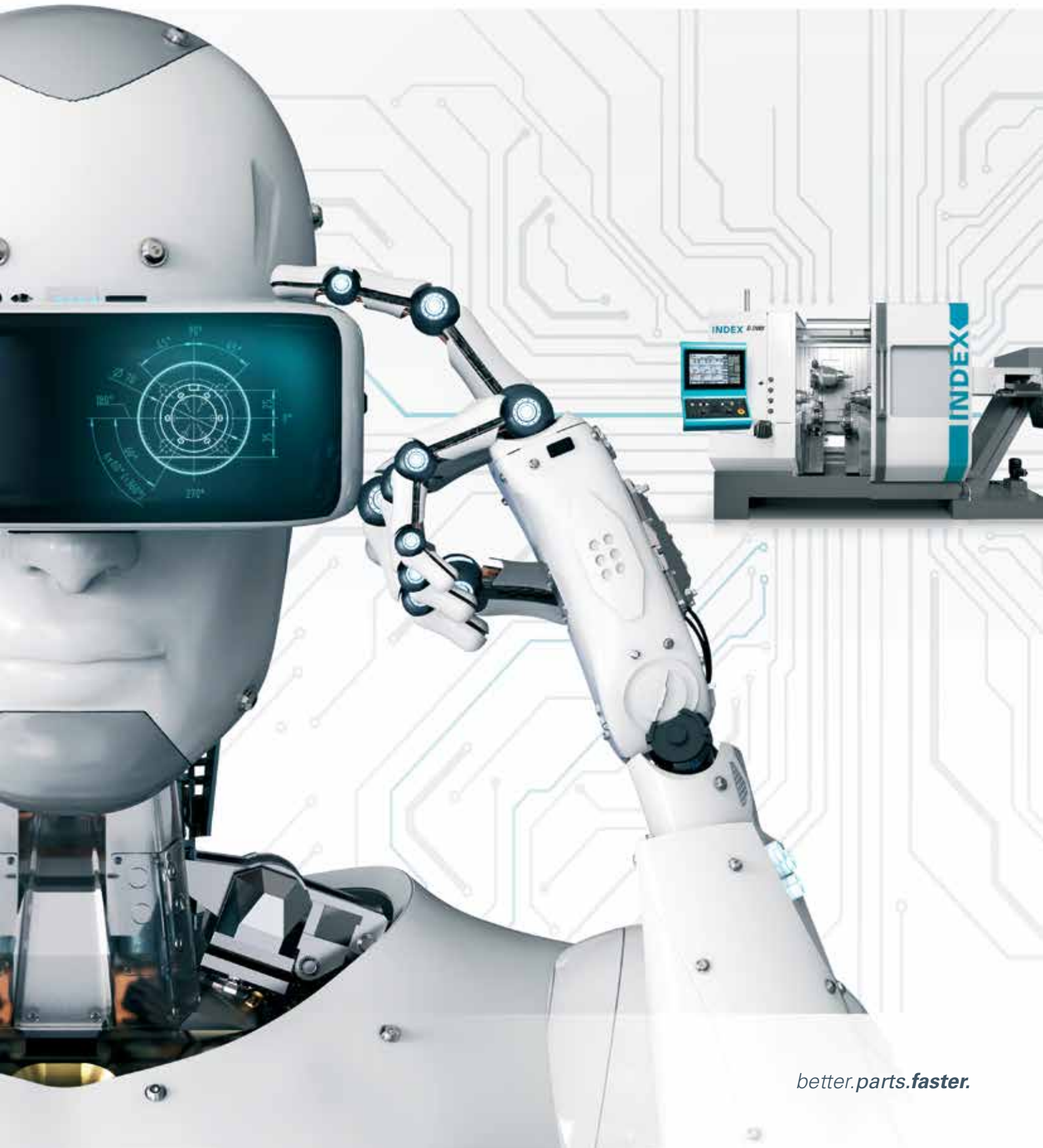


X4.0

INDEX
TRAUB

CONNECTING YOUR FUTURE



better.parts.faster.

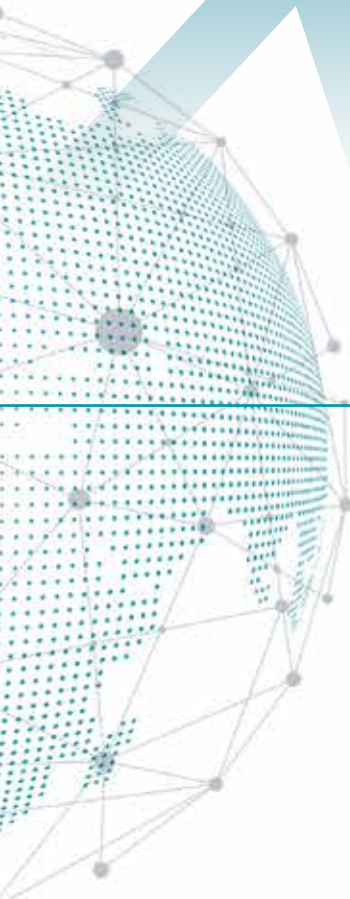
IDEALLY EQUIPPED FOR A NETWORKED WORLD

- Operating state monitoring
- Availability and usage analysis
- Notifications / push messages
- Condition monitoring
- Maintenance planning
- Predictive maintenance
- Fingerprinting
- Spare part identification
- Secure connection

...



4.0



iX4.0 is the IoT platform for integrated machine diagnostics and process monitoring that connects your production machines to the digital world.

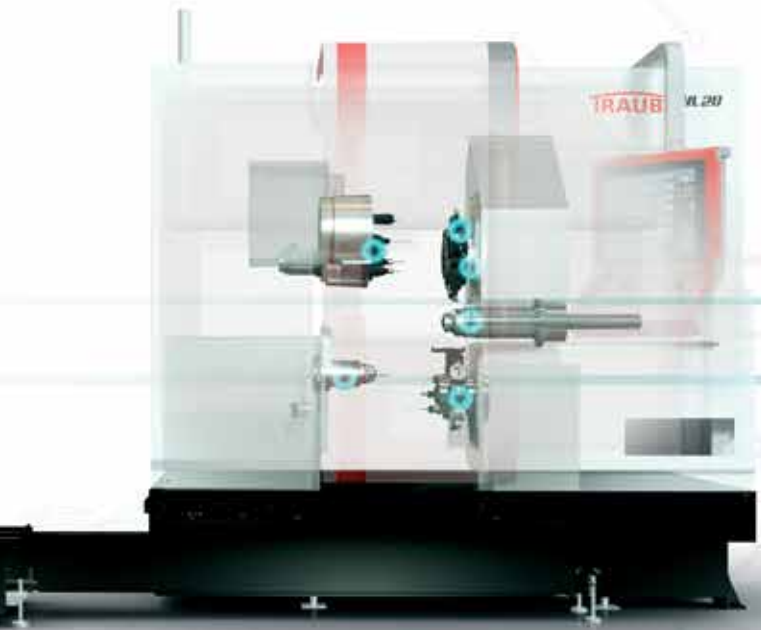
It provides you with status data from your machines for further analysis and fault messages. This information can be sent to all browser-enabled devices – such as your smartphone – to monitor your machines during unattended operation. On the basis of the established OPC-UA protocol, it is possible to integrate machines with all controls used by INDEX and TRAUB, dating back to 2007.

Are you ready for the networked future?

KEEP AN EYE ON PRODUCTION

Monitor and analyze the productivity of your machinery. Get informed about malfunctions and track the status of your machines at any time.

Optimize security and efficiency with iX4.0.



Machine overview

Icon	Machine ID	Name	Model	Status
	100001	Beispielmaschine	INDEX R200	Online
	100002	Beispielmaschine	INDEX R200	Offline
	100003	Beispielmaschine	INDEX R200	Offline
	100004	Beispielmaschine	INDEX R200	Offline
	100005	Beispielmaschine	INDEX R200	Offline

Single signals | occurrence over time



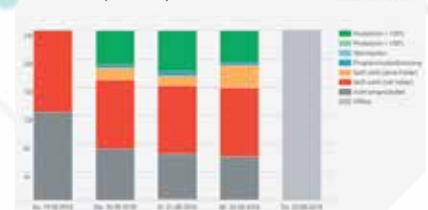
iX4.0 - basic without cloud connection of the machine

- Management of all machines
- **OnlineDocument** (machine documentation available online)
- **SparePartFinder** (spare part lists, 3D models, procurement 24/7)
- **TicketManager** (create fault report and tracking)
- **ServiceManagement** (administration and planning of maintenance and service)
- **DataExchange** (transparency of transferred data)

iX4.0 - options with cloud connection of the machine

- **StatusMonitor** (operating states and usage analysis including shift management)
- **AlarmHistory** (overview of all alarm messages)
- **AlarmMessenger** (SMS/Email in case of malfunction)
- **CrashSensor** (on milling spindle)
- **SpindleCheck** (speed histogram, temperature curve)

Status per day



Service management

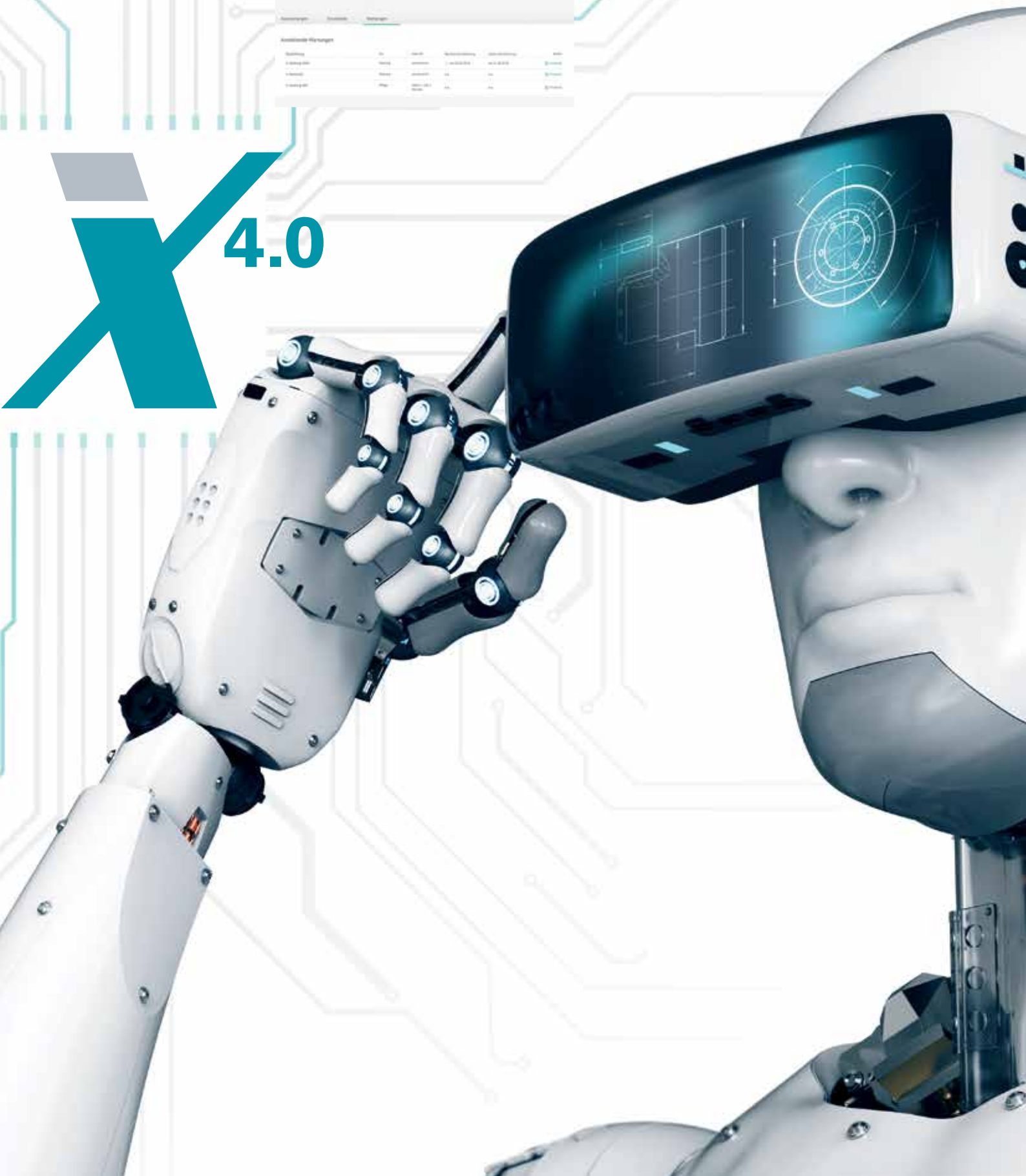
INDEX-0200 (S40211_dev)

System	State	Priority	Category	Created	Updated
System 1	OK	Low	Hardware	2023-10-27 10:00	2023-10-27 10:00
System 2	Warning	Medium	Software	2023-10-27 09:30	2023-10-27 09:30
System 3	Error	High	Network	2023-10-27 08:15	2023-10-27 08:15
System 4	OK	Low	Security	2023-10-27 07:45	2023-10-27 07:45

Available Storage

System	Used	Free	Capacity	Usage %	Alert
System 1	10GB	90GB	100GB	10%	OK
System 2	50GB	50GB	100GB	50%	Warning
System 3	95GB	5GB	100GB	95%	Error
System 4	20GB	80GB	100GB	20%	OK

X 4.0



iX4.0 - BASIC

WITHOUT CLOUD CONNECTION OF THE MACHINE

OnlineDocument

Access all documents at one location!

OnlineDocument provides your required documents centrally at one location and allows you access at any time and from anywhere.

Features:

- Quick and easy access to machine-related data, e.g., machine manual
- Easy search options
- Always up to date
- No matter from which device - you have your machine documents always at your fingertips.

User groups:

- Machine operators
- Service personnel

DataExchange

Keep track of your data!

The data processing concept in the iX4.0 options is based on the principle that the iX4.0 data is owned by our customers. With DataExchange, you gain complete visibility into the iX4.0 data that is exchanged and stored.

Features:

- Overview of all iX4.0 data stored
- Overview of the iX4.0 data currently being transferred including the current transmission speed
- Complete transparency

User groups:

- IT personnel
- Works Council
- Data protection officer

ServiceManagement

Manage your maintenance and service tasks centrally and simply call them up when required!

ServiceManagement supports you in your maintenance and service activities on your machines.

Features:

- Overview of upcoming maintenance and service tasks
- Step-by-step instructions for maintenance and service tasks
- Central documentation of maintenance activities performed
- Information on legal regulations and their documentation

User groups:

- Maintenance staff
- Production managers

4.0 APPS

SparePartFinder

Identifying spare parts has never been so easy!
Using individual spare parts lists for your machine and relevant 3D models, required spare parts can be quickly and easily identified and ordered immediately through a direct connection to the iXshop – around the clock.

Features:

- The right spare parts list for every machine
- Easy handling due to clear structuring by main assembly and subassembly
- 3D viewer for easy identification of spare parts
- Connection to the iXshop for direct ordering of identified spare parts

User groups:

- Maintenance staff
- Purchasers
- Machine operators
- Production managers

TicketManager

Create tickets quickly and easily and monitor their status!

TicketManager allows you to create tickets online and keep track of their current status at all times.

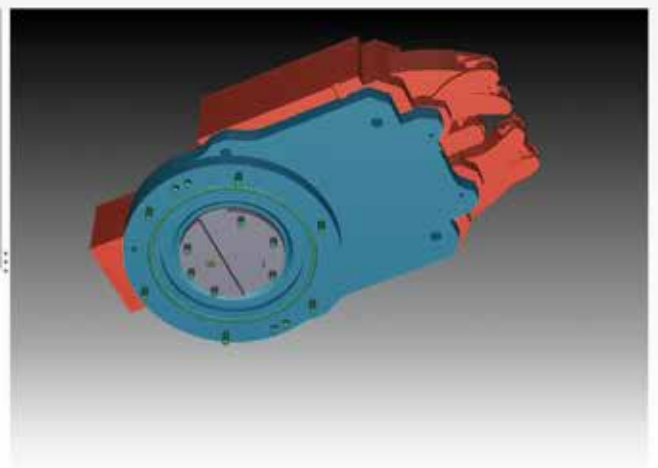
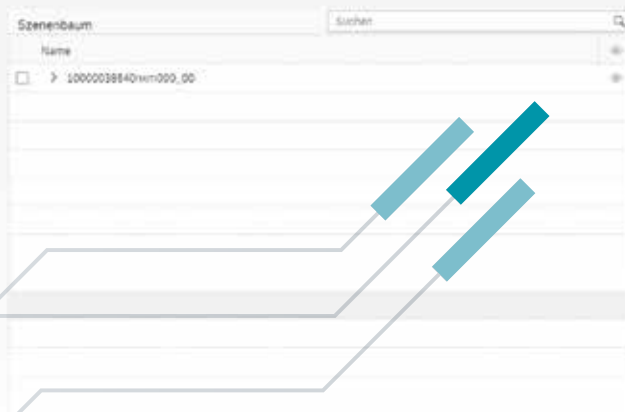
Features:

- Create tickets online
- Describe and communicate your request with just a few clicks
- View ticket status
- Sorting and search options simplify your overview
- Our customer service department will immediately take care of your request.

User groups:

- Maintenance staff
- Production managers
- Machine operators

Tool steady rest WT2



iX4.0 - OPTIONS

WITH CLOUD CONNECTION OF THE MACHINE

StatusMonitor

Stay on top of your production at all times!

Features:

- Overview of the productivity of your machinery
- Display of the current status of each connected machine
- Cumulative statuses of your machines per time unit (day, week, month and year)
- Integrated OEE analysis options over freely selectable time periods
- Detailed analysis of the machine status on the basis of individual signals

User groups:

- Production managers
- Machine operators
- Service personnel

AlarmMessenger

Immediate notification by your machine!

AlarmMessenger notifies you directly of user-defined machine states.

Features:

- Get notified by SMS or email when a certain condition occurs
- Flexible and easily configurable notification options
- Respond without losing time

User groups:

- Machine operators
- Service personnel
- Production managers



4.0 APPS

CrashSensor

Detect collisions of the milling spindle!

CrashSensor quickly detects collisions of the milling spindle. This facilitates fault diagnosis and enables specific counter-measures.

Features:

- Collision detection
- Collision logging
- Evaluations over time

User groups:

- Machine operators
- Service personnel
- Production managers

AlarmHistory

Monitor alarm messages online!

AlarmHistory allows you to receive alarm messages conveniently online!

Features:

- Display of alarm messages in freely configurable time periods
- Convenient filter and sorting options
- Storage of all messages that have occurred
- Extensive evaluation options

User groups:

- Machine operators
- Service personnel

SpindleCheck

Analyze the centerpiece of your machine!

Always keep an eye on your spindles and respond immediately if the readings deviate from the norm.

Features:

- Documentation of spindle operations
- Speed histogram
- Utilization histogram
- Temperature curve of motor, environment, coolant/lubricant and hydraulic fluid
- Display of clamping operations for each spindle
- Storage of spindle data for subsequent analysis
- Recording of the spindle running time to support maintenance tasks

User groups:

- Machine operators
- Service personnel

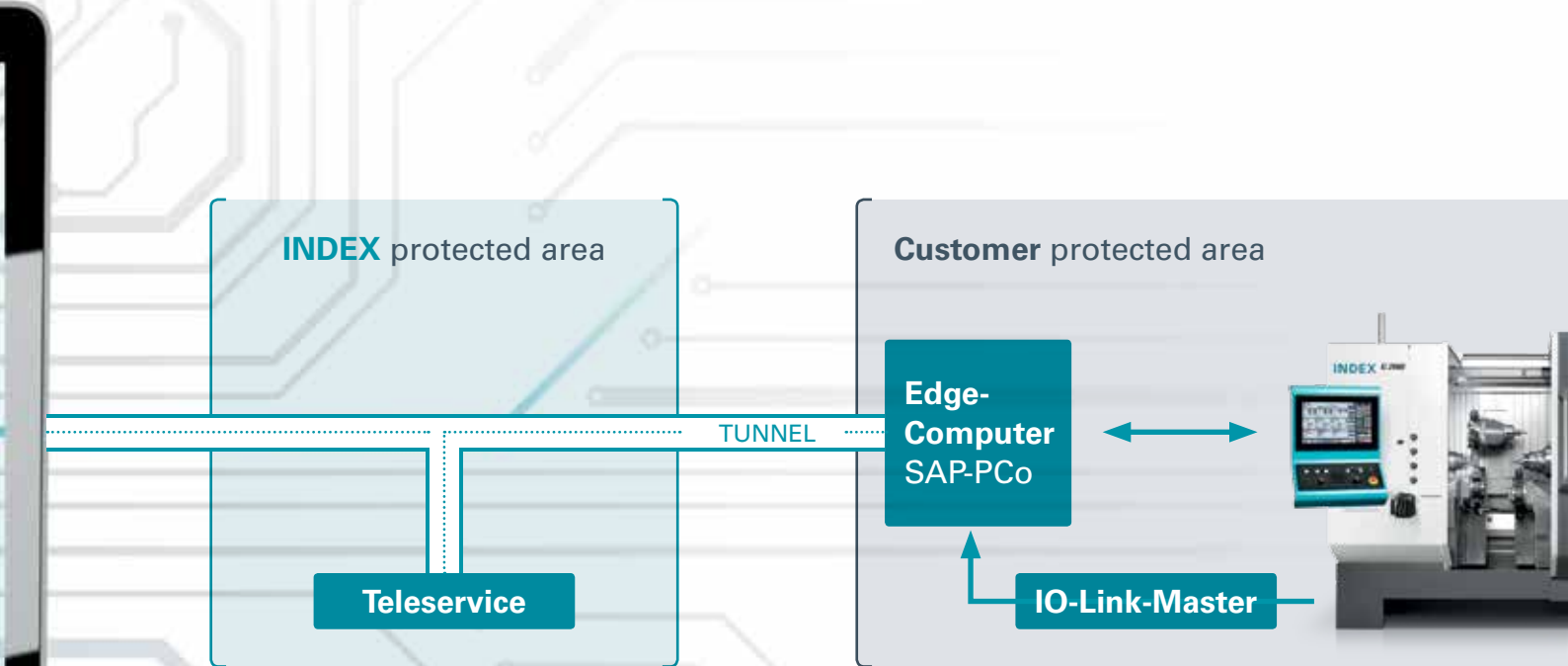
MAKE YOUR MANUFACTURING PROCESSES **SECURE AND EFFICIENT!**

iX4.0 is suitable **for any device** with a standard web browser.



iX^{4.0}





Security and transparency

- Capability for the machine operator to monitor the data connection
- Use of recognized standards for data transfer and storage
- Storage and processing of data in the SAP cloud infrastructure
- 100% transparency of the transferred data

Efficiency

- OPC-UA as recognized standard interface
- Local data pre-processing to reduce the amount of data transferred
- No impairment of the manufacturing process by data transfer

Technical requirements:

- Any CNC control terminals used on INDEX and TRAUB machines since 2007
- Device with a standard web browser



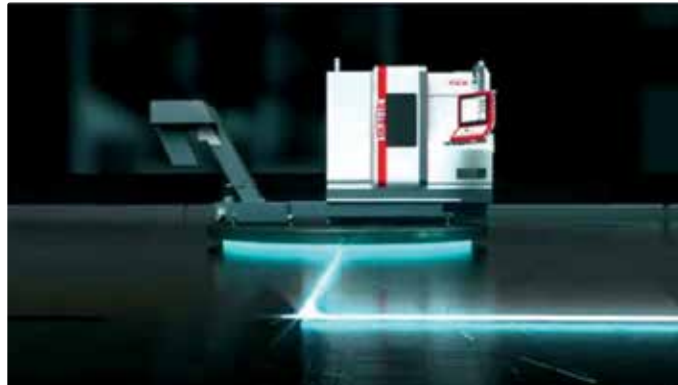


Xplore

Explore the variety
of INDEX products

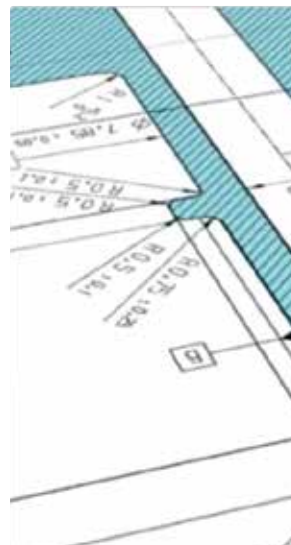
X4.0

The IoT platform



Xshop

The equipment portal



Xservices

The service portal

Xworld

The world of digital integration

iXworld is the cloud platform for everything to do with your machines – from procurement to operation to service for the machine.

www.iXworld.com

better.parts.faster.

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