



Epiroc Capital Markets Day 2019

Mattias Olsson, Senior Vice President Corporate Communications







Practicalities





Today's presenters





Mattias Olsson SVP Corporate Communications



Per Lindberg President and CEO



Helena Hedblom SVP Mining and Infrastructure



Martin Hjerpe SVP M&A and Strategy



Sami Niiranen President Underground Rock Excavation



Jose Sanchez President Drilling Solutions



Breakout sessions:
Intelligent mining and infrastructure.



Anders Lindén SVP Controlling and Finance (CFO)



Break

Video



Epiroc Group

Per Lindberg, President and CEO



Epiroc's key strengths



Leading productivity partner in attractive niches

Strong and proven operating model

High and resilient aftermarket exposure

Driving the future in intelligent mining and infrastructure

History of value creation for all stakeholders

Leading global productivity partner

Epiroc in brief

- We provide customers in selected niches of the global mining and infrastructure with
 - innovative, safe and sustainable drill rigs, rock excavation and construction equipment, and tools
 - world class service to enhance productivity
 - solutions for automation and interoperability
- We are a 146-year old start-up with >14 000 employees collaborating with customers in +150 countries
- We have a strong, proven and value-creating business model
 - Annual* revenues of BSEK 41.1
 - Operating margin* of 20.1%
 - ROCE* of 29.5%



...in attractive niches



Exposure to hard rock applications

Mining

76% of order intake*

Underground mining

Surface mining

Exploration







Customer characteristics

- Large customers
- High expenditure per customer, while limited share of customer's total capex and opex
- Equipment remain in the mine, only moving within the site
- Continuous operations

Infrastructure

24% of order intake*

Underground civil engineering



Deconstruction and recycling







Customer characteristics

- Large number of customers
- Lower expenditure per customer
- Equipment moving from worksite to worksite
- More project-based business

*January - September 2019

Strong and proven operating model



Focus and agility

Focused and decentralized business



Quick and efficient decision-making

High degree of direct sales and services



~85% direct sales

Strong services business



Aftermarket 65% of revenues

Flexible manufacturing philosophy



75% of product cost for equipment is purchased

Sharp focus on innovation

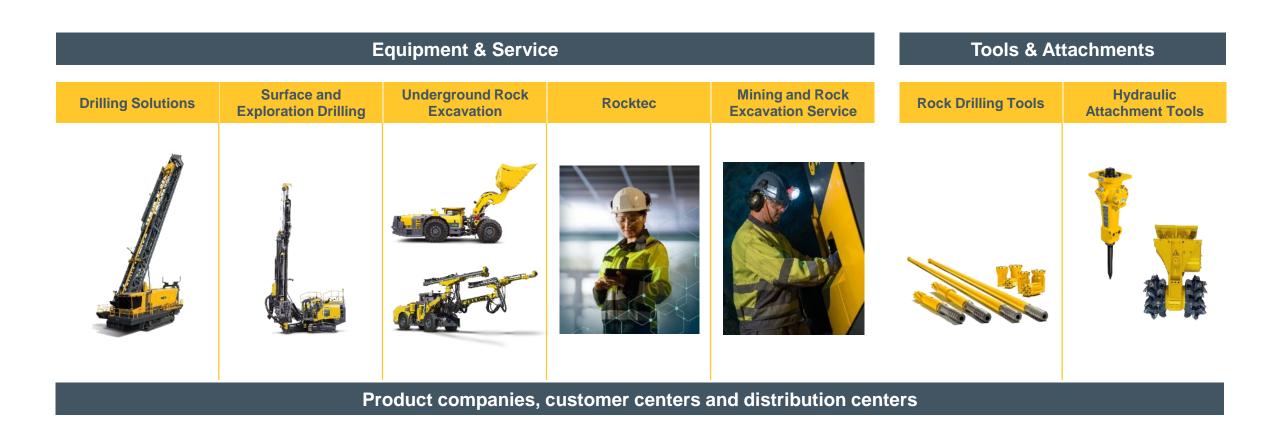


Leadership in automation, digitalization and battery

Focused and decentralized businesses



2 segments and 7 divisions



Always close to our customers

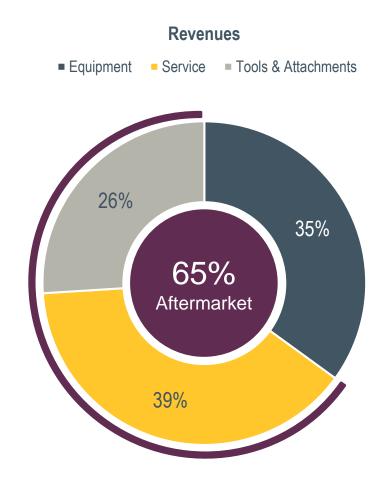


Global presence with high degree of direct sales and service



High proportion of recurring business

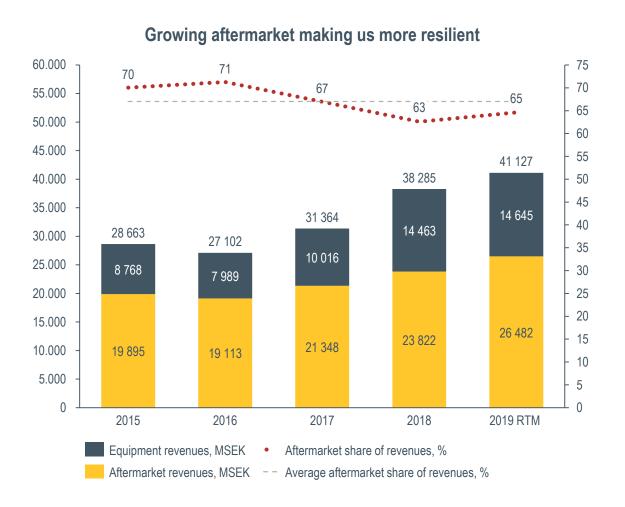






Attractive mix of revenues







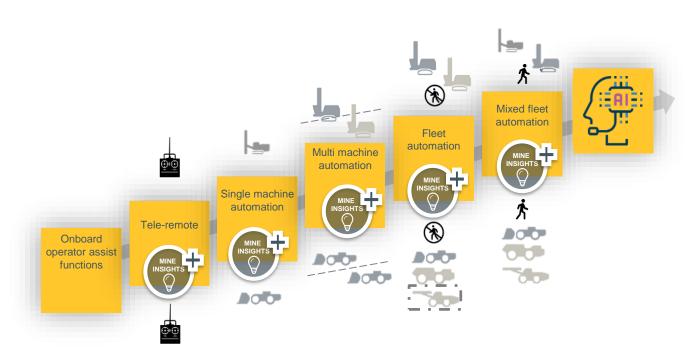
Driving the future in intelligent mining and infrastructure



Leadership in automation, digitalization and battery

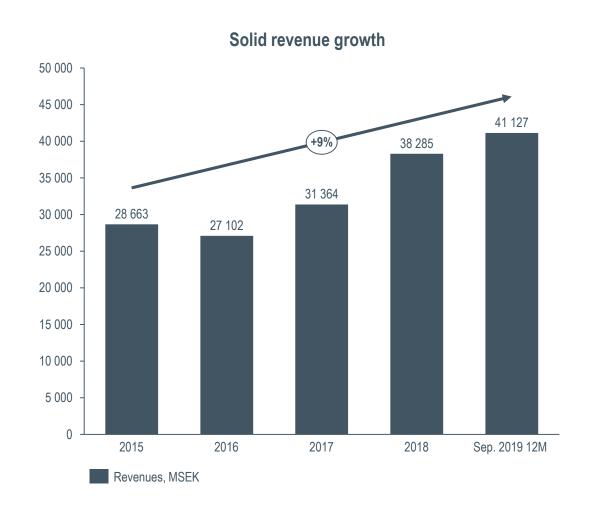
- Market leading offering in automation and information management solutions
- Strong market attention for 6th Sense
- 60% of equipment delivered with rig control system
- 3 400 machines delivered with connectivity
- 43 projects for automation underground
 - 600 drill rigs equipped for complete automation of the drilling process
 - 30% increase in utilization of connected Simba production drills globally
- Autonomous and teleremote surface drilling in 16 countries on 5 continents
- Leader in battery-electric vehicles with 100 000 hours of operations

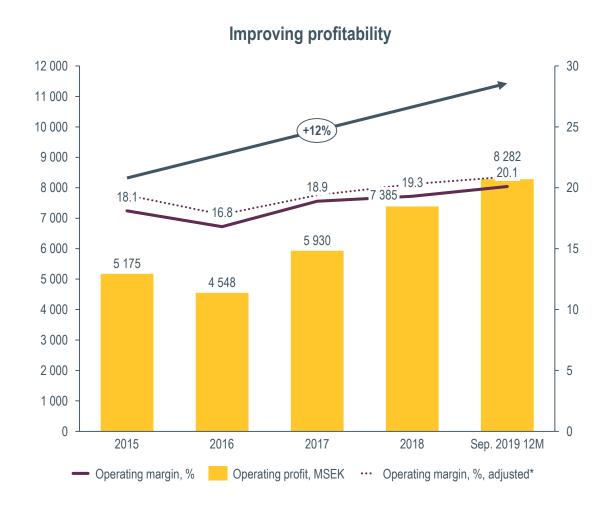
Increasing levels of machine automation



Value creation

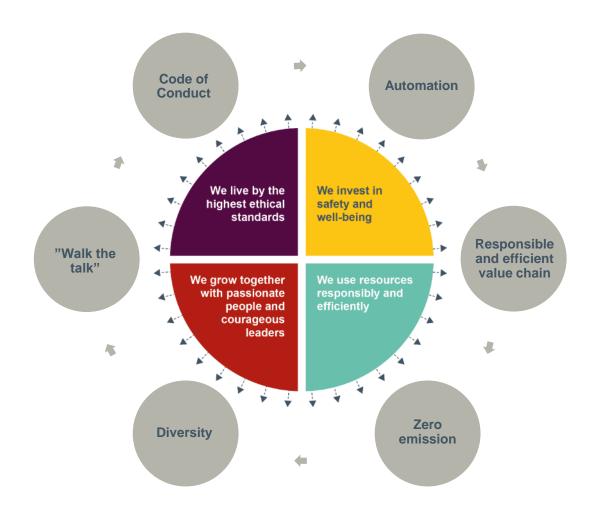






Sustainability is integrated

In our own and customer's operations





Financial goals



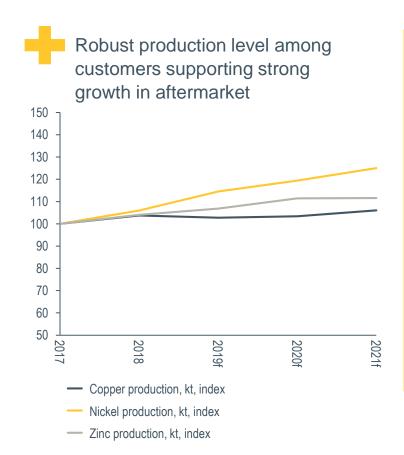
Goals	Description		2015 - 2018	Sept. 2019*
Growth	Annual revenue growth of 8% over a business cycle	Compound annual growth rate	10%	14%
Profitability	Industry-best operating margin, with strong resilience over the cycle	Average operating margin	18.3%	20.1%
Capital efficiency	Improve capital efficiency and resilience. Investments and acquisitions shall create value	Average ROCE	25.7%	29.5%
Capital structure	Have an efficient capital structure and have the flexibility to make selective acquisitions. The goal is to maintain an investment grade rating	Rating BBB+ with a stable outlook		
Dividend policy	Provide long-term stable and rising dividends to its shareholders. The dividend should correspond to 50% of net profit over the cycle	Dividend for 2018 corresponds to 47% of net profit		

*12 months until September 2019, reported



Uncertainty weighs on near-term robust market







Strong customer focus for improved productivity – leading to strong growth in connectivity and automation

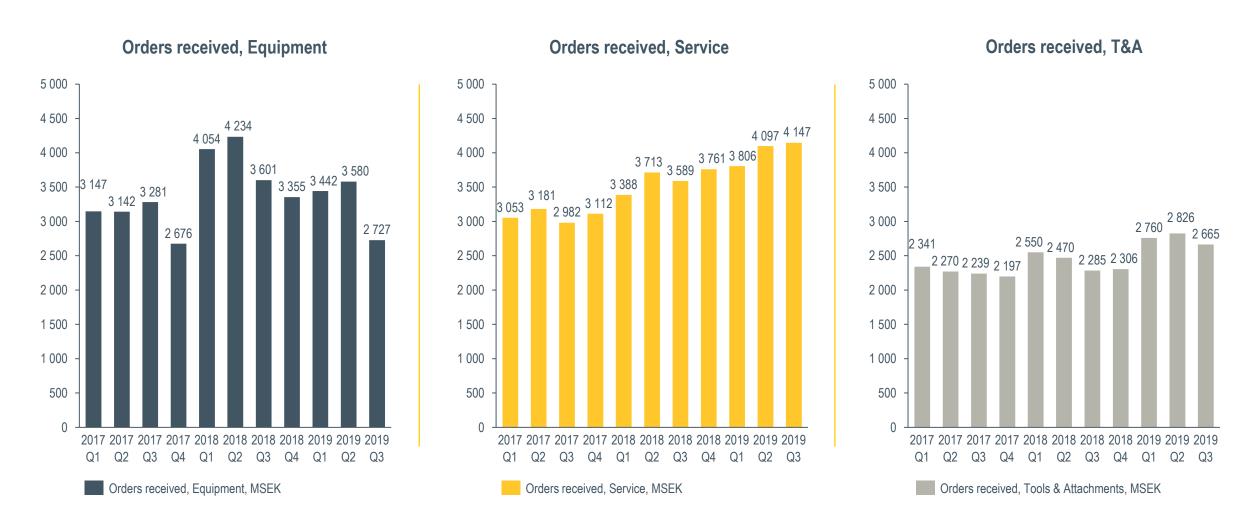
Global uncertainty increases cautiousness and leads to delayed projects

Actions to improve our efficiency and resilience

Citi: 4Q 2019 Commodities Market Outlook

Softer equipment demand, strong aftermarket





Near-term demand expectations Epiroc Q3 Outlook

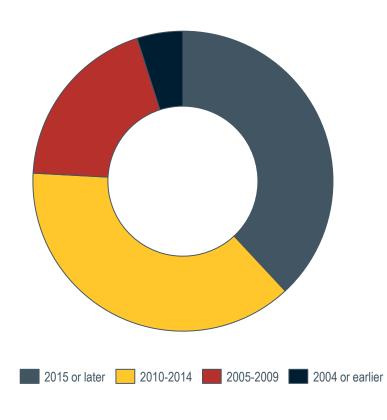
"In the near-term, we expect that the demand will remain largely at the level seen in the third quarter. That said, the economic environment continues to be uncertain."



Medium term - replacement demand



Equipment fleet, by year of commissioning



- 24% of the equipment is older than 10 years
- The average age is about 7 years
- Utilization/running hours, maintenance, midlife services, etc. impact the condition of the machines
 - Average age and running hours vs. expectancy higher for underground equipment

Data based on orginal commissioning date 25

Long term market dynamics attractive!

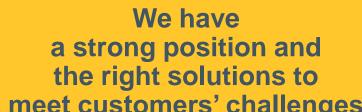


A growing world...

Increases the underlying need for infrastructure and minerals

... with increasing challenges to meet the demand... Driving cost of hard rock excavation

...and strong focus on safety and sustainability



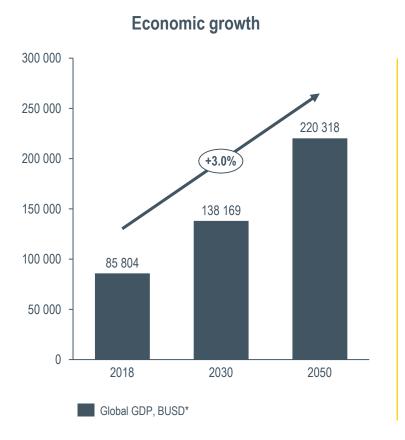
Safe and sustainable solutions, increased productivity and lower total cost of ownership

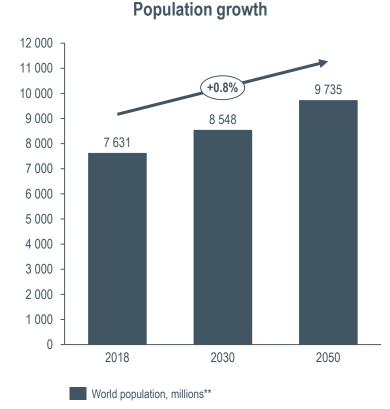


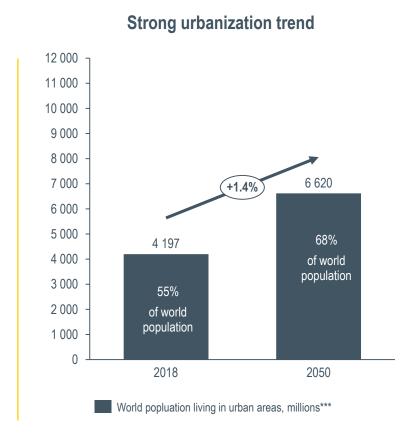
A growing world... (1/4)



Increases the underlying need for infrastructure and minerals







^{*} OECD 2018 - Economic Outlook No 103 - https://stats.oecd.org/Index.aspx?DataSetCode=E0103 LTB

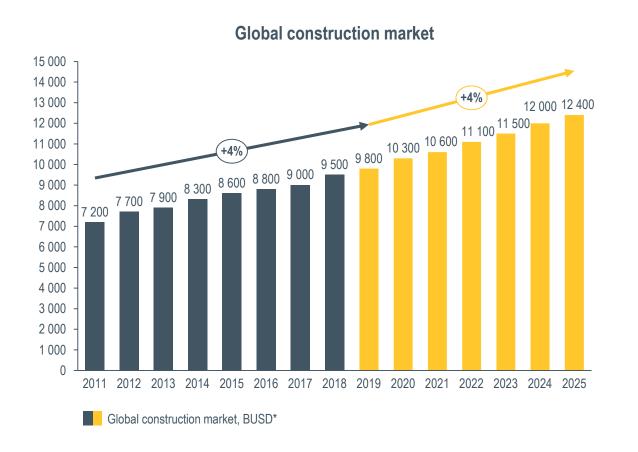
^{**} United Nations 2019: https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf

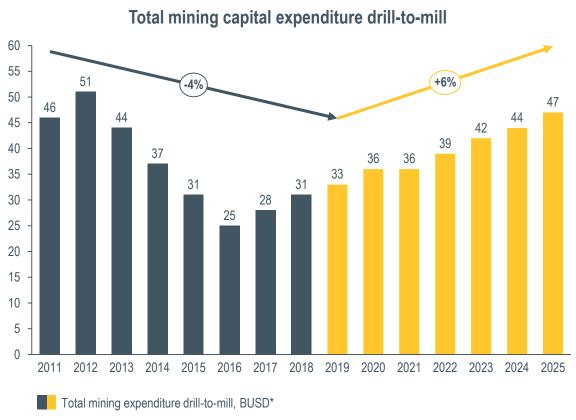
^{***} United Nations 2018 - https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html

A growing world... (2/4)



Increases the underlying need for infrastructure and minerals

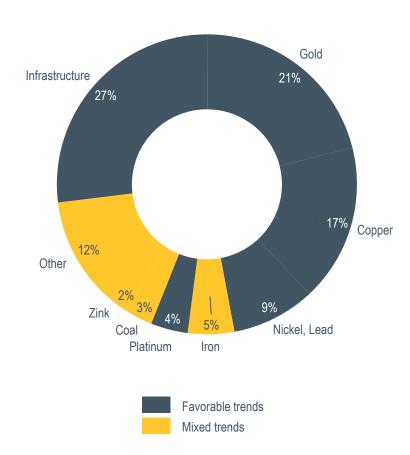




A growing world... (3/4)



Favorable hard rock exposure





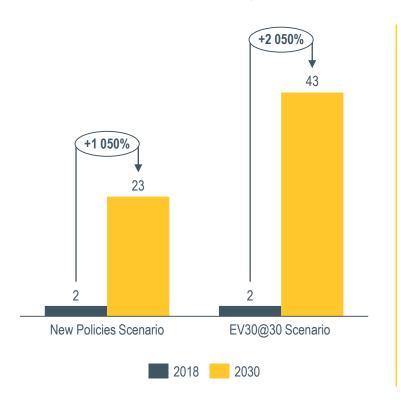
Estimated exposure of revenues in 2018

A growing world... (3/4)

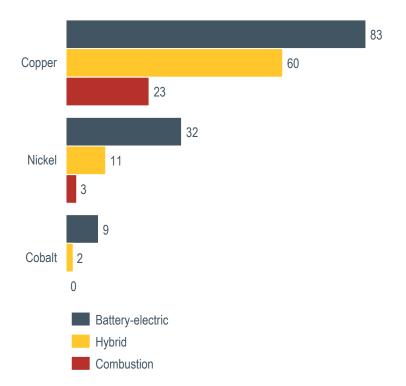


Example: Electrification driving metal demand

Electric cars sold annually, millions



Metal used per car, kg



Assuming that 30% of all cars sold in 2030 are electric:

- The demand for **copper** would increase by an additional **10%**
- The demand for nickel would increase by an additional 40%
- This is only for the cars. Network grids, chargers etc. are not included.

... with increasing challenges to meet the demand... (1/2)



Customers meeting productivity and complexity challenges

Average overall equipment effectiveness in different industries, % Underground mining 29 Open pit mining 38 Crushing & grinding 70 Oil & Gas 88 90 Oil refining 92

Strong focus on productivity

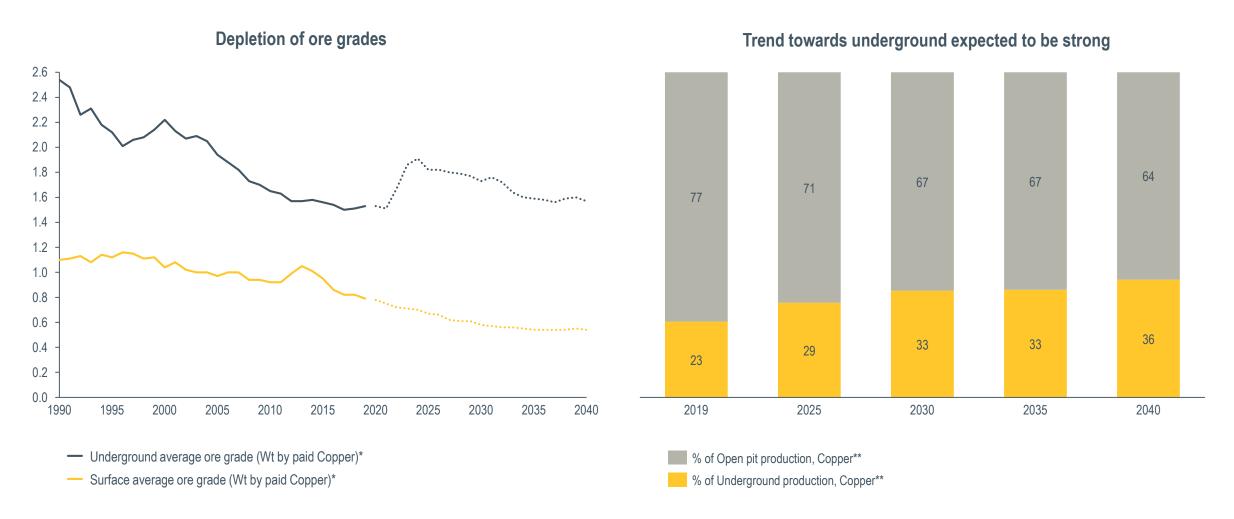


— MineLens Productivity Index**

... with increasing challenges to meet the demand... (2/2)



Increasing cost of hard rock excavation



^{*}The graph was obtained from Wood Mackenzie's Copper mine cost service, a product of Wood Mackenzie
**McKinsey and MineLens, 2018

...and strong focus on safety and sustainability

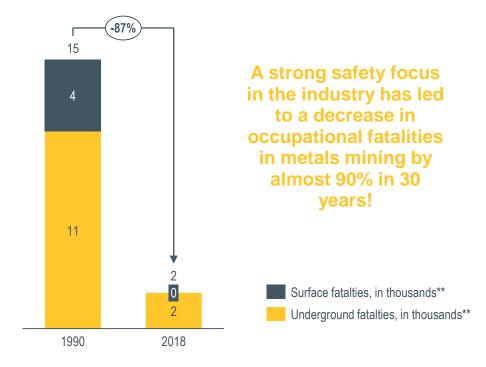


Customer's taking on the sustainability challenge*

	Category	Key subcategories
Social impact	Health and safety	Reduce number of casualties
		Reduce number of injuries
		Reduce illness
	Quality of life	Reduce visual impact on landscape
		Reduce vibration
		Reduce noise
	Socio-economic	Create jobs
		Educate and develop skills
		Create sustainable infrastructure and housing
Environmental impact	Air	Reduce emissions
		Reduce mining or blasting dust
		Reduce road dust
		Reduce acid mine drainage
	Water	Minimize shortage
		Improve sedimentation
		Reduce waste
	Land	Protect biodiversity
		Reduce heavy metals spilage

Why do we always put safety first?

Because our equipment and solutions make a difference!



^{*}ATKearney - https://www.atkearney.fr/documents/20152/434588/Mining%2BTakes%2Bon%2Bthe%2BSustainability%2BChallenge.pdf/f002cd17-aafd-33a8-9372-9e40c849db84?t=1520575913266

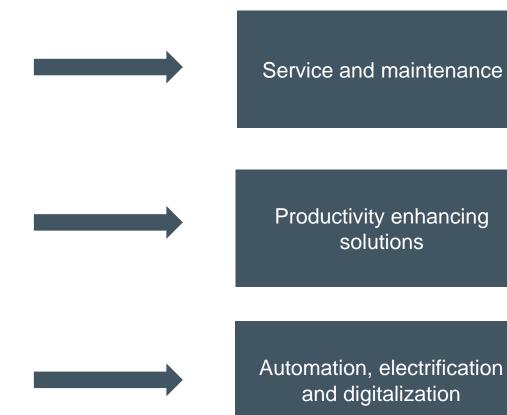
^{**} Centers for Disease Control and Prevention - https://wwwn.cdc.gov/NIOSH-Mining/MMWC/Fatality/NumberAndRate?StartYear=1983&EndYear=2018&SelectedOperatorType=0&SelectedMineType=0&SelectedCommodity=2

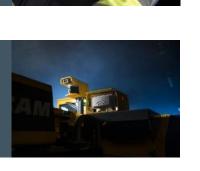
The right solutions to meet customers' challenges



We have a strong position and the right solutions to meet customers' challenges

Safe and sustainable solutions, increased productivity and lower total cost of ownership





Video

Smart, safe, seamless







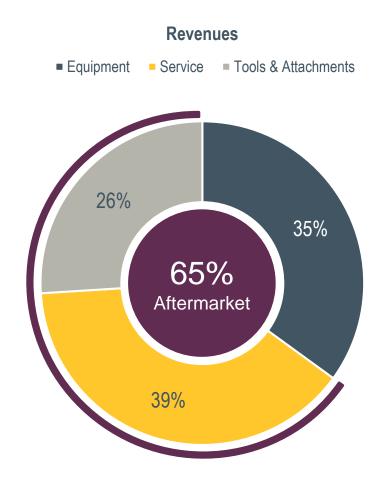
Strong and resilient aftermarket business

Helena Hedblom, Senior Executive Vice President, Mining & Infrastructure



High proportion of recurring business



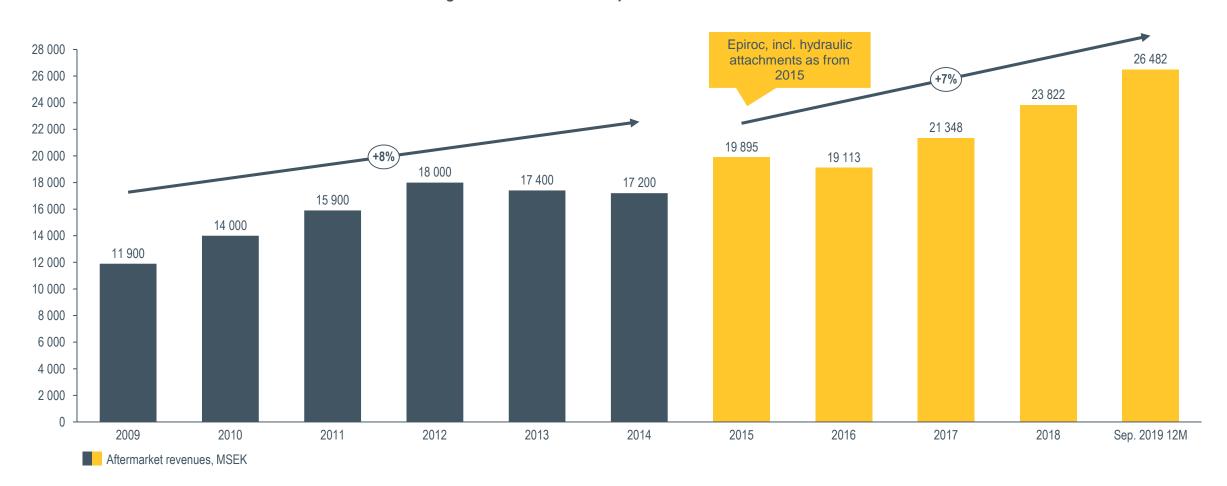




Solid growth in the aftermarket business



Strong aftermarket business provides resilience





Trends and customer values in aftermarket



- Safety and sustainability
- Productivity and efficiency
- Total Cost of Ownership (TCO)
- Connectivity digitalization





Broad aftermarket offering



 Service agreements and audits Supply of spare parts and components Midlife services, training, and other service products Rock drilling tools

 Hydraulic attachments







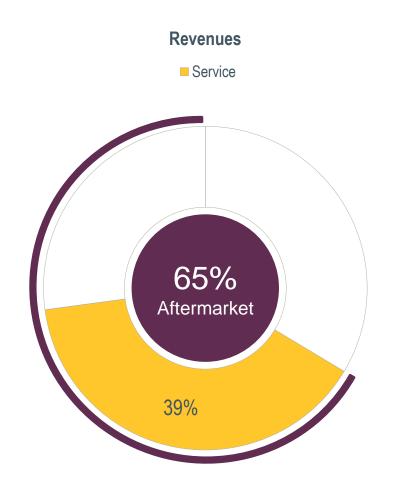


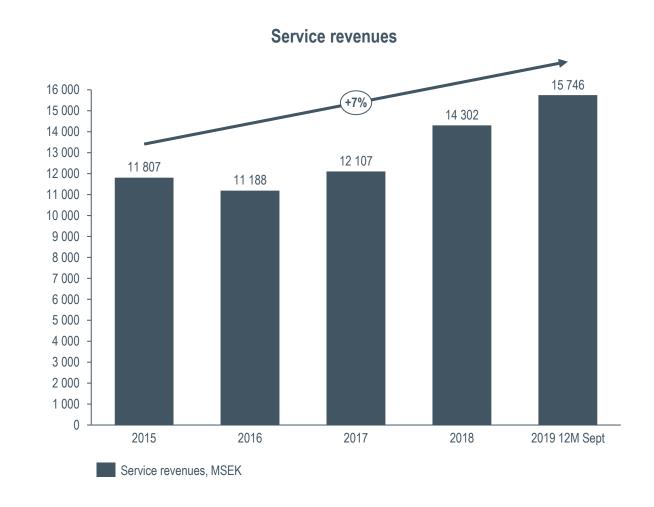
Service 39%

Tools & Attachments 26%

A strong service business







12 months until September 2019 44

Presence is vital and a competitive advantage!

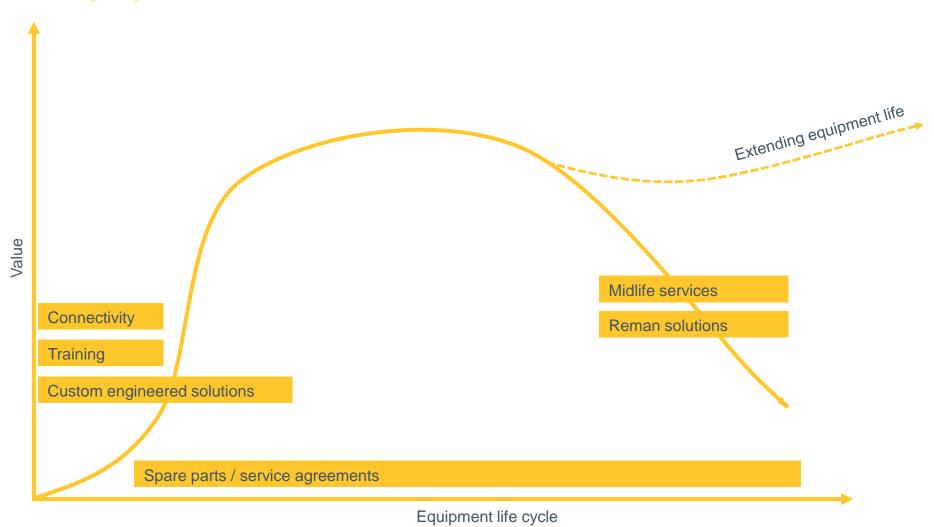




Equipment life cycle and service offerings



Service – value proposition



Examples from our broad service offering



Replacement parts and kits



Service agreements and audits



Reman solutions



Midlife services



Custom engineered solutions



Training products



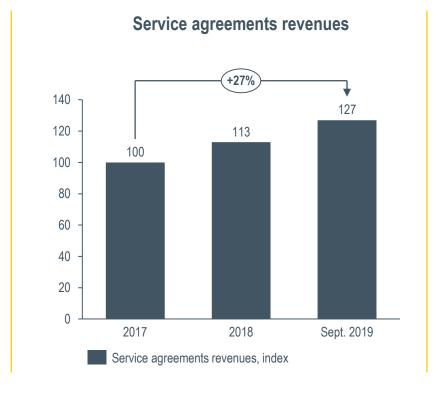
Telematics (connectivity)

Service agreements



From parts provider to partner

- Clear service value proposition
- Service agreements for different demands
- Lifecycle management



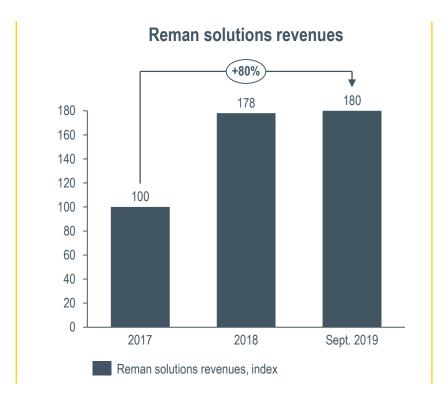


Reman solutions



New lease on life

- Sustainable remanufactured components
- Original Equipment
 Manufacturer (OEM) certified
 quality



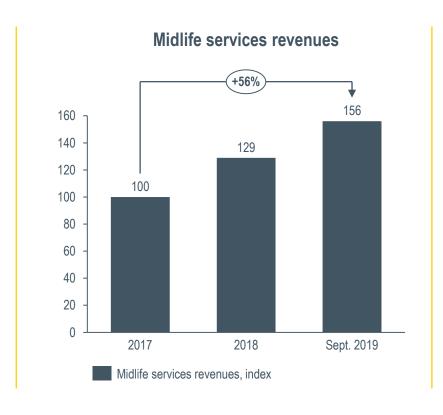


Midlife services



Extend equipment life

 Replacing old with new components, returning equipment to maximum productivity and operating efficiency at a fraction of the cost of a new machine.





Custom engineered solutions



Engineered to meet individual needs

- More than spare parts, less than a machine
- The solution is designed to match the machine configuration, and to incorporate the latest version of components to ensure both safety and productivity

Custom engineered solutions revenues 250 200 150 100 2017 2018 Sept. 2019 Custom engineered solutions revenues, index

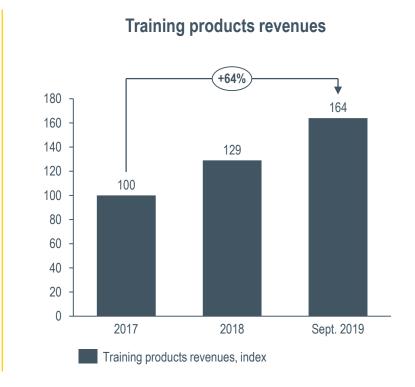


Training products



A safe way to generate value

 Training tools that raise operators' skills, increase their ability to master the machine and drilling expertise, right from the start.

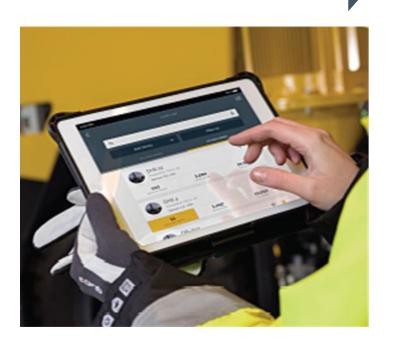




Connectivity – an enabler for service transformation



Connectivity



Data analysis



Data driven service



Seamless interaction

Proactively understand needs for service, spare parts and consumables



Epiroc proactively understands the needs for service, spare parts and consumables. Customers are empowered with easy and context-aware ability to find the products and services relevant to their situation.

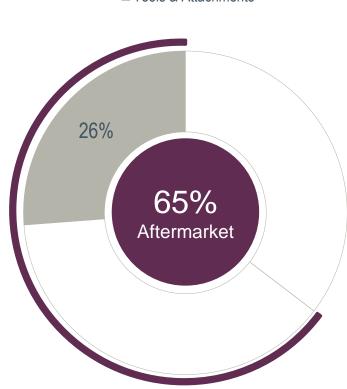
Whether you are supported automatically, remotely or on-site, the solution allows you to request and follow up on your support needs, ensuring you stay operational

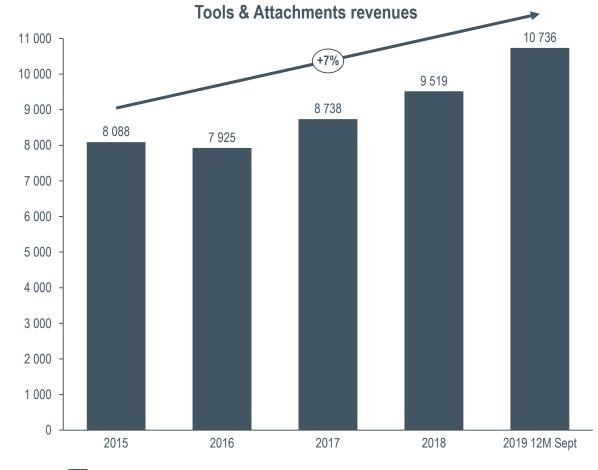
Tools & Attachments











Tools & Attachments revenues, MSEK

About Rock Drilling Tools



Summary

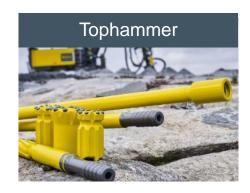
- Key contribution to customer productivity total cost of operation
 - Invisible products that do the job
 - Presence and supply-chain key
- Complementing Epiroc equipment innovation
- Resilient business
- 70% of sales through some level of customer agreements
- Raw material to finished goods



Redefining the offering in Rock Drilling Tools



Grow and acquire in core businesses











Divest / exit non-core businesses





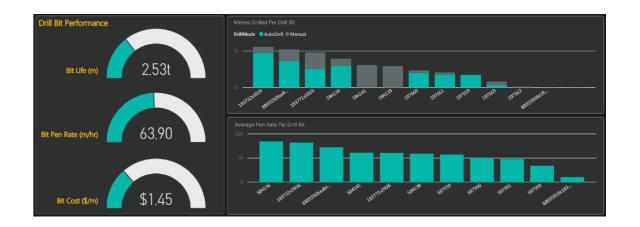


Innovation driving the business forward



Digitalization

- 6th Sense
- Seamless view of rock drilling tools performance
- Co-operation with capital equipment divisions to enable real-time performance monitoring
- Smart Inventory Management
- Cost per measure contracts
 - Daily tracking and reporting on performance of consumables by rig and application can be digitalized







Innovation driving the business forward



Product development

- Power Bit Underground
 - Faster penetration rate
 - 37% longer service life
- New M-series DTH hammers
 - The fastest DTH hammer ever with a unique piston design allows much higher impact frequency. This means also lower fuel consumption and lower running costs.



About Hydraulic Attachments



Key summary

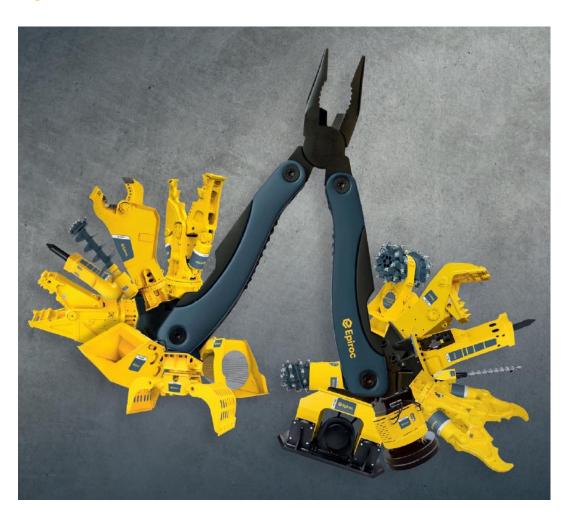
- Premium hydraulic attachment tools for demolition, recycling, mining and quarrying
- Key contribution to customer productivity
- Mainly towards infrastructure
- Distributor sales
 - Synergies with Epiroc market presence and expertise



We make a multi-tool out of our customers' carriers

Epiroc

Hydraulic Attachment Tools



Breakers

Drum Cutters



Shears: Steel Cutters, Concrete Busters, Combi Cutters



Bulk Pulverizer

Demolition Pulverizer



Grapples

Bucket Crushers / Screeners



Magnets

Compactors





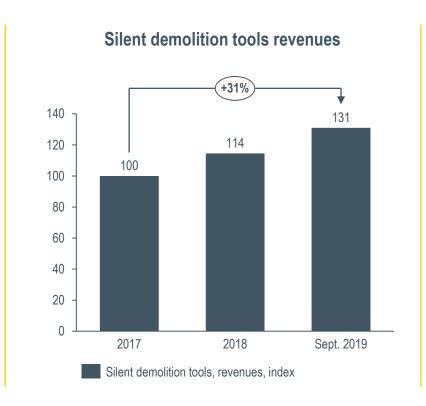
Related service & aftermarket business



Silent demolition tools



 The silent demolition product range has been developed and the offering is broader





Hydraulic attachment aftermarket



 Strong focus on the hydraulic attachments service and consumables business

Hydraulic attachment aftermarket revenues Sept. 2019 Hydraulic attachment aftermarket, revenues, index









Mergers and Acquisitions

Martin Hjerpe, Senior Vice President M&A and Strategy



Continuous focus on acquisitions







Adding capability through M&A: Key criteria





"Is this target attractive and well-performing in itself?"



Strategic fit and synergies with Epiroc

"Does it support a core business strategy of Epiroc?"



Potential to become or remain number 1 or 2

"Does it provide a path to be undisputed market leader?"

Expansion logic with different strategic rationale



Outside core

"New products to new customers"

Adjacent to core

"Broaden our offering to existing customers"

Core markets

"Consolidate and gain scale"





Automation, digitalization and electrification for underground applications

Sami Niiranen, President, Underground Rock Excavation Division



Sami Niiranen – President Underground Rock Excavation



Mining Engineer, Helsinki, Finland



A leader in automation, digitalization and electrification



Timeline for underground equipment

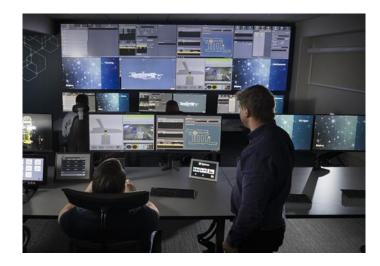
-2010

- Rig Control System (RCS)
- Single-machine automation
- Electric-hydraulic drilling equipment
- Data collection



2010 - 2020

- Increased demand for automation
- Digitalization creates opportunities
- Electrification strategies
- Partnerships and collaboration



2020 -

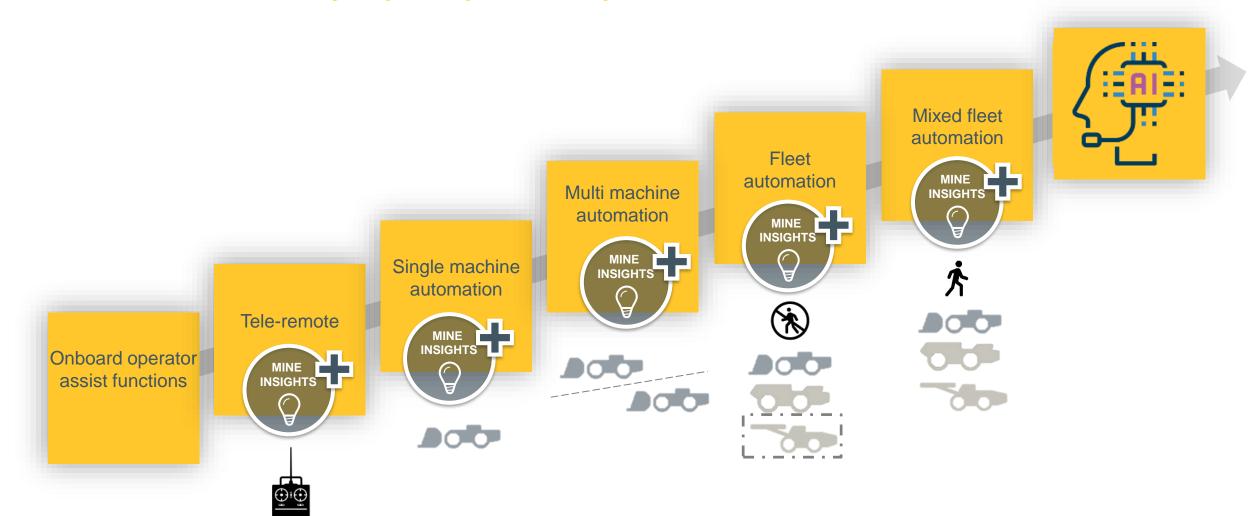
- Interoperability (mixed fleet)
- Information management
- Serial production of battery vehicles
- New business models



Increasing levels of machine automation



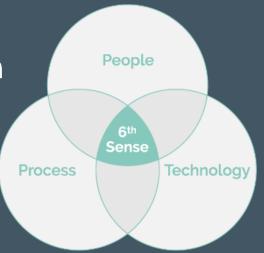
Innovation continuously improve productivity for our customers





6th Sense is the Epiroc way to optimize our customers' value chain through automation, system integration and information management

- enabling a smart, safe, seamless operation



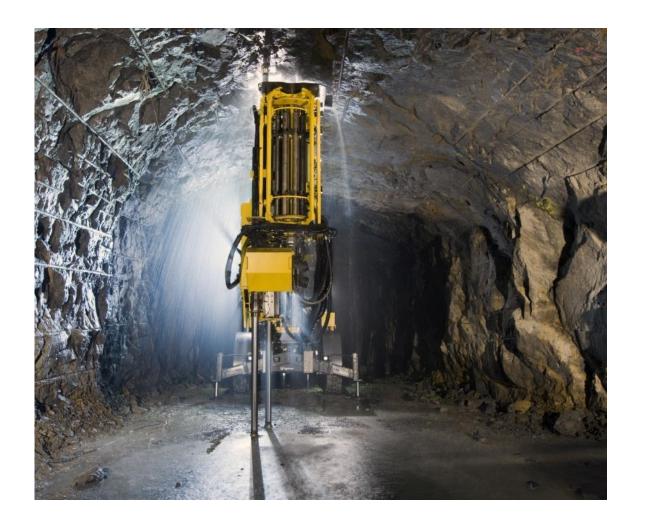


Leading solution for production drilling automation



6th Sense Production solution – Apatit JSC

- Teleremote, ABC Total and Certiq telematics for remote control and monitoring of production drilling
 - One operator controls six production drill rigs
 - Remote transmission of drill plans
 - Automatic drilling
- Improved safety
- Increased productivity by 20%





Epiroc sets the standard of loader automation

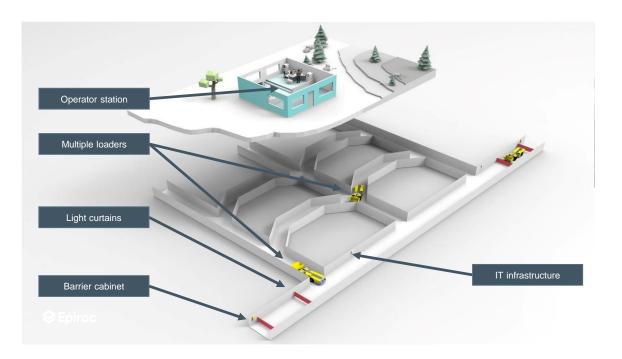


Highest level of loader automation



6th Sense Transport solution – Scooptram Automation Total

- Automation for multiple loaders, operated/monitored from control room
- Safer work environment by removing people from hazardous areas
- Higher fleet performance through automated traffic control
- Optimized Load-Haul-Dump cycle with autonomous functions





Information Management



6th Sense Mine Management Solution - Pucobre

- Information management and system integration of Pucobre's existing systems
- Planning and dispatching system for Transport, Production and Development
- Epiroc Activity Planner and Mobilaris platform with Scheduler and Operator Client
- Collaboration between Pucobre, Epiroc and Mobilaris
- Support and maintenance agreement







Battery-electric vehicles



- Benefits include improved health and safety, reduced emissions, lower total cost of operation and higher productivity
- 100 000 operating hours accumulated to date
- >70% reduction on energy consumption, mainly from reduced ventilation
- 10% increased productivity for Minetruck MT42
 Battery with faster ramp cycle time



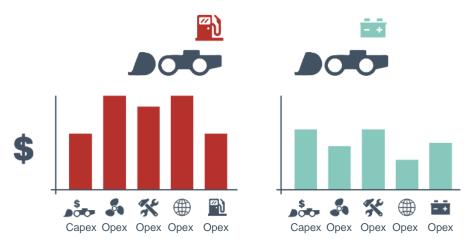
Sustainable Intelligent Mining Systems (SIMS) project is part of Horizon 2020, the European Union's most extensive research and innovation program. Epiroc is coordinator.

Improved stability with Battery as a Service



Adding another aftermarket revenue stream

- Epiroc will take full responsibility for the batteries, including maintenance, technology upgrades, and recycling
- Enables close collaboration with customers and ancillary business
- Full access to performance information and other data → competitive advantage







The future is electric

Our ambition is to produce the world's greenest machines, using the world's greenest cells, producing the world's greenest metals, doing our best for our planet





Module





Sub pack











Automation and information management for surface applications

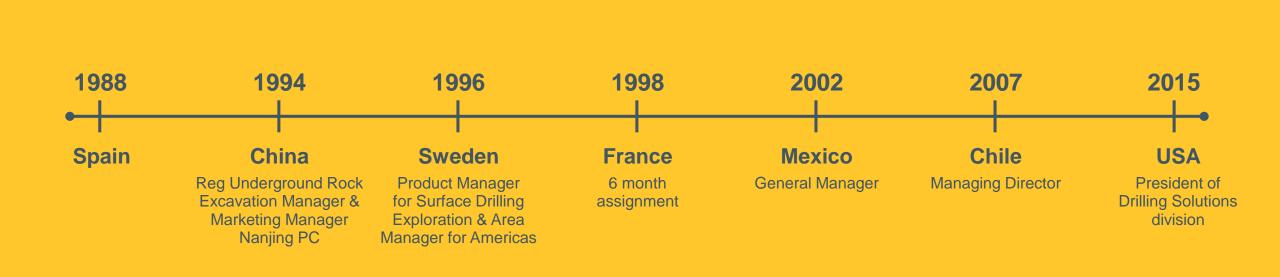
Jose Manuel Sanchez, President, Drilling Solutions



Jose M Sanchez – President Drilling Solutions



MSc Mining from Madrid School of Mines, Master's Degree in Marketing & Sales Management



Distinctions:

- Chairman of Epiroc intercompany Legal entities in the Americas
- Board member of ASIM (party owned by Epiroc Drilling Solutions)
- Medal of Honor as Engineer of the year 2016 by the Mining Engineers Association of Central Spain

Envision

Future mine







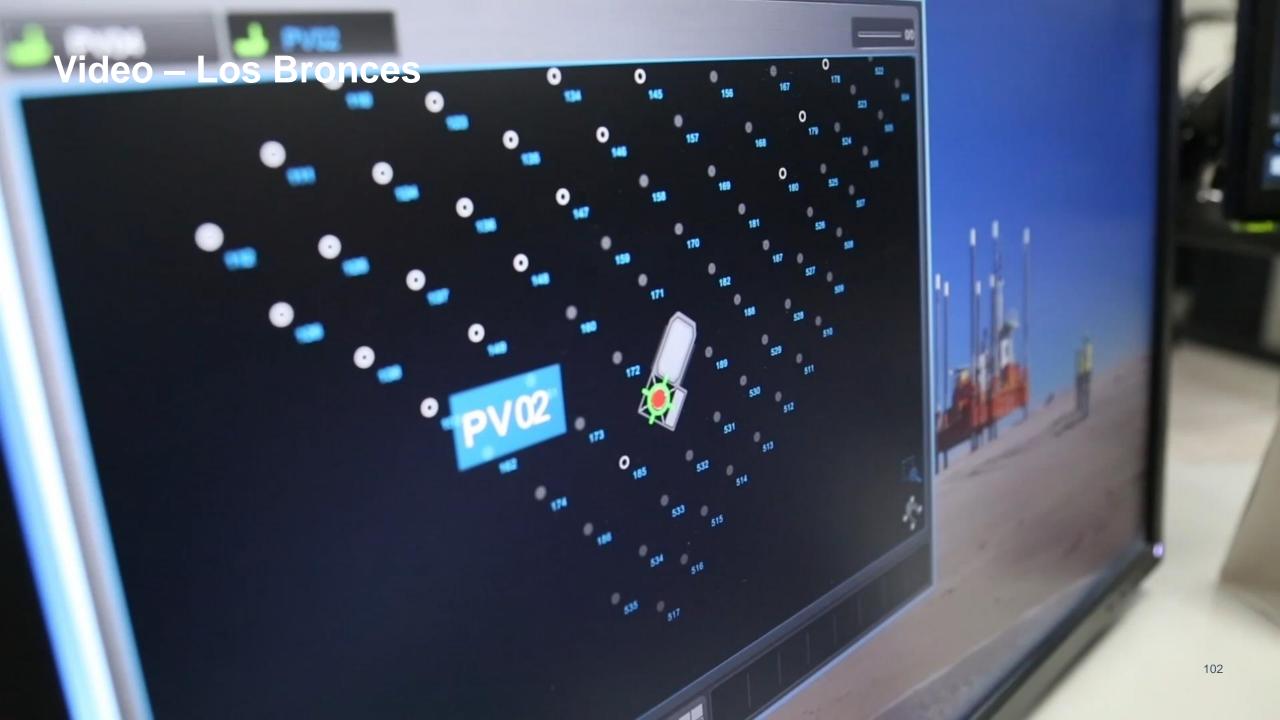






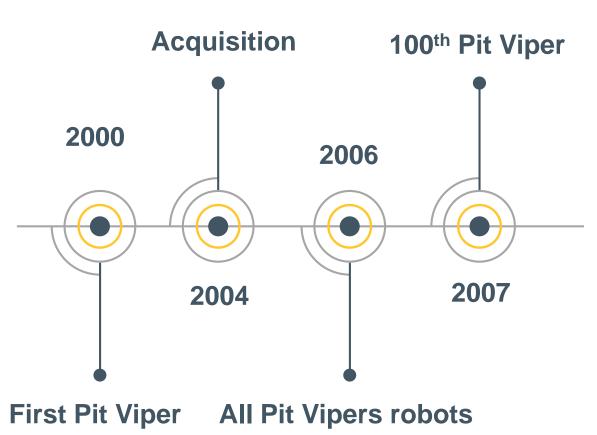






Building the legacy

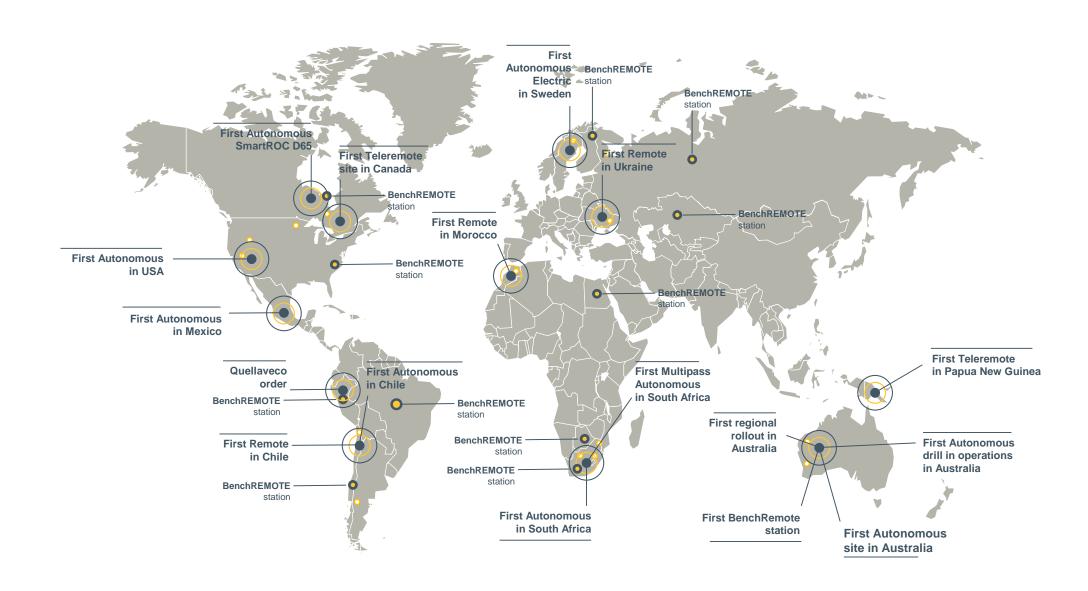






What's on today





Continuing to build the legacy



Forward Looking

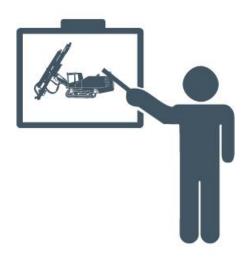
 AGILE methodology for faster time to market



FAST, Field Automation
 Service Team, to ensure
 successful customer roll outs

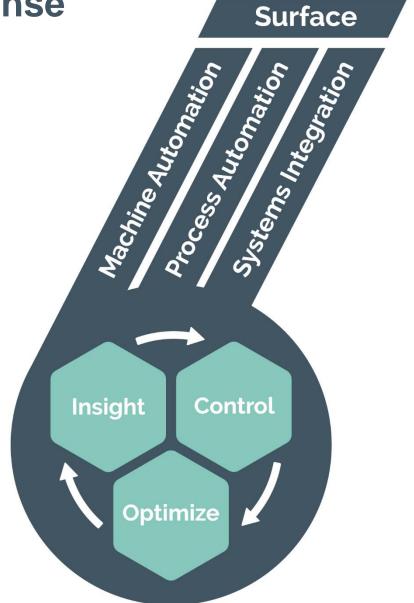


 Global competence with Surface Automation Center













Strong and proven operating model – the financials

Anders Lindén, CFO



Strong and proven operating model



Focus and agility

Focused and decentralized business



Quick and efficient decision-making

High degree of direct sales and services



~85% direct sales

Strong services business



Aftermarket 65% of revenues

Flexible manufacturing philosophy



75% of product cost for equipment is purchased

Sharp focus on innovation

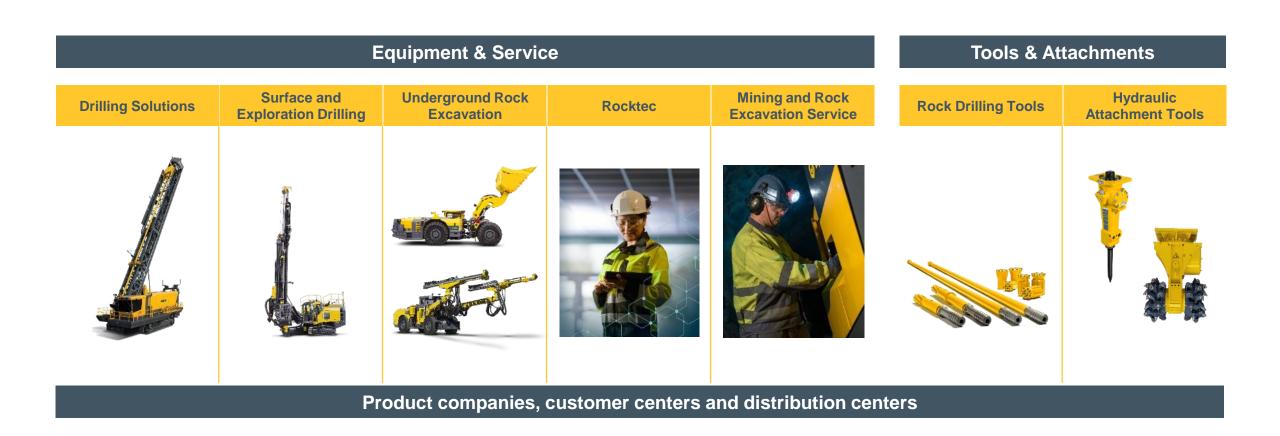


Leadership in automation, digitalization and battery

Focused and decentralized businesses



2 segments and 7 divisions



Decentralization in our DNA

Advantages

- Entrepreneurial organization
- Quick decision making and adoption to shifting environment
- Strong ownership and commitment to create results
- Creates strong internal pipeline of good leaders

Challenges

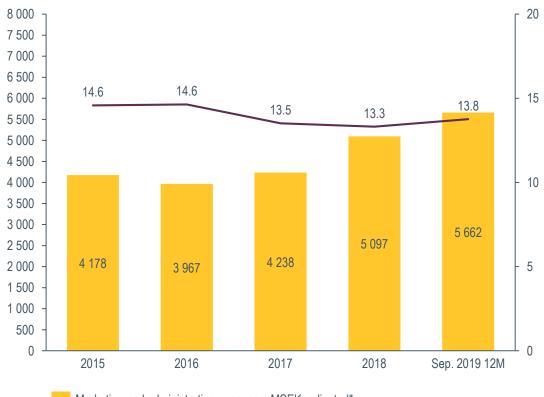
- Governance model important
- Need clear communication on strategy to get "buy-in"
- Courageous leaders that dare taking decisions
- Inefficiencies due to "double positions"



Efficiency potential







Marketing and administration expenses, MSEK, adjusted*

— in % of revenues



^{*} Adjusted for change in provision for long-term incentive programs and restructuring costs of MSEK 62 in Q3 2019

Flexible manufacturing philosophy





Did you know?
75% of product cost for equipment is purchased

We only produce on orders (equipment)

which enables quick and smooth adjustments in manufacturing levels in ups and downs

We only produce core-components

to safeguard a flexible manufacturing set-up whilst protecting our innovations

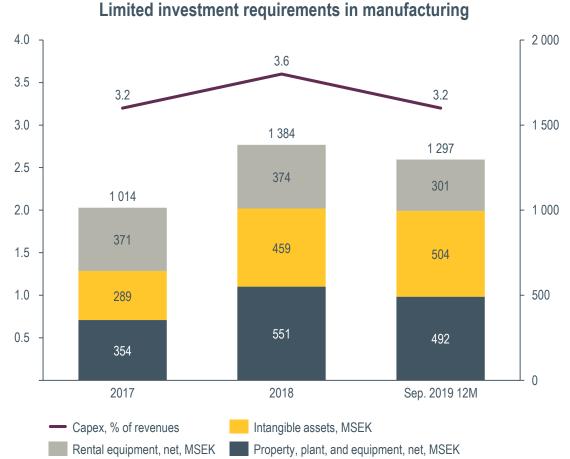
Example Boomer:



Benefits of a flexible manufacturing philosophy







*Not adjusted for IFRS 16

Core component manufacturing and assembly







Presence is more important than manufacturing footprint



Direct sales also implies "higher" working capital



Net working capital





Making Epiroc's supply chain a competitive advantage

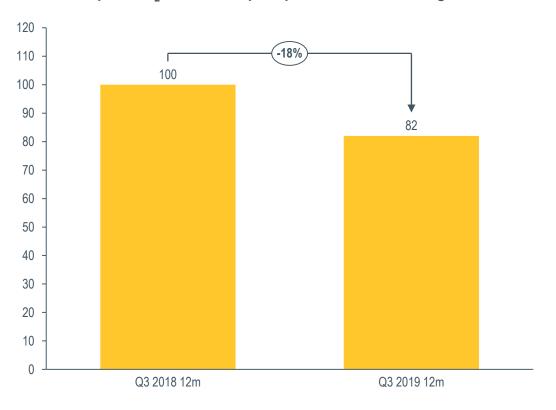
- Initiated in Q1 2018
- Parts and consumables
- Gradual improvements expected until 2021
- Availability improved with more than 4 percentage points YTD
- Lower transport costs
- Reduced transport emissions

CO₂ emissions decreasing

Epiroc

Supply-chain improvement program

Transport CO₂ emission, spare parts and rock drilling tools, tons



Transport CO2 emission, spare parts and rock drilling tools, tons

An absolute CO₂ saving of 19 505* ton translates into:

- Greenhouse gas emissions from 4 141 passenger vehicles driven for one year
- CO₂ emissions from 2 336 homes' electricity use for one year
- Greenhouse gas emissions avoided by four wind turbines running for a year
- Carbon sequestered by 322 519 tree seedlings grown for 10 years



Direct sales = Long lasting customer relationships



We are always close to our customers

We aim to solve our customers challenges

We innovate and sell productivity solutions

We produce once we get the order

We can offer financing



Strong and profitable aftermarket business



A broad global aftermarket offering...

- Spare parts
- Service agreements, incl. labor
- Consumables
- Hydraulic attachments

... representing a big proportion of revenues...

65%

... with continuous improvements for increased profitability

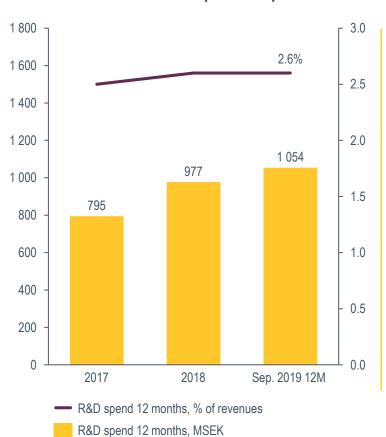
- Increase efficiency and knowledge
 of service personnel
- New technical tools to enable more efficient operations
- Improved value proposition towards customer by differentiation

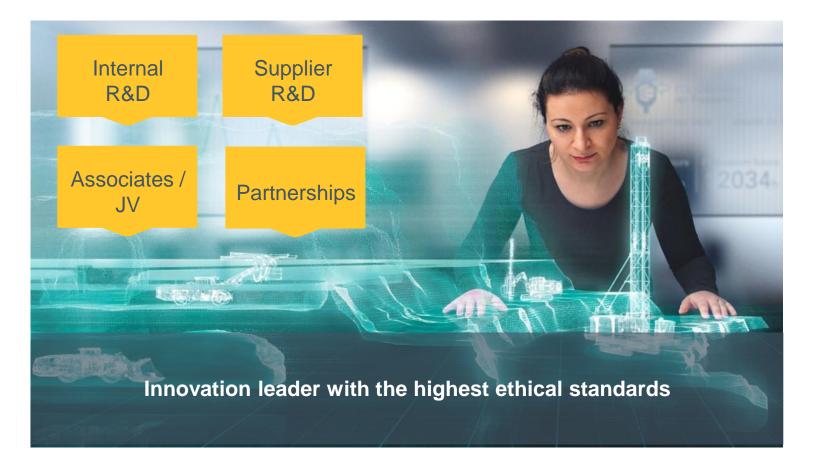
Sharp focus on innovation



Collaboration enables leverage on R&D

Research and development expenses





Video

Sustainable Underground Mining



Resilience!



Restructuring with limited restructuring costs

Restructuring cost, absolute and in % of revenues





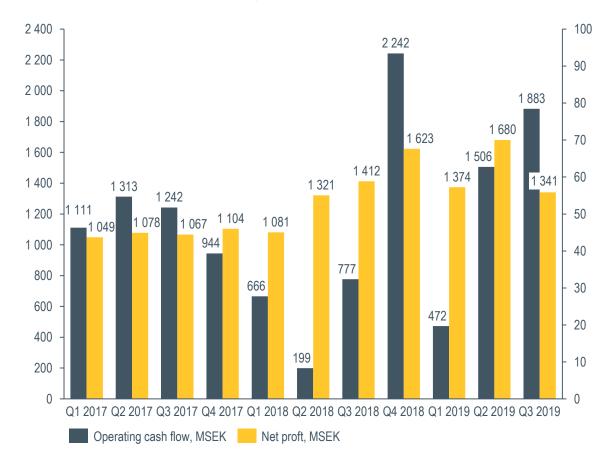
Let's talk about cash



Operating cash flow varies over the cycle

- Operating profit
- Working capital depending on cycle
- Capital expenditures at low levels
 - Rental equipment, net
 - Limited investments in other property, plant and equipment
 - Intangible assets mainly R&D and IT

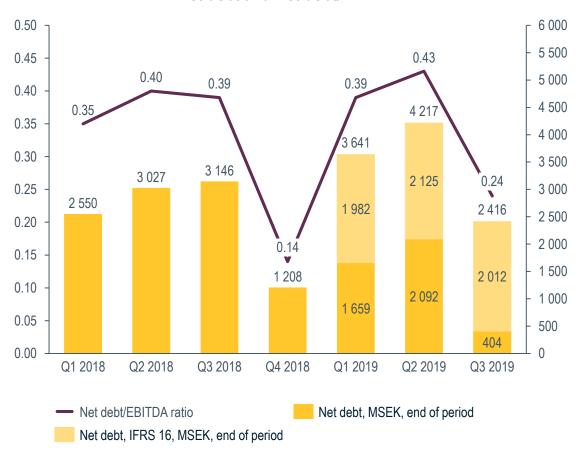
Operating cash flow and Net profit



Strong financial position







"

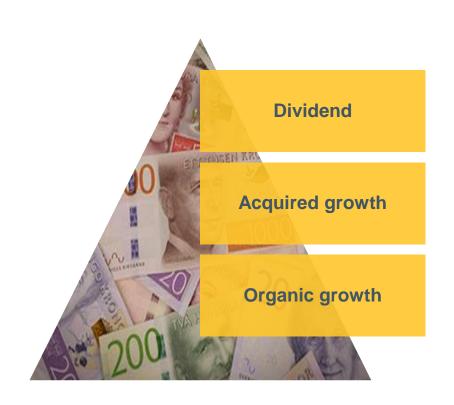
Epiroc is to have an efficient capital structure and have the flexibility to make selective acquisitions. The goal is to maintain an investment grade rating.

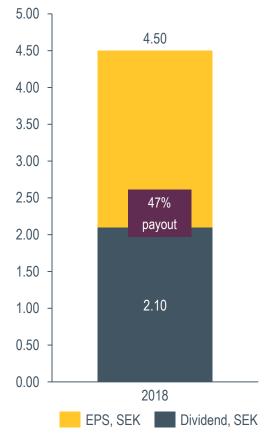
BBB+

Epiroc is assigned a BBB+ long-term issuer credit rating with a stable outlook

Capital allocation strategy







"

Epiroc's goal is to provide long-term stable and rising dividends.

The dividend should correspond to 50% of net profit over the cycle.

Epiroc's key strengths



Leading productivity partner in attractive niches

Strong and proven operating model

High and resilient aftermarket exposure

Driving the future in intelligent mining and infrastructure

History of value creation for all stakeholders





Q&A



United. Inspired.

Performance unites us, innovation inspires us, and commitment drives us to keep moving forward.

Count on Epiroc to deliver the solutions you need to succeed today and the technology to lead tomorrow.

epiroc.com



Epiroc

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