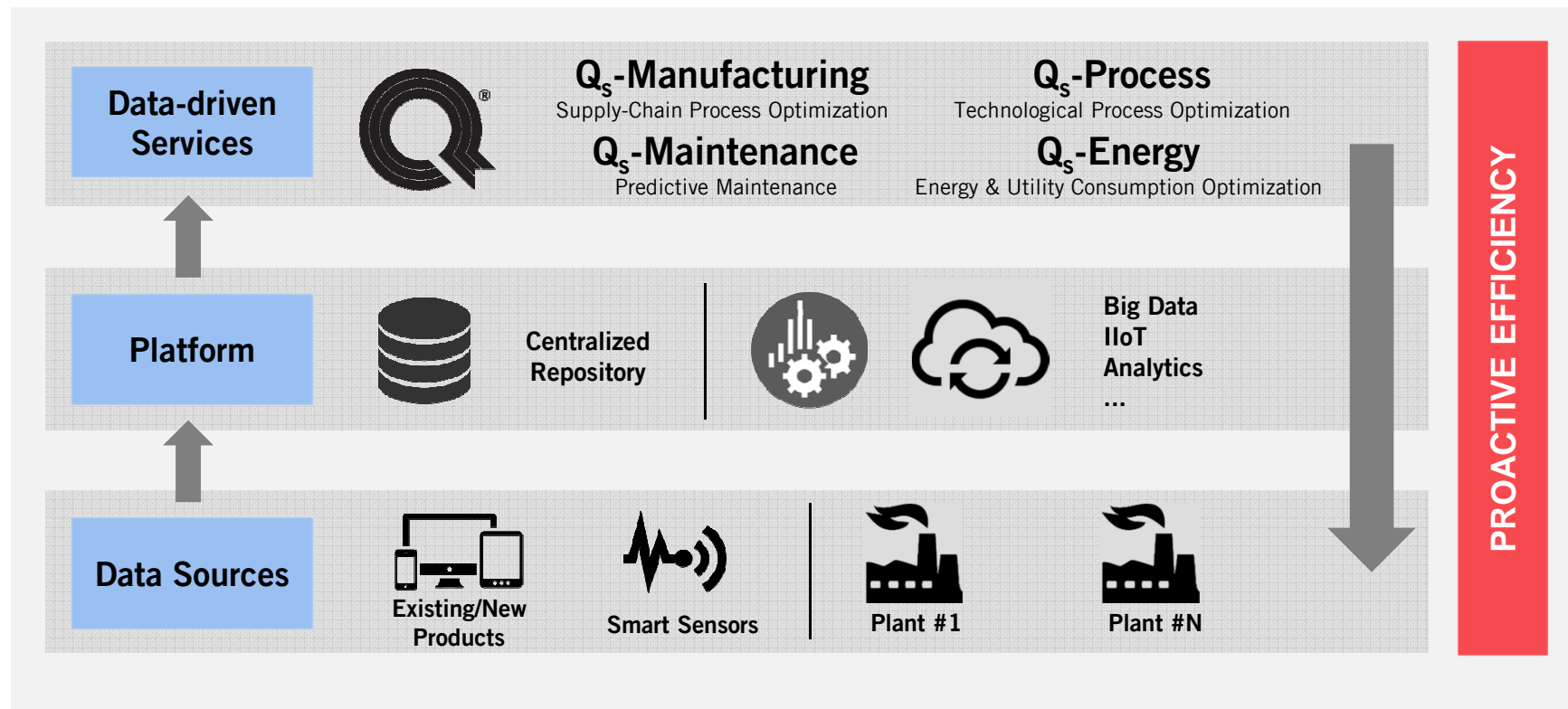


INTELLIGENT PLANT

DANIELI AUTOMATION





INTELLIGENT PLANT



3Q Automation



KPI monitoring



Equipment monitoring

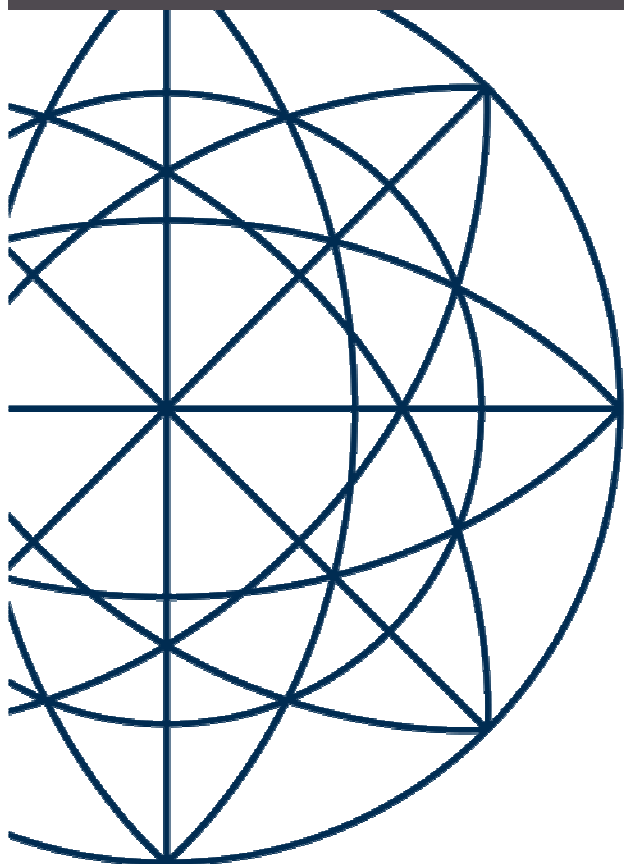


Mobility



Autonomous & Robotics System



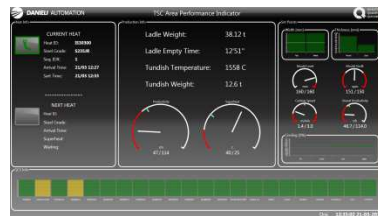


3Q AUTOMATION

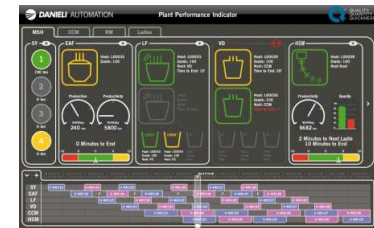
1 OA Operator Assistant



2 API Area Performance Indicator



3 PPI Plant Performance Indicator



4 Q3 Intelligence



OA - Operator Assistant

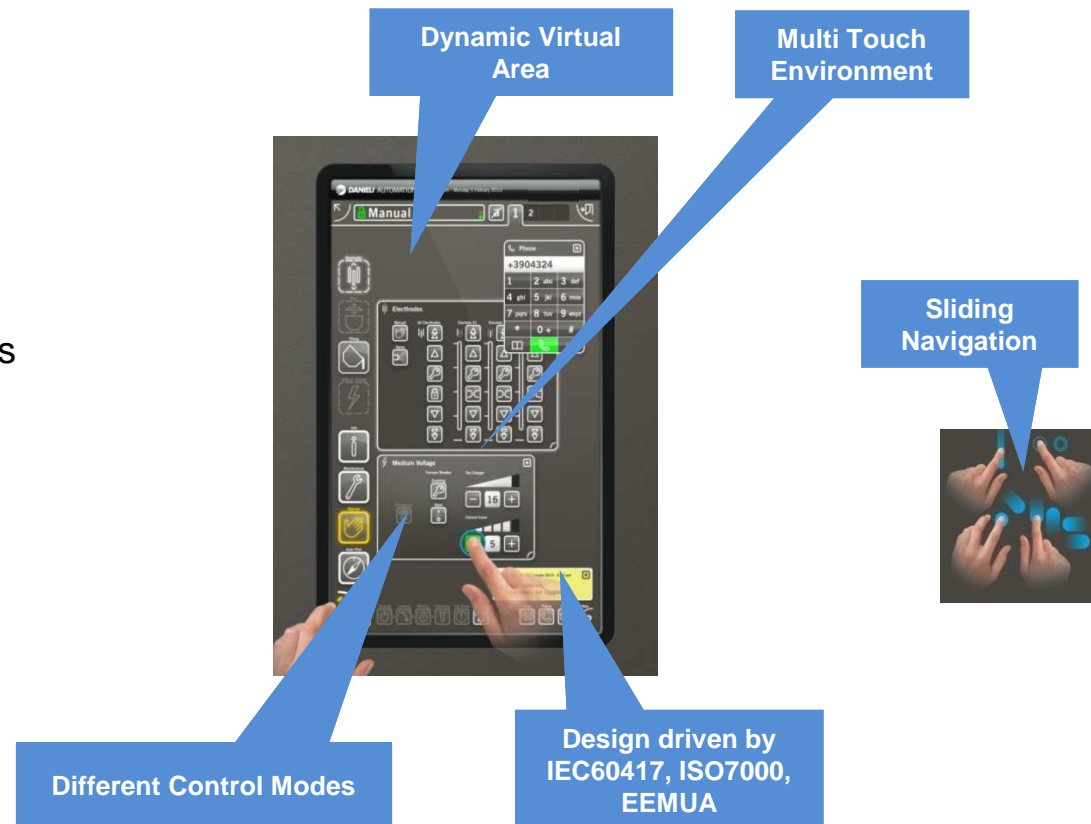
Operator Assistant:

Interactive & Knowledge based assistance to operators.

It reduces the number of commands and actions that operators have to consider.

Control Modes

- > AutoPilot
- > Assisted Manual
- > Maintenance
- > Emergency

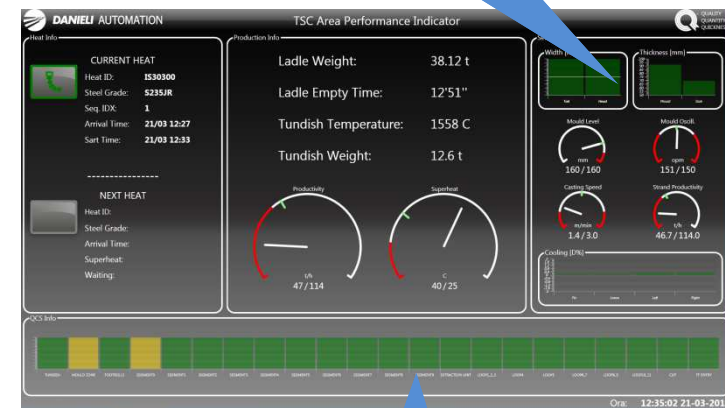


API - Area Performance Indicator



- >For pulpit operators/process technologists
- >An overall vision of the current process
- >Better decisions on process control

Process Monitoring:
Progress and Forecasts



Production Tracking

PPI - Plant Performance Indicator

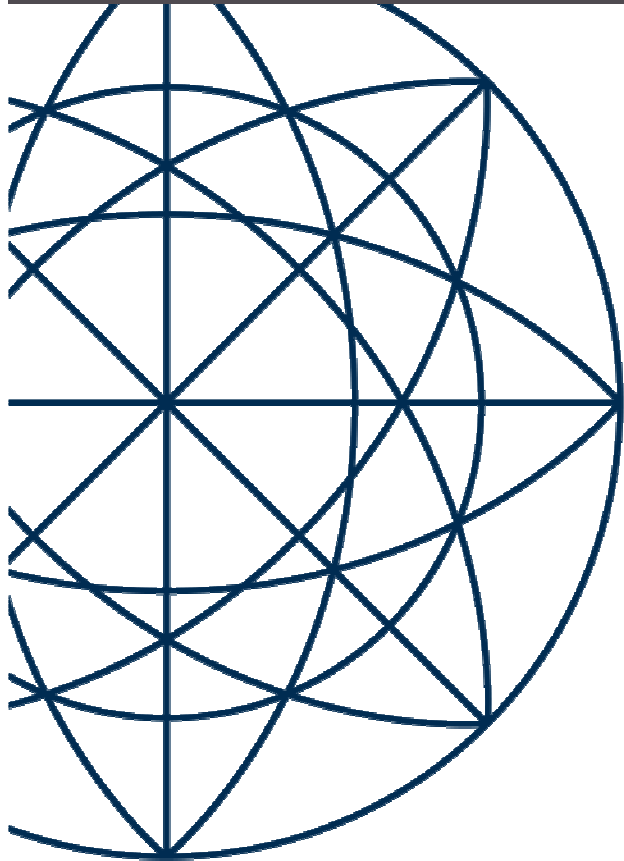


- >For operators/production managers
- >An overall vision of the given process areas
- >Better decisions on production control

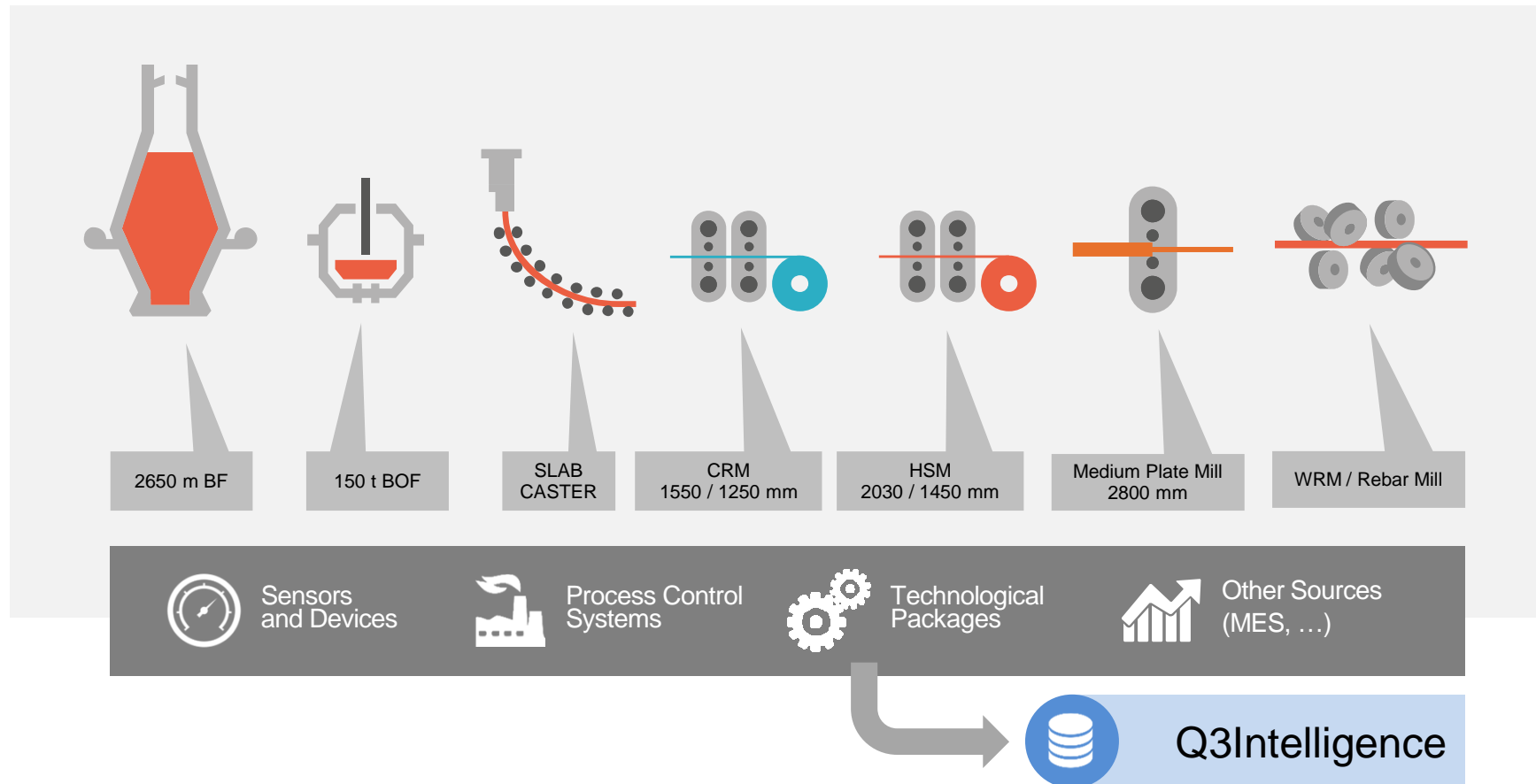
Performance Indicators



Scheduling & timing application



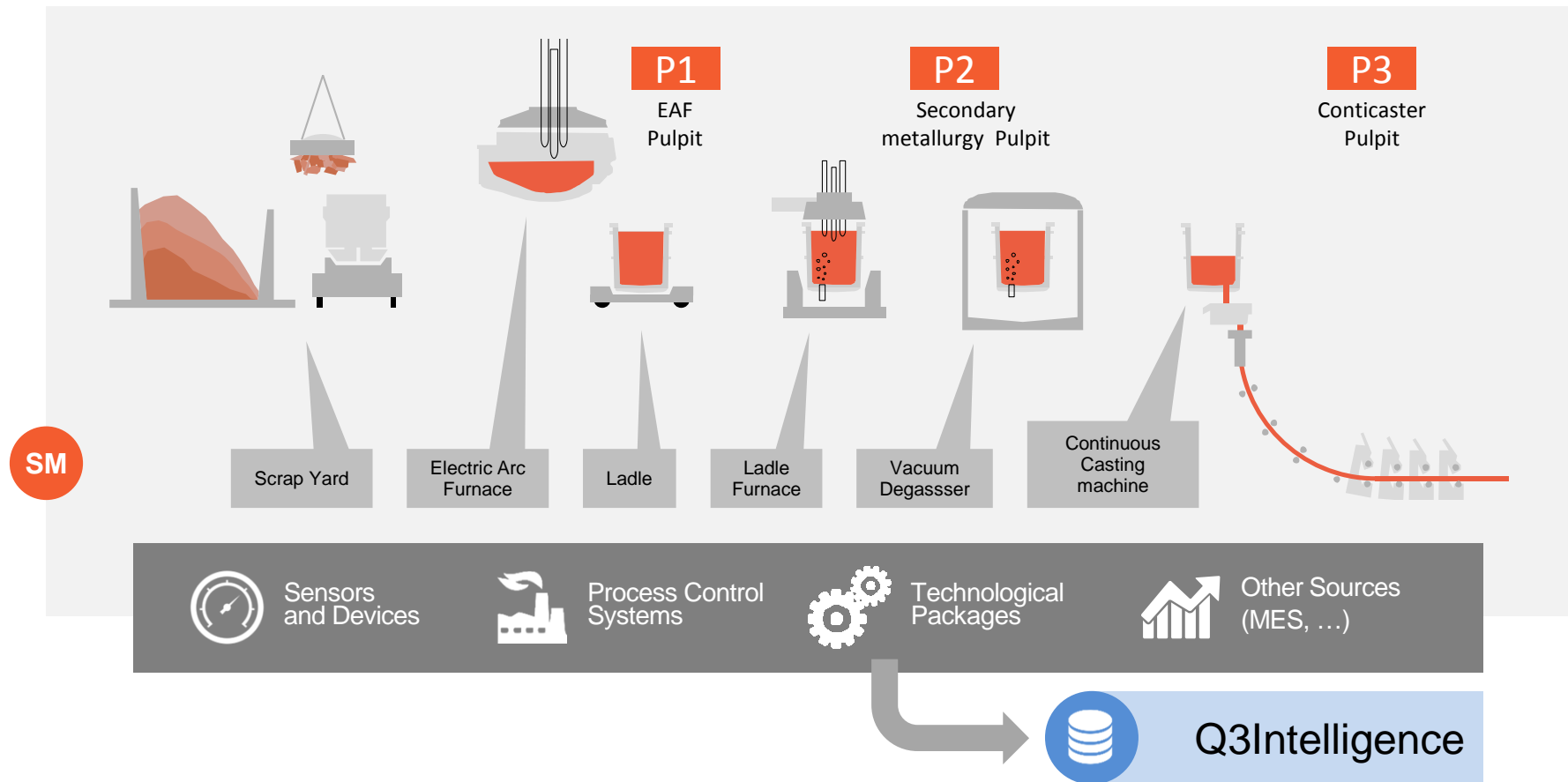
KPI MONITORING

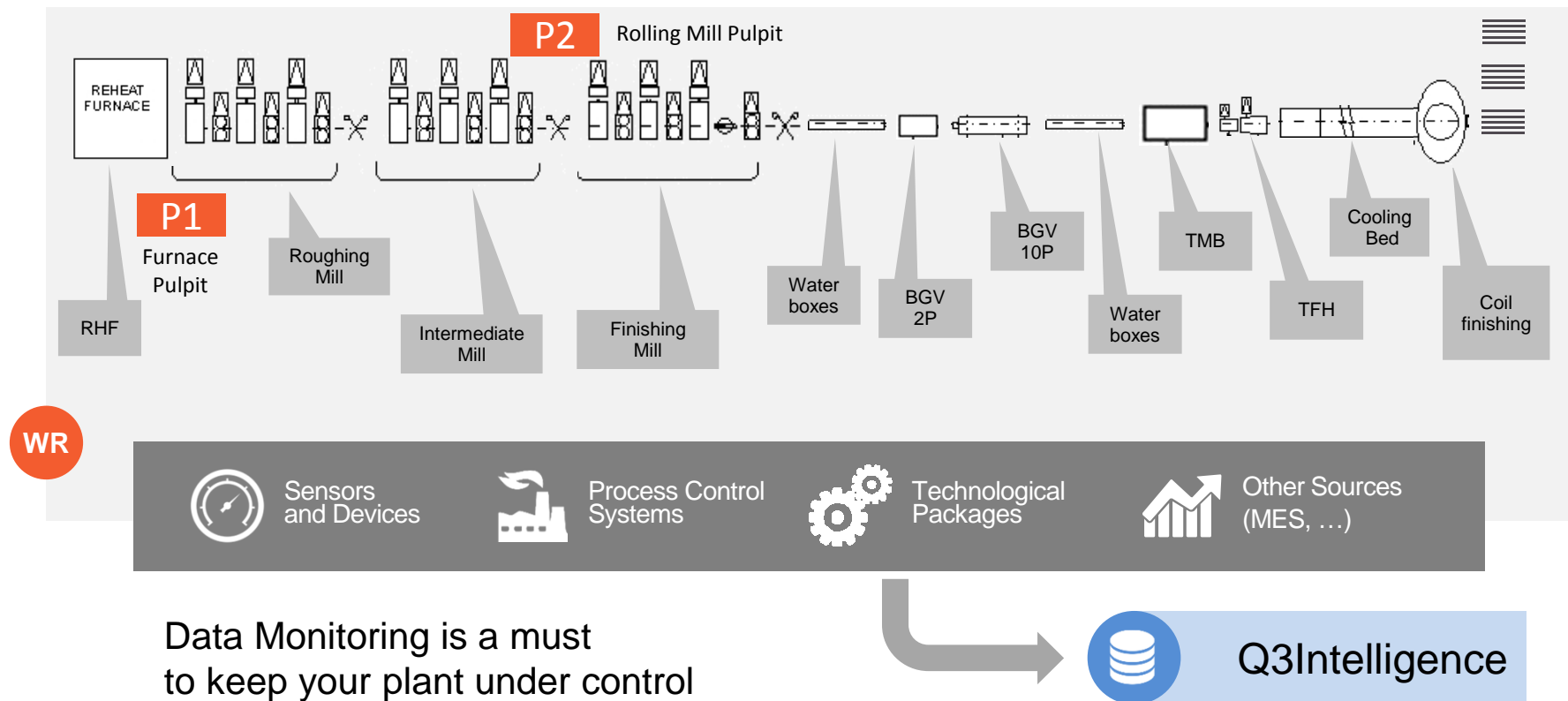


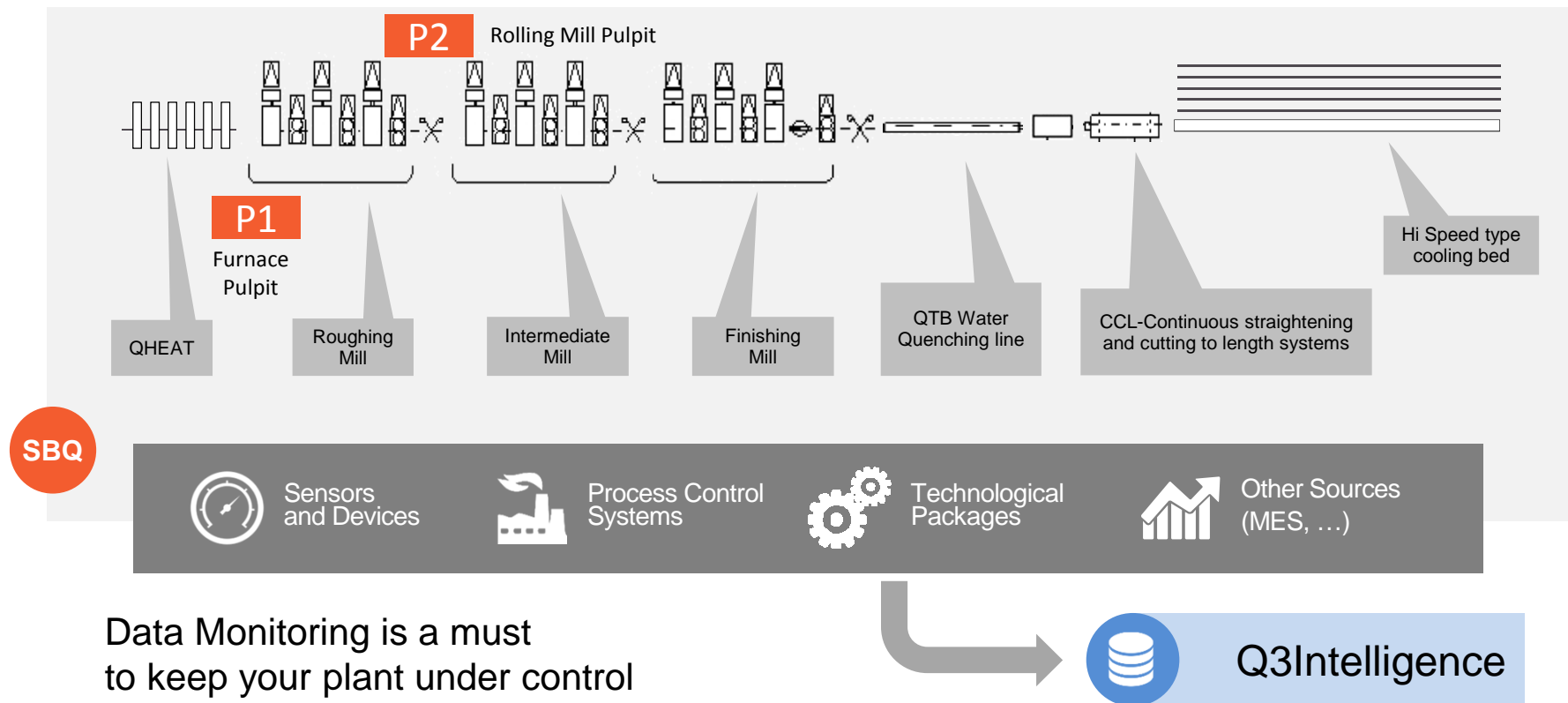
INTELLIGENT PLANT

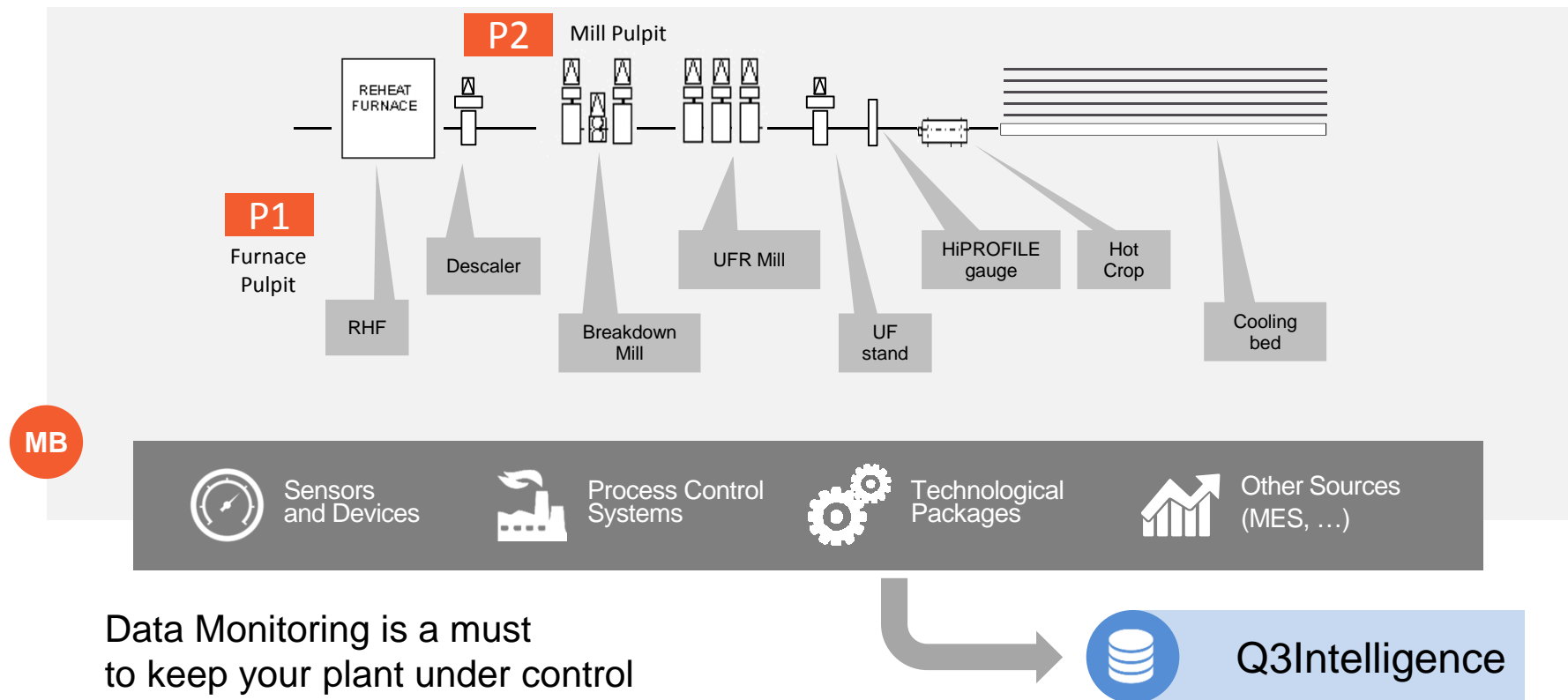
STANDARD MELTSHP CONCEPT LAYOUT

DANIELI





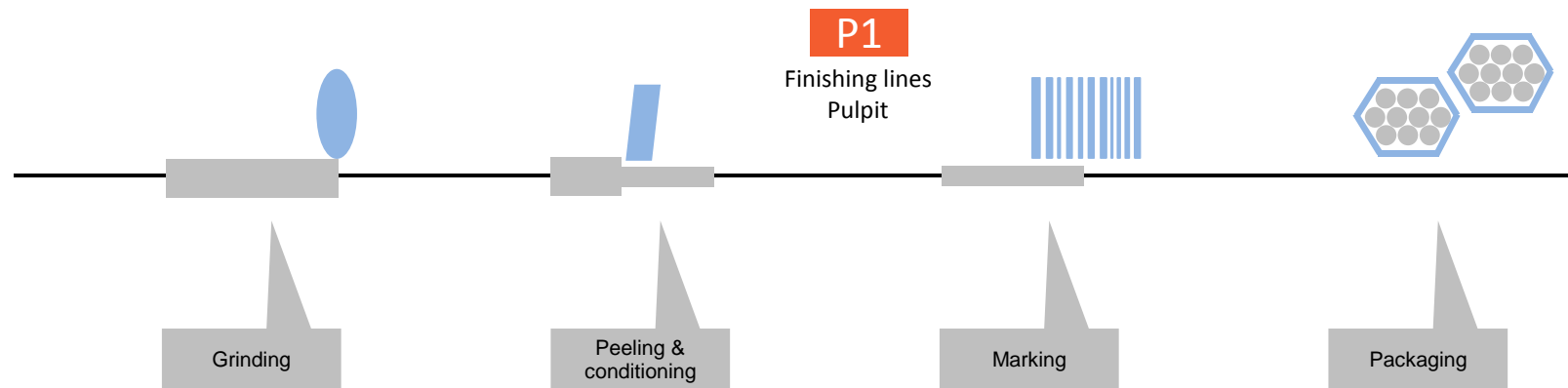




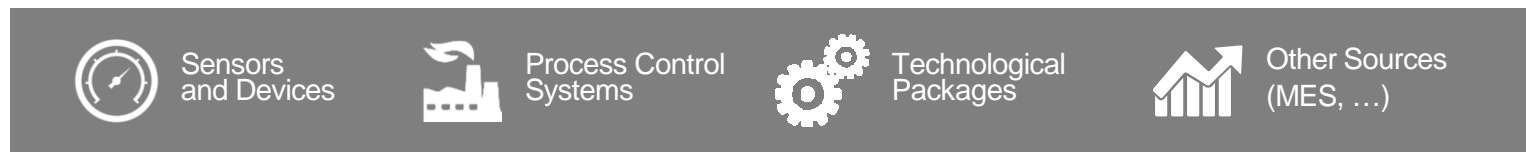
INTELLIGENT PLANT

FINISHING LINES PLANT LAYOUT

DANIELI



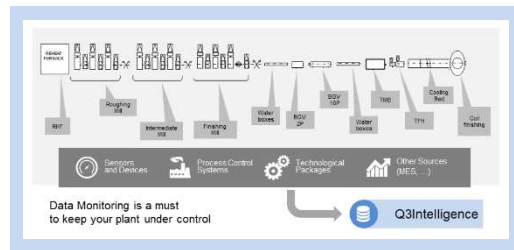
FL



Data Monitoring is a must
to keep your plant under control



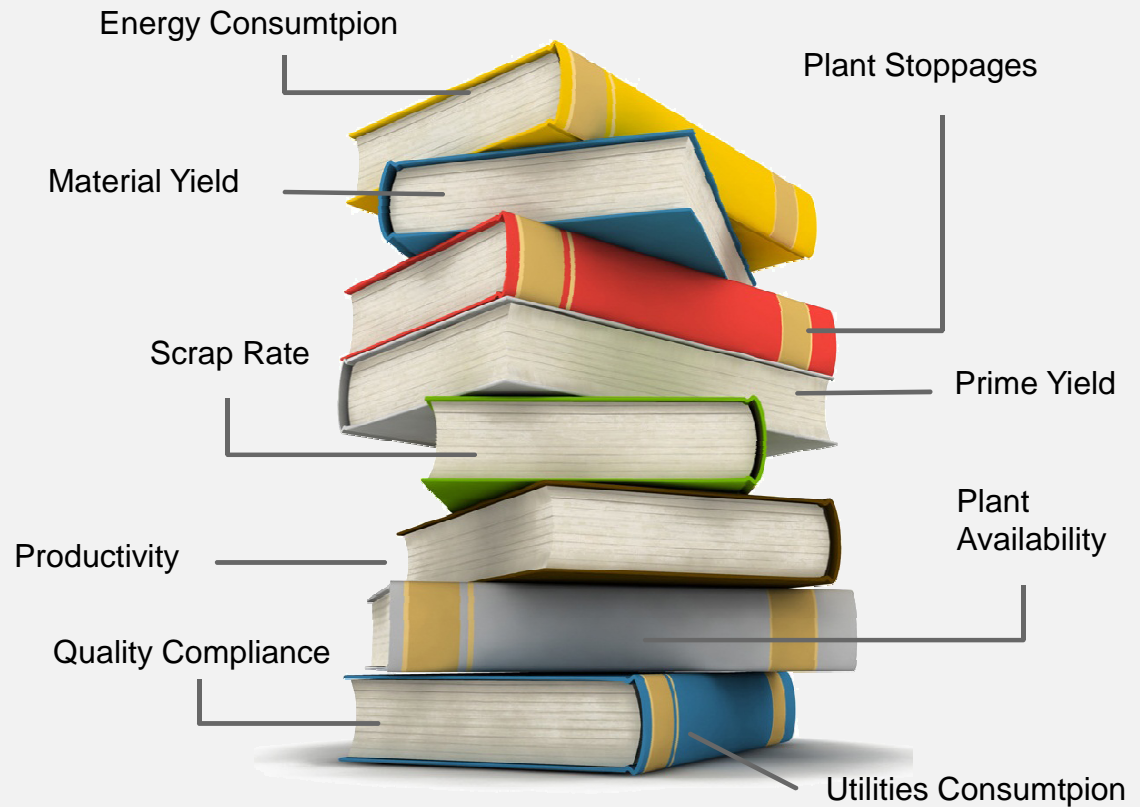
Q3Intelligence

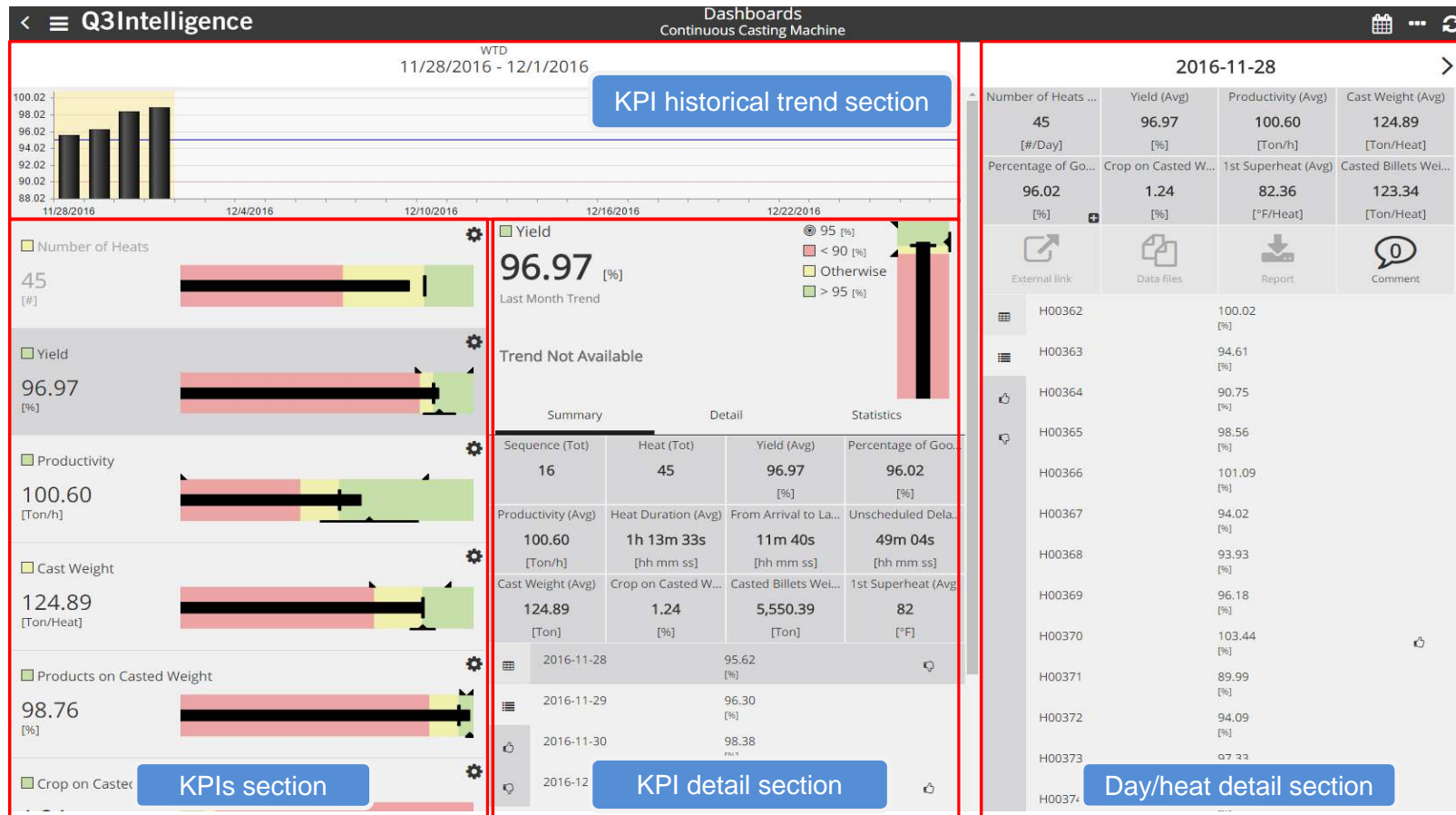


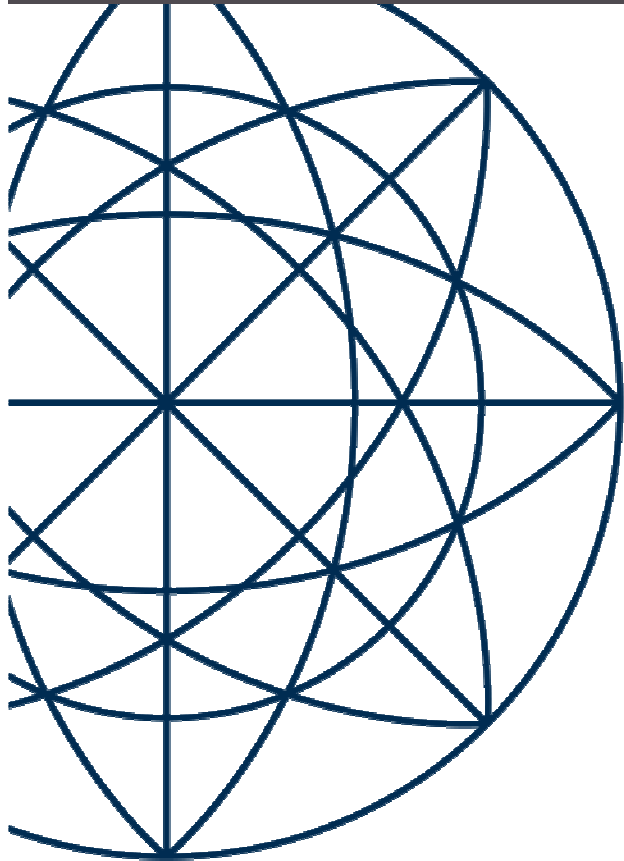
Plant data are continuously generated. Data analysis is a must to keep under control your production areas



Q3Intelligence
KPI Library

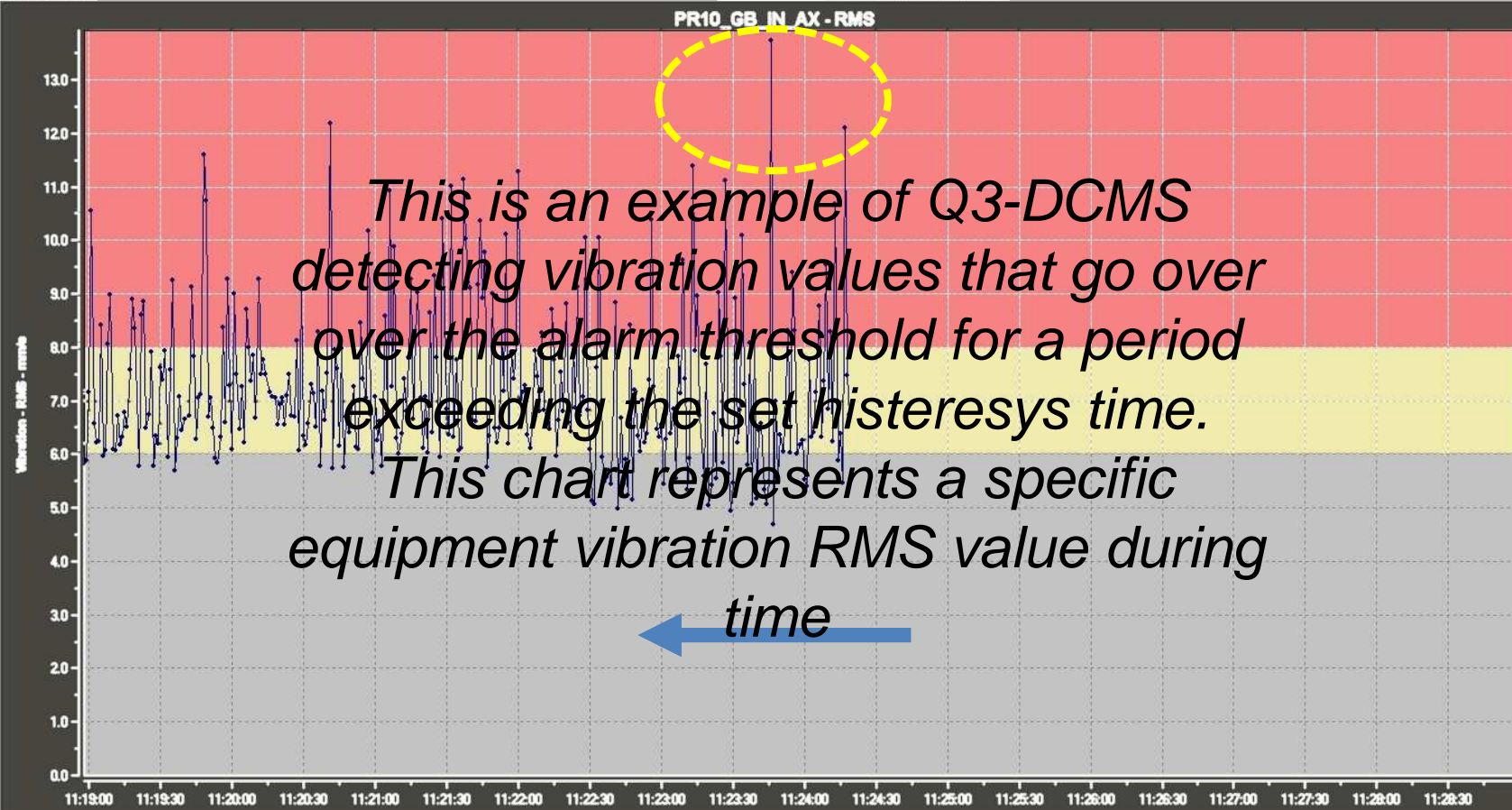




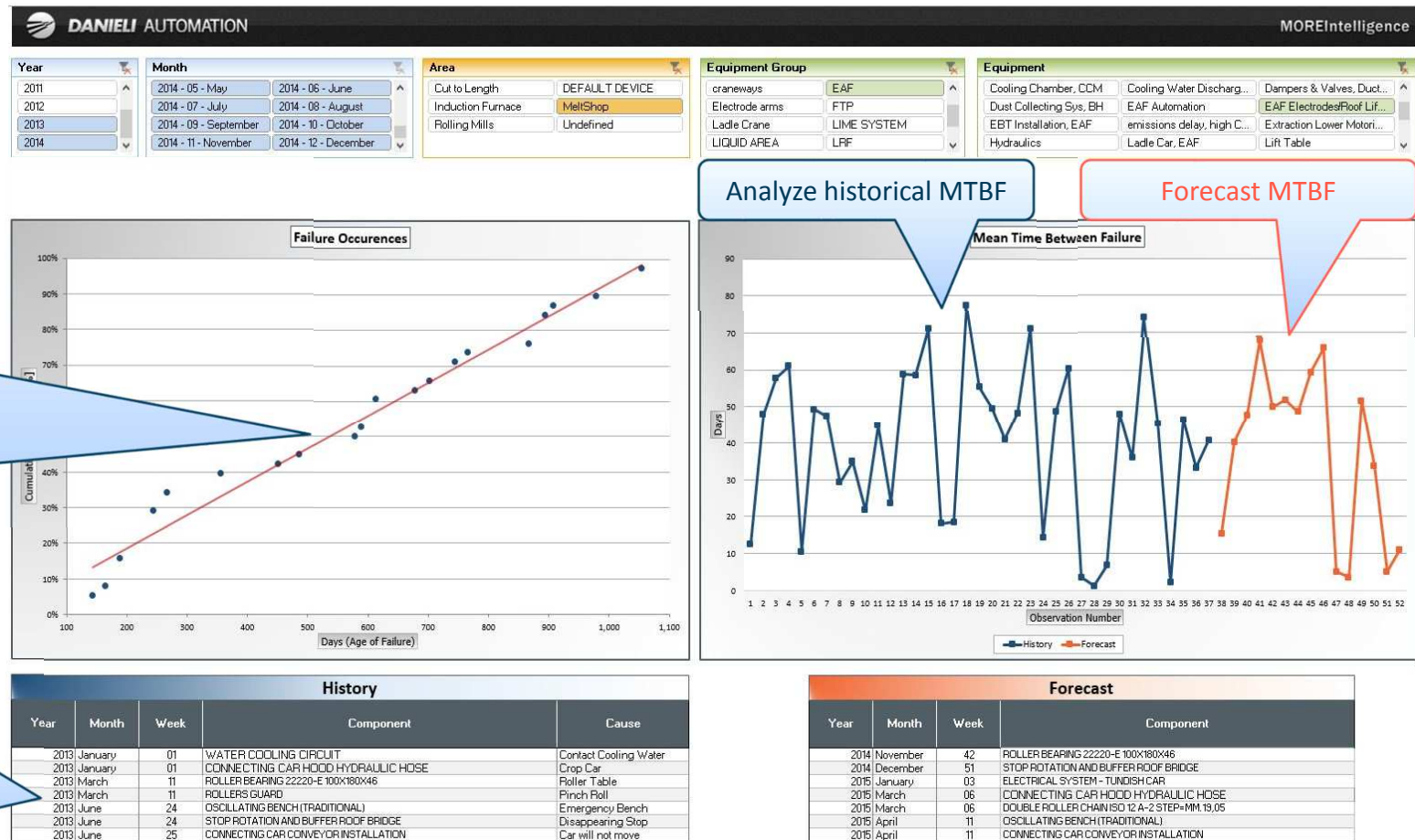


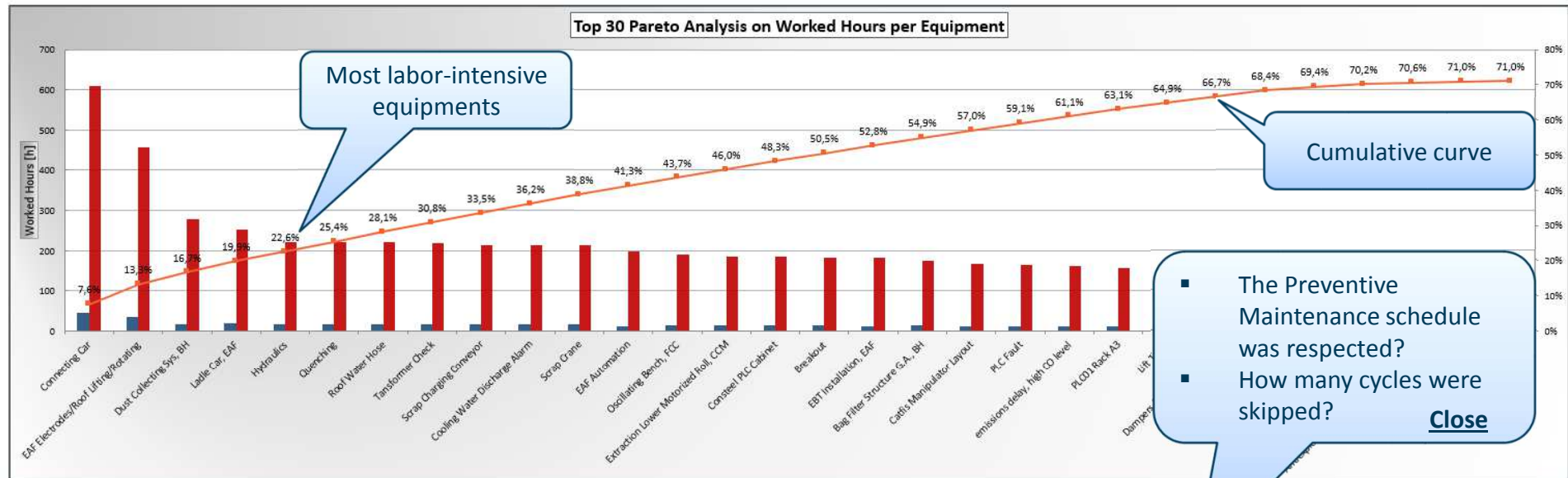
EQUIPMENT MONITORING

Q3-I

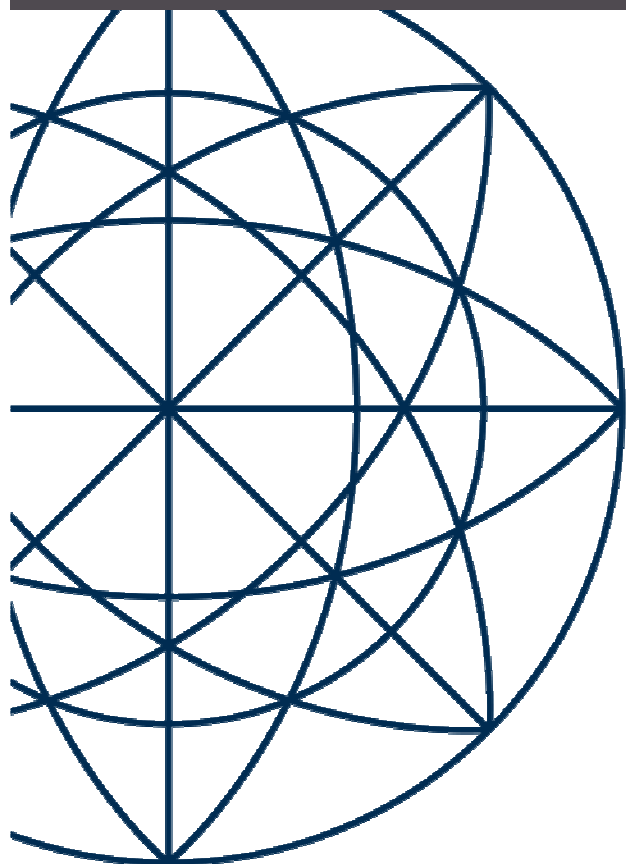


Q3-D





Equipment	Job Guideline	Hours of Electrical Maintenance	Hours of Electrical Maintenance [%]	Hours of Mechanical Maintenance	Hours of Mechanical Maintenance [%]	Number of Failures	Ageing Indicator	Cycle Text	Number of Scheduled Activities	Number of Performed Activities	% Performed on Scheduled Activities
Connecting Car		45,69	6,98%	608,52	93,02%				156	153	98,08%
EAF Electrodes/ Roof Lifting/Rotating		34,62	7,06%	455,69	92,94%				171	166	97,08%
	Cylinders insp: tighten bolt, rods	0,50	4,81%	9,90	95,19%				1	1	100,00%
	Cylinders insp: leakage, pressure	7,80	7,69%	93,60	92,31%			2 SEMI-ANNUAL	26	24	92,31%
	Encoder coupling inspection	3,00	6,65%	42,10	93,35%			MONTHLY	12	12	100,00%
	Cyl Roof lift, rotat, lock bolt, surface	0,92	6,96%	12,30	93,04%			1 SEMI-ANNUAL	1	1	0,00%
	Roof lift, rotate, locking cyl inspect	0,02	0,81%	2,44	99,19%			1 WEEKLY	26	25	96,15%
	Roof lifting system: levers,	0,28	2,05%	13,35	97,95%			1 SEMI-ANNUAL	1	1	100,00%
	Main bearing and wheels lubricatio	7,80	7,69%	93,60	92,31%			WEEKLY	26	26	100,00%
	Lifting arm lubrication	7,50	6,67%	105,00	93,33%			1 WEEKLY	26	25	96,15%
	Clamp cyl insp: leak, press, seal	3,40	7,69%	40,80	92,31%			WEEKLY	26	26	100,00%
	Locking system lubrication	3,40	7,39%	42,60	92,61%			WEEKLY	26	26	100,00%

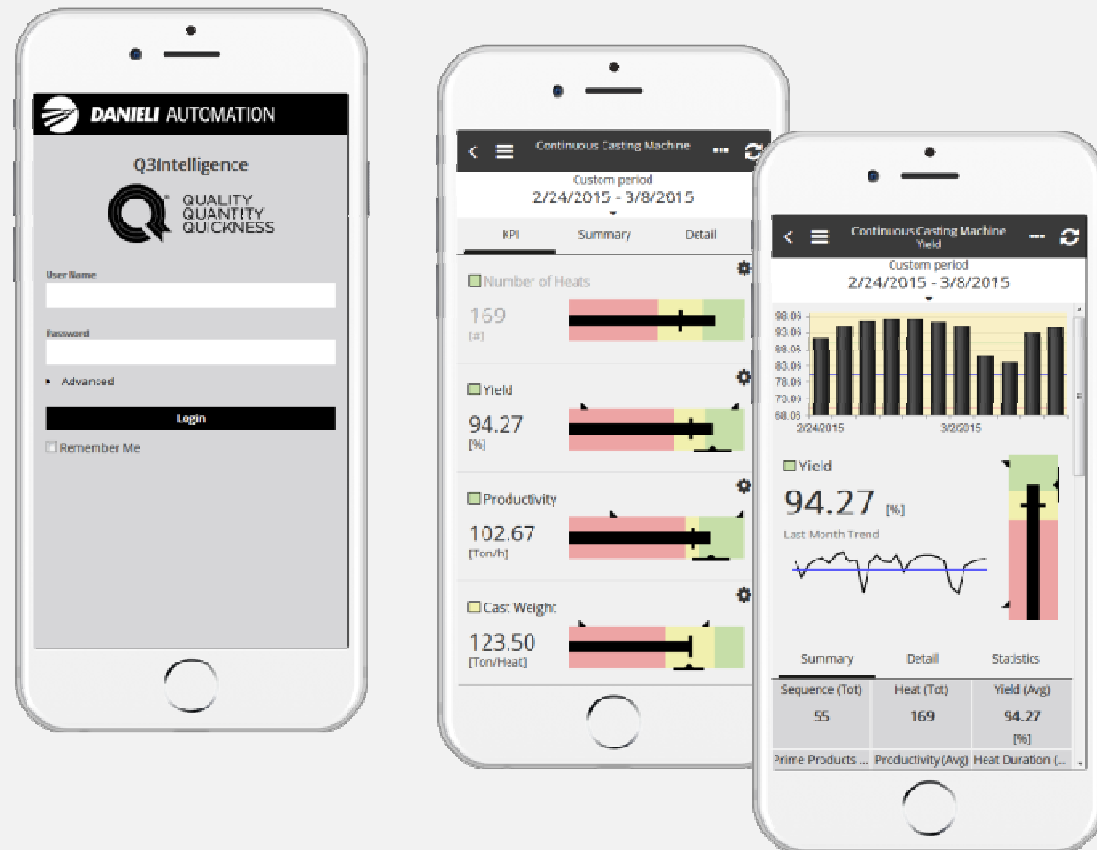


Q3 MOBILE INTELLIGENCE

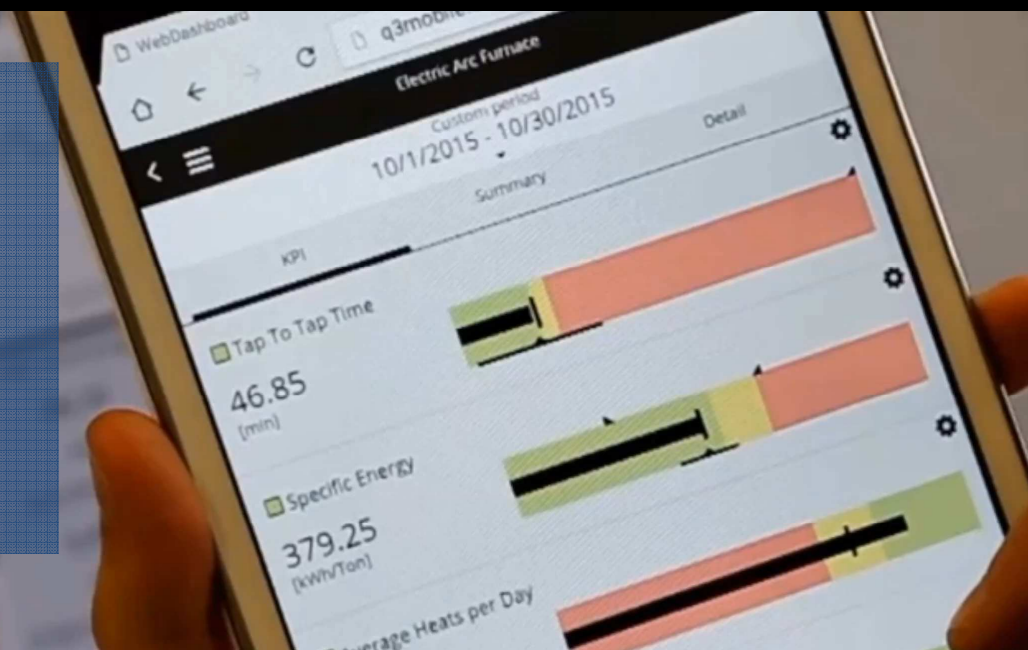
Q3MobileIntelligence is a web-based application for the **real-time production monitoring** of all plant areas.

Clear and concise, focused on content, **easy to understand**.

It brings the full power of mobile devices into the metals industries.



THE FULL POWER
OF FLEXIBLE
DEVICES INTO THE
METALS INDUSTRY



Q3MOBILE INTELLIGENCE

Q3 MOBILE SHOP FLOOR

DANIELI

KEEP THE PLANT
PERFORMANCES
ALWAYS UNDER
CONTROL



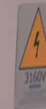
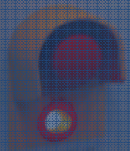
Q3MOBILE INTELLIGENCE

Q3 MOBILE RECOGNIZER

DANIELI

NOTHING TO CARRY
ON

EASY TO INSTALL
EASY TO CONFIGURE
EASY TO USE

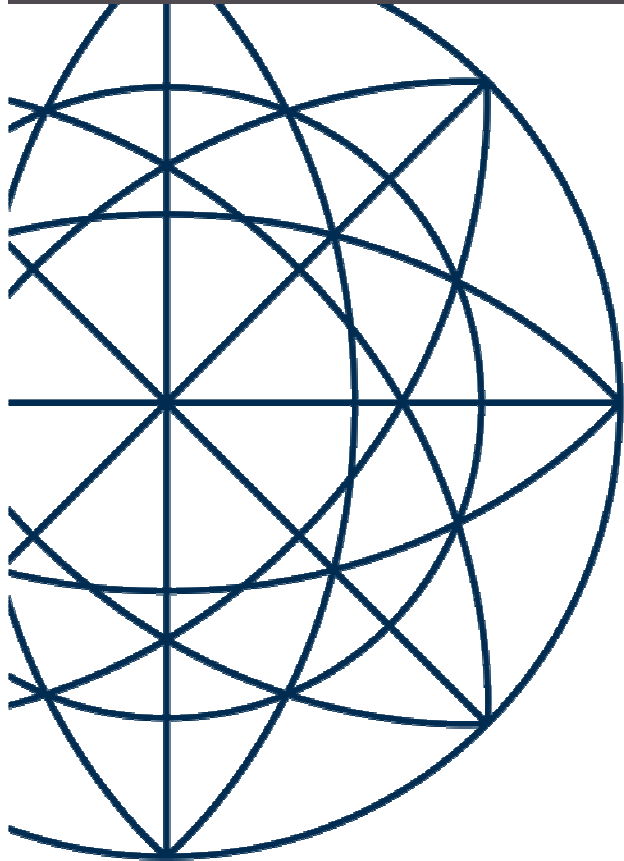


- › Secure Internet and Intranet connection to production data
- › End-user customization and filtering capabilities
- › Integration with reports
- › Access to IBA and FDA files (from desktop version)
- › Sharing of multi-media content (photos, videos)



- › **Enhanced productivity** from continuous interaction among users
- › **Collaborative awareness** of plant status and performances with the capability to react promptly
- › Benchmark the current plant performances regarding set targets
- › Increased engagement in the workplace





ROBOTIC APPLICATIONS



METAL INDUSTRY

Q-ROBOT

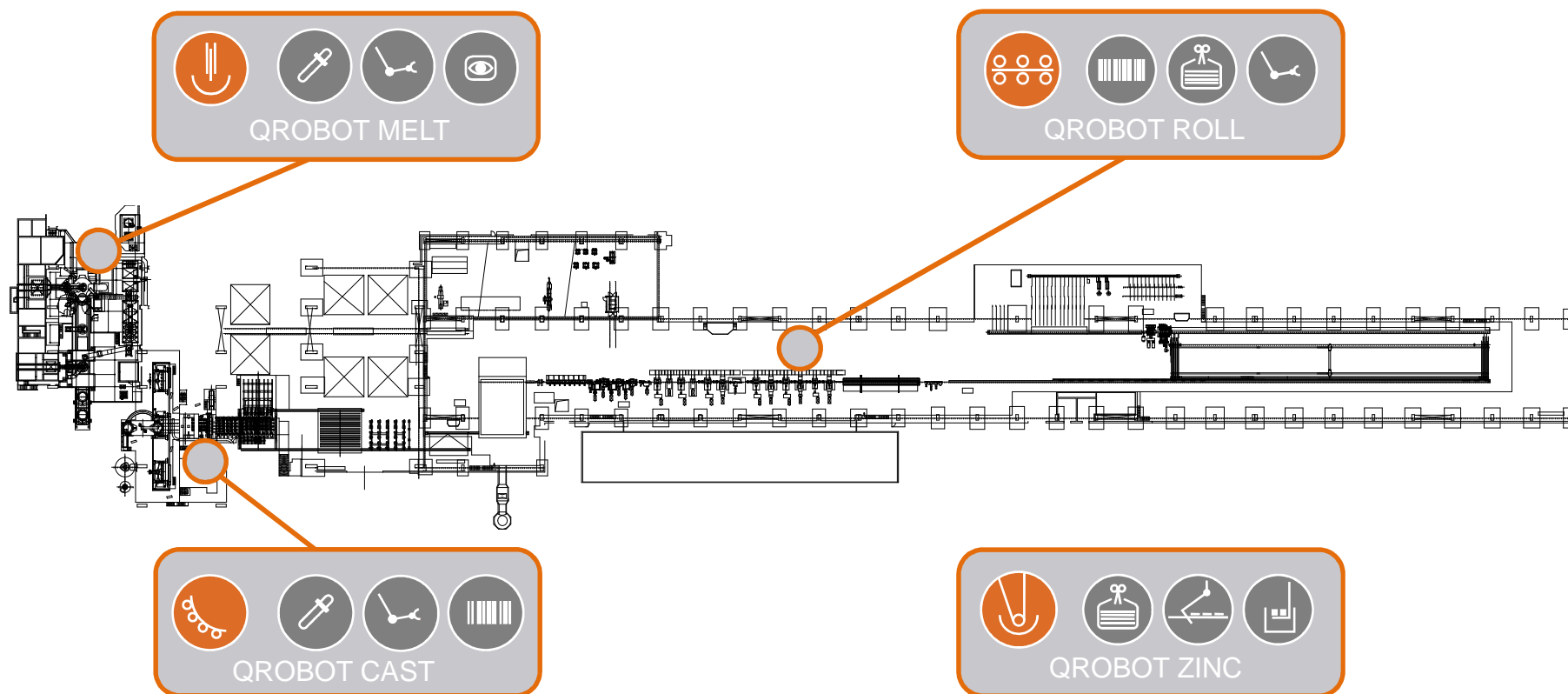
Robot applications created to help the operator to work better and safer in the metal industry



ROBOTIC SOLUTIONS

MELTSHOP ROBOTIC APPLICATIONS

DANIELI

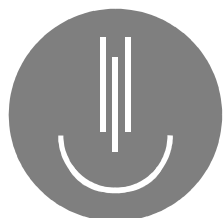


ROBOTIC SOLUTIONS

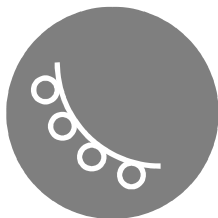
DANIELI AUTOMATION Q-ROBOT RANGE

DANIELI

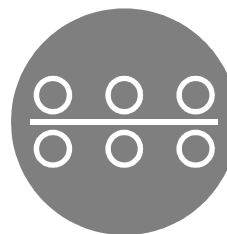
Q-ROBOT CLASS



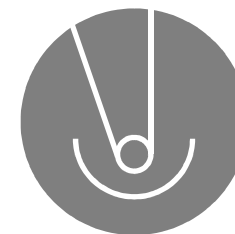
MELT



CAST



ROLL



ZINC

MELT



sampling
& analysis

SAMPLE



remotely operated
interventions

EBT



vision, inspection
& measurment

SCAN



ROBOTIC SOLUTIONS

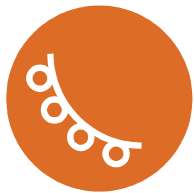
DANIELI AUTOMATION Q-ROBOT RANGE

DANIELI TELEROBOT LABS

MELT



CAST



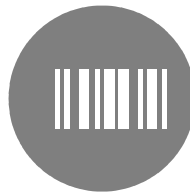
sampling
& analysis

LADLE



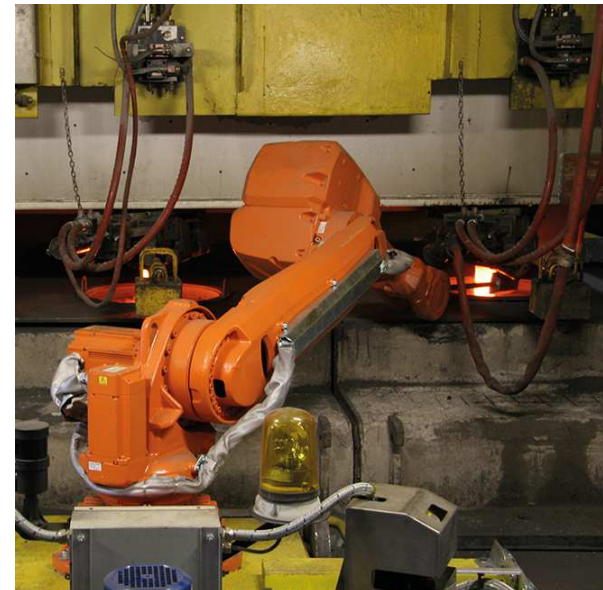
remotely operated
interventions

LADLE
MOULD
DEBUR



Tag & mark

TAG
MARK

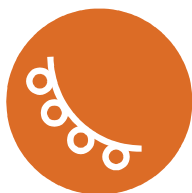


ROBOTIC SOLUTIONS

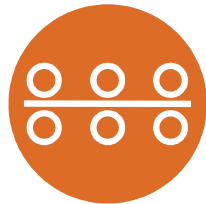
DANIELI AUTOMATION Q-ROBOT RANGE

DANIELI TELEROBOT LABS

CAST



ROLL



tag & mark

TAG
MARK



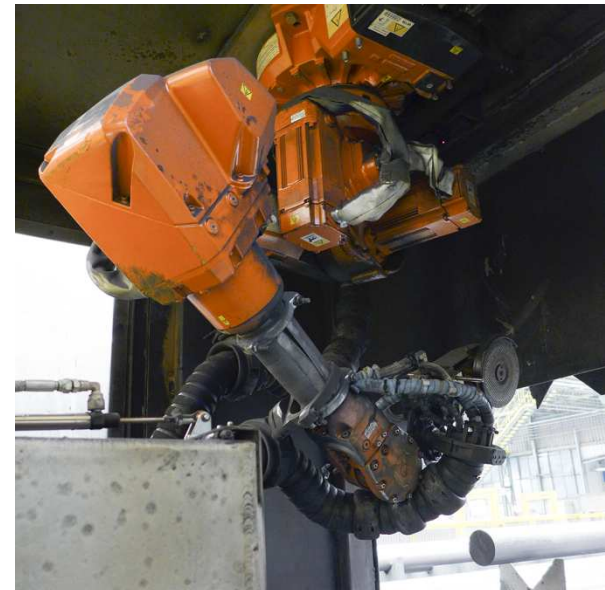
destrap

DESTRAP



remotely operated
interventions

DEBUR

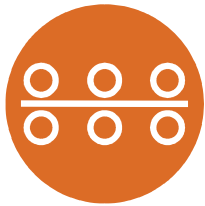


ROBOTIC SOLUTIONS

DANIELI AUTOMATION Q-ROBOT RANGE

DANIELI TELEROBOT LABS

ROLL

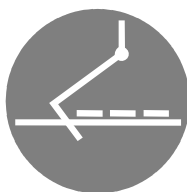


ZINC



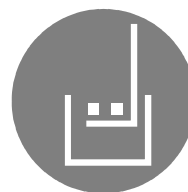
destrap

DESTRAP



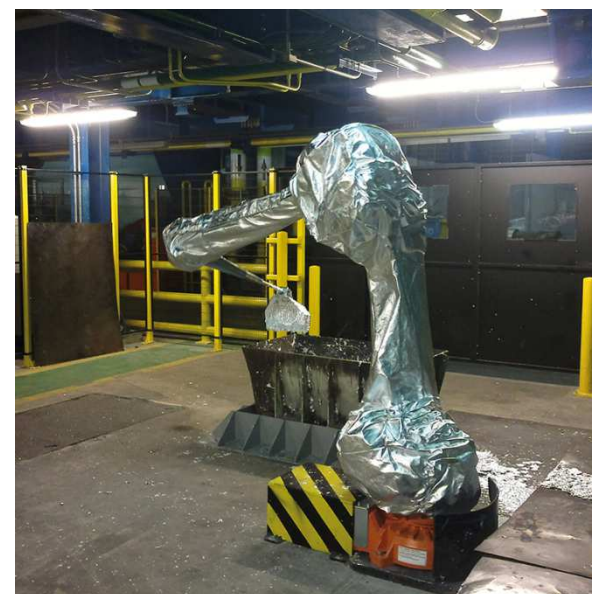
skimming

SKIM



ingot

INGOT



ROBOTIC SOLUTIONS

DANIELI AUTOMATION Q-ROBOT RANGE

DANIELI TELEROBOT LABS

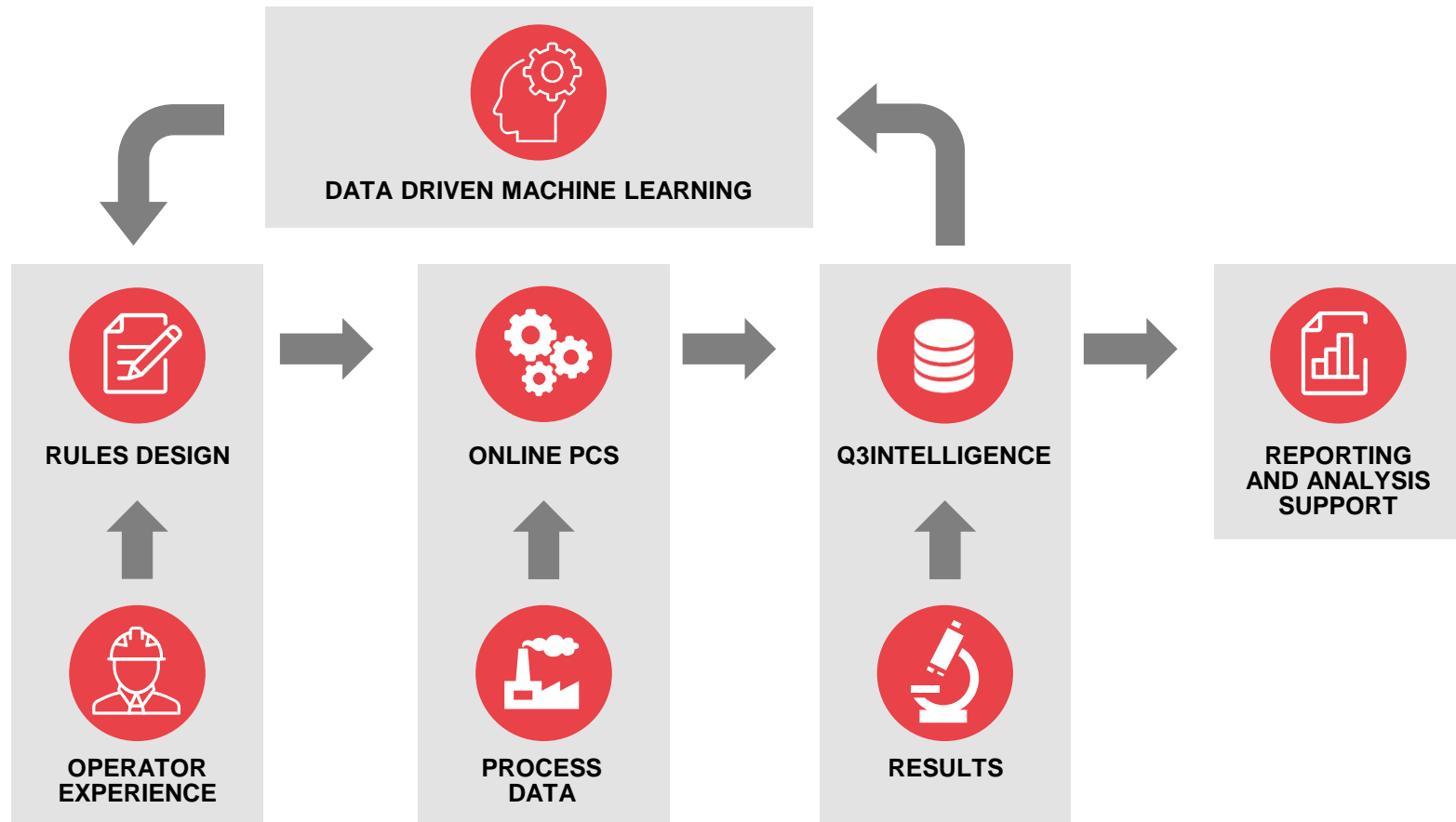
ZINC



DIGI&MET

SMART APPROACH

DANIELI



INTELLIGENT PLANT

DANIELI AUTOMATION

