

BEUMER Group

Business Unit Cement

Packing Plants

AFCM Vietnam 2015

Andre Tissen -Director Business Unit Cement-

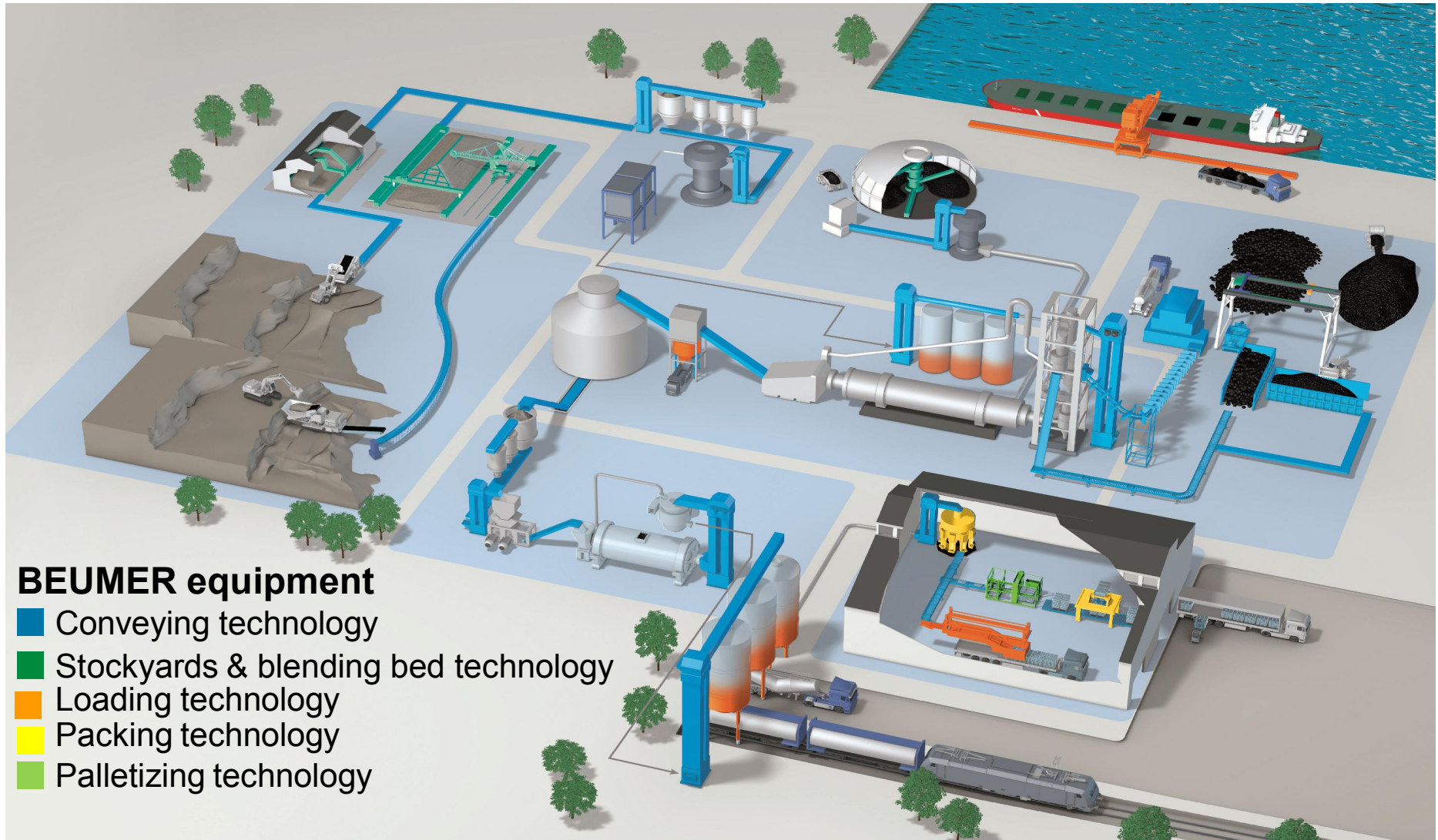
Agenda

- BEUMER Group equipment in a cement plant
- BEUMER equipment for packing plants
 - BEUMER rotary filling machine
 - BEUMER truck loading technology
 - automatic
 - manual
 - BEUMER palletising technology
 - BEUMER stretch hood technology
 - with pallet
 - palletless

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BEUMER Group equipment in a cement plant

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BEUMER equipment

- Conveying technology
- Stockyards & blending bed technology
- Loading technology
- Packing technology
- Palletizing technology

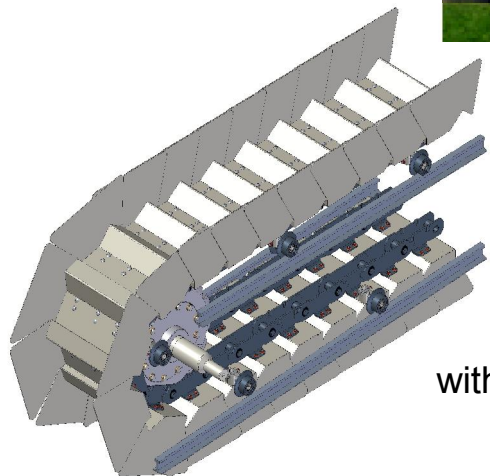
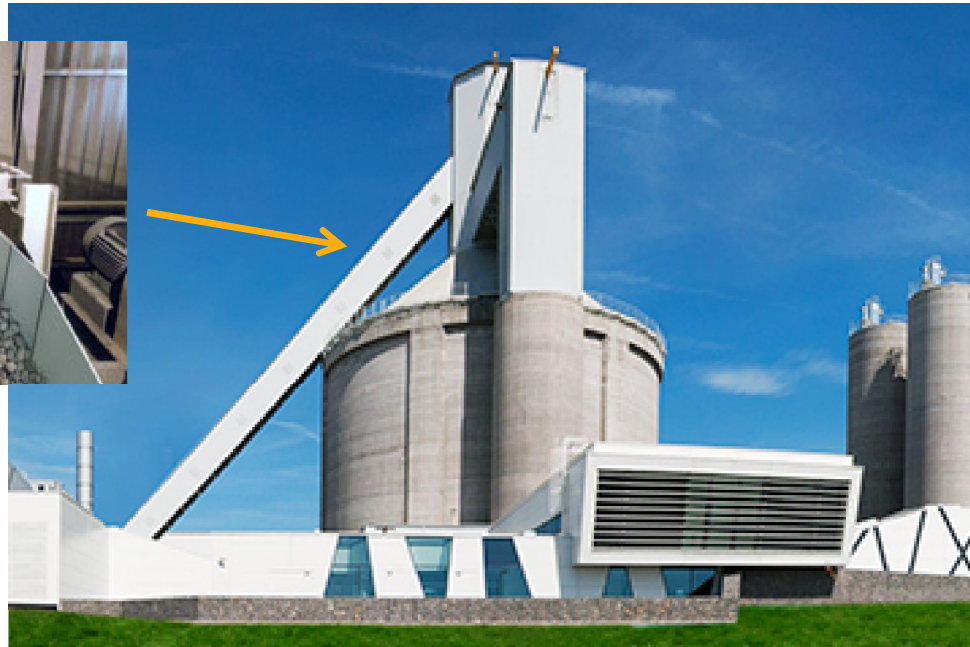
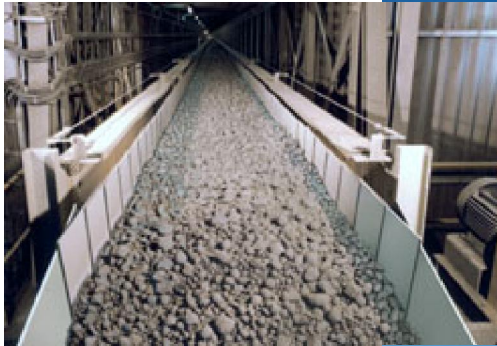
Conveying technology – trough overland / pipe conveyors

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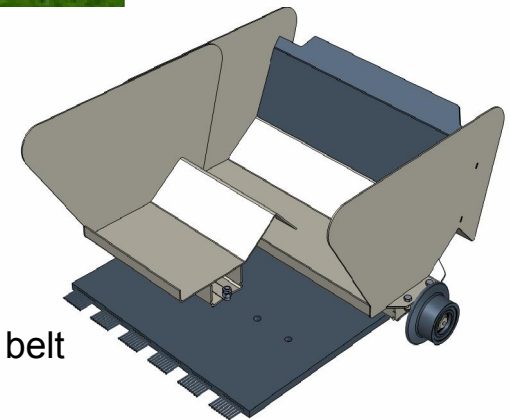


Conveying technology – clinker transport

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with chain



with belt

Conveying technology – bucket elevators

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Belt Bucket Elevators



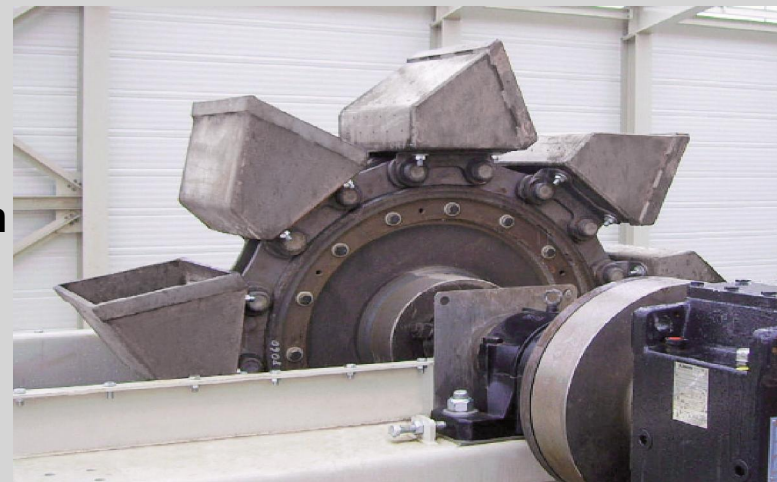
for lifting heights
up to 200 mm

Heavy Duty Belt Bucket Elevators



for lumps up to 120 mm

Central Chain Bucket Elevators



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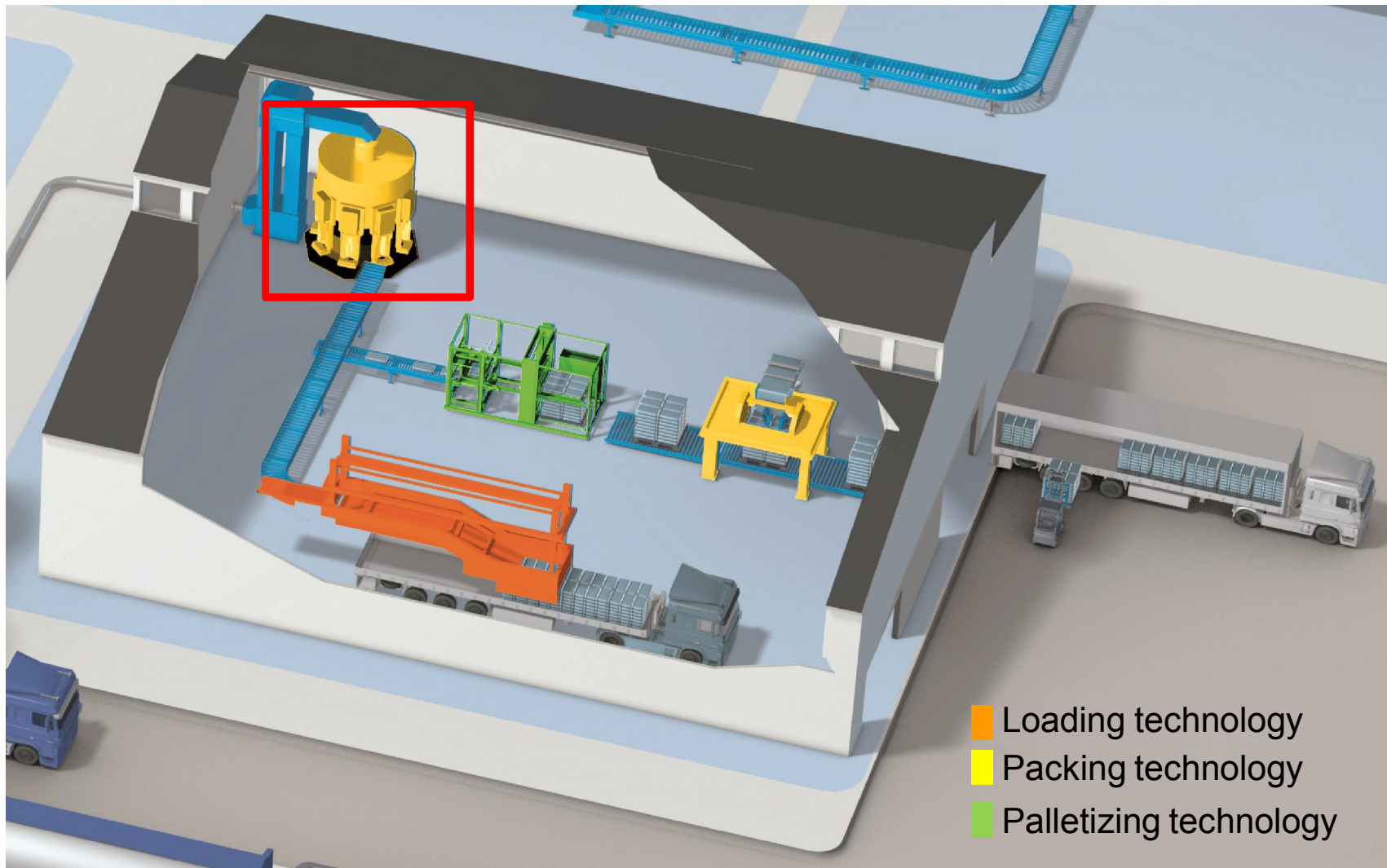
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BEUMER Group equipment in a packing plant

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Concept of the BEUMER filling system

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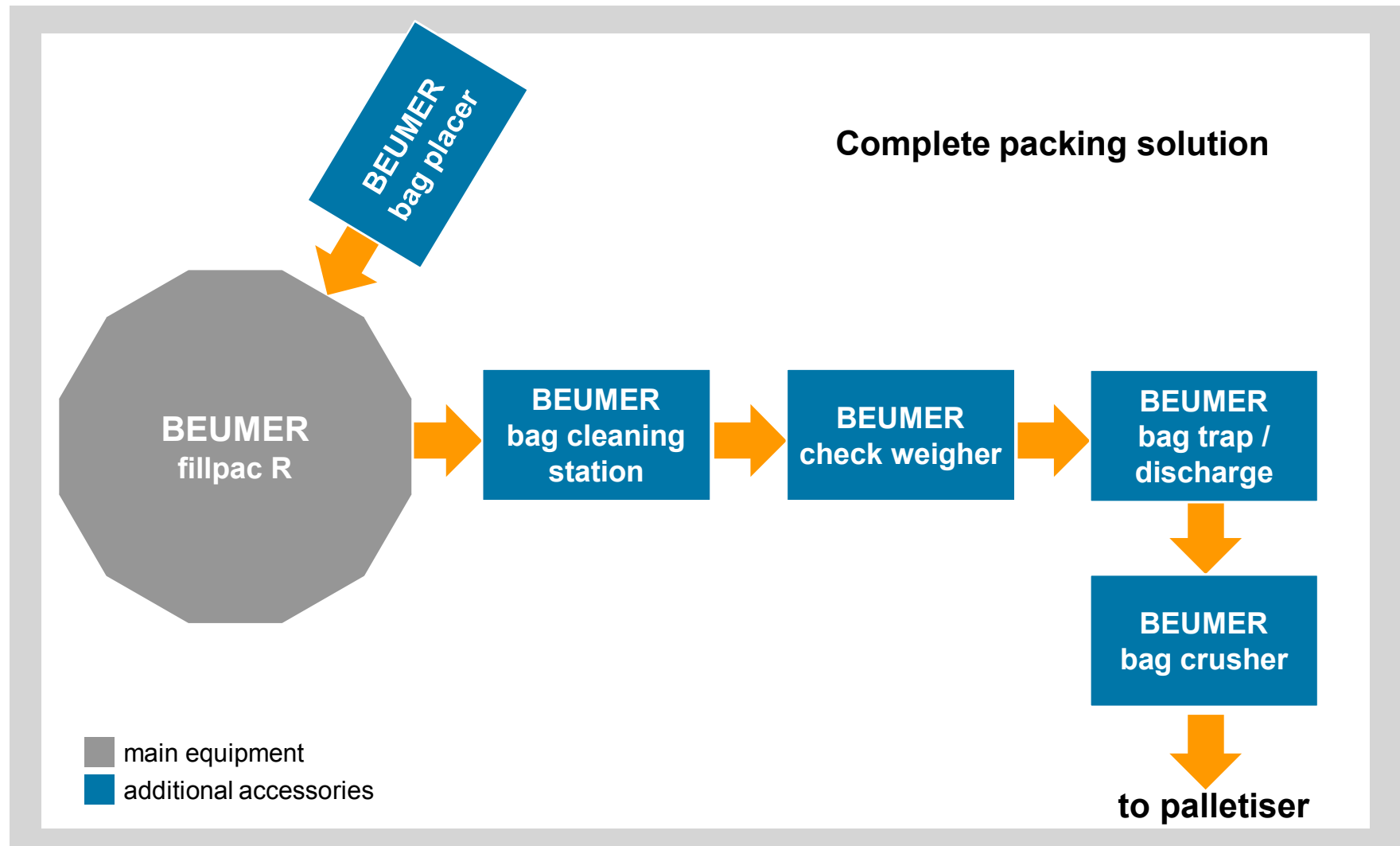


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Filling machine – bag placer – bag discharge line

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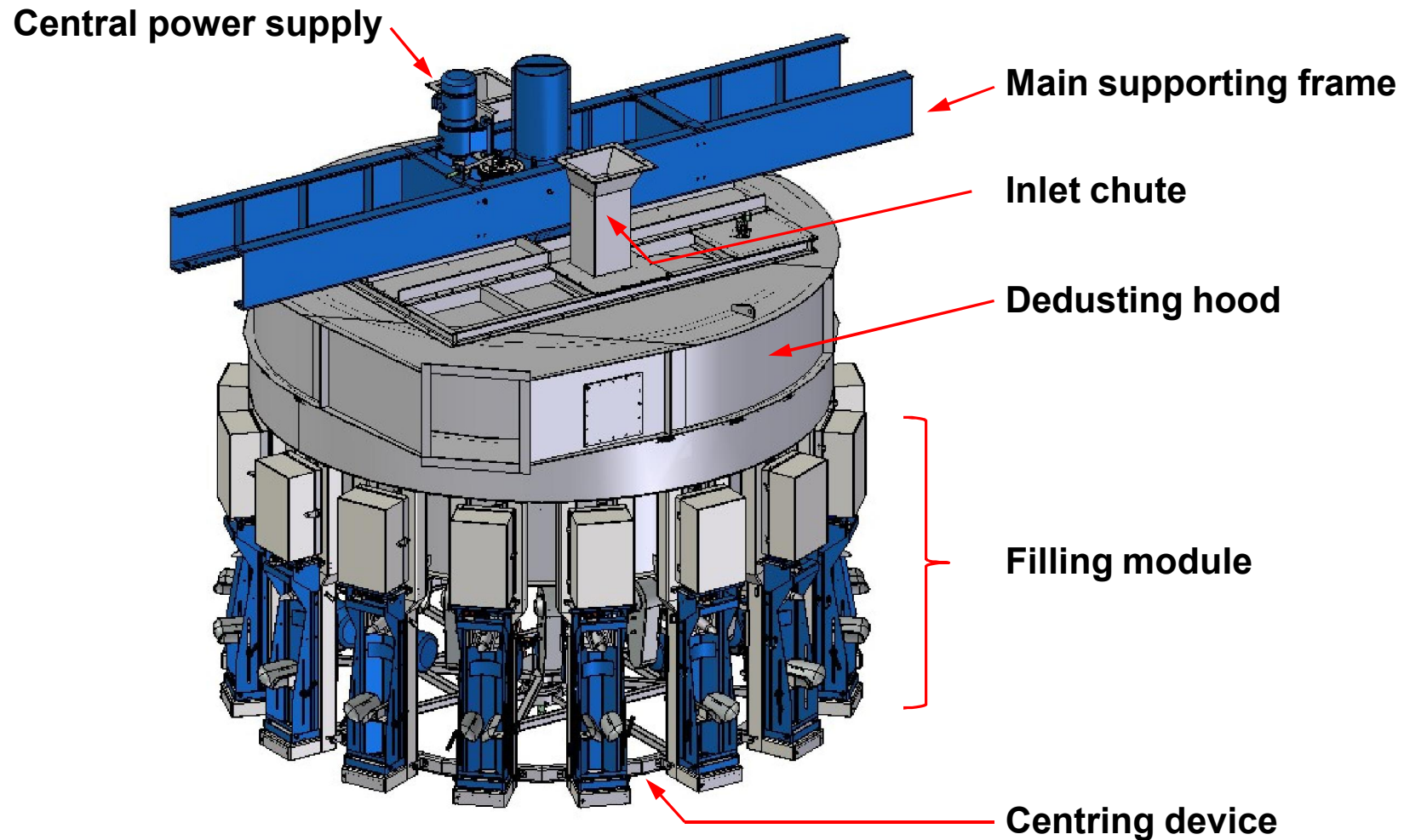


Capacities BEUMER fillpac RC



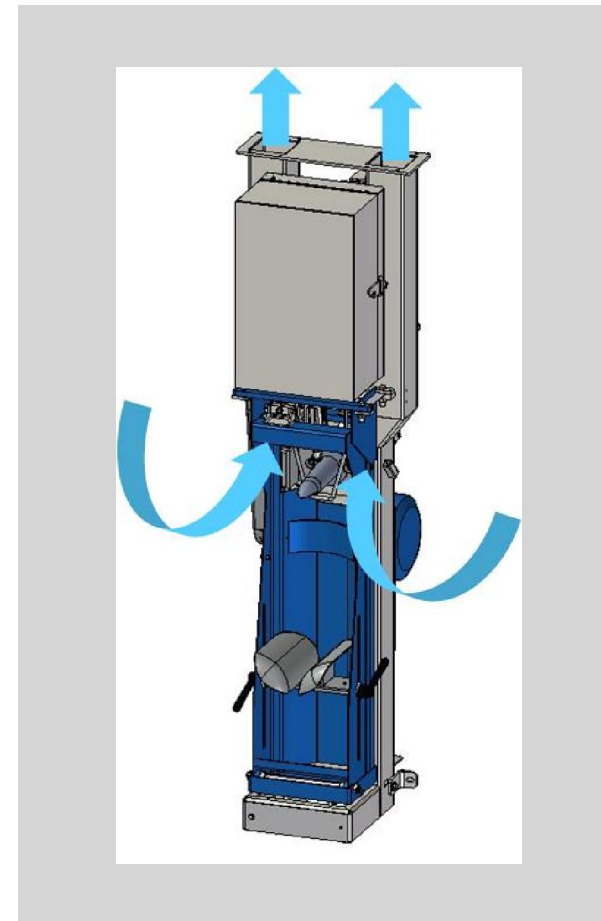
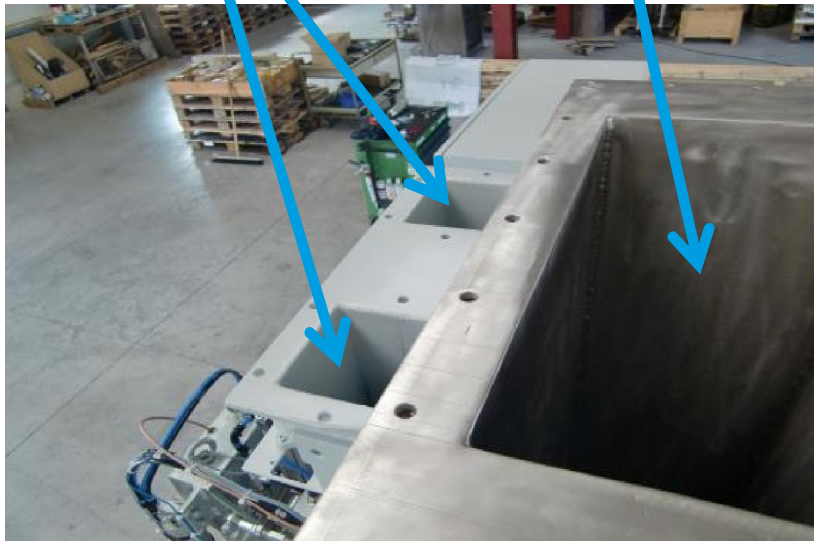
- BEUMER fillpac R, 4-spout
 - 60 TPH → 1200 bags/h (50 kg bags)
 - → 1500 bags/h (25 kg bags)
- BEUMER fillpac R, 6-spout
 - 90 TPH → 1800 bags/h (50 kg bags)
 - → 2250 bags/h (25 kg bags)
- BEUMER fillpac R, 8-spout
 - 120 TPH → 2400 bags/h (50 kg bags)
 - → 3000 bags/h (25 kg bags)
- BEUMER fillpac R, 10-spout
 - 150 TPH → 3000 bags/h (50 kg bags)
 - → 3750 bags/h (25 kg bags)
- BEUMER fillpac R, 12-spout
 - 180 TPH → 3600 bags/h (50 kg bags)
 - → 4500 bags/h (25 kg bags)
- BEUMER fillpac R, 16-spout
 - 240 TPH → 4800 bags/h (50 kg bags)
 - → 6000 bags/h (25 kg bags)
- BEUMER fillpac R, 20-spout
 - 300 TPH → 6000 bags/h (50 kg bags)
 - → 7500 bags/h (25 kg bags)

Structure BEUMER fillpac R



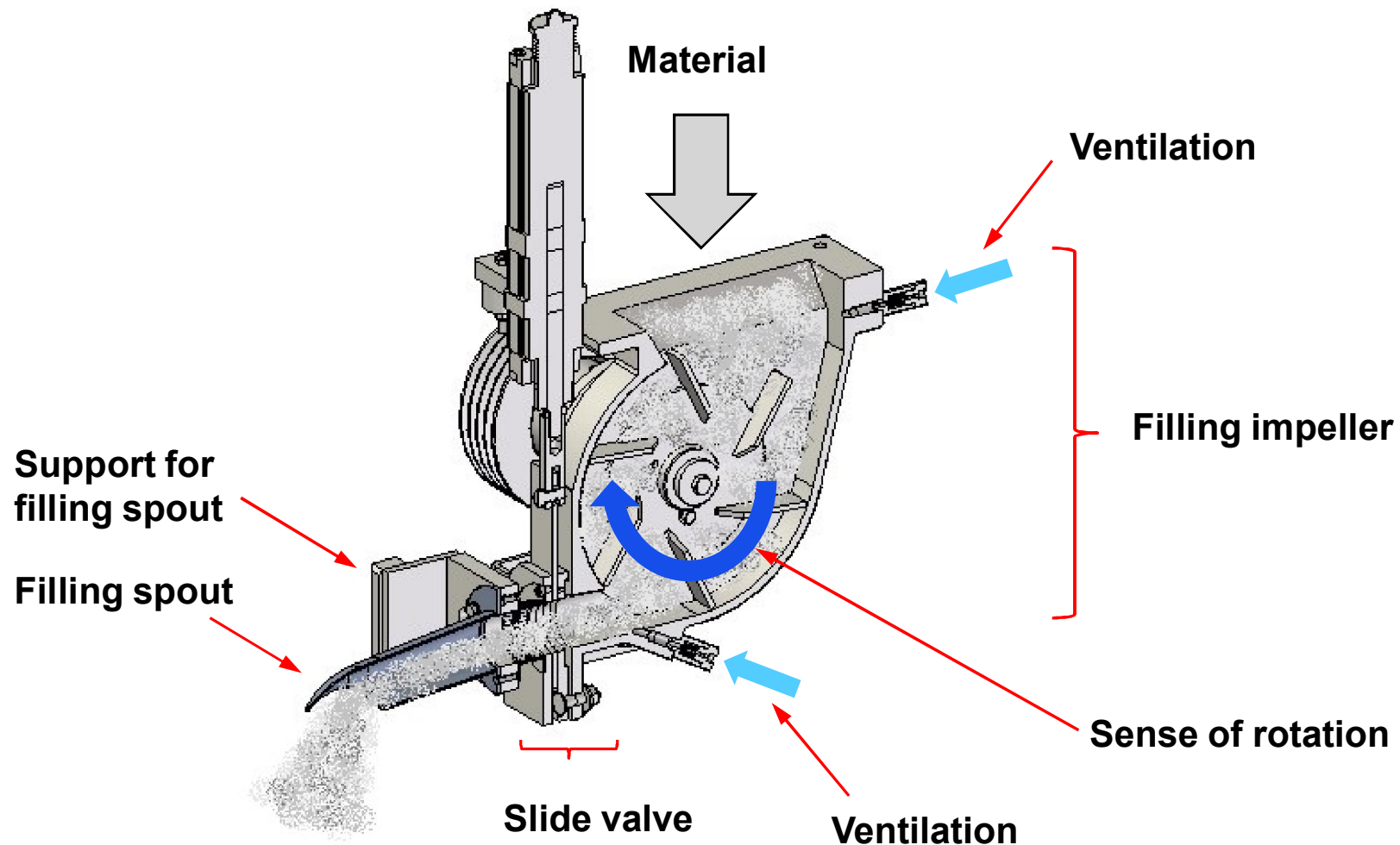
BEUMER fillpac module

- Dedusting pipes
- Inlet / interface to the pre-hopper & rotary feeder



Material flow fillpac R: Product to be filled

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BEUMER bag placer

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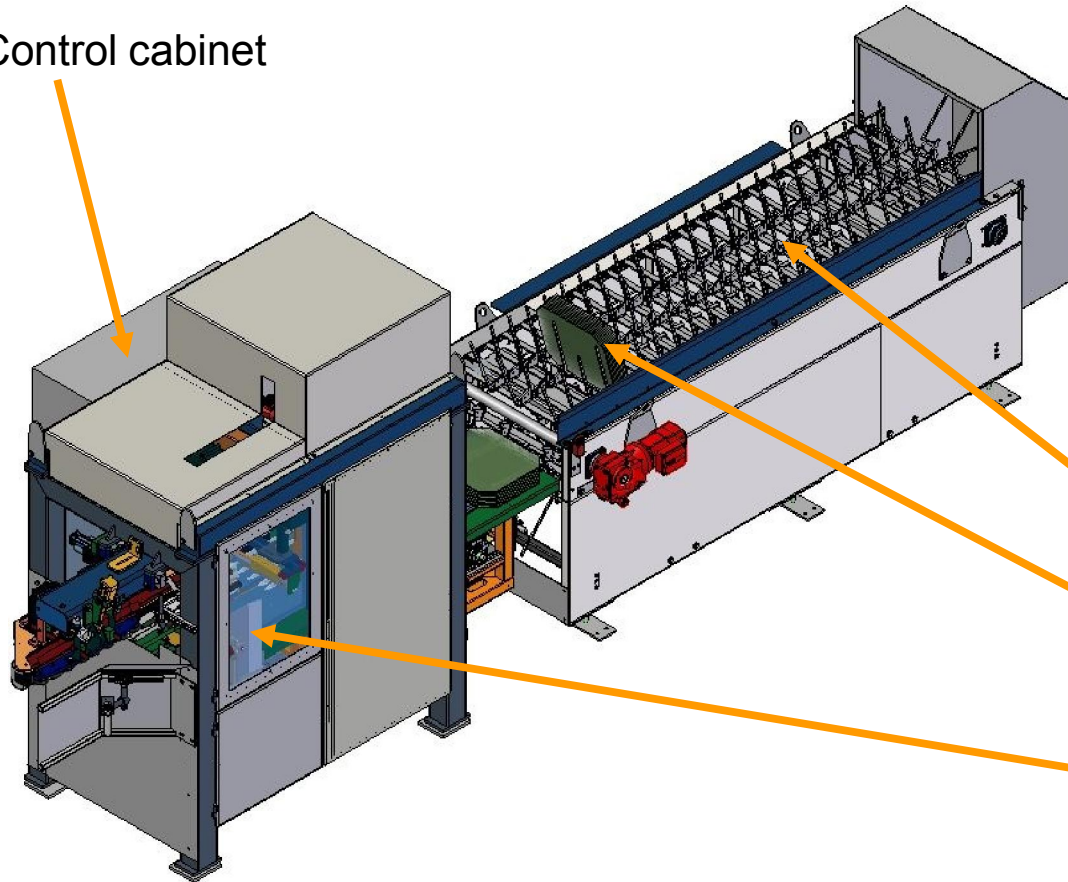


- Suitable for paper bags, laminated Starlinger bags, HDPE and PP woven bags (different application unit to be used for woven, HDPE and PP bags; 2,400 bags/h)
- 4,000 bags/h

BEUMER bag placer

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Control cabinet



Ream magazine

30 bags
in one bag ream

Bag placer



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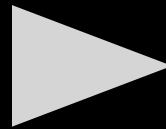
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BEUMER bag placer

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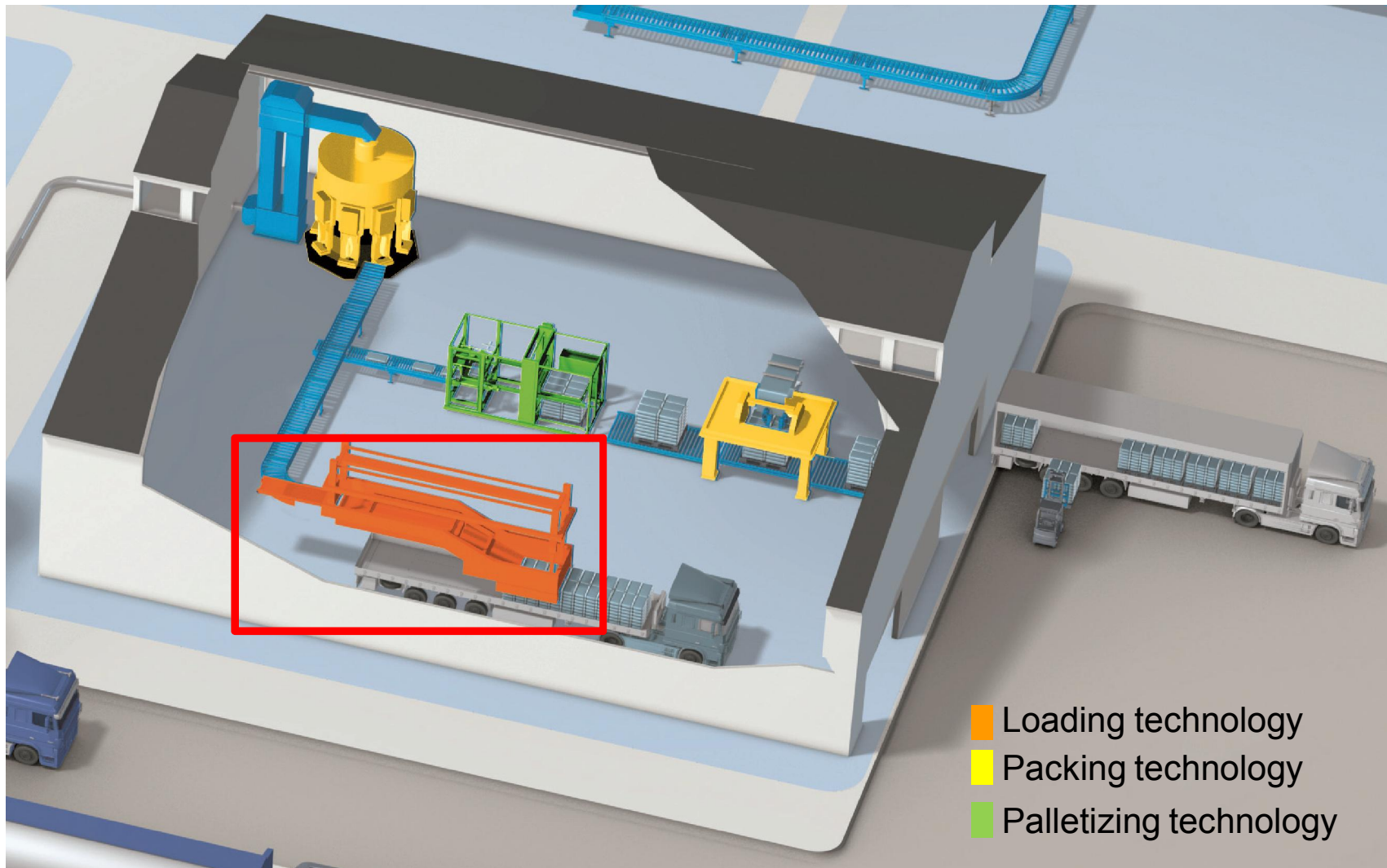
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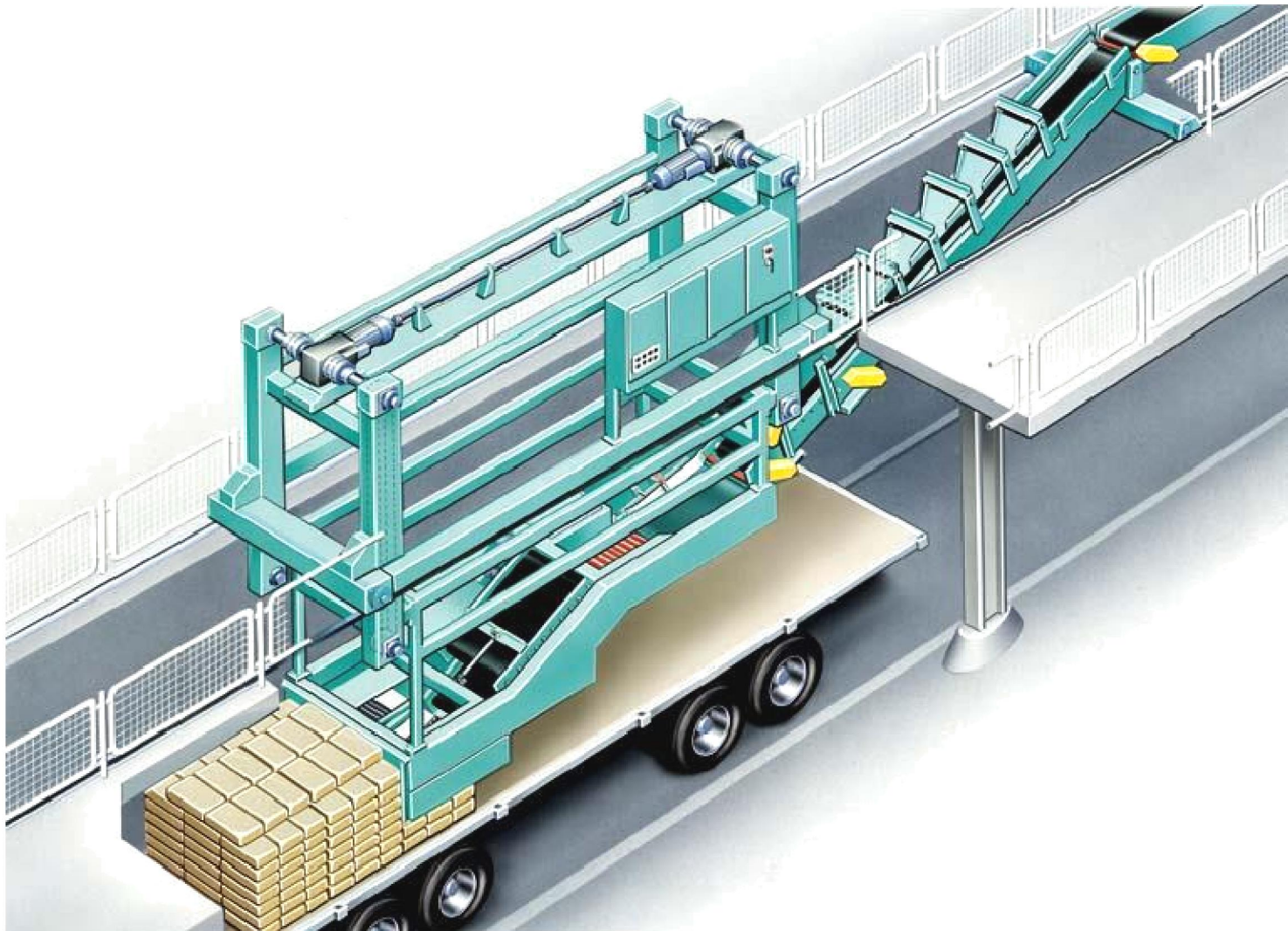
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BEUMER Group equipment in a packing plant

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quick loading of open trucks directly from the packaging machine to the loading area



BEUMER autopac® in operation in a cement plant



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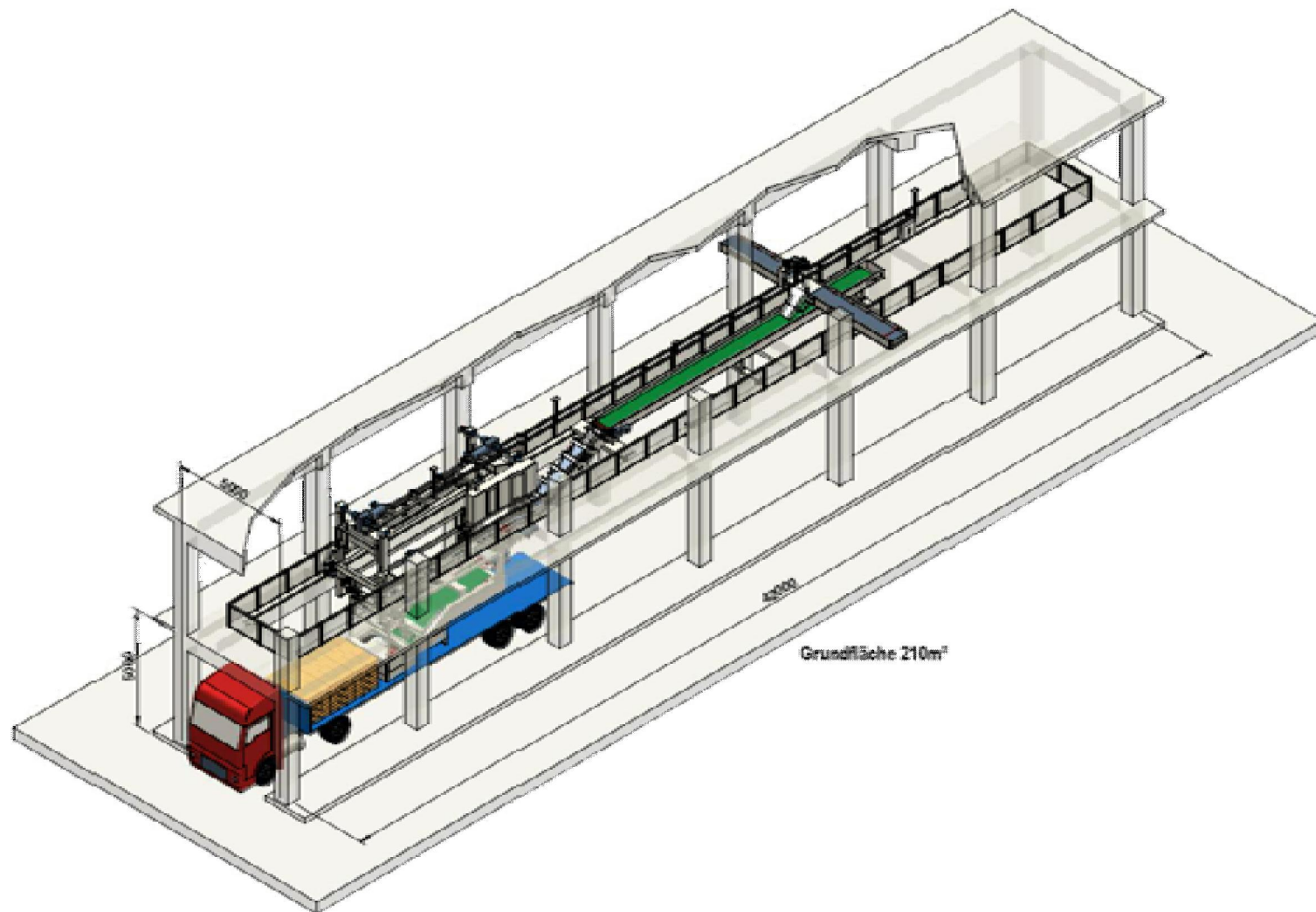


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BEUMER autopac®

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MOVIE



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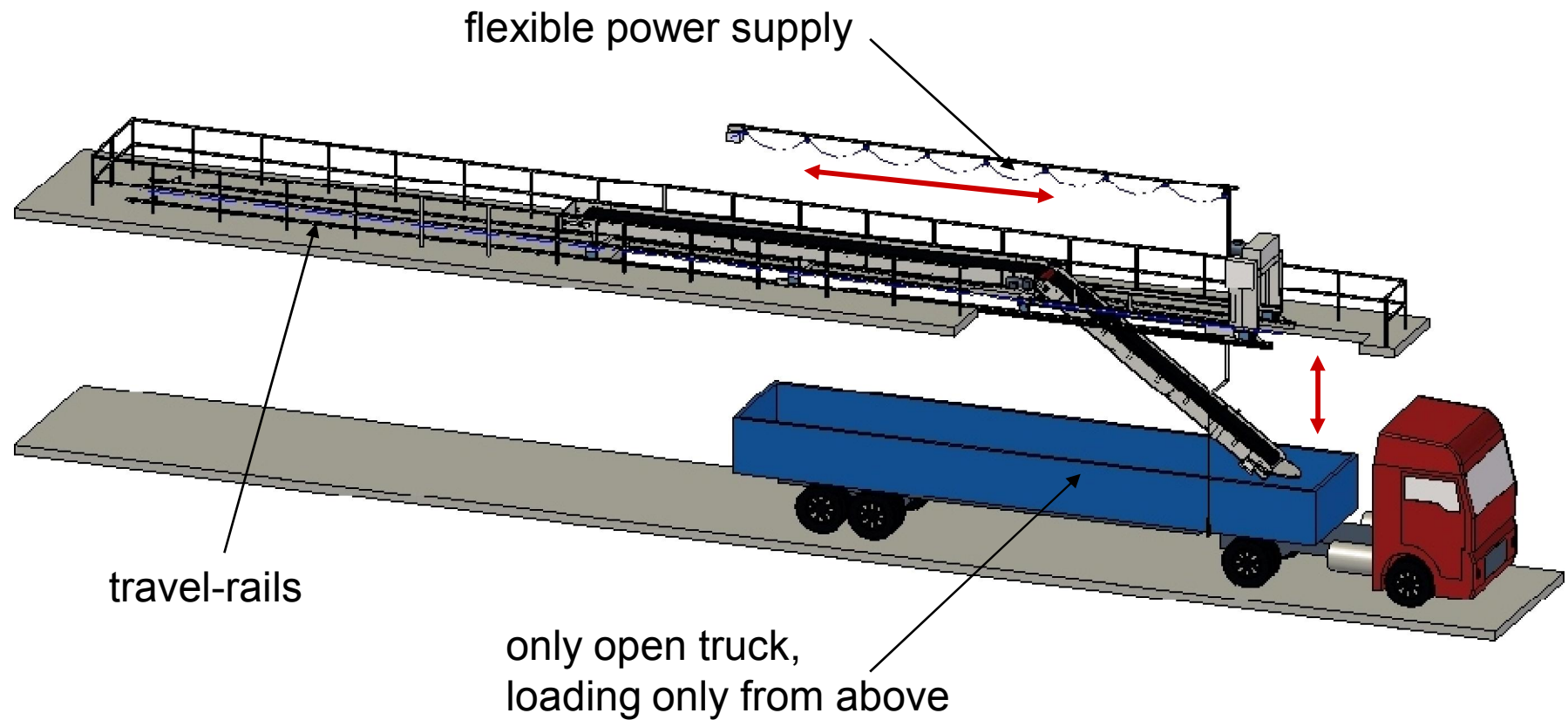
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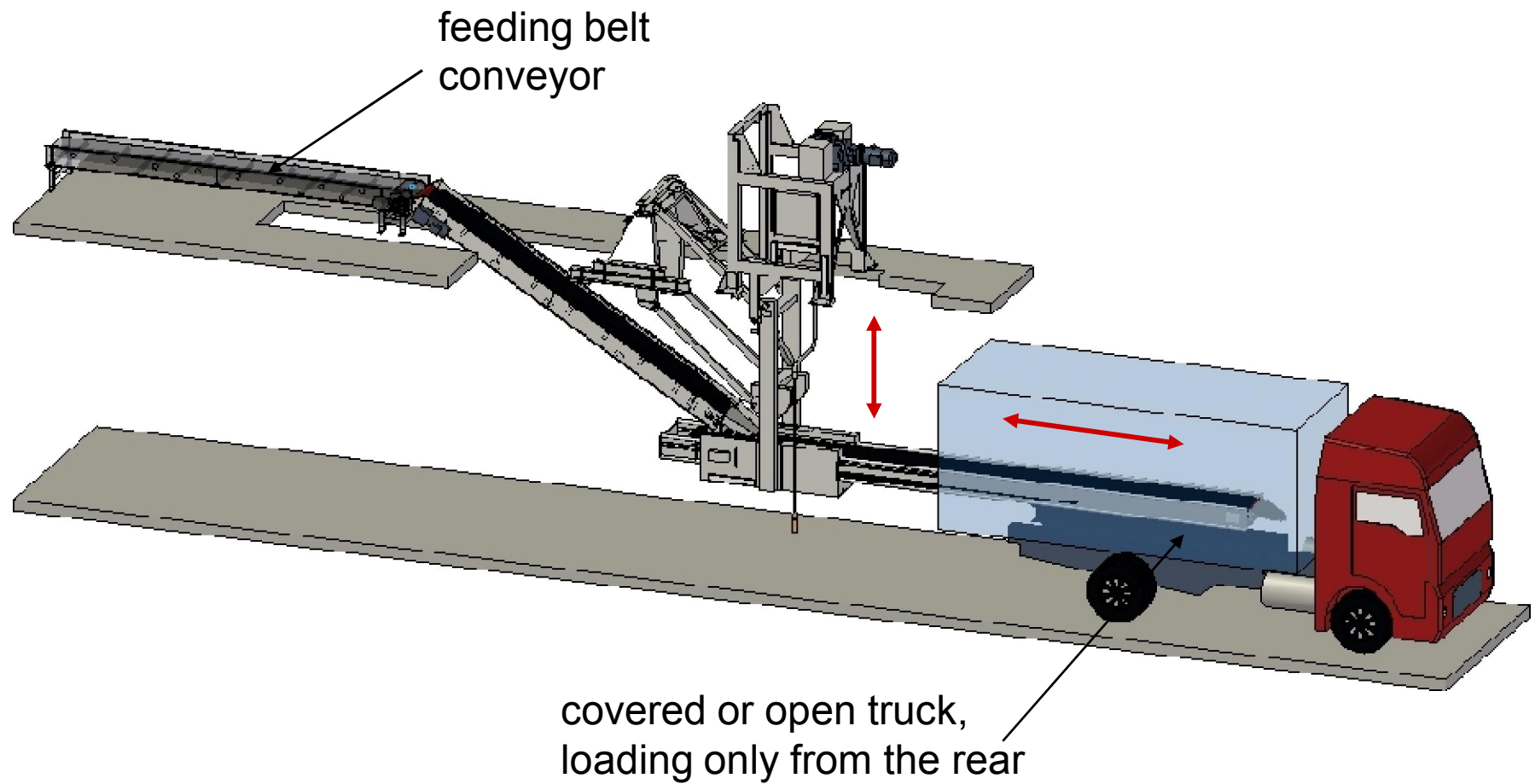
Truck loading machine B17

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Truck loading machine B19

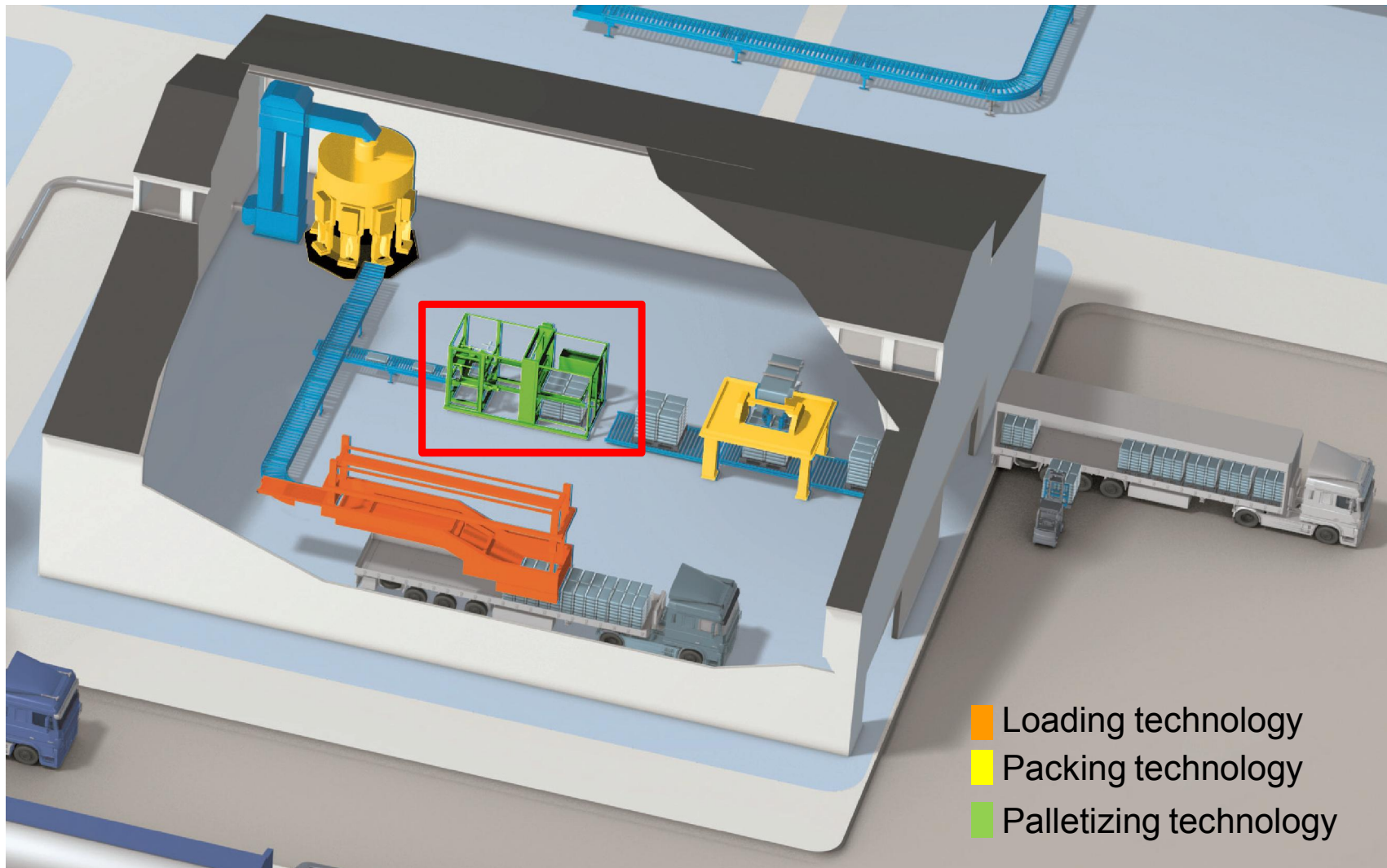
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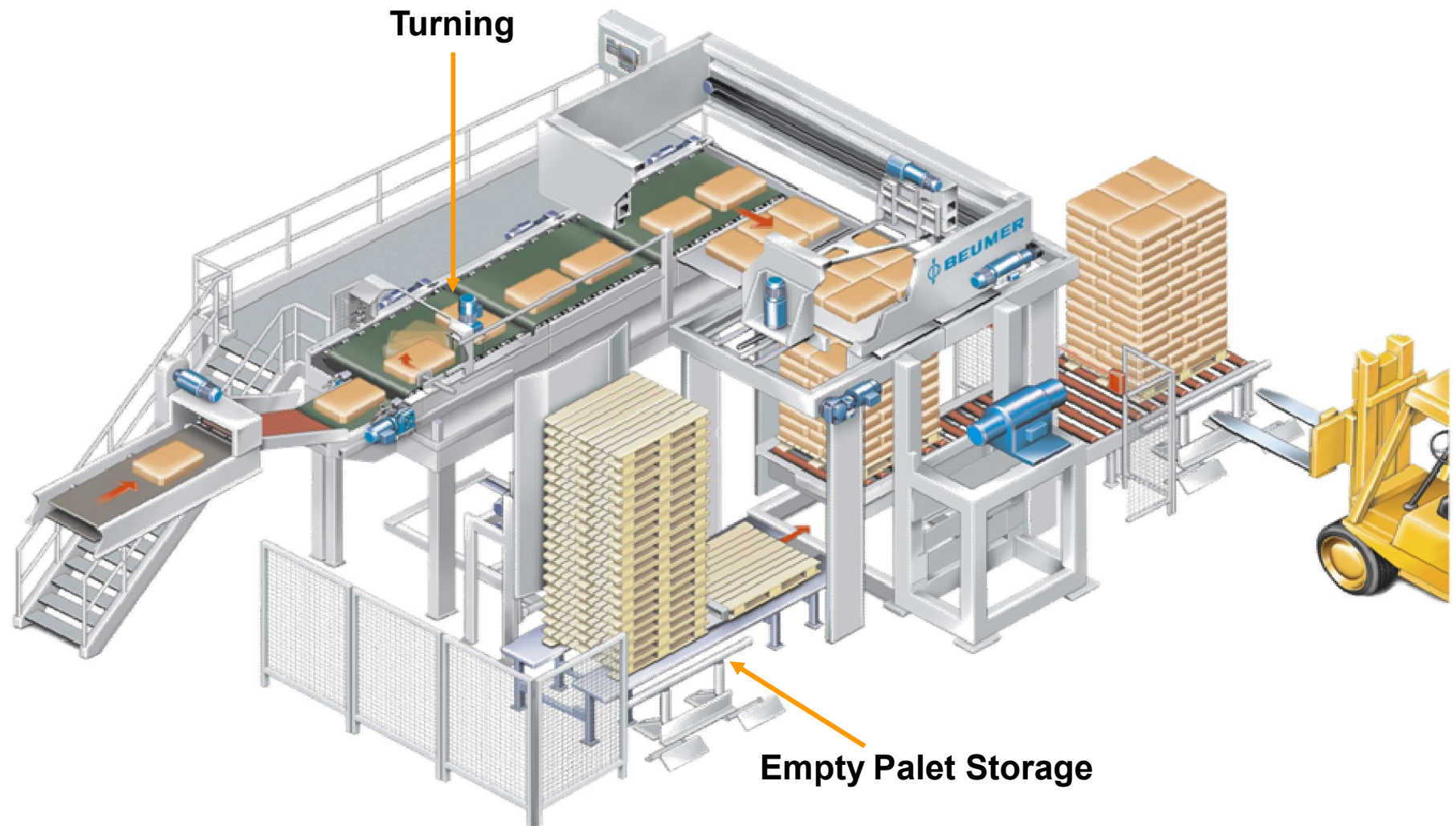


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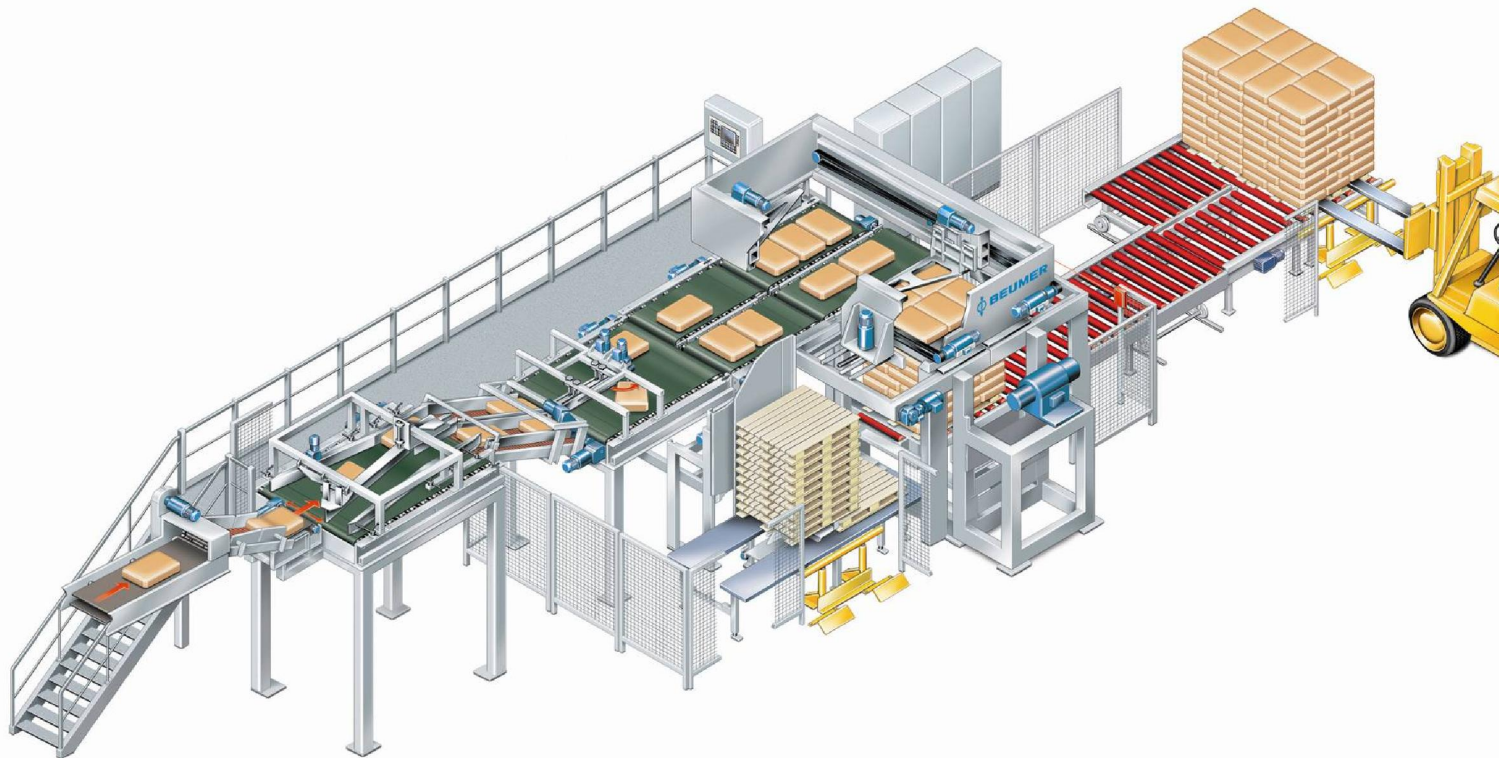
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Capacity data palletizing installations

Palletizer with bar turning device						
Packing pattern	SBQ 1600	SBQ 1800	FVSQ 3000	SBBQA 3000	VBVSQ 4000	SCSSBB QA 5000
Palletizing capacity bags/h with stack heights between 800 and 1400 mm						
3-bag	800	1200	1200	1200 – 1400	1200	1200 – 1400
5-bag	1600	1800	2400 – 2600	2600 – 3000	2600 – 3000	4500
6-bag	1600	1800	2700 – 3000	3000	3000	4500
6-bag toothed	1200	1800	2700	3000	3000	3600
7-bag	1350	1800	3000	3000 – 3500	3500	4400 – 4500
8-bag	1350	1800	3000	3500 – 3700	4000	5500
10-bag	1450	1800	3000	3800	4200	5500



Palletizing capacity

- up to 5.500 bags/h bei 25-kg-bags, 10-bag bonded



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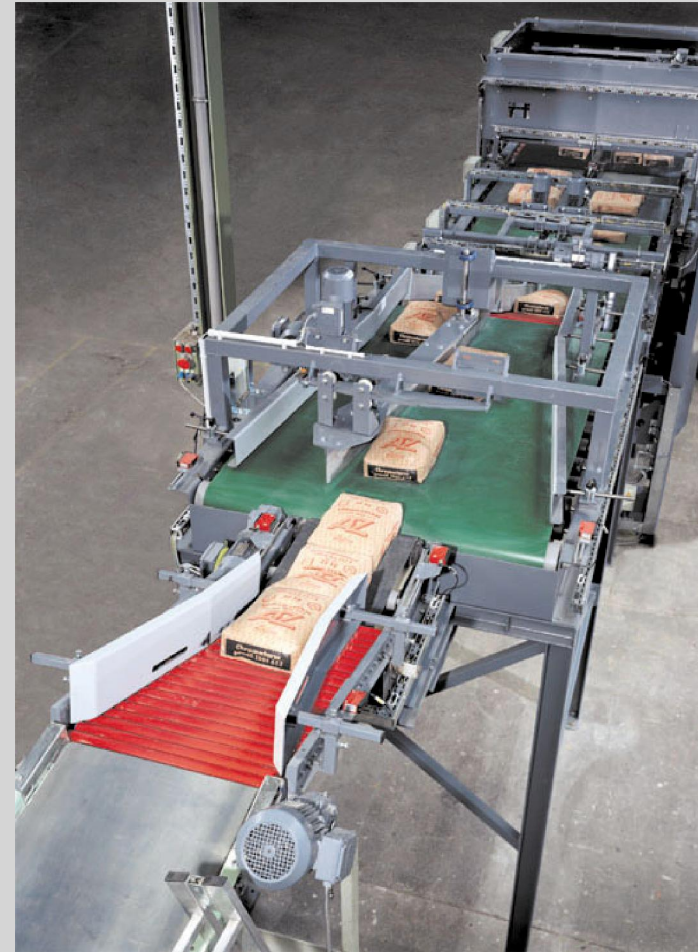
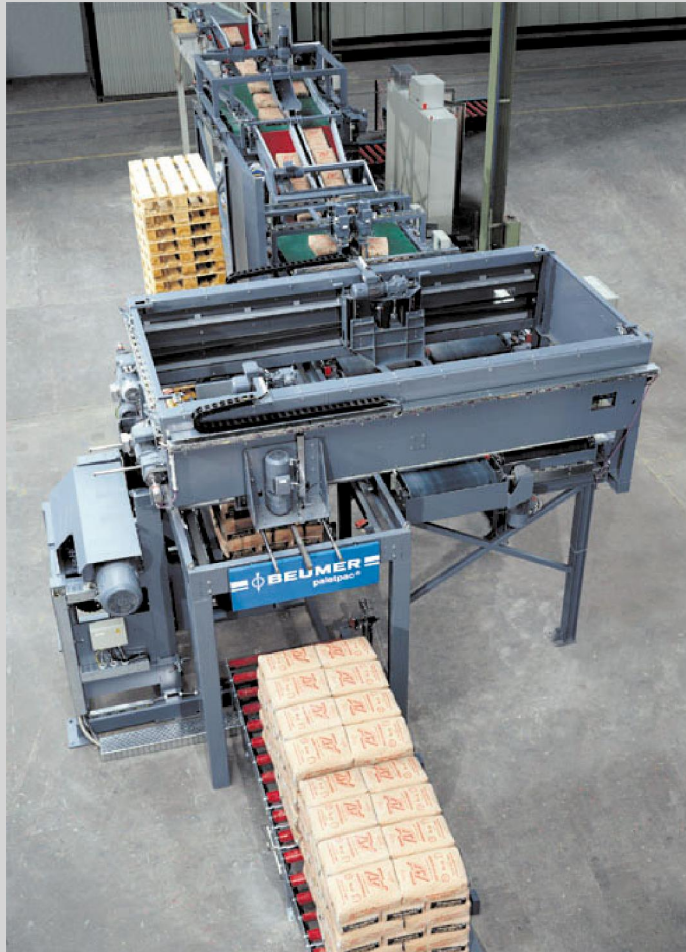
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BEUMER paletpac® 5000

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BEUMER paletpac® 5000

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1st step – bag distributor



2nd step – bag turning device



3rd step – roller conveyor



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BEUMER paletpac® 5000

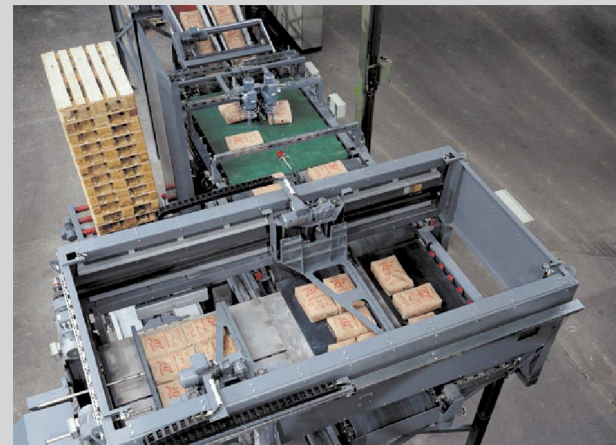
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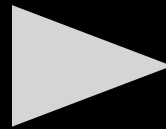
Double layer conveyor with raisable and lowerable double push-off slide



BEUMER paletpac® 5000

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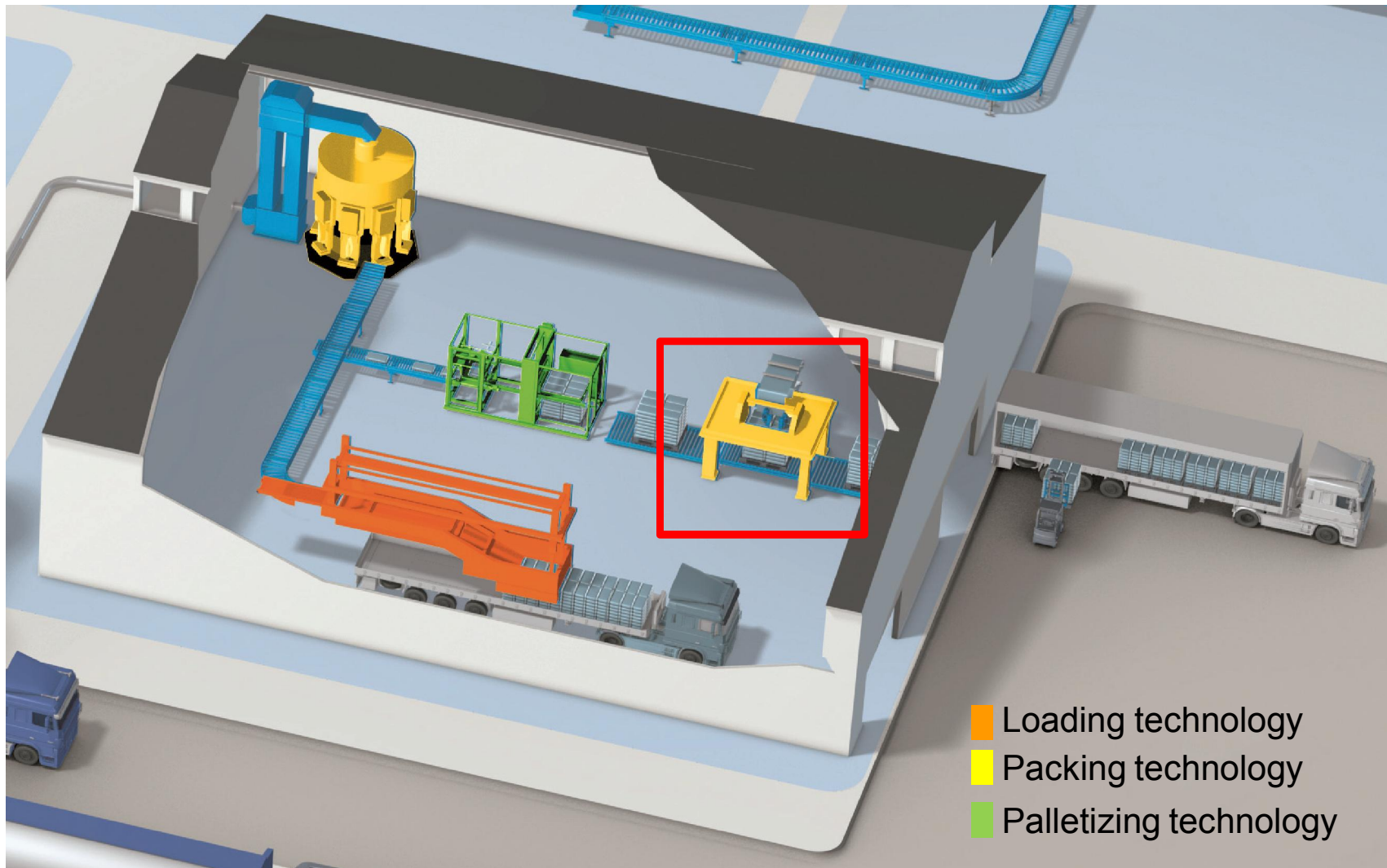
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BEUMER Group equipment in a packing plant

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Advantages of stretching technology



- Considerably lower energy consumption compared to the shrink hood technology
- No adhesion between the film and PE bags
- No risk of fire due to open flame or heat radiation
- Elastic film with high restoring forces, i.e. film tension remains constant even with setting effects of the product
- Considerably lower maintenance costs compared to the shrink hood technology



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Comparison old SH M to new SH A



old Stretch Hood M



new Stretch Hood A



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BEUMER stretch hood® A

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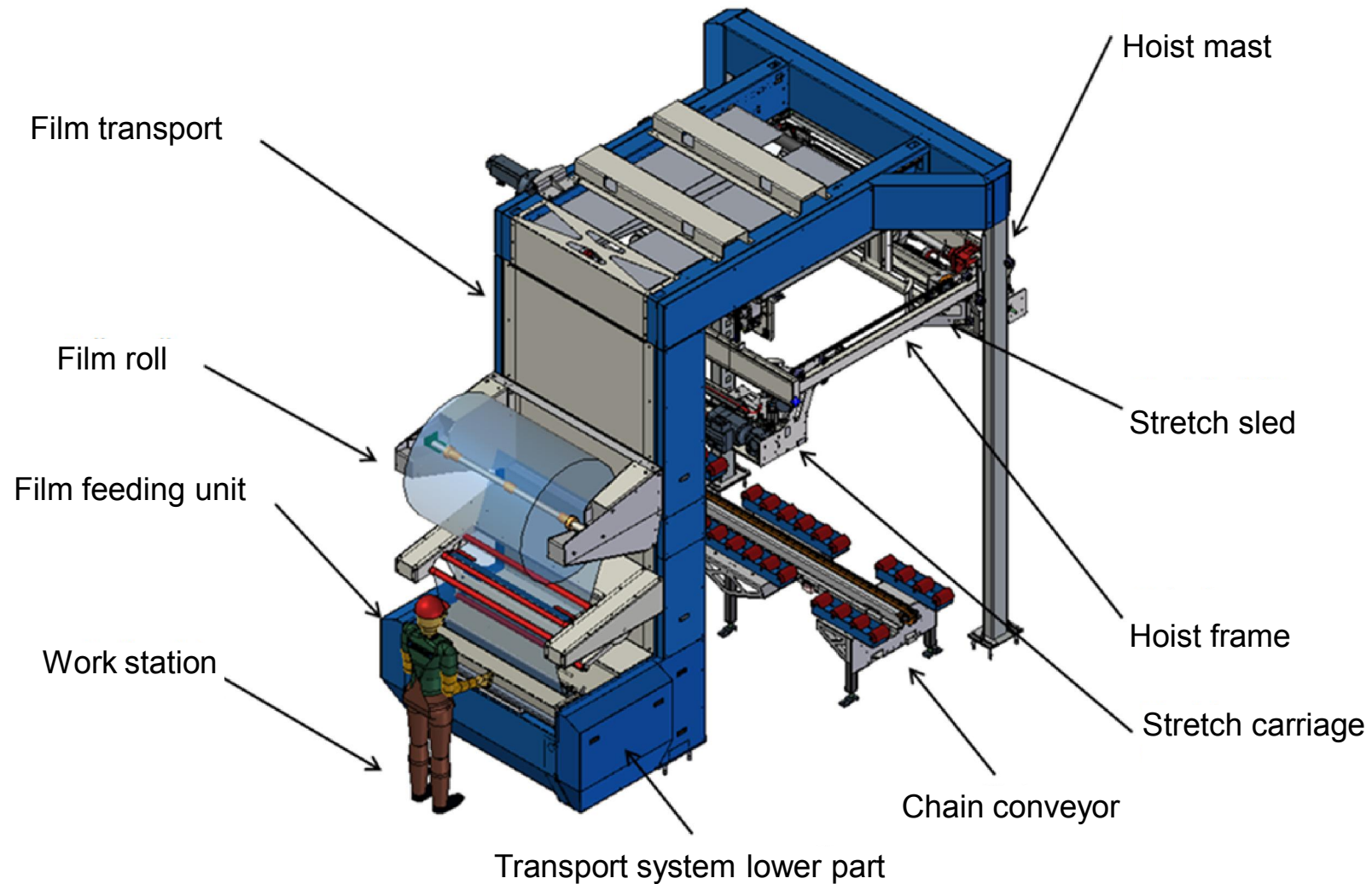
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BEUMER stretch hood® A

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Key Features BEUMER stretch hood® A

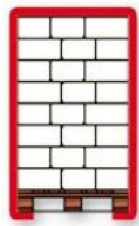


- Package Dimension
 - Length: 600 - 1400 mm
 - Width: 800 - 1220 mm
- Modular Design
 - Height: 1400, 1800, 2400, mm (possible in 200 mm steps)
 - Height max. 3000 mm (special construction!)
- System Height
 - Minimum 450 mm (standard 700 mm)
- Additional Features - under development
 - High performance option
 - Multi-format application
 - Open Frame Solution

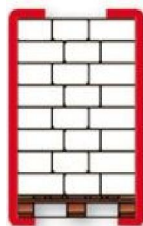
For improved processing technology

Packaging process:

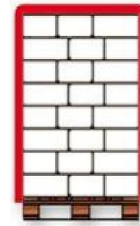
All packaging processes, described more detailed in the BEUMER standard, can be run



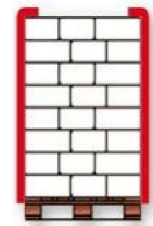
Under stretch
Closed hood



Under stretch
Open hood



High rack stretch
Closed hood

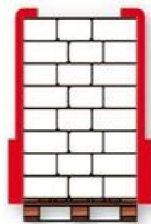


High rack stretch
Open hood

Optional packaging processes:



Different
banderoles



Different
Foot reinforcements



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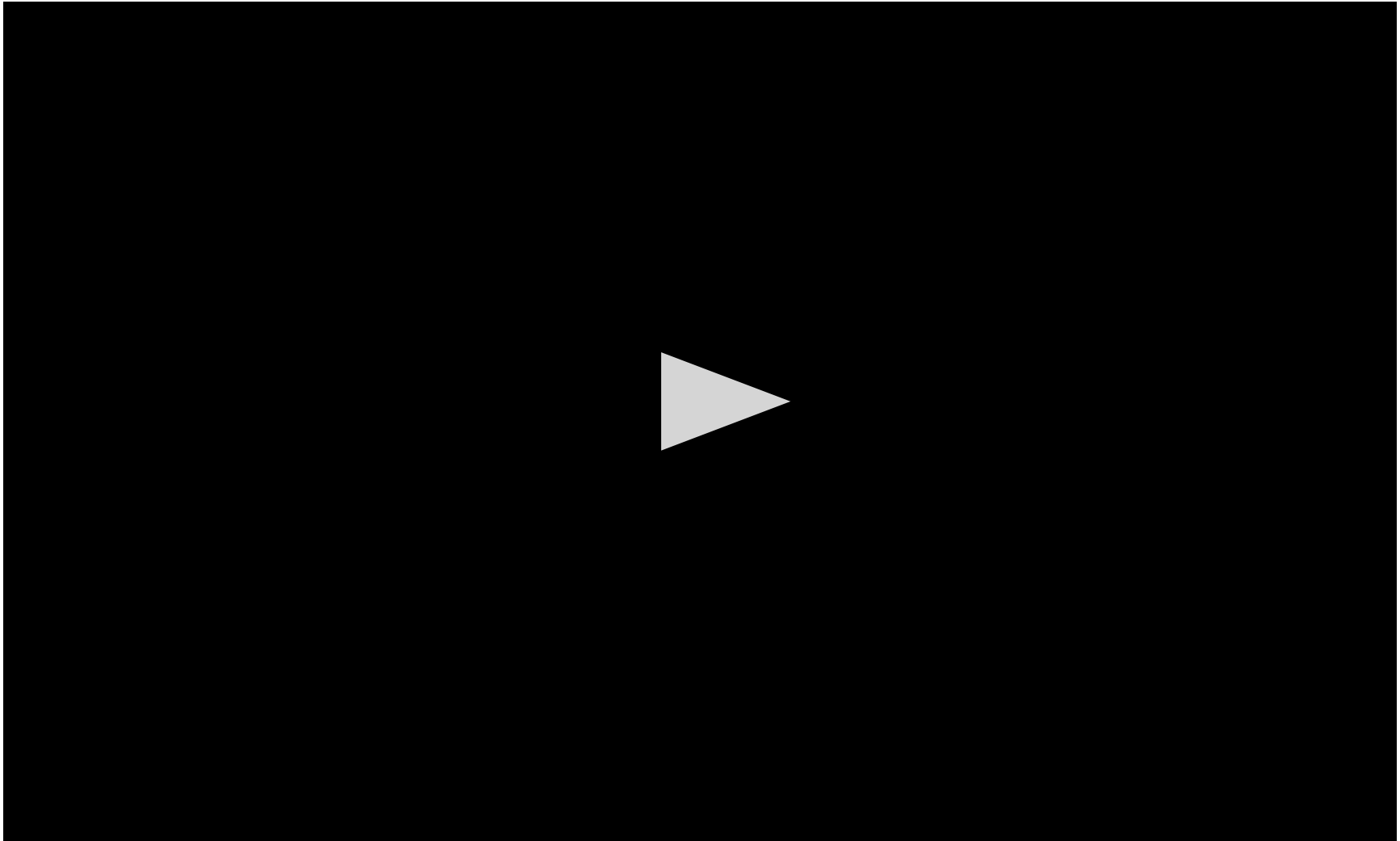
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Video sequence Calucem

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Customer benefits:

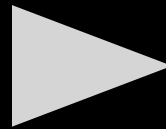
- No pallets necessary (lacking availability)
- Reduction of packaging costs (film costs are considerably lower than pallet costs)
- No pallet handling, no pallet storage, no pallet repair shop necessary
- Higher loading volume due to absence of pallets (lower package height)
- Less space consumption (more loading units per container, no pallet weight, no returnable system for pallets)
- Load is protected from weather exposure on all sides

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BEUMER Group **Cement Division**

Thank you for your kind attention.



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