

# RUD COCKPIT

FOR A SMART CONNECTION TO YOUR CONVEYORS

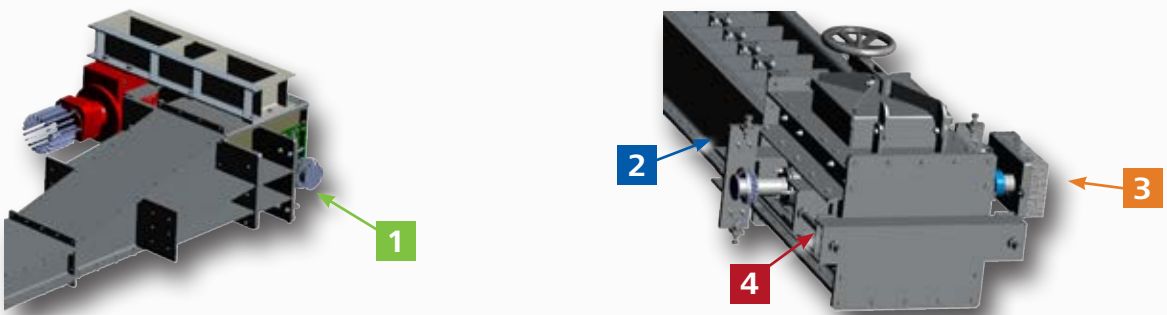
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Analysis of critical assets | Improvement of process safety | Forecasting the service life | Targeted planning of service costs

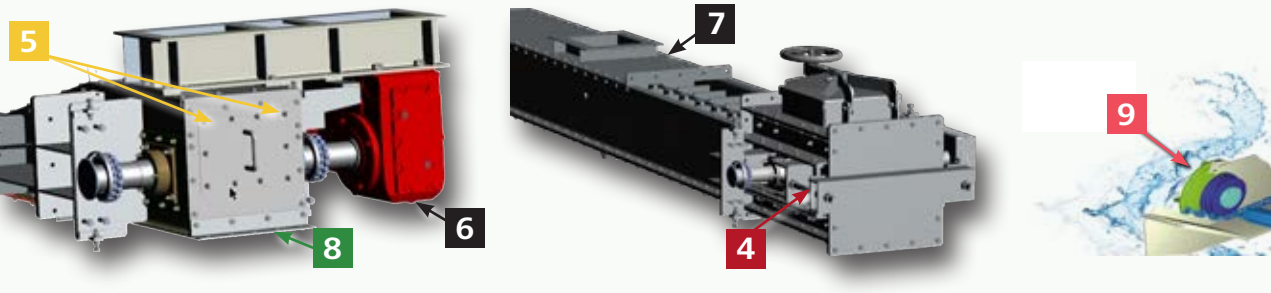
# RUD COCKPIT






## Basic packages



No.		Function of the sensor	BASIC PACKAGE 1 Forecasting Model	BASIC PACKAGE 2 Direct Measuring Model
1		<ul style="list-style-type: none"> <li>• Speed analysis</li> <li>• Operating hours</li> </ul>	✓	✓
2		Chain life forecast based on RUD Model	✓	✓
3		Supervision of chain fracture	✓	✓
4		Chain wear measurement at one chain loop*		✓

## Add-Ons for basic packages



No.	Add-Ons		
5		2 sensors	Chain travel analysis
6		1 sensor	Power analysis (hydraulic power only in a first step)
7		1 sensor	Temperature
4		1 sensor	Chain elongation analysis* (= due to wear)Second sensor for both chain loops
8		1 sensor	Overfilling of the discharge chute
9		4 sensor	SOI detects fix seated submerged idlers

\* Both information leads to a more detailed expected residual lifetime of the chain equipment

# RUD COCKPIT

Measure, observe & improve your operations

**NEW**

Connect your conveyors to the RUD COCKPIT and profit from our experiences. Analyze the availability of your conveyor.



## YOUR BENEFITS AT A GLANCE

- Automated, continuous measuring
- No stops of the conveyor necessary. No loss in production!
- Real time data. Validated information on every moment
- Fact based budget planning possible.
- Availability of data at all mobile devices for quick decisions.
- Web-based access to your data, no download of an App
- Permanent availability of the data through cloud application
- Core function is independent useability on any type of conveyor
- Safe access with personalised password

## RUD COCKPIT IS ABLE TO:

- detect dangerous operating conditions (e.g. undue heat, over-filled chutes, unusual speeds, fixed seated idlers, tensioning distance consumed, etc.).
- Provides a prognostic of residual life time of the chain equipment (basic package 1) or provides a real time chain elongation in percentages (basic package 2).
- Supports predictive maintenance approaches and planning of services.
- Allows a conclusion why the lifetime of a chain equipment is reduced (due to various speeds, fixed seated idlers, etc.).

## APPLICATIONS:

- Vertical Conveyors (e.g. bucket elevators)
- Horizontal Conveyors (e.g. scraper conveyors for de-ashing or other applications)

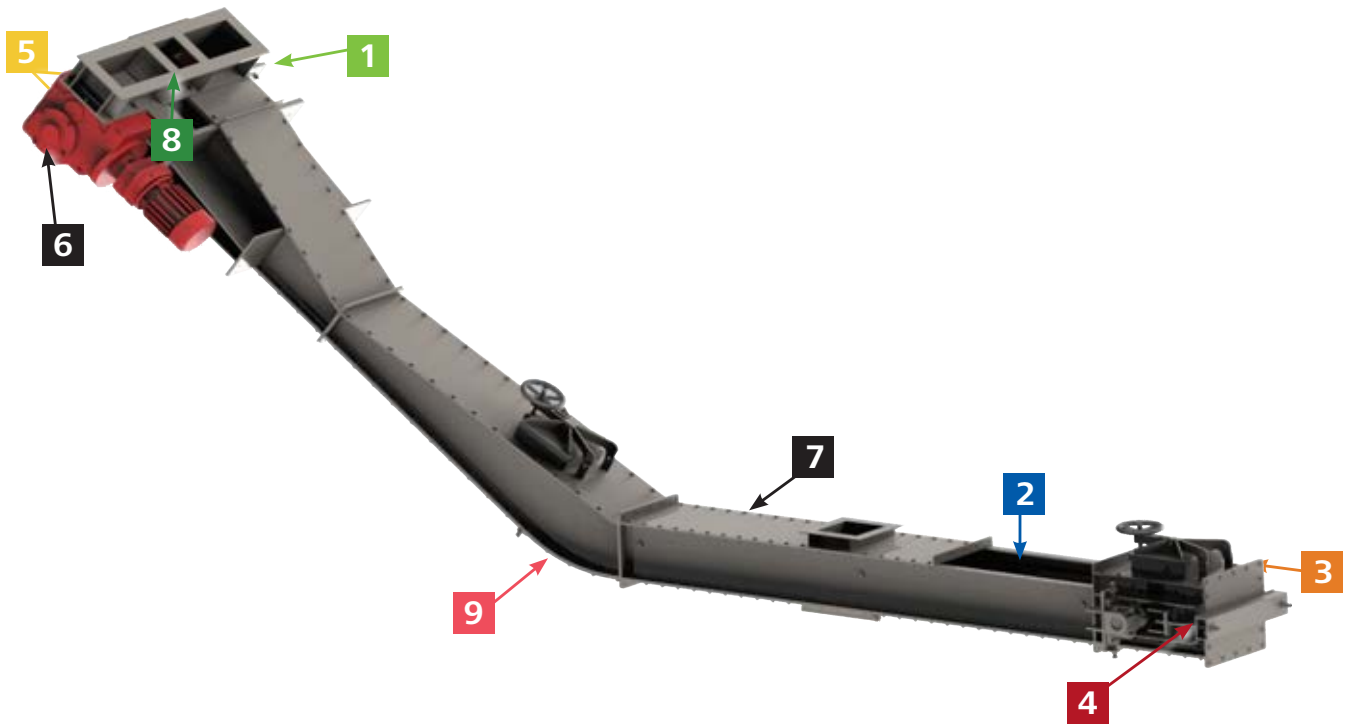
## FOCUS:

- Analyzation of critical operating conditions = transparency!
- Knowledge based consultancy for conveyors
- Fact based budget planning



# RUD COCKPIT

RUD's new revolution – is a part of the 'Cloud of Things'! You also?



## Detailed installation effort

No.	Subject	Function
1	Speed analysis / Operation hours	Provides information about the speed and the operating hours of the machine
2	Chain life forecast based on RUD model	Collect relevant informations
3	Supervision of chain fracture	This sensor signalized if the tensioning shaft does not rotate
4	Chain wear maesurment at on chain loop/ Chute elongation analysis	Collect information about the residual tensioning distance
5	Chain travel analyses	Detect up climbing chain links
6	Power analyses (hydraulic power only in a first step)	Collects information about the power consumption of the machine
7	Temperature sensor	Detects the temperature
8	Overfilling of the discharge chute	Collect signals caused by overfilling of the machine
9	SOI detects fix seated submerged idlers	These sensors signalized if the submerged idler do not rotate

# RUD COCKPIT

Web surface



## Mobile end user devices

- Managing all of your machines from one place
- Flexibility for new devices
- Easy login all over the world
- Responsive design for your mobile device



Contact RUD COCKPIT  
Hotline +49 7361 1457

Following hardware end user devices can be used for the visualization of Alarms and the view of the web application:

**Desktop PC | Smartphone | Tablet Computer | Laptop Computer**

- It is a LAN / WLAN access necessary and a mobile network





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# CONVEYOR & DRIVE TECHNOLOGY

WITH SPECIAL SOLUTIONS FROM RUD



Whether it is complete bucket conveyor, chain conveyors or chain drive, RUD BULKOS rises to every conveyor challenge thanks to our extensive experience with the most varied bulk materials such as cement, fertilisers, stones and soils and many others.



RUD is the global original equipment manufacturer among the leading lifting equipment manufacturers. We also offer a variety of round link steel chains for different industries.



RUD chain locks "Powerblock" and "dominator" are considered as benchmarks of the industrial sector throughout the world and are used in high-performance mining companies due to their high level of reliability.



The RUD TECDOS team is developing and manufacturing drive solutions for turning, lifting, moving, telescoping or shifting. In addition to the component program, complete solutions like the TOOL MOVER are also available as the TECDOS OMEGA, GAMMA and PI drives.



As the technology leader, RUD provides components and total solutions on the basis of round link steel chains and FORKY for energy generation with coal and biomass as well as in the area of recycling. Be it material supply, ash removal or cleaning scraper, RUD CRATOS offers the suitable solution.