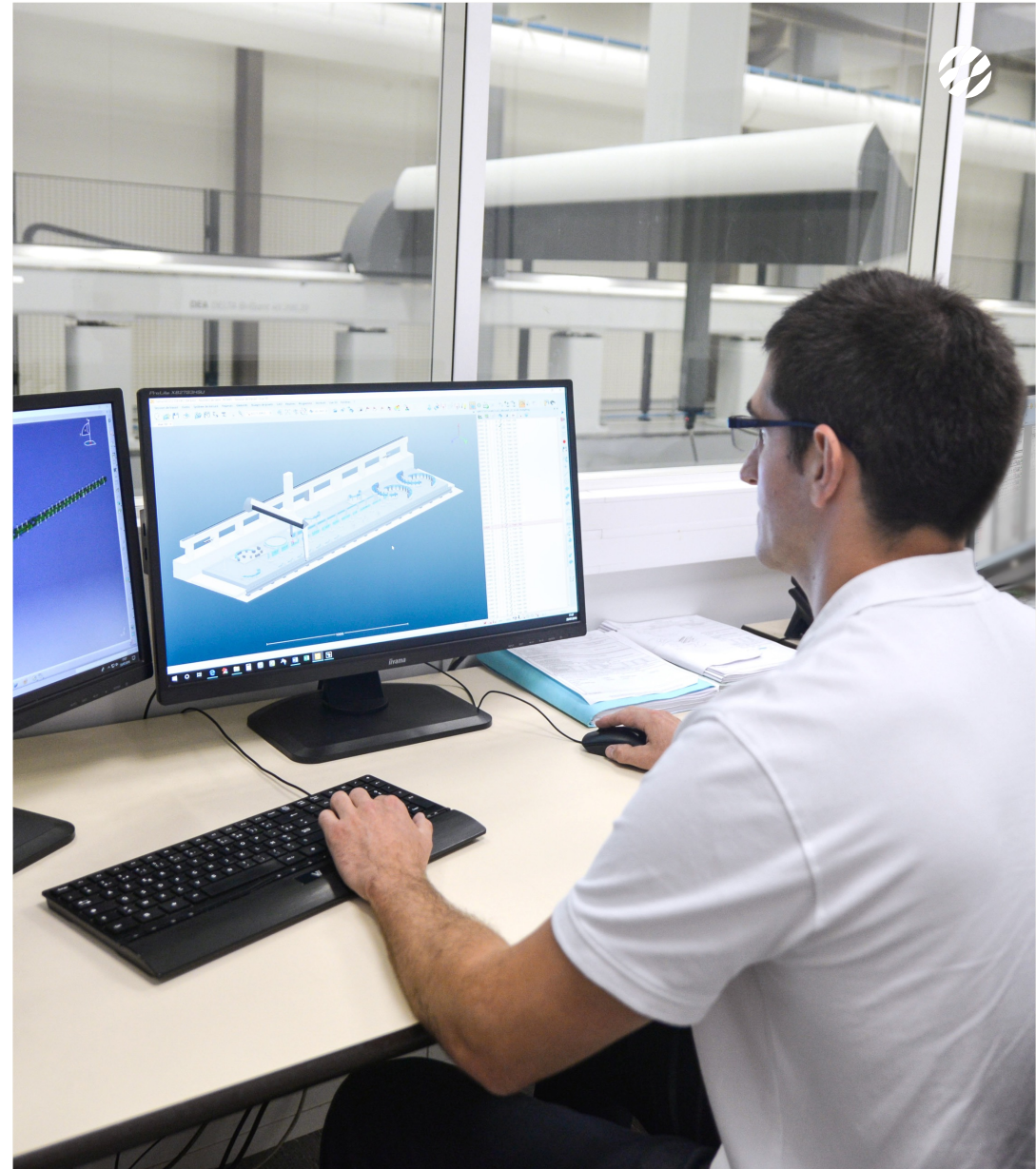
	Silmax⁴	+
	MetrologX⁴ !-Robot	

- Full digital twin of verification
- Quality verification of the finished part in-line

“One advantage to highlight is the capability of virtually reproducing the whole inspection environment.

The programming from A to Z of highly complex parts with collision avoidance, brings us considerable machine time savings and allows to measure more exactly.”

Julien Ecran
Offline programming expert, Figeac Aero





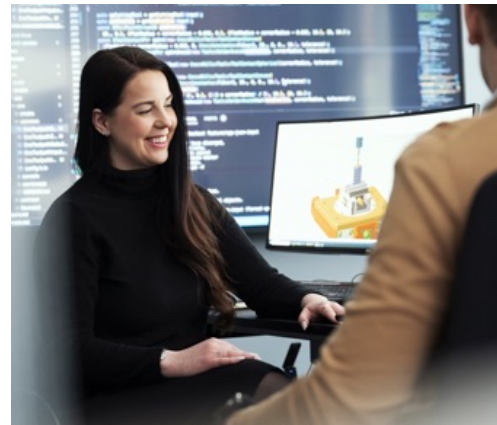
Strategic direction



Establish a leading position in key markets



Accelerate growth on strong assets



Create additional value through synergies



Explore offer expansion

Targets

The strategy execution
from 2019 to 2025

Sandvik Manufacturing Solutions

Software revenue

4 BSEK

Adjusted EBITA

22%

Summary

- Leading position established
- Progress in realization of synergies
- Further growth potential identified

Further growth opportunities

Geared up for next phase

- Different opportunities, strong synergies
- Leveraging on our unique market position through the agnostic and end-to-end offer
- Further product integrations providing a seamless user experience

Working towards closing the loop for a more efficient and sustainable manufacturing

