

The background of the slide is a large, black and white photograph of a massive industrial machine, likely a tunnel boring machine (TBM). The machine is shown from a low angle, emphasizing its scale. A prominent red ring is visible around the cutting head, which is equipped with several large, black, pointed cutting tools. The machine is situated in an industrial setting with various structural elements and scaffolding visible in the background.

**Compact BWE KR400Nk**  
and  
**Belt Wagon PV400Np**

**NOEN, a.s.**

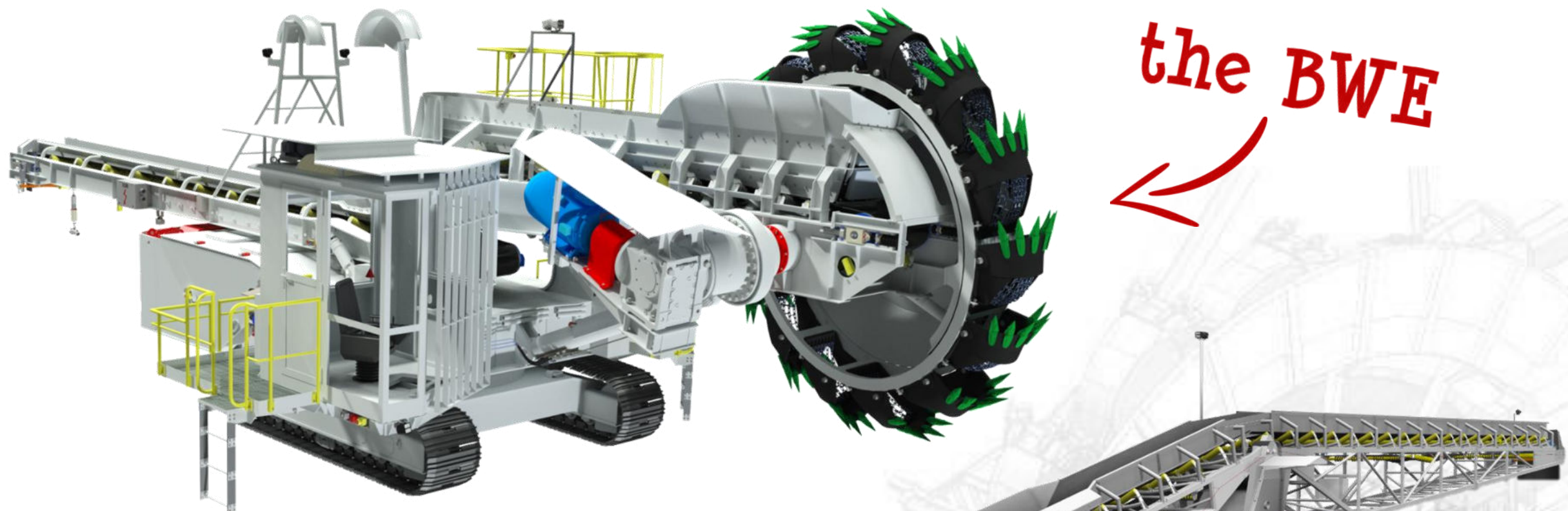
Ing. Pavel Snášel

Sales & Business Development Manager



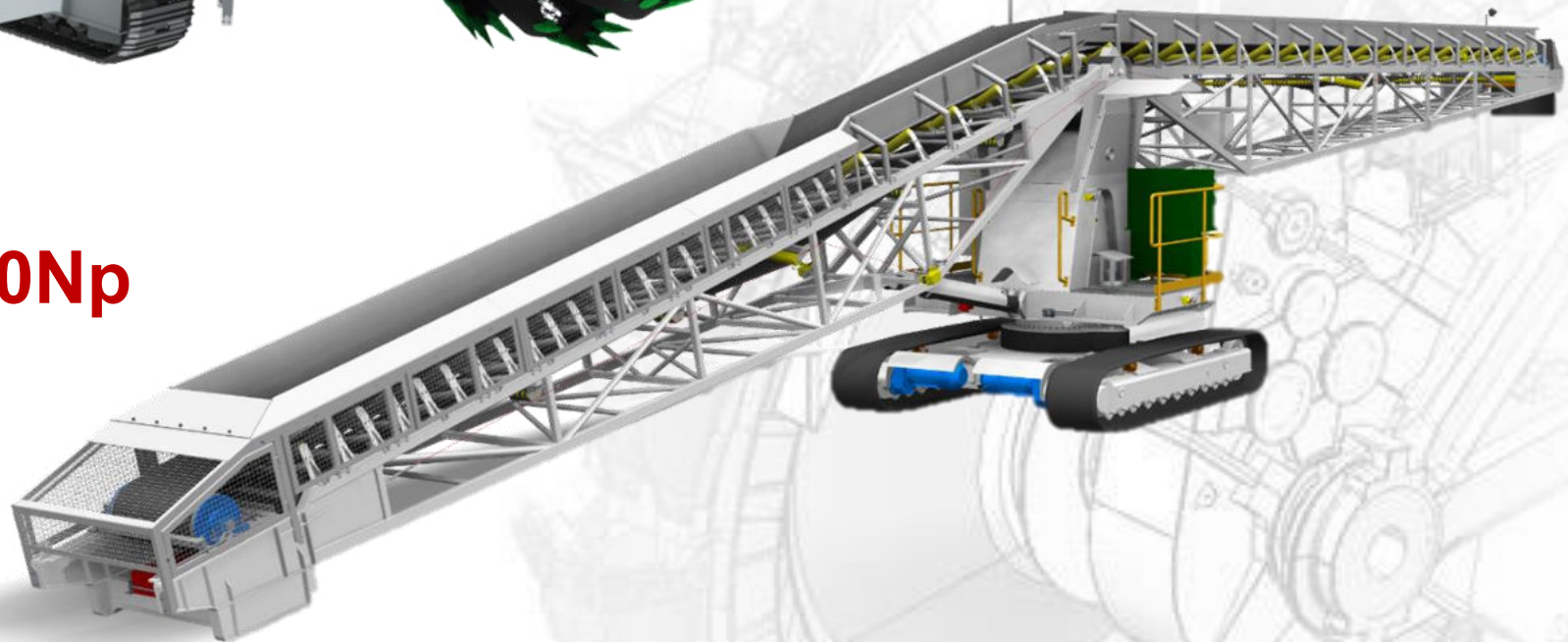
# Introduction

Compact Bucket Wheel Excavator **NOEN KR400Nk**

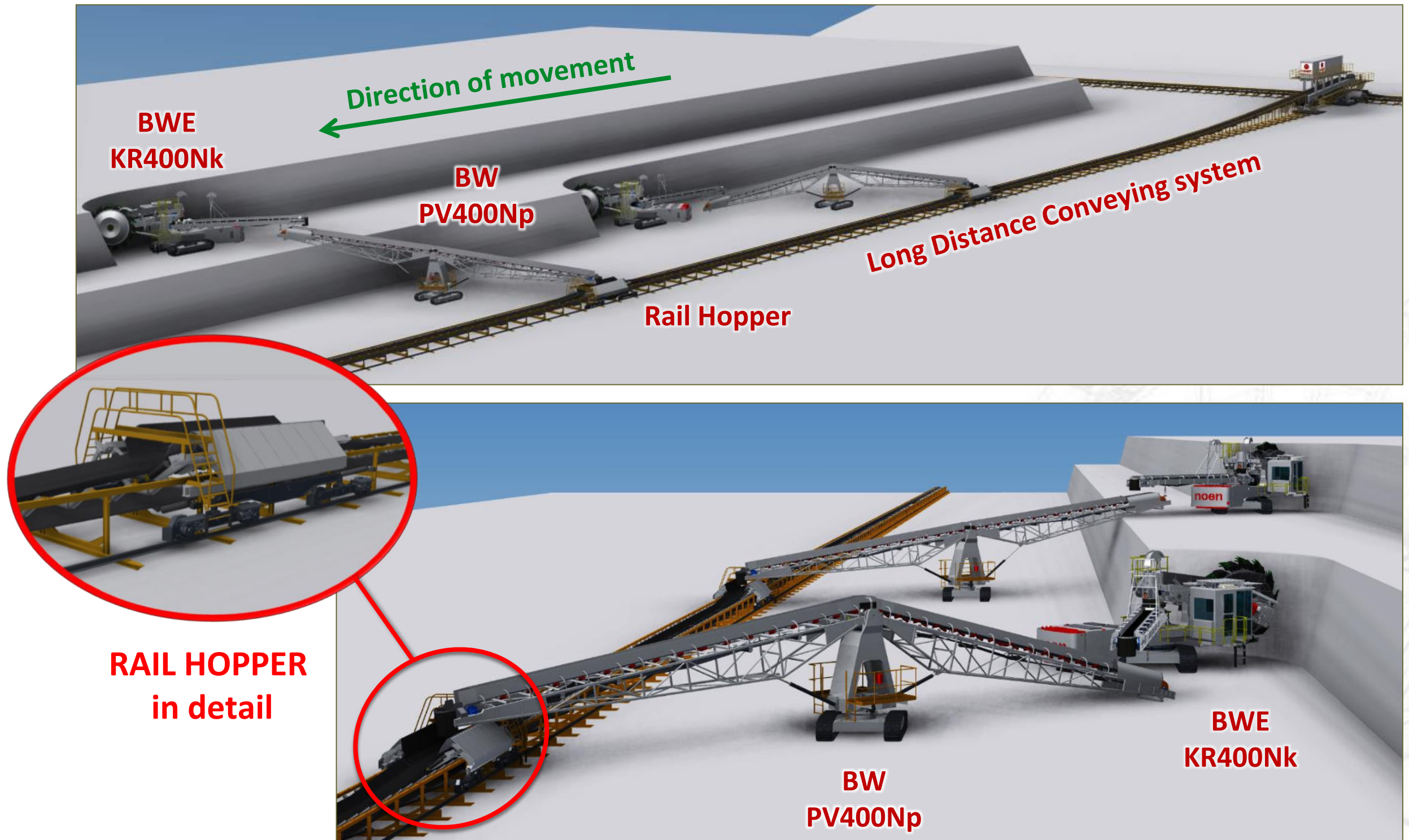


Belt Wagon **NOEN PV400Np**

*the BW*



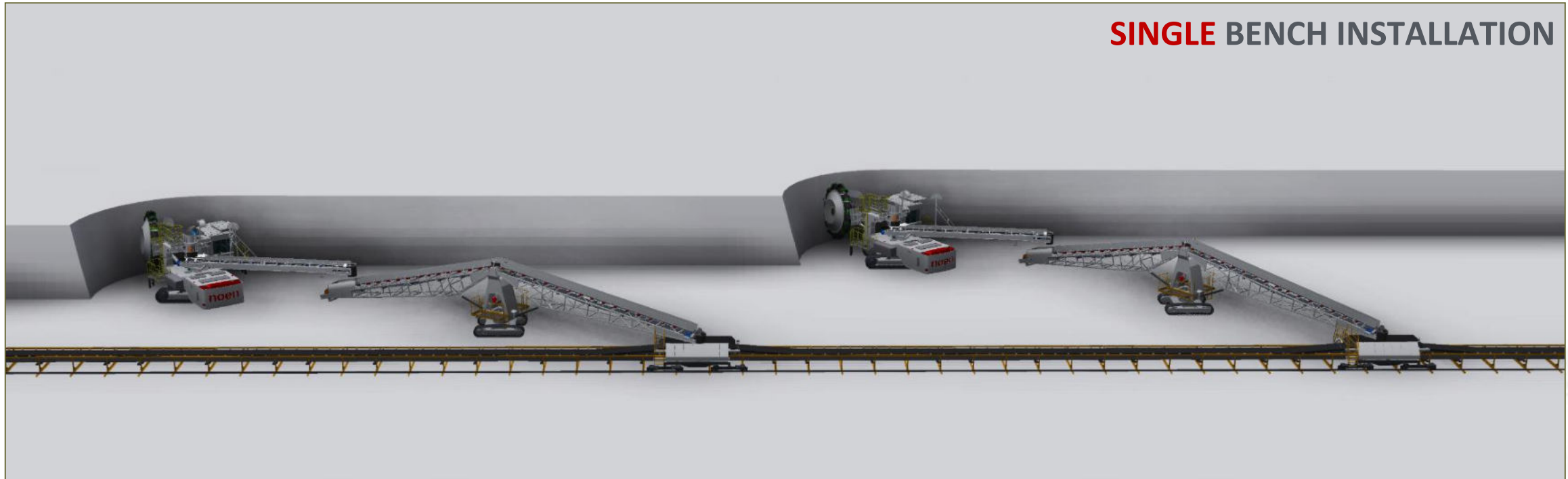
# Installation and system of excavating



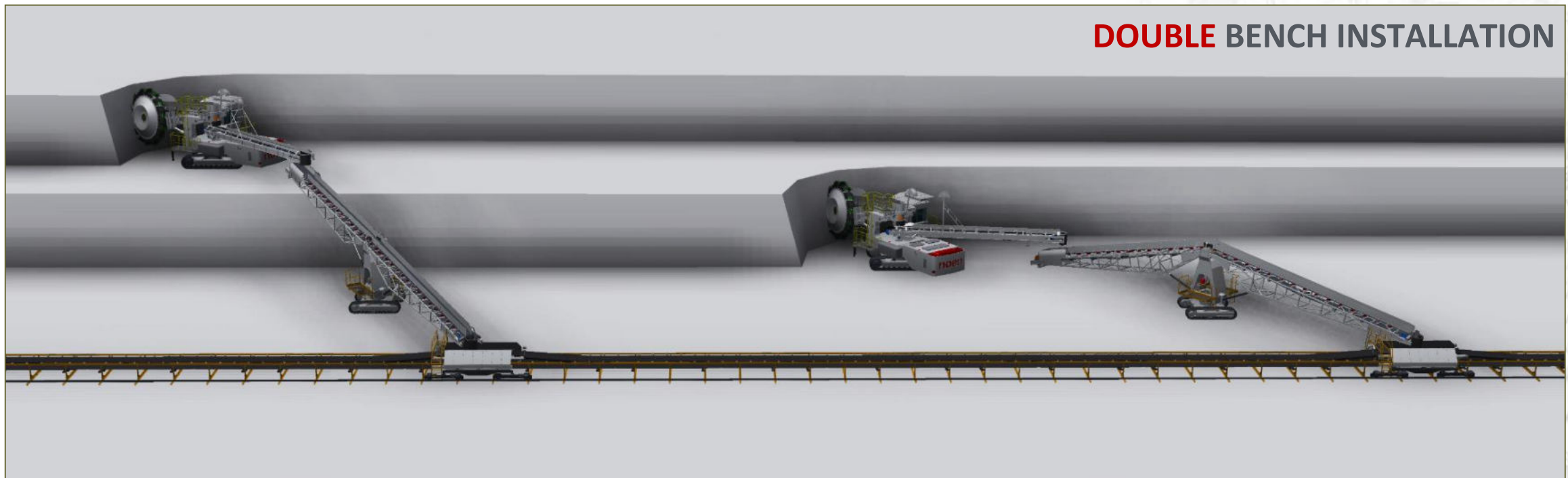


# Installation and system of excavating

**SINGLE BENCH INSTALLATION**



**DOUBLE BENCH INSTALLATION**



# BWE NOEN KR400Nk

## Compact Bucket Wheel Excavator **NOEN KR400Nk**

- Low energy consumption
- Good cost effectiveness
- Low time consumption for operating movements
- Low grain size of output material
- Transportability in one piece – low onsite assembly time
- Belt Conveyor components identical with Belt Wagon

**the BWE**




# BWE NOEN KR400Nk

The BWE is designed for specific parameters of **open pit mines**.

## **The excavated material**

Chalk, Overburden, Coal, Metal Ores, Gravel, etc.

## **The way of work**

The material is excavated by bucket wheel driven by electro-mechanical drive. The excavated material goes on the belt conveyor through the bucket wheel boom and transfer point to the discharge boom where exits the bucket wheel excavator and continues to the subsequent conveyor belt, Belt Wagon of long-distance transport.

## **Main features**

The whole machine sits on crawler undercarriage with the ability of 360° slewing.

The hoisting system for bucket wheel boom as well as for discharge boom is hydraulic.

There is a central lubrication system which is automatically lubricating the main parts (slewing bearing, gears, shaft bearings, etc.)

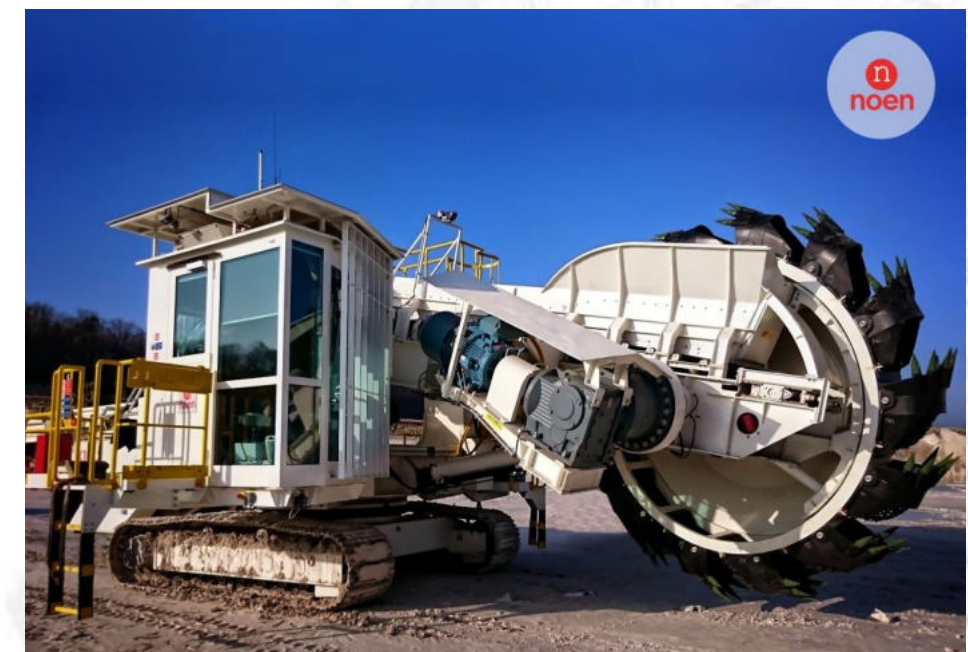
The BWE can be transported as a whole without necessity of major dismantling.





# BWE NOEN KR400Nk

BWE identification	NOEN KR400Nk	-
Bucket volume	100	dm <sup>3</sup>
Conveyor belt width	800	mm
Theoretical output	100 to 400	m <sup>3</sup> /h
Effective output	50 to 200	bm <sup>3</sup> /h
Service mass	74	t
Output grain size	0 to 300	mm
Input Voltage	400	V
Bucket wheel diameter	4 300	mm
Bucket wheel drive type	Electro-mechanical	-
Bucket wheel drive power	75 to 90	kW
Electric power installed	190	kW
Length of bucket wheel boom	6 000	mm
Length of discharge boom	11 000	mm

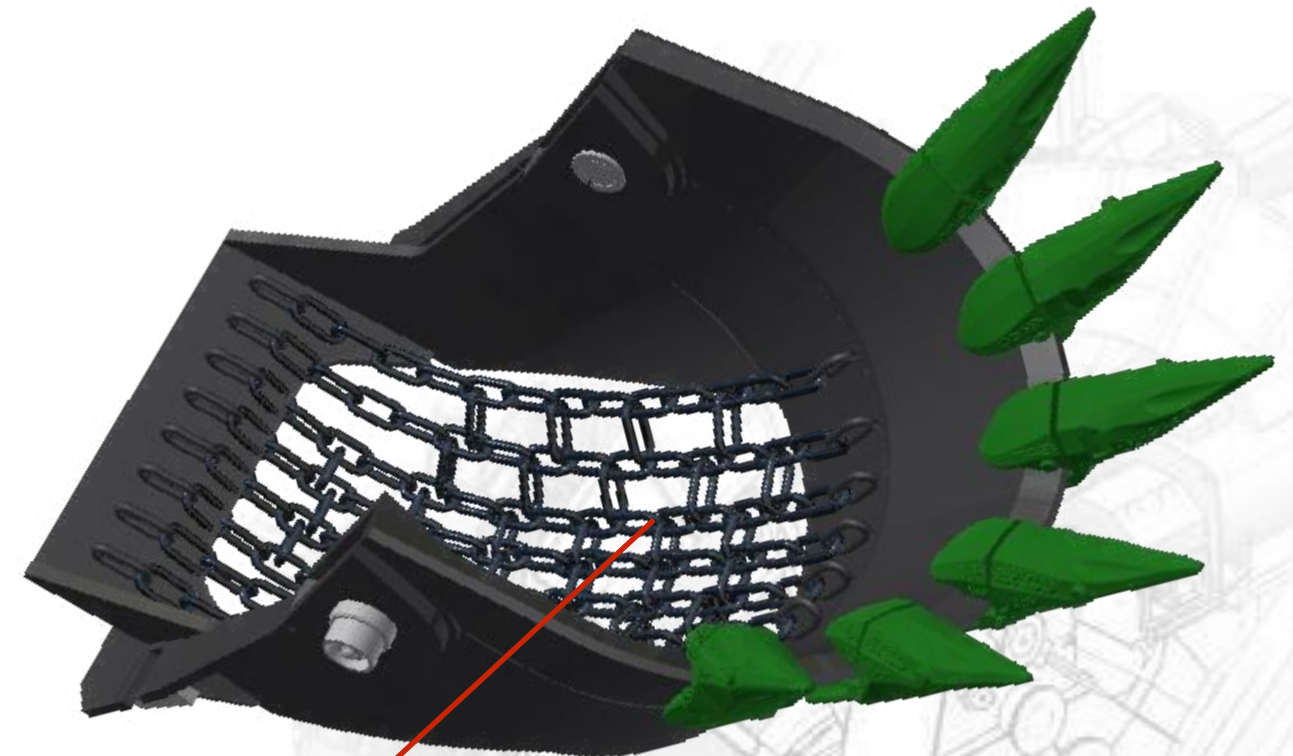


# BWE NOEN KR400Nk

## Digging Element - **Bucket with Teeth**



Tailor made **teeth arrangement** according to excavated material



**Self-emptying system** designed according to stickiness of excavated material



# BWE NOEN KR400Nk

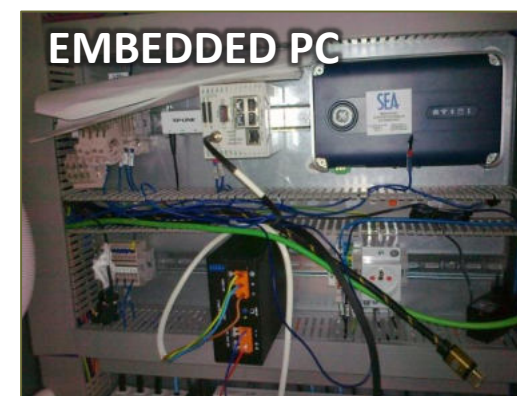
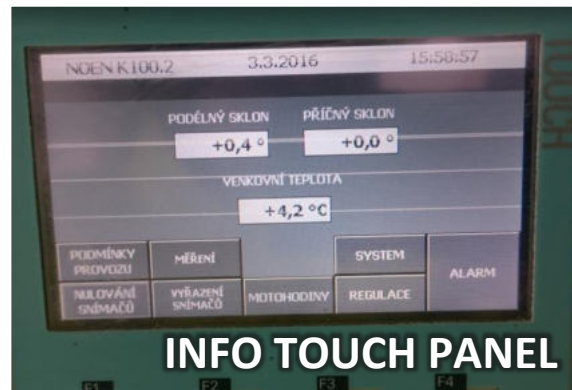
**Transportability** in one piece - low onsite assembly time





# BWE NOEN KR400Nk – Main Parts & Features

Ergonomic and comfortable **Operator's Cab** - Inside

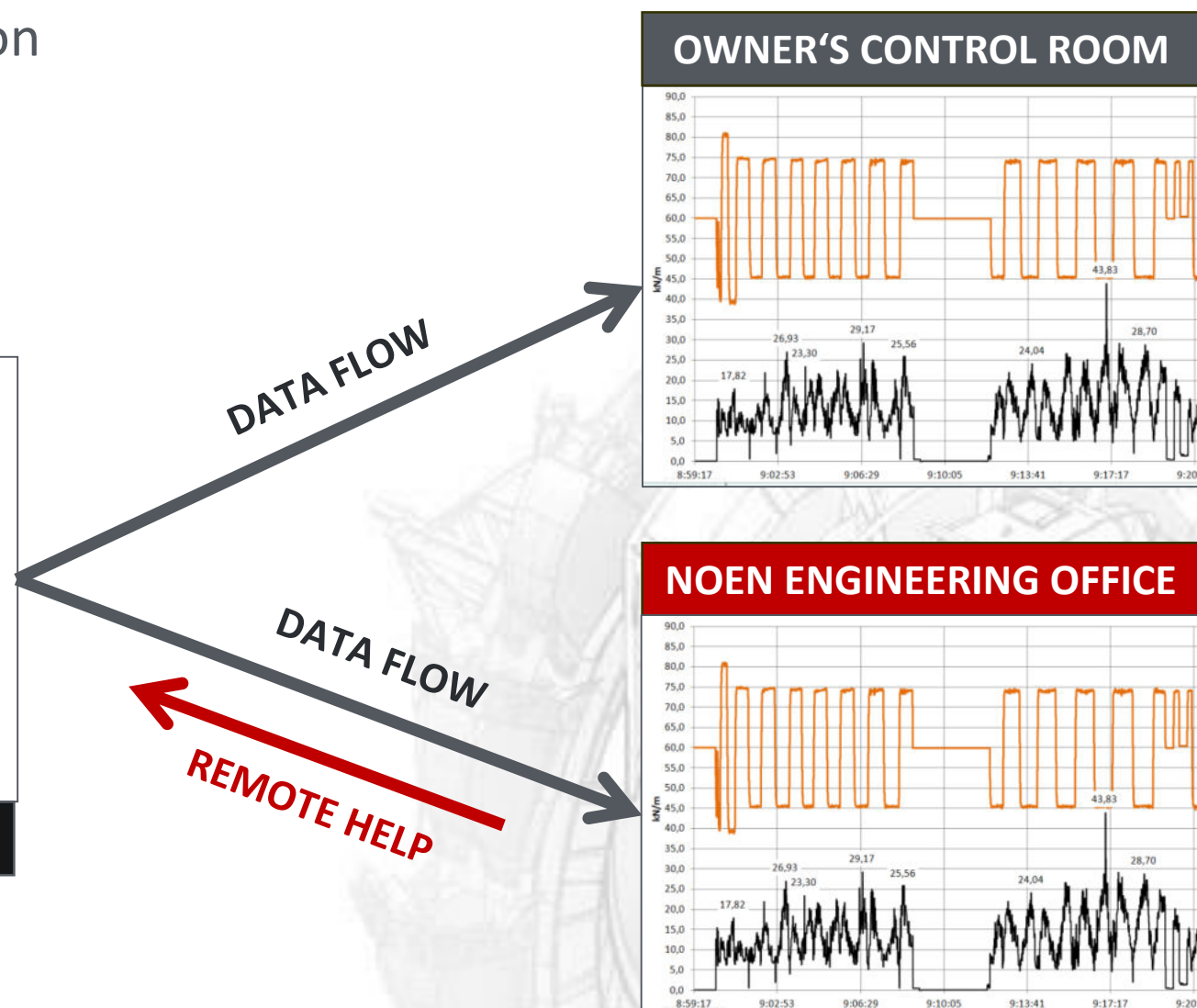
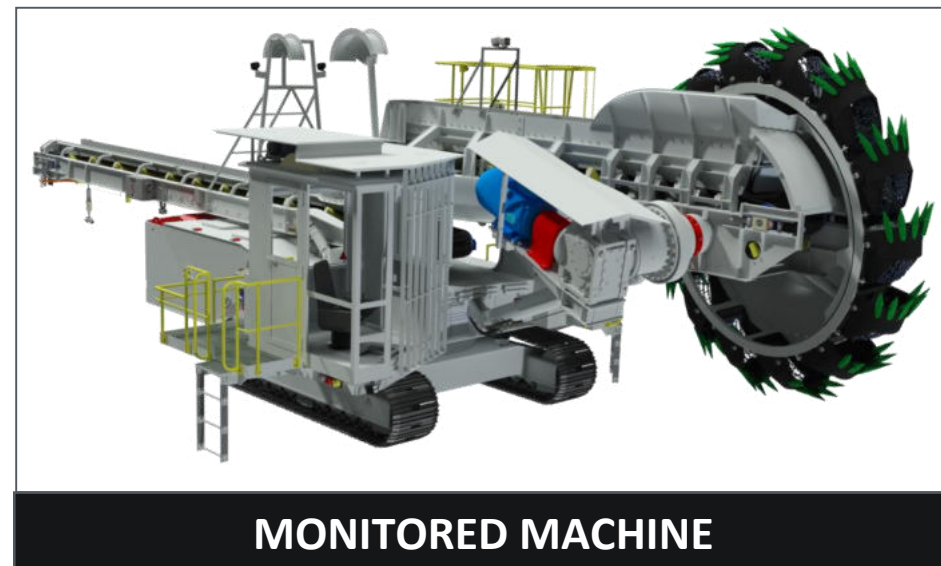




# BWE NOEN KR400Nk – Main Parts & Features

## Data-logging and monitoring

- Logging of various data from PLC and FC on IPC
- Supervision of machine in warranty period
- Possible failure cause investigation
- Feedback data for engineers
- Remote help and settings

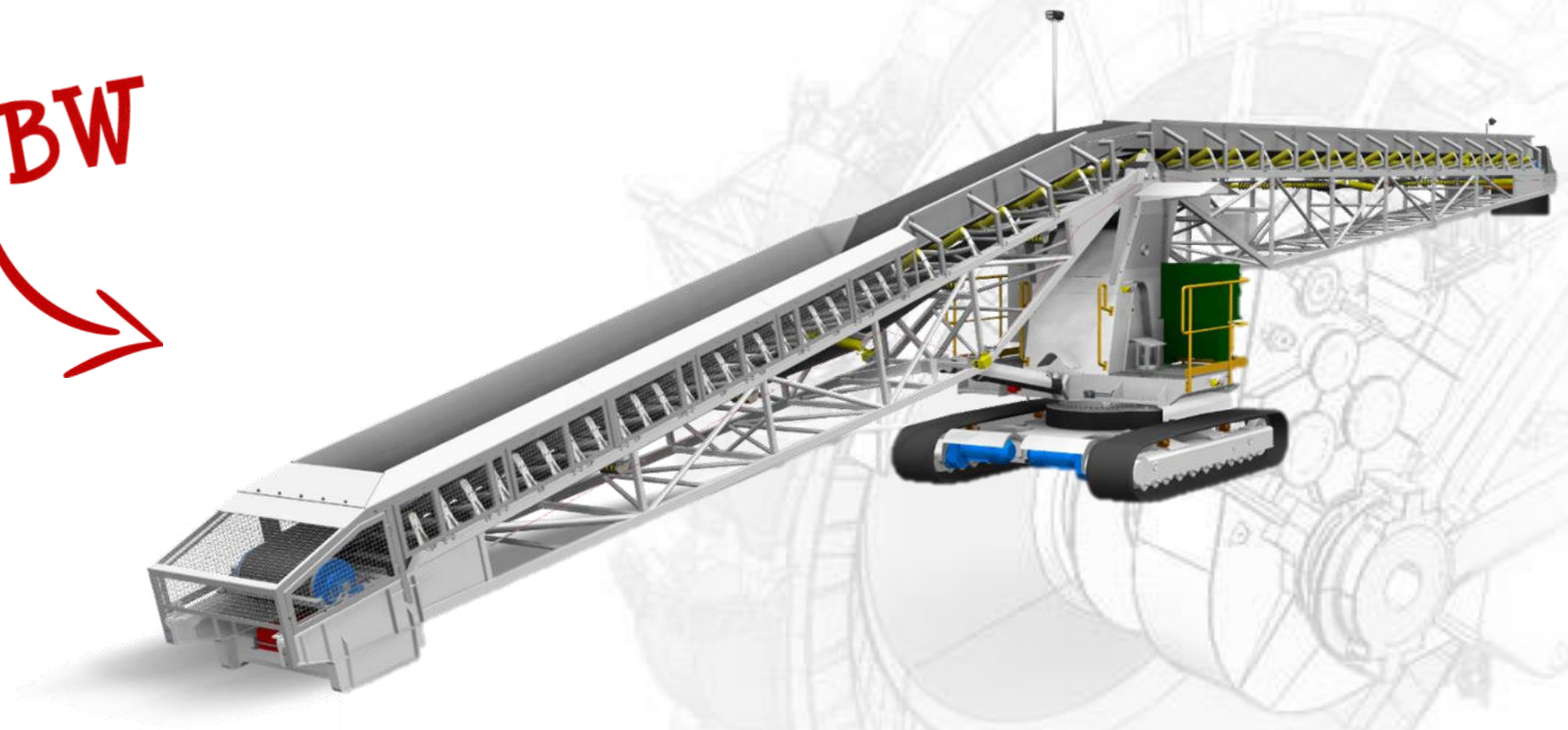


# BW NOEN PV400Np

## Belt Wagon **NOEN PV400Np**

- Maximally extends operating distance of BWE and improves its mobility
- Low energy demand
- Good cost effectiveness
- Transportability in one piece – low onsite assembly time
- Maximally identical spare parts with the BWE

the BW



# BW NOEN PV400Np

The Belt Wagon is designed for increase mobility of the Bucket Wheel Excavator.

## The transported material

Chalk, Overburden, Coal, Metal Ores, Gravel, etc.

## The way of work

The material excavated by a BWE is loaded to a hopper of the Belt Wagon. Material is transported on a belt conveyor of the Belt Wagon to a desired point (e.g. Following BW, a hopper of long-distance belt conveyor, etc.).

Is it possible to transport a material onto same or different mine levels (benches).



# BW NOEN PV400Np

BW identification	NOEN PV400Np	-
Chassis	Crawler with electro-mechanical drives	-
Conveyor belt width	800	mm
Theoretical output	100 to 400	m <sup>3</sup> /h
Service mass	25	t
Transport speed of empty PV	0÷12	m/min
Maximum slope of empty PV	1:10	-
Max. ground pressure of empty PV	0,55	Kg/cm <sup>2</sup>
Input Voltage	400	V
Belt conveyor drive power	37	kW
Electric power installed	55	kW
Length	31 900	mm
Length of inlet boom	14 000	mm
Length of discharge boom	18 000	mm
Range of head pulley height	0÷8	m
Crawler width	3 500	mm
Slewing angle of upper part	320	°





# BW NOEN PV400Np

**Transportability** in one piece – no need of conveyor belt splicing onsite and overall low assembly time





# BW NOEN PV400Np – Main Parts & Features

Ergonomic **Control panel** and **Remote control**







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