

An aerial photograph of a city street, showing buildings on either side and several cars parked or driving on the road. The image is used as a background for the presentation slide.

SSAB SmartSteel - Towards internet of materials

PIIA Summit 4 Oct 2018

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Solutions to today's challenges often have digital components

Dominant trends		
Shorter time to market	Production efficiency	Transparency
Value creation in networks	New business	Incumbents challenged
Emerging trends		

We decided to focus into three areas



Customer interaction

Expand digital service channels

Customer Portal

CRM - Salesforce

Marketing automation



Production & Operations

Digital insights and automation

Production digitalization

Software robotics



SSAB Offering

SmartSteel and new services

SmartSteel



Digital Customer Interaction

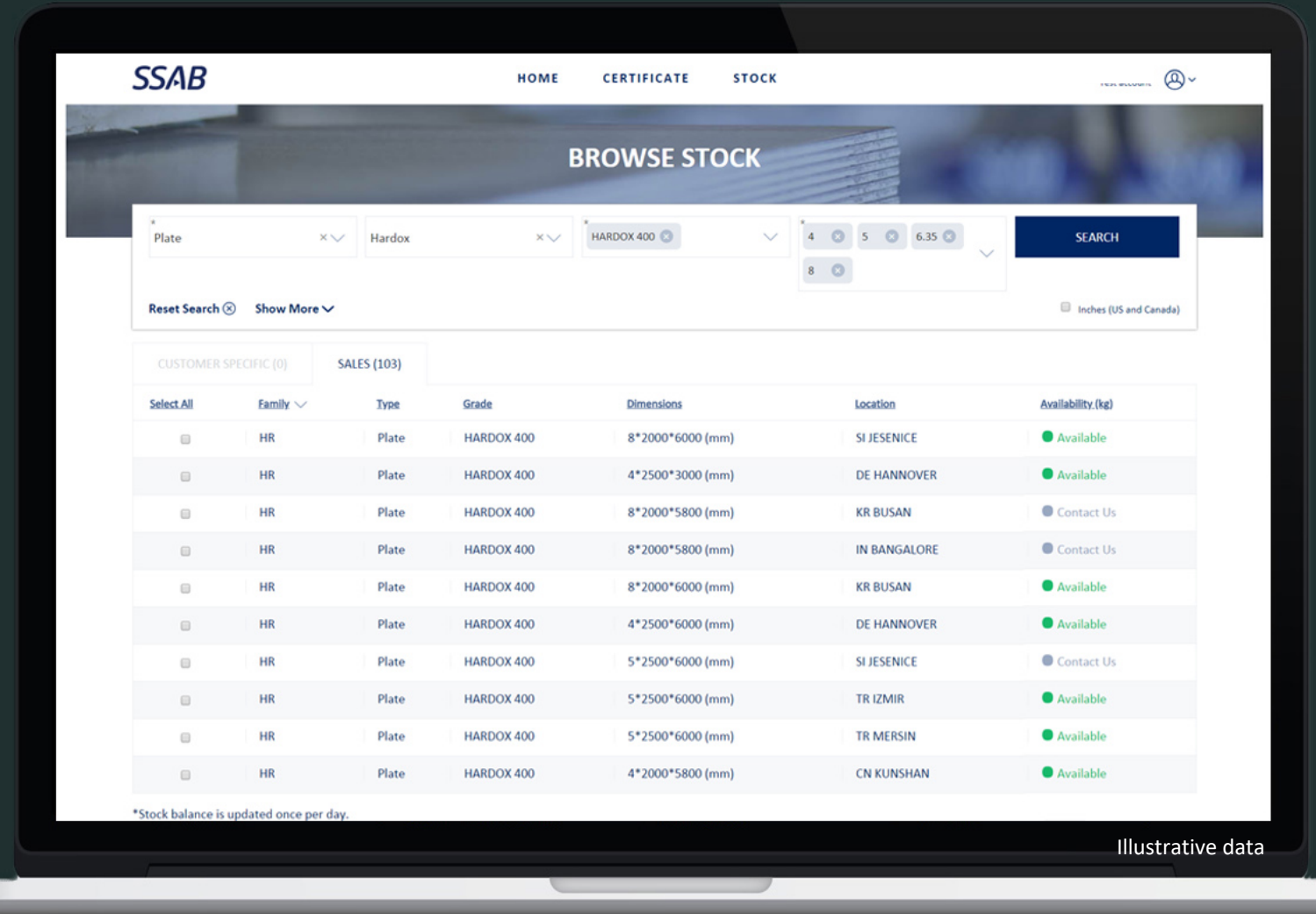




New customer portal being launched

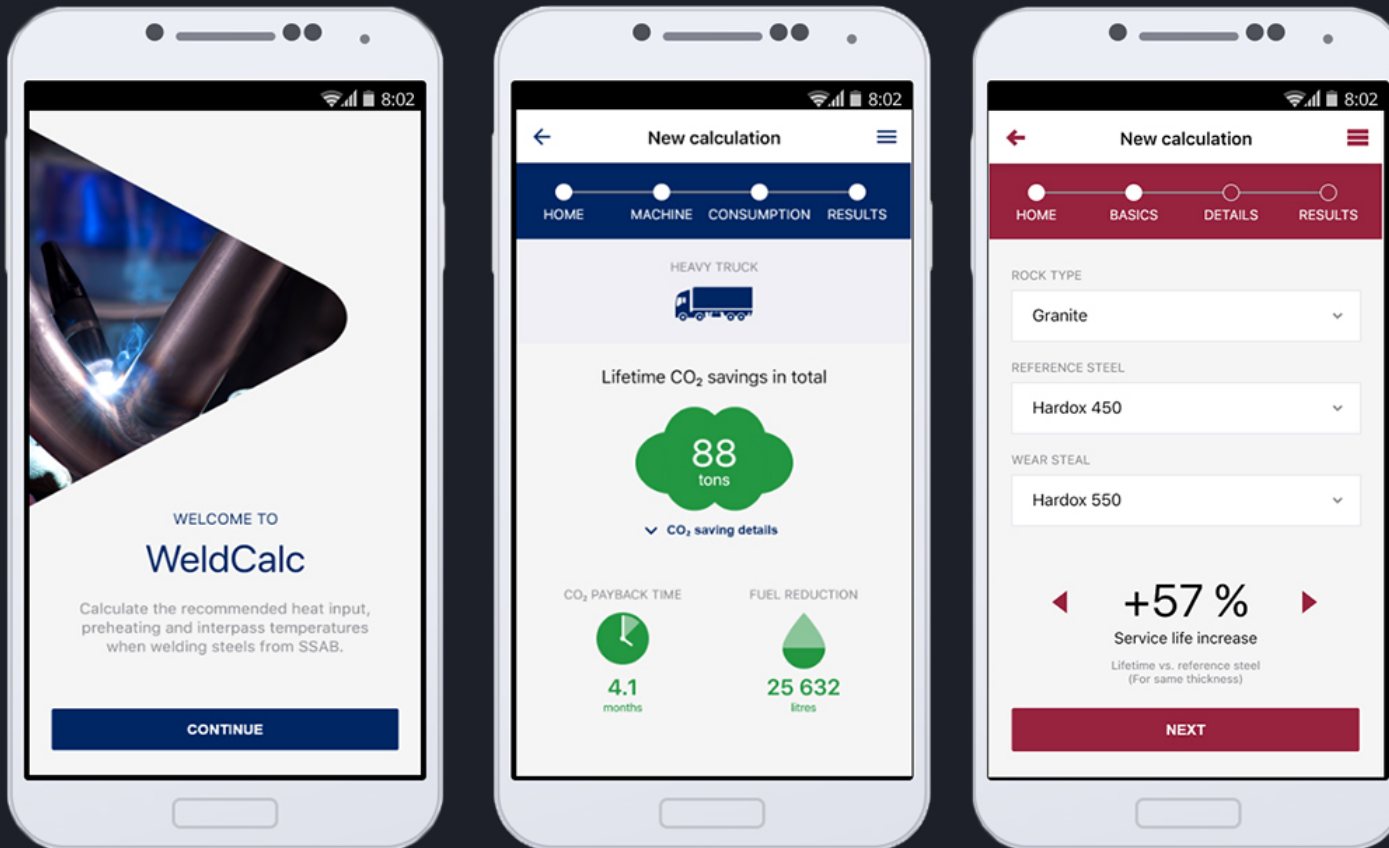
First release enables stock availability checks and material certificate downloading

New services being developed based on customer feedback





Mobile becomes a stronger service channel



Mobile application development roadmap

- ▶ WearCalc™
- ▶ SmartSteel
- ▶ WeldCalc™
- ▶ EcoUpgraded™
- ▶ BendCalc™
- ▶ WeldSelect™

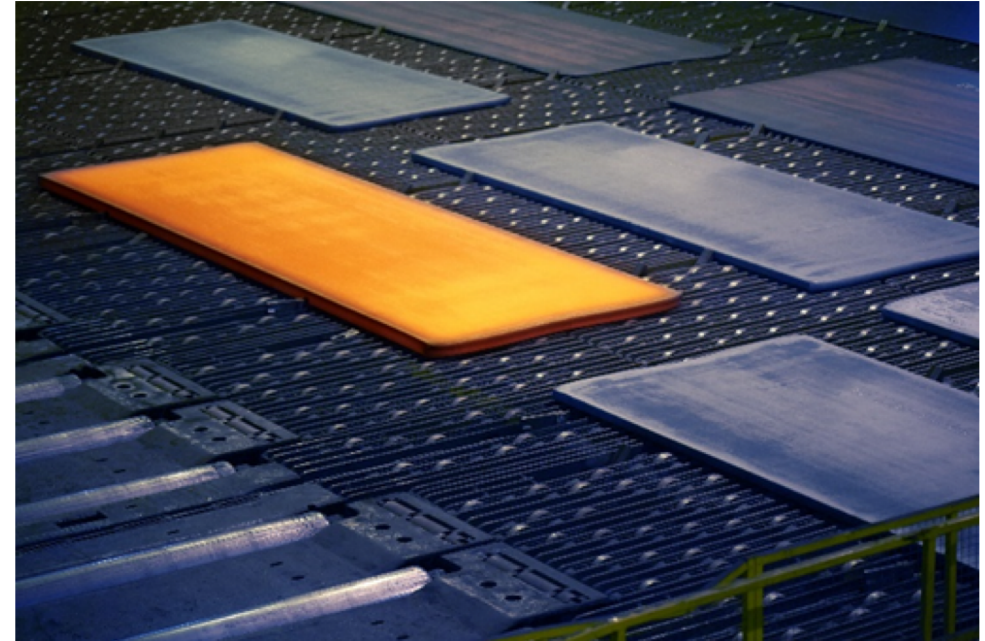


Production and processes



Production digitalization

- ▶ Focus in data management
- ▶ Priority for projects improving stability, quality management and safety
- ▶ R&D for e.g. AI use in process optimization





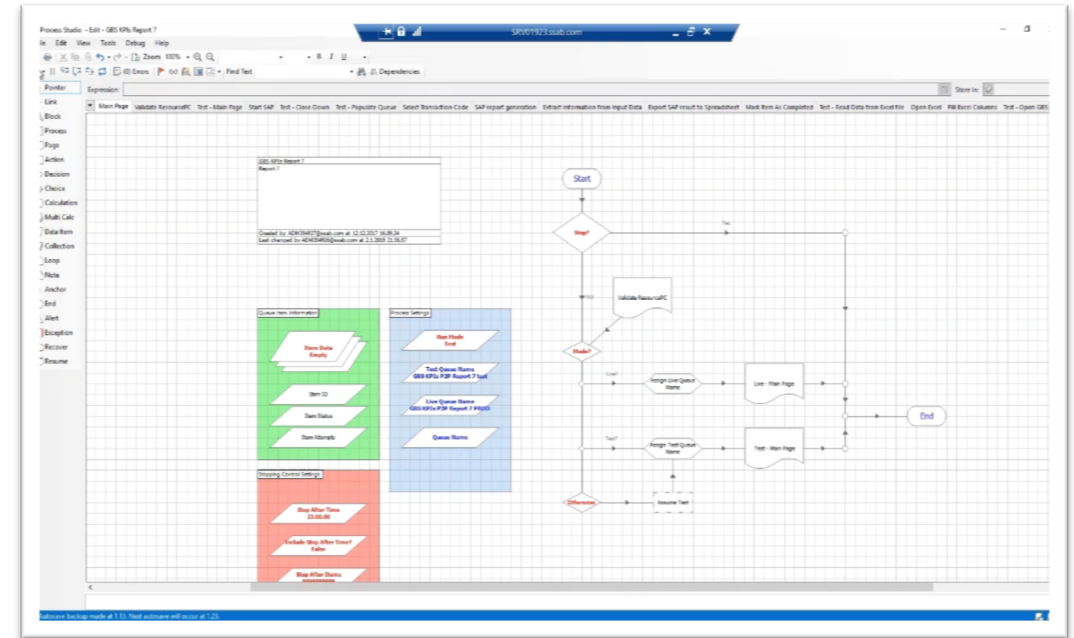
Predictive monitoring keeps coke elevator moving

- ▶ Remote monitoring of coke elevator using sensors and IoT
- ▶ Predictive maintenance and failure prevention
- ▶ Main benefits in operational safety and efficiency
- ▶ Process already avoided a potential breakdown

Software robots are automating our administrative processes



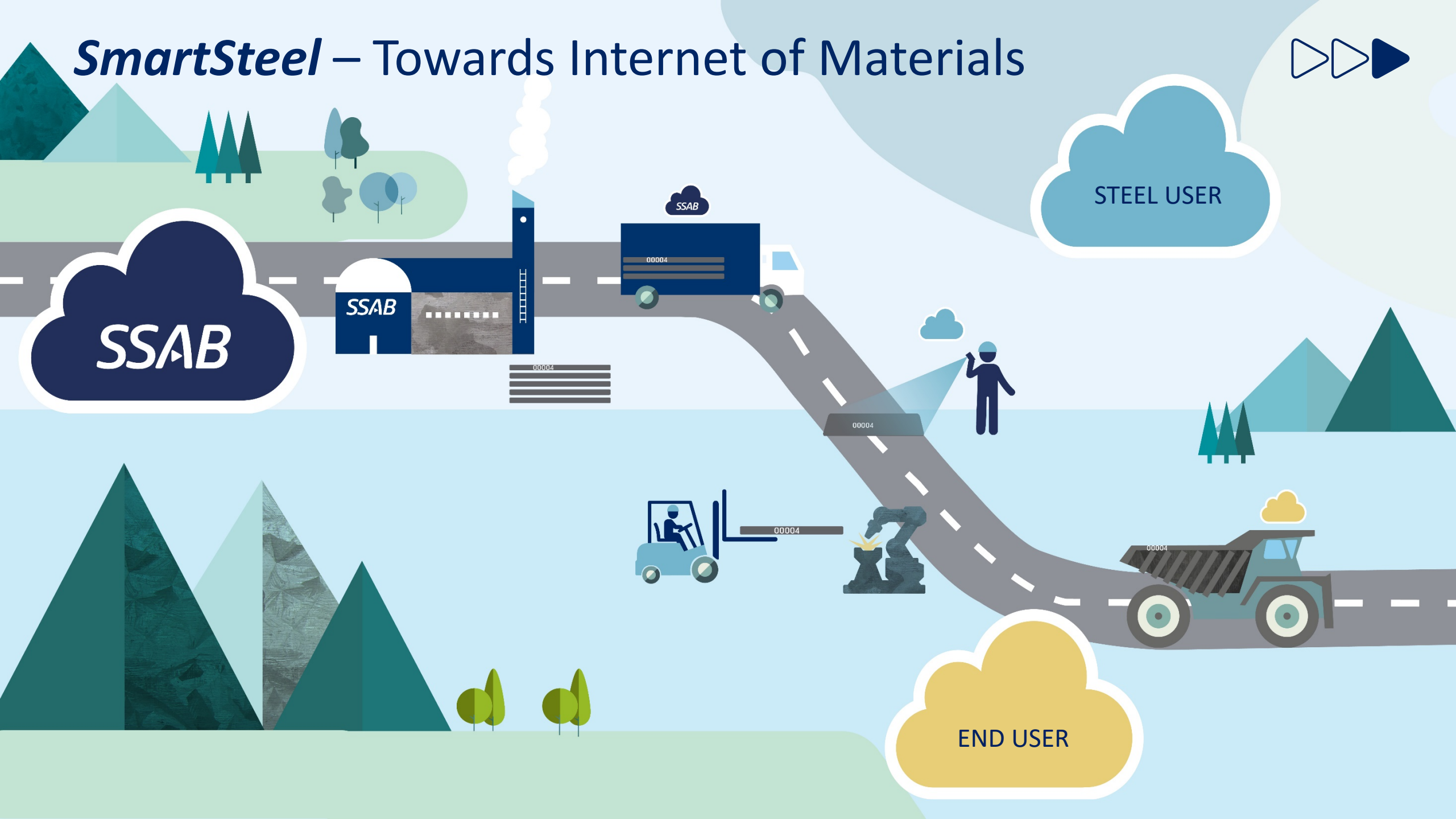
- ▶ Automation of administrative process steps that require repetitive and rule based human actions
- ▶ Robot “mimicking” the manual user



SmartSteel



SmartSteel – Towards Internet of Materials





SmartSteel being developed on three levels

Short term

Rollout and improve
SmartSteel 1.0

Mid-term

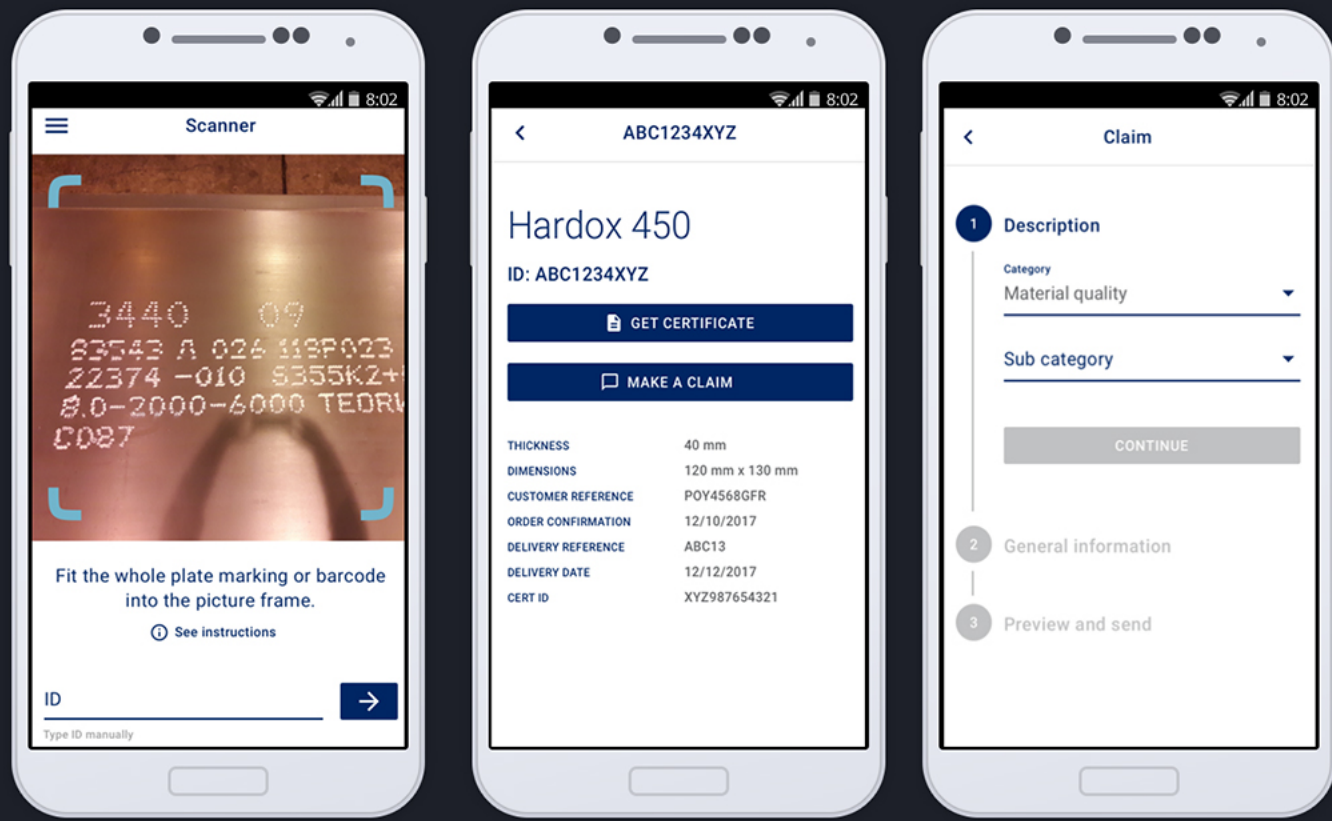
Pilots aiming for further releases. **Focus in machine adjustment and improved connectivity**

Long term

Research for **breakthrough technology in steel recognition**



Launching first release of SmartSteel



SmartSteel 1.0



Innovation challenge to find unique steel fingerprint

SSAB PRODUCTS ▾ STEEL SELECTOR SUPPORT SERVICES CONTACT US COMPANY ▾

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September 19, 2018 12:00 CET

Innovation Challenge to find future steel product fingerprint

SSAB and Sandvik Materials Technology are joining forces to find the best ideas on how to track steel products during their whole life cycle.

Today the SmartSteel Innovation Challenge is launched, an initiative by SSAB and Sandvik Materials Technology looking to find new brilliant ideas on what a future steel fingerprint could be made of. Is it digital, does it use artificial intelligence, is it a chemical solution, or could it be mechanics? Companies and research





Nordic co-operation in three industrial ecosystems



Steel recognition research
SmartSteel concept development



Pilot projects with customers and stakeholders



Customer Pilots
Reference architecture
Concept development

SSAB



*A stronger,
lighter and more
sustainable world*