

INTELLIGENT STEEL COMPANY. EXPLORING OPPORTUNITIES OF THE DIGITAL AGE

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NEW FORMS OF COMBINED SALES

- MARKETPLACES **Up to 25% by 2023**
- ON-PROJECTS DELIVERY

CUSTOMER-TAILORED PRODUCT

- ATTRIBUTED STEEL **Up to 15% by 2025**
- ONCE PRODUCED GOODS

OUT-OF-STEEL REVENUE

- PLASTICS AND COMPOSITES **Up to 45% by 2028**
- SERVICES AND REPORTING

REPLACEMENT

- TRADITIONAL INDUSTRIES SQUEEZE
- BETTER MATERIALS **Up to 10% by 2028**



TOMORROW AND MID-TERM

FR COMPOSITES (CAGR 5Y 20%)

WASTE MANAGEMENT (COGS -2%)

WIND POWER (CAGR 5Y 200%)

CO2 TO ETHANOL (COGS -4%)

ELECTRIC MOTORS (CAGR 5Y 20%)

SOLAR COATINGS (CAGR 10Y 40%)

3D PRINTING (CAGR 5Y 10%)

SELF-HEALING MATERIALS (CAGR 10Y 150%)

MATERIAL INFORMATICS (CAGR 5Y 30%)

HIGH STRENGTH STRUCTURES (CAGR 10Y 40%)

NEW CUSTOMERS
NEW PEOPLE
NEW SCIENCE



2018

Digital twin

Wearables and IoT

Computer vision

Virtual assistants

Augmented reality

Virtual reality

Blockchain

UAV (drones)

2019

Exoskeletons

Additive technologies

Wide sensors and LiDARs

Edge computing

Connected mine

Material informatics

Self-healing materials

Cognitive services



E-COMMERCE

EBITDA growth 1-2%

- OMNICHANNEL SALES
- B2B GOING B2C
- MIDDLE DISTRIBUTION MARGIN CAPTURE

DIGITAL SUPPLY CHAIN

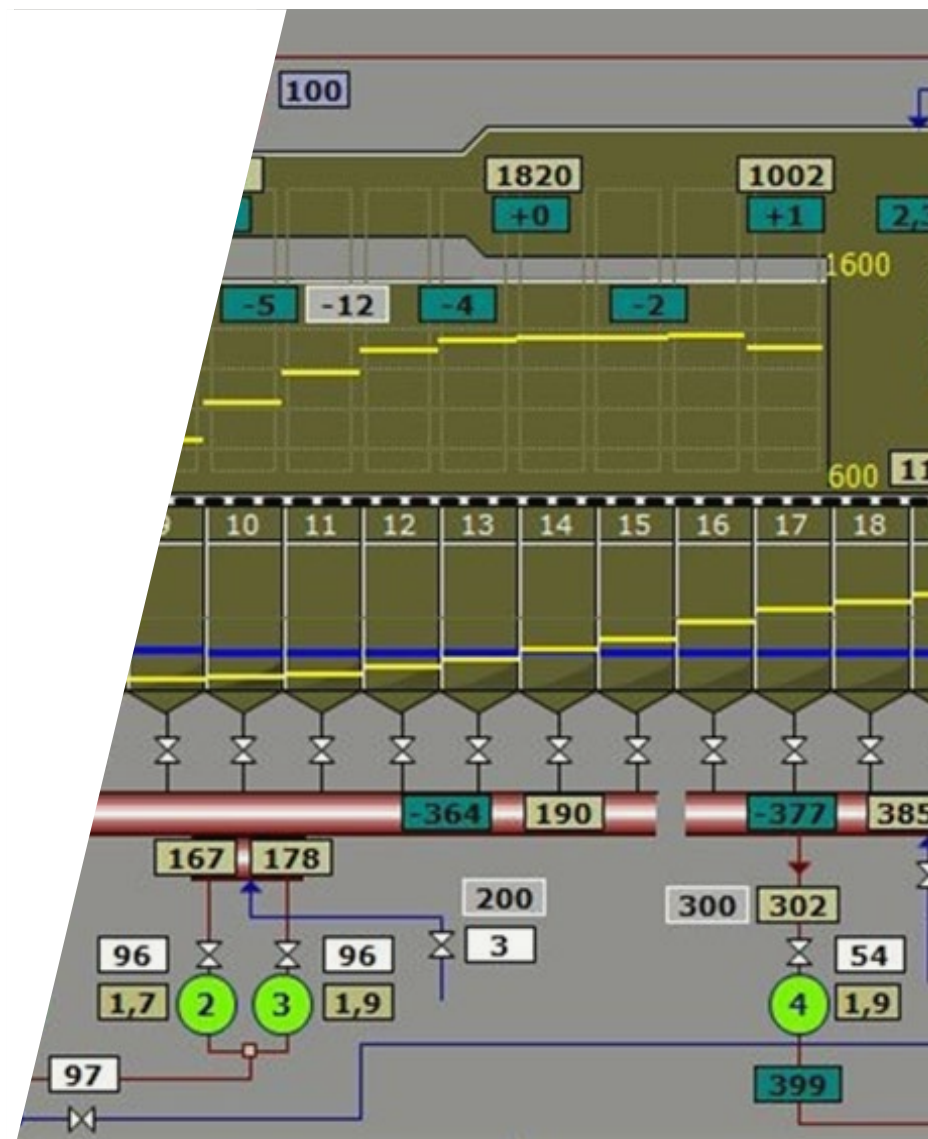
EBITDA growth 2-4%
Cost reduction 4-6%

- COMBINED SALES, CONNECTED CUSTOMER
- E2E INTELLIGENT SUPPLY
- SYNCHRONIZED PLANNING
- SMART FACTORY

PREDICTIVE

Volumes growth 5-7%

- IDLE TIME REDUCTION
- BAD FG REDUCTION
- PERSONNEL BEHAVIOUR FORECAST





QUESTIONS AND ANSWERS

SERGEY DUNAEV
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