RIETER

ESSENTIAL

Rieter Digital Spinning Suite

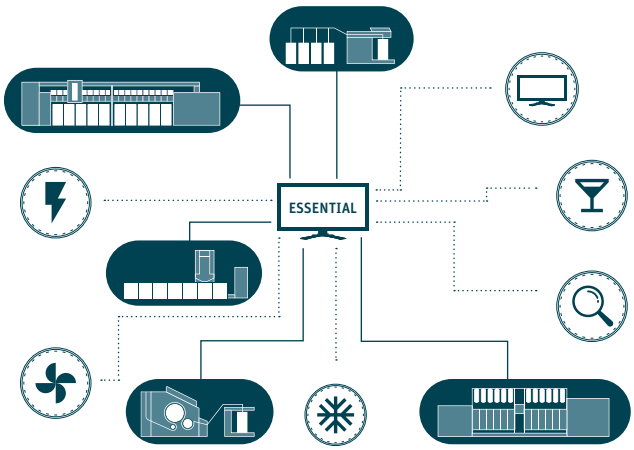
The all-in-one mill management system

ESSENTIAL – Rieter Digital Spinning Suite

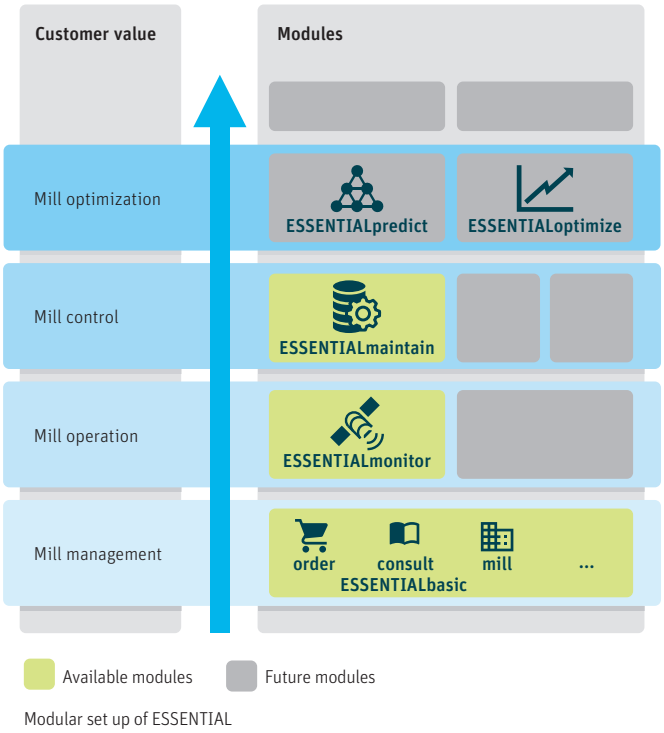
The all-in-one mill management system

ESSENTIAL leverages digital technology for the textile value creation. The Rieter Digital Spinning Suite analyzes data of the entire spinning mill in real-time and provides meaningful key performance indicators based on this.

With comprehensive and clearly arranged digital analysis, the system supports management in strengthening the expertise of mill staff, eliminating inefficiencies and optimizing processes across the entire system. Through its holistic approach, ESSENTIAL is connecting the dots in the spinning mill.



ESSENTIAL is connecting the entire spinning mill



Modular set up of ESSENTIAL

Modules for all requirements

ESSENTIALbasic, the starter module of the Rieter Digital Spinning Suite, is available free of charge to all Rieter customers. This module includes solutions such as the Rieter calculator, ESSENTIALorder and ESSENTIALconsult.

Additional modules can be selected as needed and added one by one. This allows a step-by-step digitization of the spinning mill.

Fast Parts Ordering and Search of Information

ESSENTIALbasic

Services for every day's mill management

ESSENTIALbasic offers useful modules and information that simplify the everyday life in a spinning mill such as:

Mill configuration
Depicts all machines that are installed in the spinning mill. Mill managers can also add non-Rieter machines and auxiliary equipment to have a complete overview.

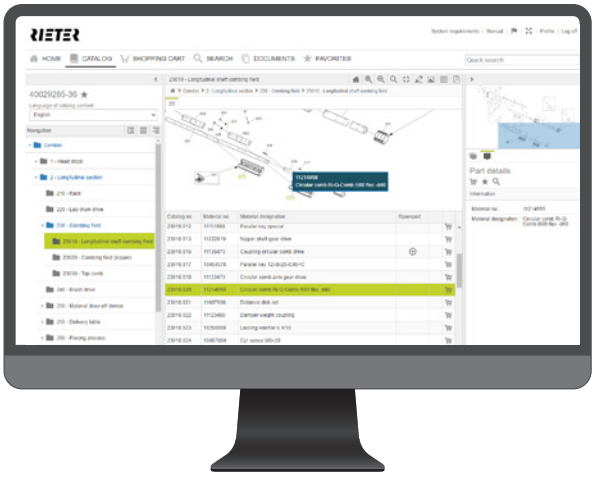
Market information
Useful market information is integrated into ESSENTIALbasic. The information level is constantly expanded.

Ordering and management

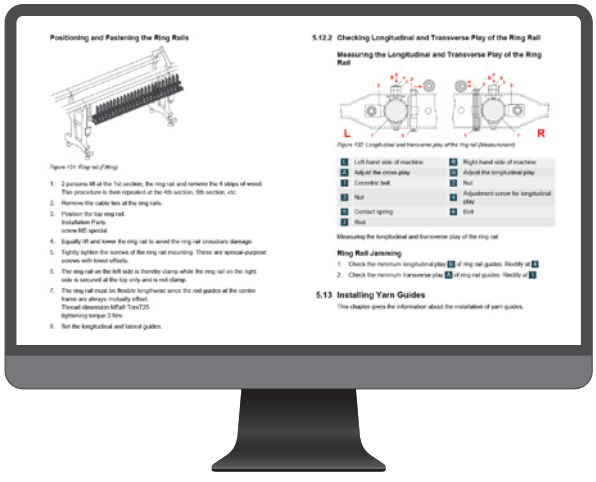
ESSENTIALorder facilitates the handling of both urgent orders and standard orders, allowing spinning mills to optimize the amount of stock they hold internally.
The module contains an online state-of-the-art spare parts catalog for the specific machine configuration. Rieter's inventory comprises over 14.5 million parts – the availability, price, and supplier of which can all be checked before ordering. Once an order has been placed, the parts are quickly shipped to their final destination from Rieter's central and local warehouses.
The system is available 24 hours a day, enabling the customer to submit orders from anywhere and at any time.

Find information fast

ESSENTIALconsult provides a quick access to important information. The digital manual contains all operation manuals, eliminating the need to spend time searching through paper documents. Further documents can be added by the customer and linked to a specific machine.



State-of-the-art webshop



Digital documentation

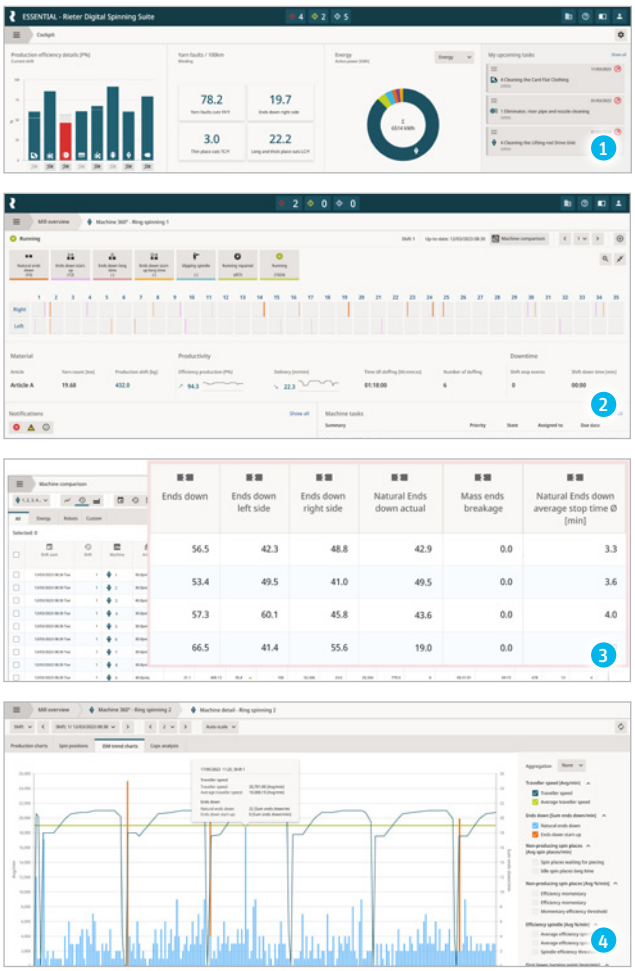
Comprehensive Key Performance Indicators

ESSENTIALmonitor

Introduce the right measures

ESSENTIALmonitor provides clearly organized data from the entire spinning process centrally. This allows all relevant information to be collected, weaknesses to be identified, and personnel to be utilized in the most economical way. The specific and non-stop recording of data for production, energy, and quality allows fast response times for introducing the right measures. This increases the efficiency of spinning mills while reducing costs. The data is displayed in a user-friendly cockpit that shows the individual data for each machine in the form of a drill-down feature, for a quick and easy access.

1. Find the most relevant data on plant level.
2. Drill down to compare performance data between machines of the same process stage – for example rotor – and have a 360° view on each machine.
3. Get performance, quality, planned maintenance and energy data per lot.
4. See detailed data per spinning position, such as yarn breaks and quality data at a specific rotor number.

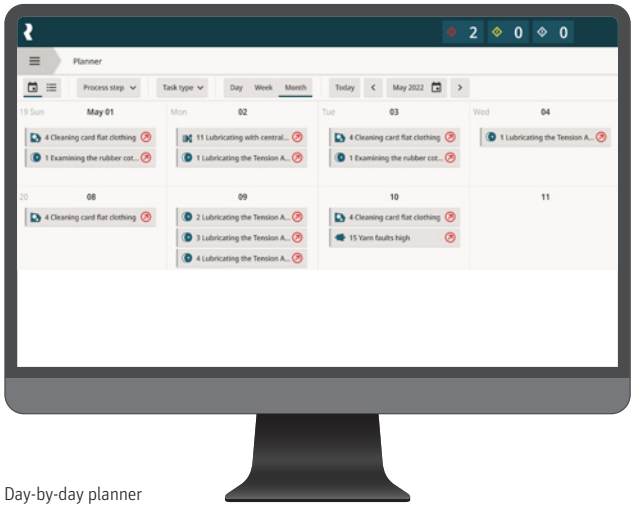


User-friendly display of key information

Manage your past, present, and future actions

Thanks to a comprehensive ticketing system and clear user instructions, actions can be organized, scheduled, assigned, and tracked with full transparency. ESSENTIALmonitor provides a complete and transparent overview of all past, present, and future maintenance and quality work.

The planned maintenance and quality planning section shows all required planned maintenance tasks such as cleaning, lubrication, and replacement. A calendar view provides an overview of all daily tasks, including offline quality test planning.



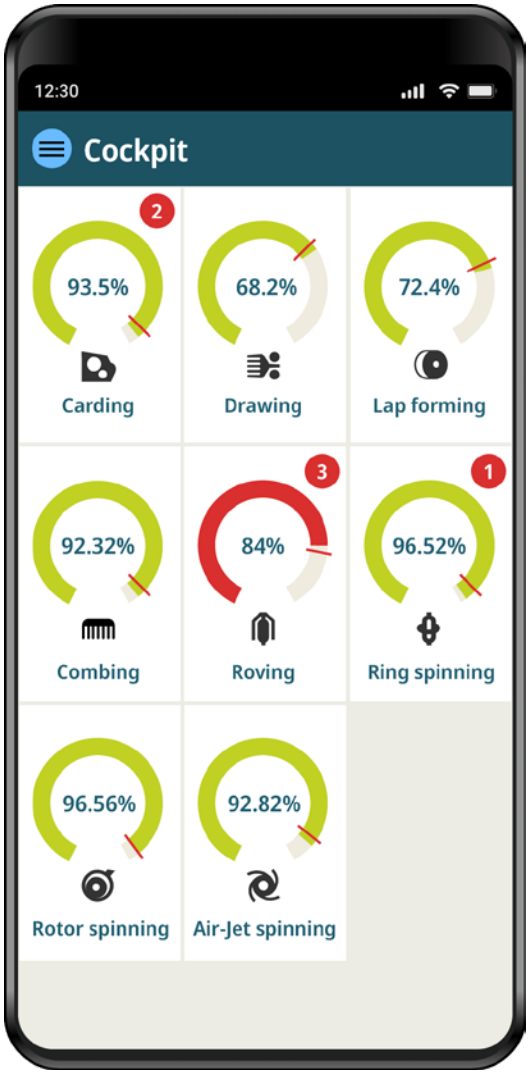
Day-by-day planner

Information Tailored to All Needs

ESSENTIALmonitor

Monitoring – anytime, anywhere

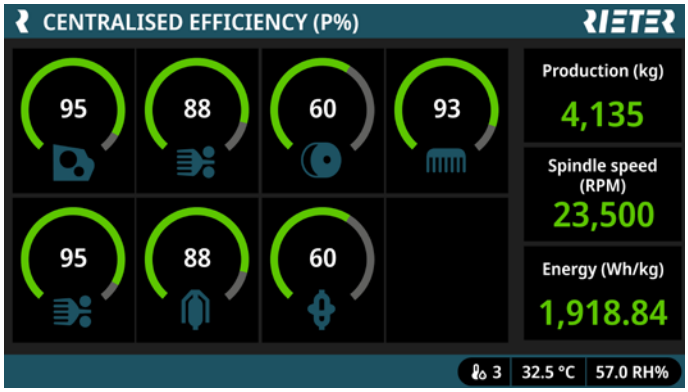
The mobile application for smartphones of ESSENTIALmonitor provides key data concerning production, quality, and energy in near real time. The app enables customers to respond to challenges without delay and minimizes expensive downtime.



Smartphone app of ESSENTIALmontior

For a transparent spinning mill

ESSENTIALdashboard as an option of ESSENTIALmonitor visualizes current key performance indicators (KPIs) such as efficiency, production, and key quality data. A large display unit makes the information available directly in the mill. ESSENTIALdashboard offers even more transparency on the current performance of the spinning mill and provides staff with relevant information.



Large display unit with KPIs

User-centric approach

There are various functions working in a spinning mill that require different data. Therefore, ESSENTIAL displays the most important data in a role-based cockpit. Data tiles can be selected and re-arranged to meet individual requirements.

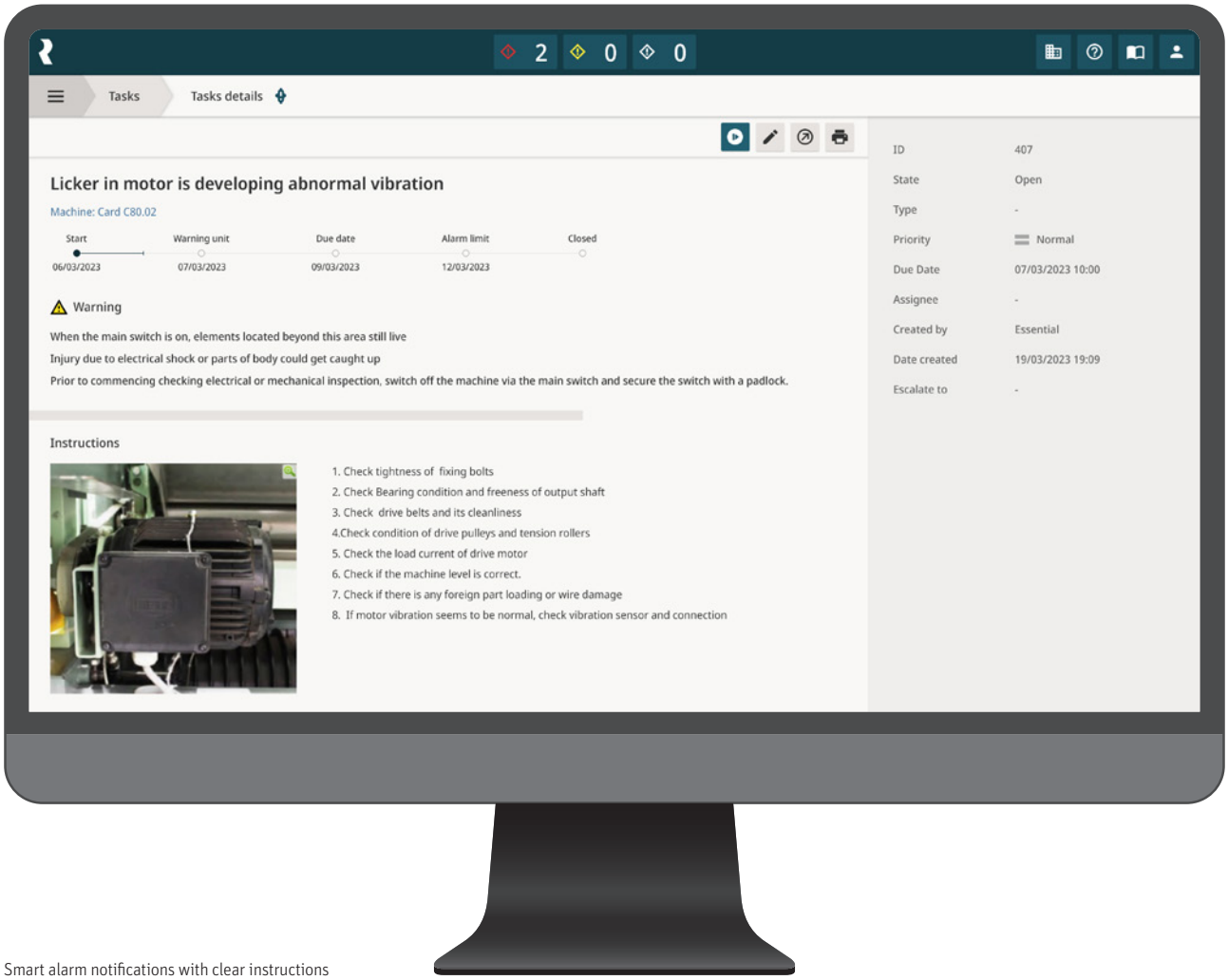
The customer-oriented Rieter Digital Spinning Suite not only improves decision-making at the top level, but also supports daily business decisions that employees face every day in spinning mills. Depending on the hierarchy level and information needed, different channels are useful. The mobile app is ideal for the decision makers to get a 24/7 overview of the performance of their spinning mills. The mill managers have all data in a user-friendly cockpit on their desktop and can drill down to every detail. They can also generate reports on various levels such as a plant overview or a report on machine stops. Operators and supervisors see the performance of their machines on ESSENTIALdashboard while working.

Consistently High Production Output

ESSENTIALmaintain improvement suggestions

Condition monitoring with alarm instructions

ESSENTIALmaintain enables intelligent spinning mill maintenance. It analyzes sensor data from critical machine components and identifies abnormalities to avoid outages. Detailed alarm notifications with clear measures ensure that the user keeps the equipment at highest availability. Thanks to a smart ticketing system, past and current alarms are available, and it is easy to track their status. This improves machine productivity and lengthens the service life while reducing the overall costs of inspection and maintenance. From Rieter to third-party spinning equipment and auxiliaries, ESSENTIALmaintain covers the entire spinning mill maintenance needs.



Smart alarm notifications with clear instructions

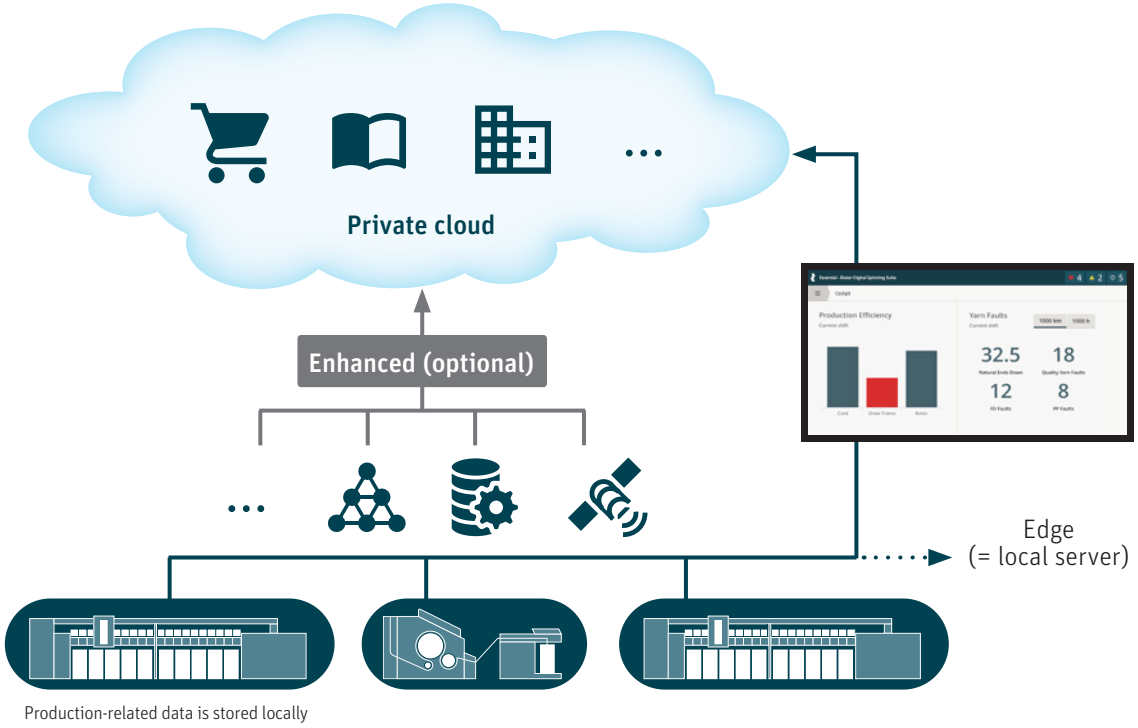
Keep Your Data Safe

Key data in local servers

Control key data

ESSENTIAL uses edge computing to gather and process all data locally in the spinning mill. The system analyzes this data immediately, which helps the spinning mill's management to make decisions. ESSENTIALmonitor, ESSENTIALmaintain are available with edge computing due to critical production-related data processing such as machine performance or yarn quality. This means data is stored on a local server in the spinning mill.

ESSENTIALmonitor receives the data from the Programmable Logic Controllers (PLCs) of all Rieter machines. Rieter end spinning machines have integrated sensors that check the running properties of each individual spinning position. For ring and compact spinning, this is available through the integrated Individual Spindle Monitoring (ISM) system premium and for rotor and air-jet spinning by the digital yarn clearers. For ESSENTIALmaintain, master and sensor concentrators are installed on the equipment.



Enhance functionalities

To enhance user experience and customer value and draw on the more than 220 years of process know-how of Rieter, a private cloud is key to provide further analysis, visualization and process recommendations.

ESSENTIALbasic, including the modules ESSENTIALorder and ESSENTIALconsult, and other features with non-production critical data are therefore stored on a private cloud. To ensure that cloud data is secure, Rieter works together with reliable partners, focusing on security and compliance with legal requirements.

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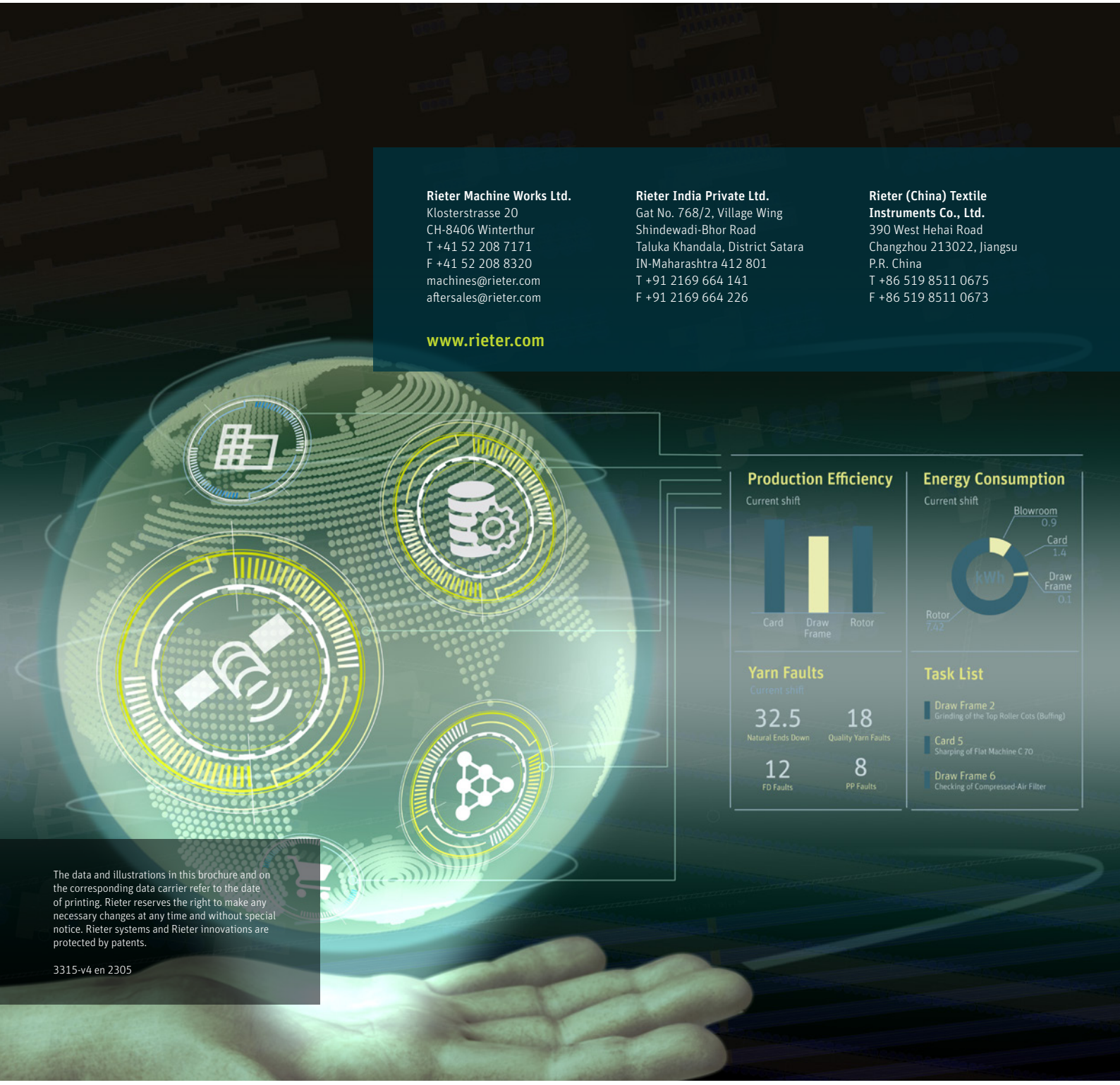

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