

AUMUNDGROUP

WE CONVEY QUALITY

AUMUND GROUP. Spanning the Globe.

ESI EUROSIL COMPANY PRESENTATION

 **EUROSIL**
AUMUND GROUP

INTERNATIONAL LOCATIONS

Familiar with local conditions



- AUMUND Fördertechnik, Germany
- AUMUND Holding, The Netherlands
- ESI Eurosil, The Netherlands
- AUMUND Logistic, Germany
- AUMUND Group Field Service, Germany
- SCHADE Lagertechnik, Germany
- SCHADE, UK
- SAMSON, UK
- TILEMANN, Germany
- AUMUND France
- AUMUND USA
- AUMUND Mexico
- AUMUND Brazil
- AUMUND MEA, UAE
- AUMUND India
- AUMUND China
- AUMUND Asia (Hongkong)
- AUMUND Indonesia
- SCHADE Australia

THE INTERNATIONAL TEAM SPIRIT



More than **570** people

Education

29% engineers
18% with a university degree
53% high school level

Seniority

29% up to 5 years
49% up to 15 years
22% more than 16 years

Department

34% Sales
21% Technology
20% Administration
11% Production
14% Service

Internationality

More than **25** nationalities
More than **30** languages

THE AUMUND GROUP OF COMPANIES

**Partnering
industry
sectors**

**Loading and
Unloading**
SAMSON
Materials Handling

Logistic Services
AUMUND Logistic

Service
for plant
availability

**Chains and
Components**
TILEMANN

Maintenance
PREMAS

**Experts
in bulk
handling
worldwide**

Conveying
AUMUND Fördertechnik

Storage and Reclaiming
SCHADE Lagertechnik

Silo Technology
ESI Eurosilos

Field Service
AUMUND Group Field Service

Conversion
AUMUND Fördertechnik

After Sales
AUMUND Fördertechnik

ESI EUROSILO A HISTORY IN FUTURE PROOF SOLUTIONS



ESI Eurosilos

- Dutch company with more than 55 years of experience and close to 200 units have been built around the world.
- The storage capacity of the silo systems are up to 100,000 m³
- Fully enclosed storage meeting the requirements of environmental protection agencies worldwide.
- Turnkey delivery or partly local supply
- Designed and Engineered by experienced engineers to a optimal fitting solution.
- ISO 9001:2015 Quality management system and ISO 45001:2018 Health & Safety certified.

INDUSTRIES

AGRIBULK

- Potato Starch
- Sugar Storage

POWER

- FGD Gypsum
- Coal
- Limestone
- Fly Ash
- Wood pellets

- Common & Mineral Salt
- Fertilizer
- EAFD DUST
- Pet Coke

PROCESS INDUSTRY

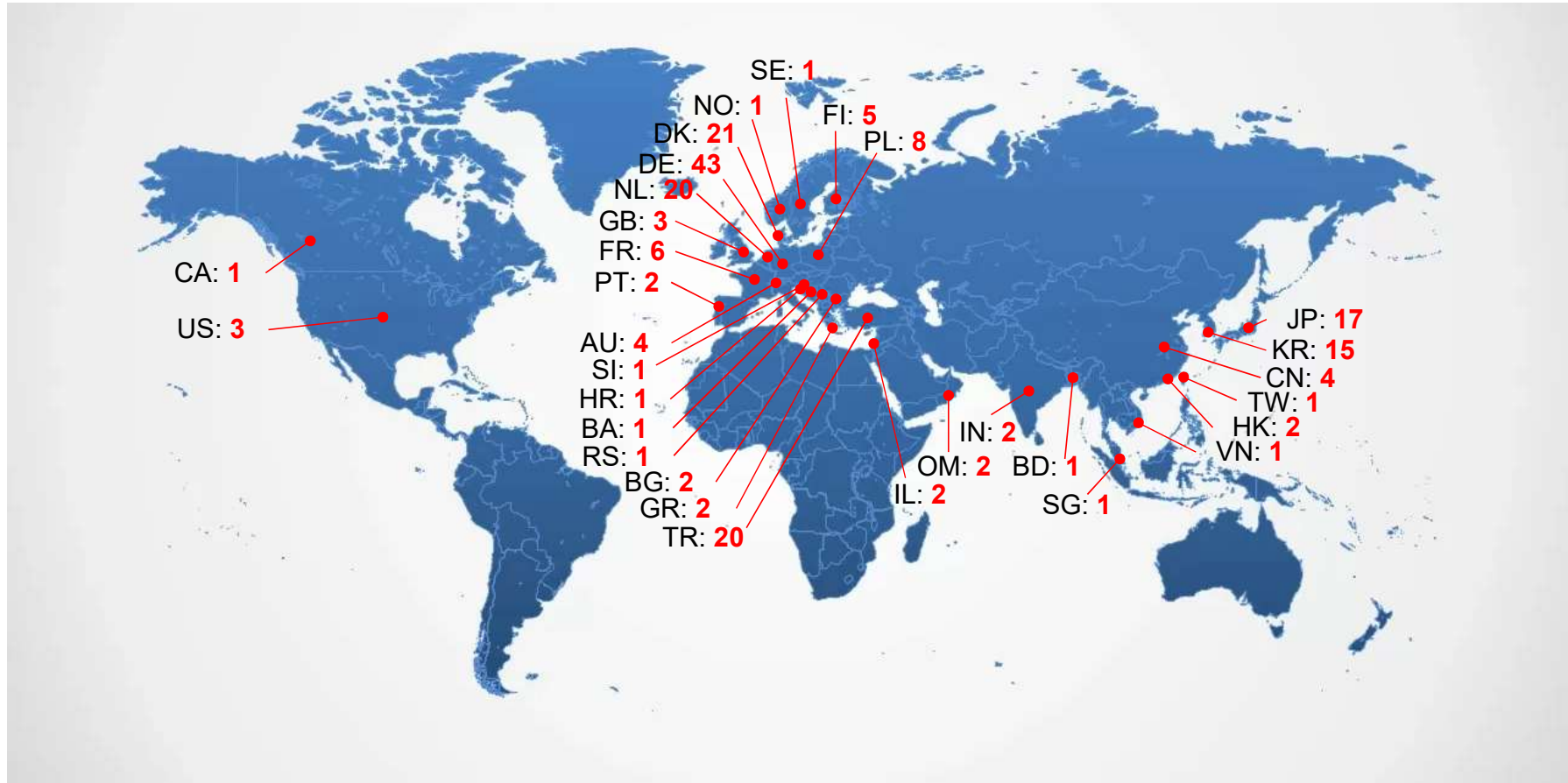
- Manganese ore
- Pellets

MINING

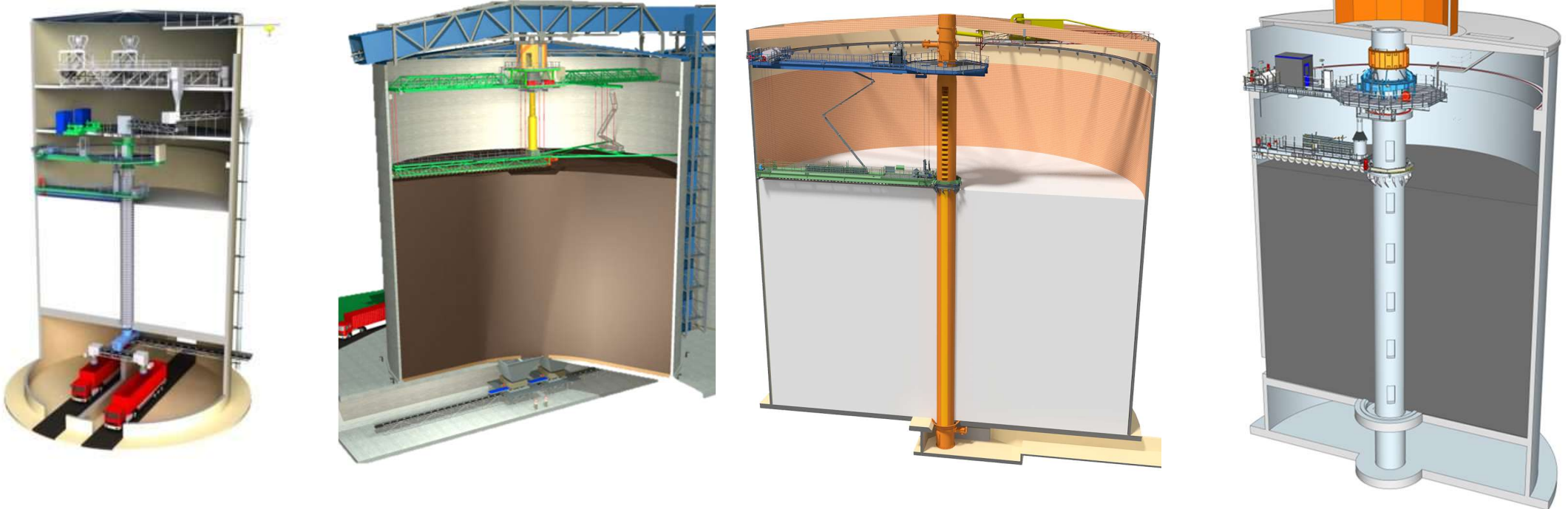
EUROSILOS WORLDWIDE

Country	Co	Commodity	# of silos
Austria	AT	Potato Starch	4
Bangladesh	BD	FGD Gypsum	1
Bosnia Herzegovina	BA	FGD Gypsum	1
Bulgaria	BG	FGD Gypsum	2
Canada	CA	Potash	1
China	CN	Steam Coal	2
China	CN	FGD Gypsum	3
China	CN	Potato Starch	1
Croatia	HR	Pet Coke	1
Denmark	DK	FGD Gypsum	3
Denmark	DK	Fly Ash	1
Denmark	DK	Potato Starch	14
Denmark	DK	Soy Bean	1
Denmark	DK	Steam Coal	2
Finland	FI	FGD Gypsum	1
Finland	FI	Steam Coal	4
France	FR	FGD Gypsum	2
France	FR	Potato Starch	4
Germany	DE	FGD Gypsum	27
Germany	DE	Fly Ash	1
Germany	DE	Potato Starch	15
Greece	GR	FGD Gypsum	2
India	IN	Flux	1
India	IN	Steam Coal	1
Israel	IL	FGD Gypsum	2
Japan	JP	FGD Gypsum	10
Japan	JP	Potato Starch	7
Netherlands	NL	Amm. Sulphate	2
Netherlands	NL	Common Salt	1
Netherlands	NL	FGD Gypsum	3
Netherlands	NL	Potato Starch	14
Norway	NO	Calcium Nitrate	1
Oman	OM	Petcoke	2
Poland	PL	FGD Gypsum	7
Poland	PL	Limestone	1
Portugal	PT	FGD Gypsum	2
Serbia	RS	FGD Gypsum	1
Singapore	SG	FGD Gypsum	1
Slovenia	SI	FGD Gypsum	1
South Korea	KR	Amm. Sulphate	3
South Korea	KR	EAFD Dust	1
South Korea	KR	FGD Gypsum	1
South Korea	KR	Steam Coal	10
Sweden	SE	Potato Starch	1
Taiwan	TW	FGD Gypsum	1
Türkiye	TR	Borax	17
Türkiye	TR	Steam Coal	3
UK	GB	FGD Gypsum	3
USA	US	FGD Gypsum	1
USA	US	Lignite	2
Vietnam	VN	EAFD Dust	1

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EUROSILO TYPES



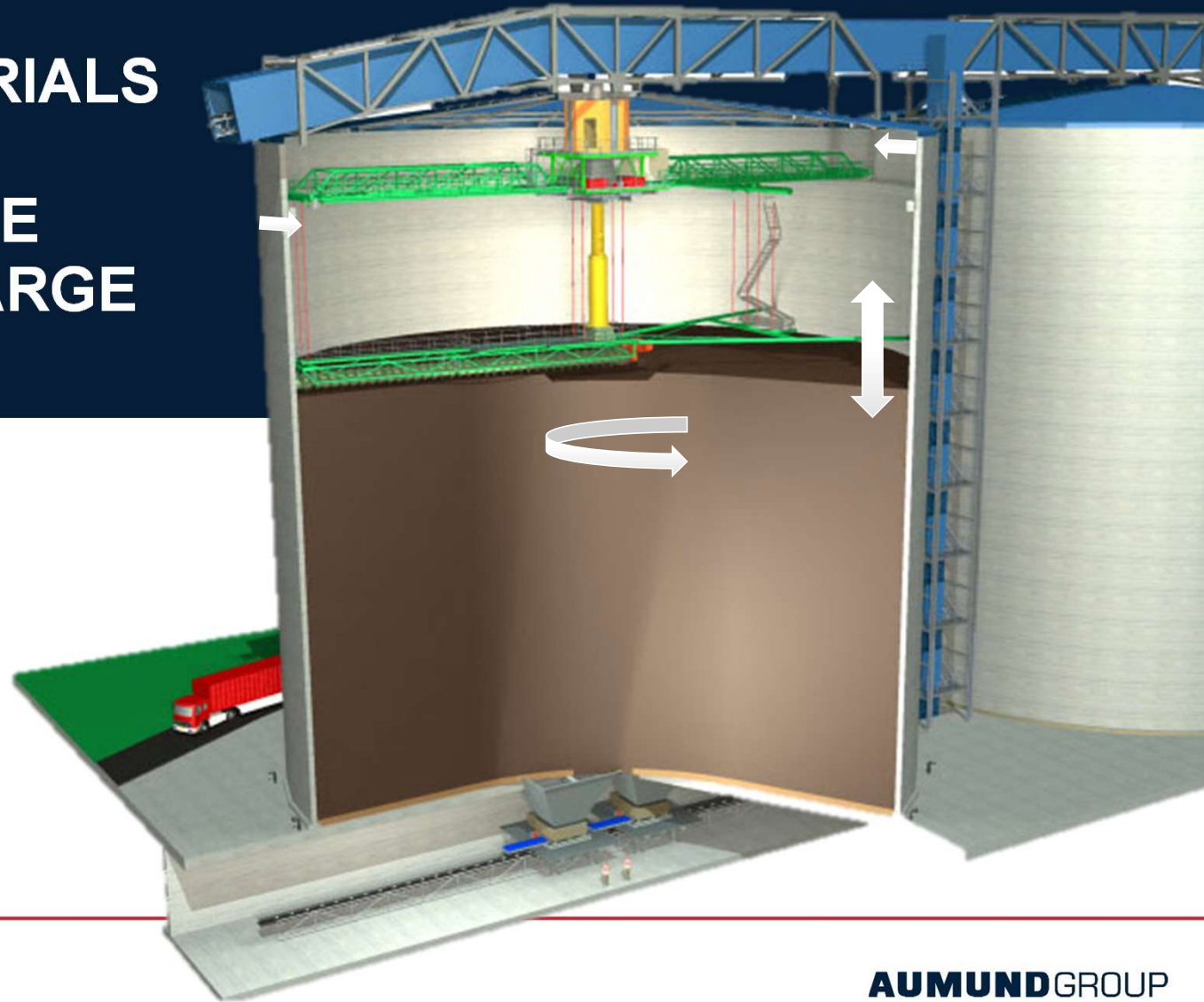
- Slotted column type (for cohesive & hygroscopic bulk mat.)
- Core gravity flow type (for free flowing bulk mat.)
- Shutter column type (for fine bulk mat.)
- Window column type (for fine bulk mat.)

FREE FLOWING MATERIALS

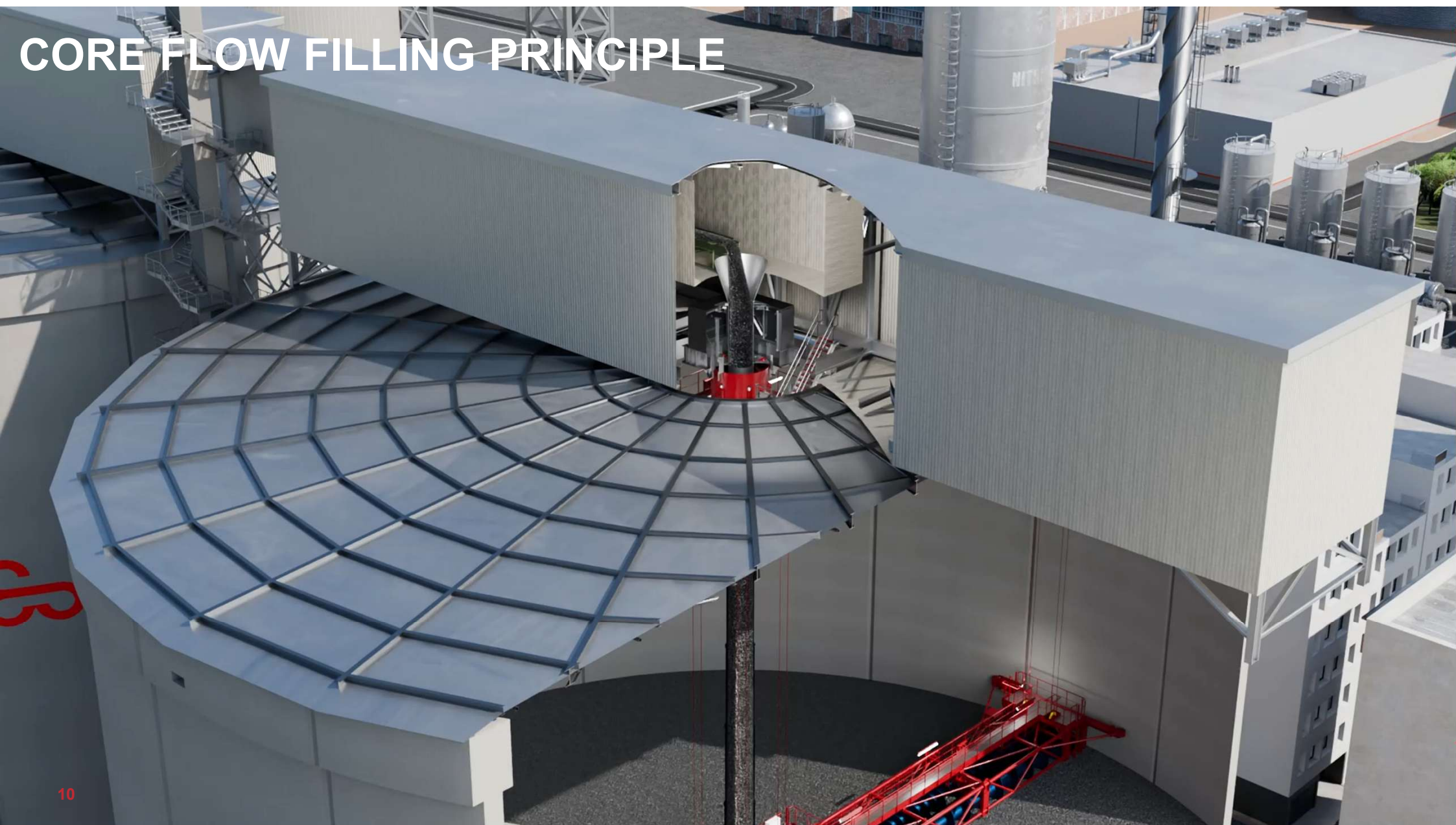
CORE FLOW PRINCIPLE WITH HOPPER DISCHARGE

Bulk Materials like:

- Coal, Petcoke, Ore, Sugar,
- Minerals



CORE FLOW FILLING PRINCIPLE



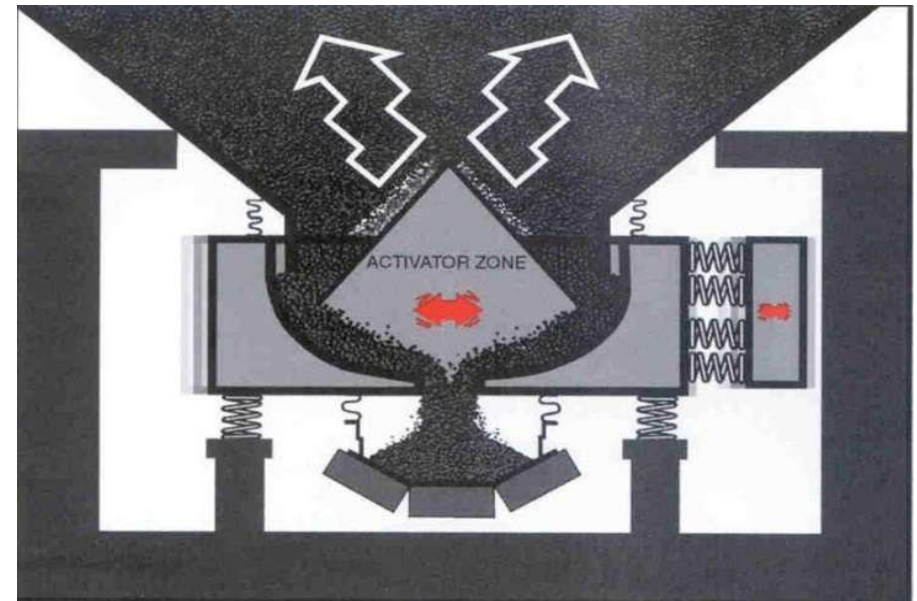
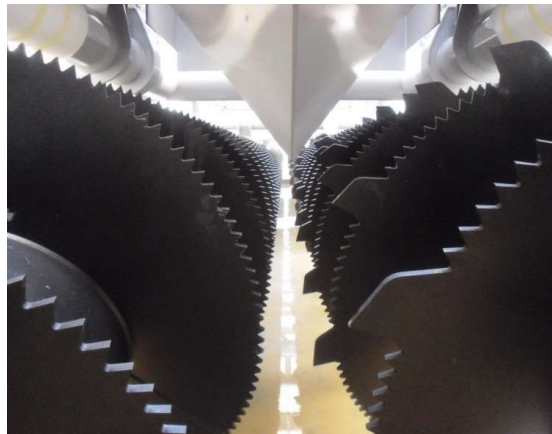
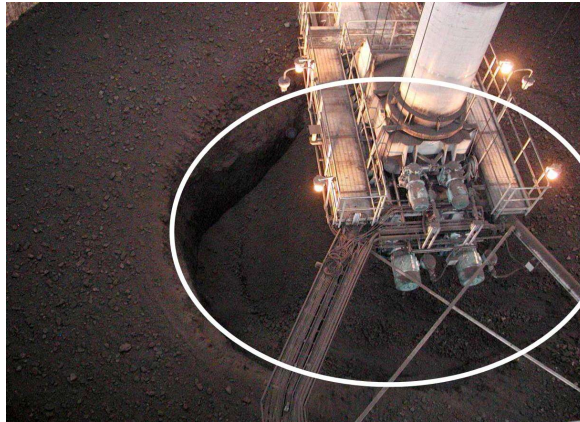
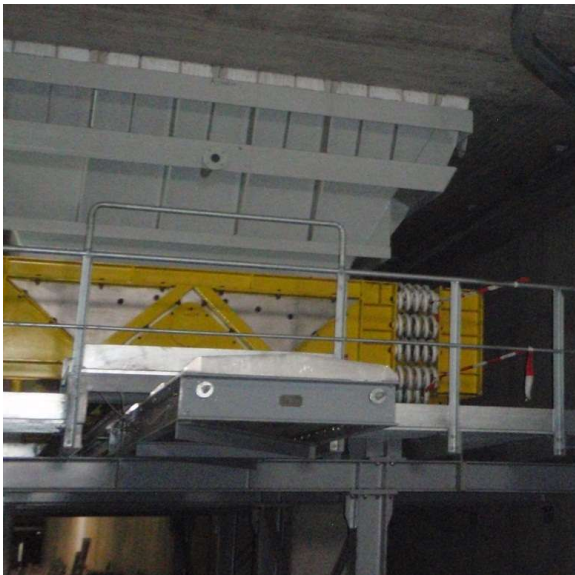
CORE FLOW HOPPER DISCHARGE



CORE FLOW DISCHARGE OPERATION



CORE FLOW HOPPER DISCHARGE

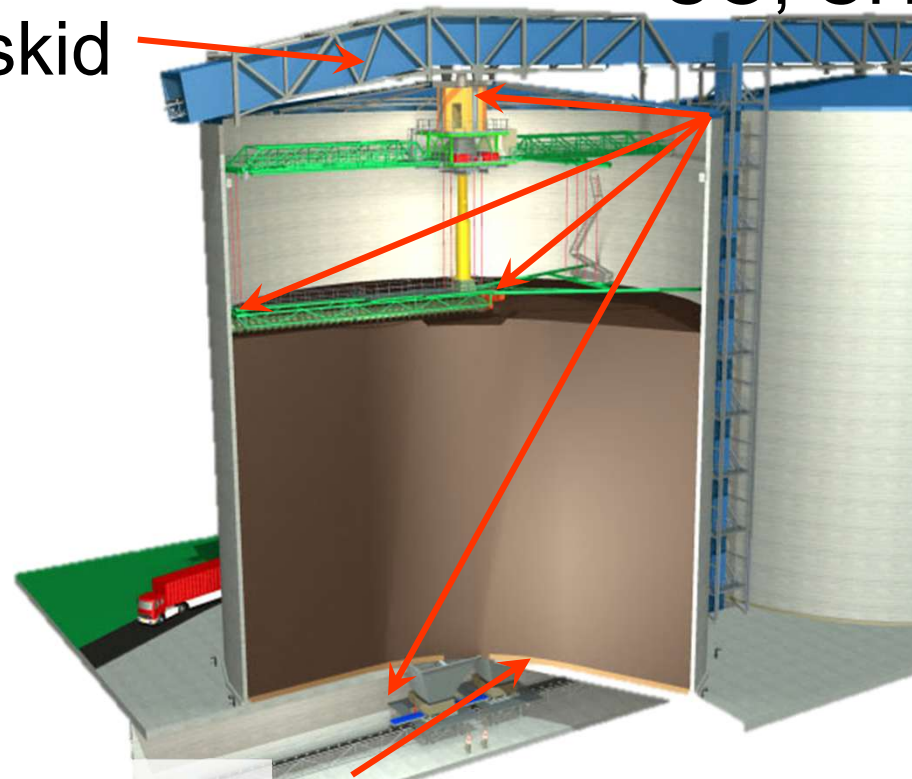


EUROSILO SAFETY CONCEPT

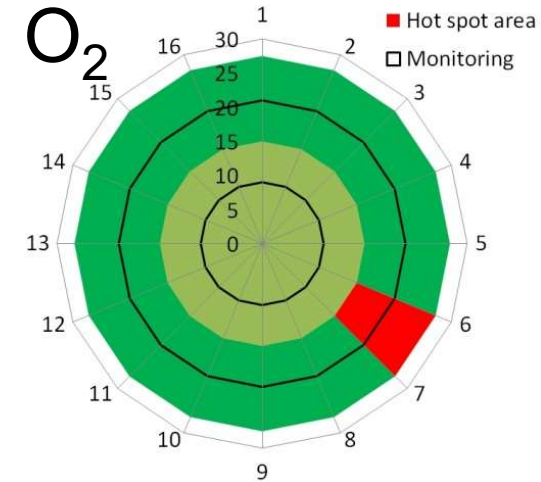
Gas Analysers:
CO, CH₄, O₂



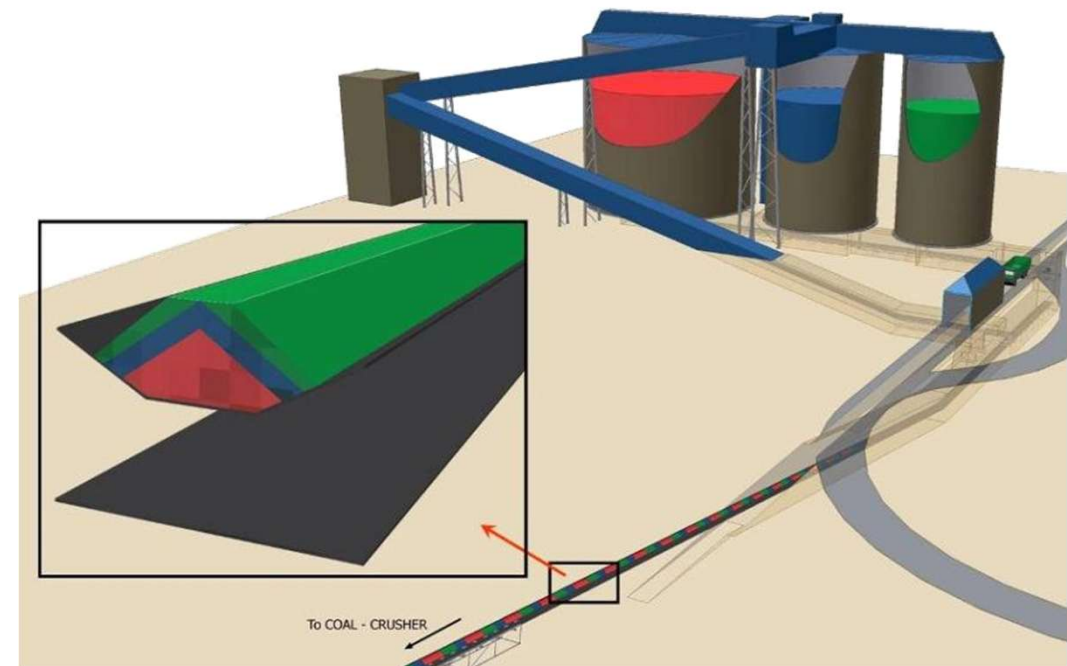
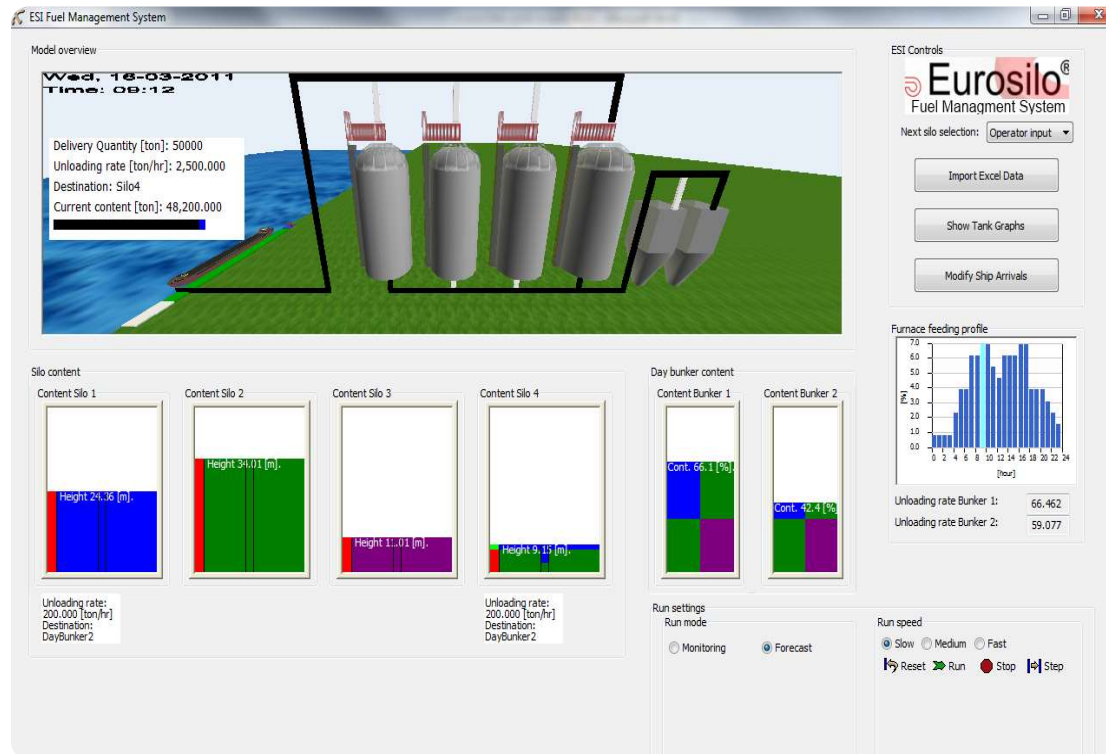
Gel skid



N₂ - purging



BLENDING & BULK SOLIDS MANAGEMENT

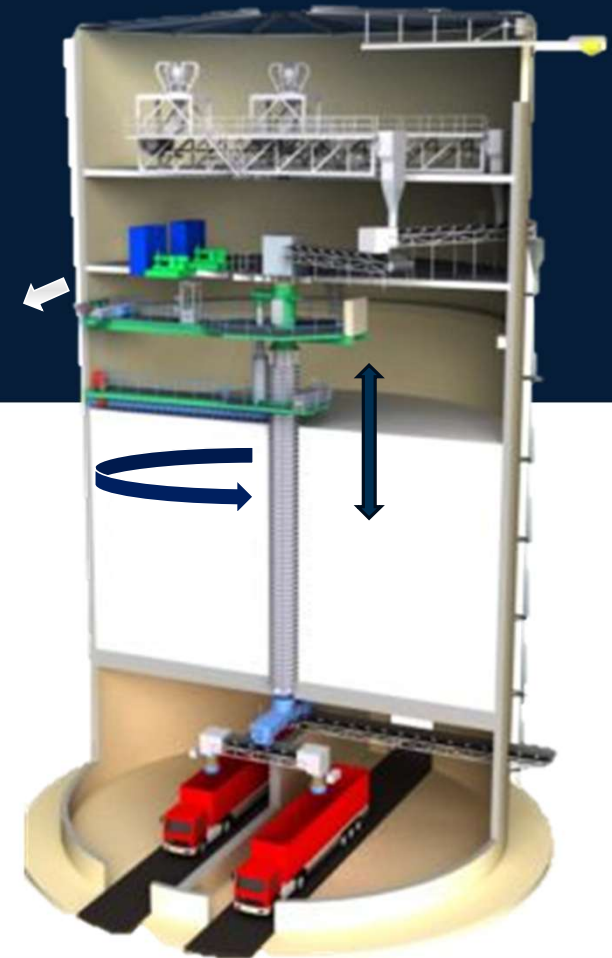


NON FREE FLOWING MATERIALS

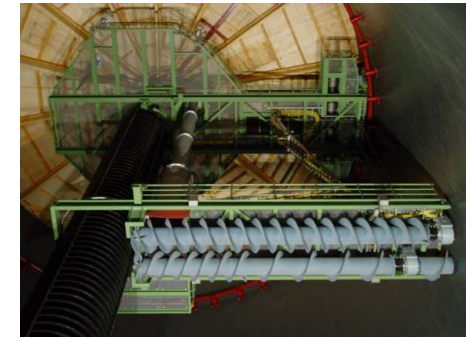
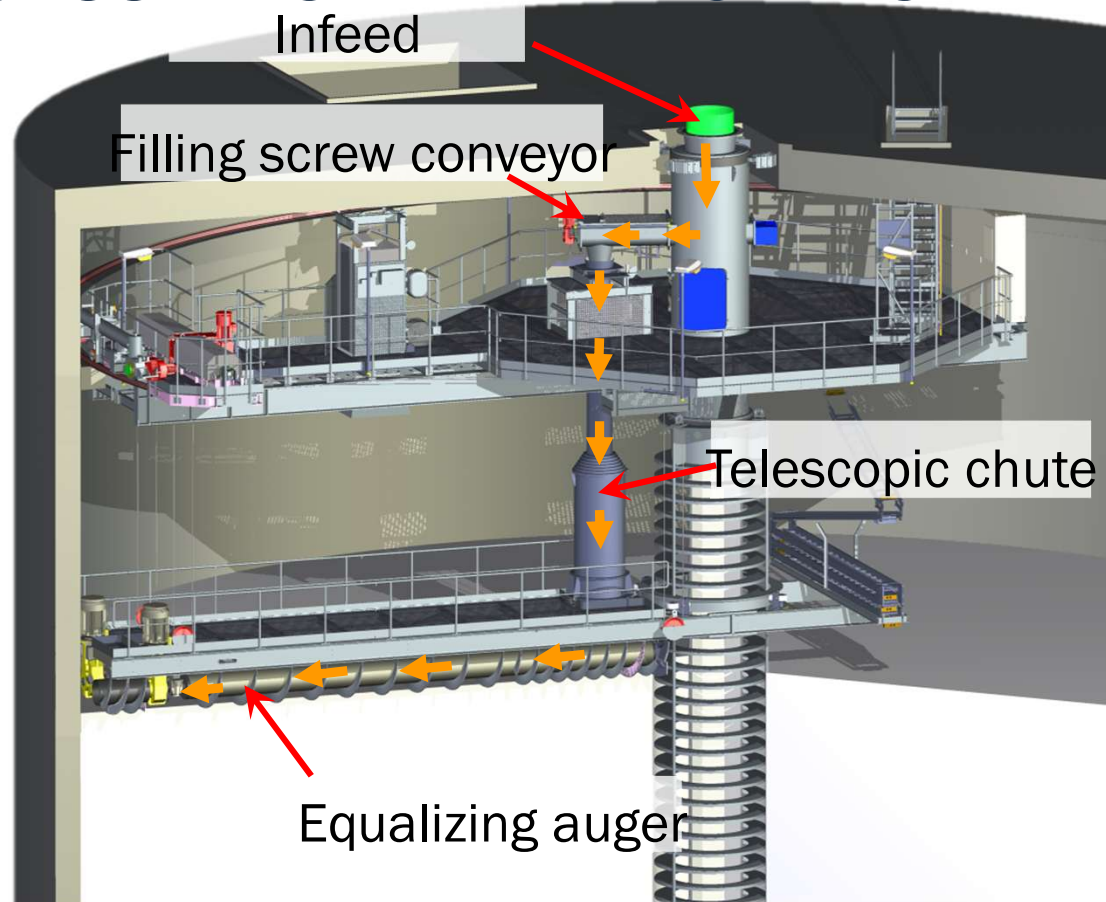
SLOTTED COLUMN PRINCIPLE

Bulk Materials like:

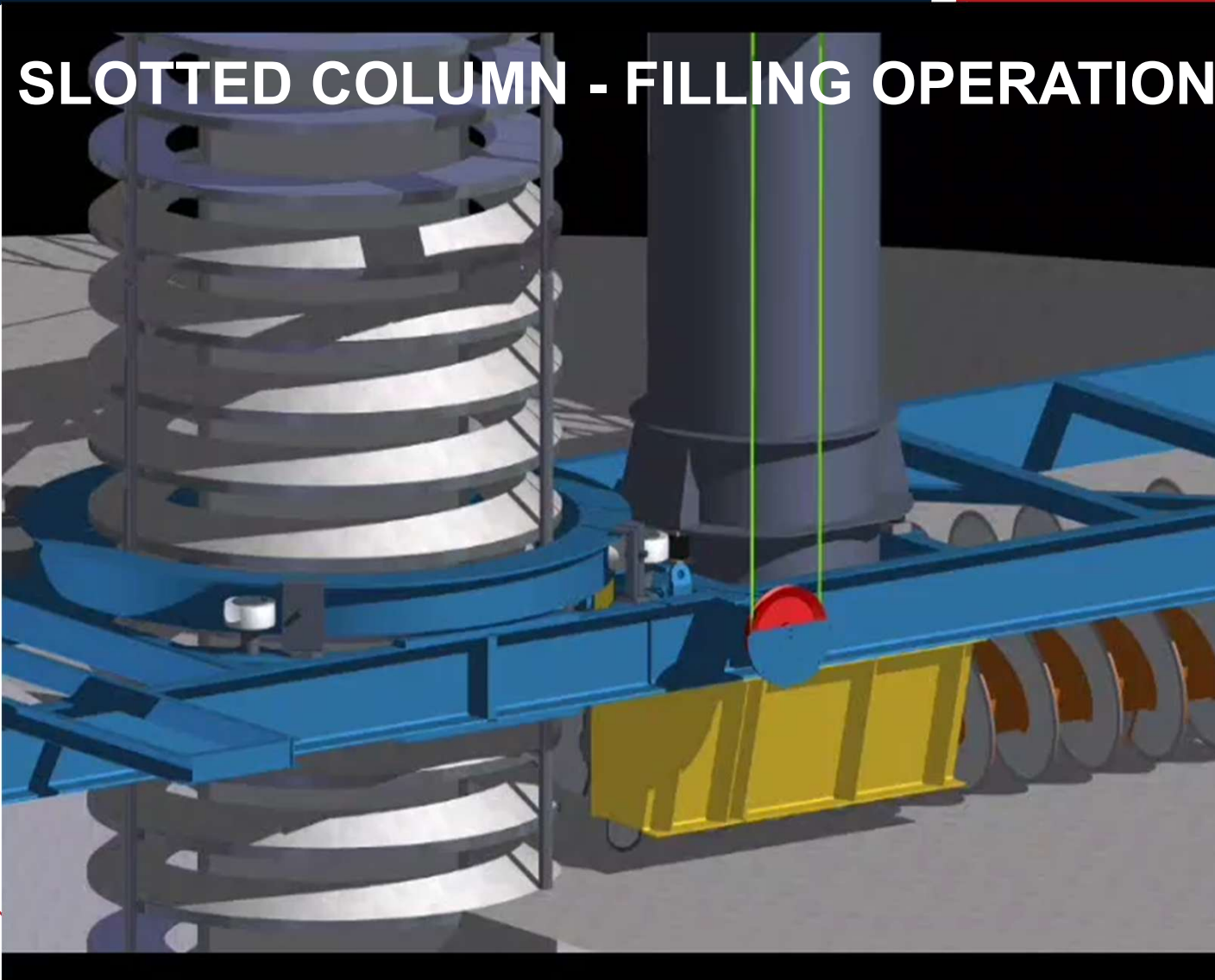
- FGD Gypsum, Fertilizers



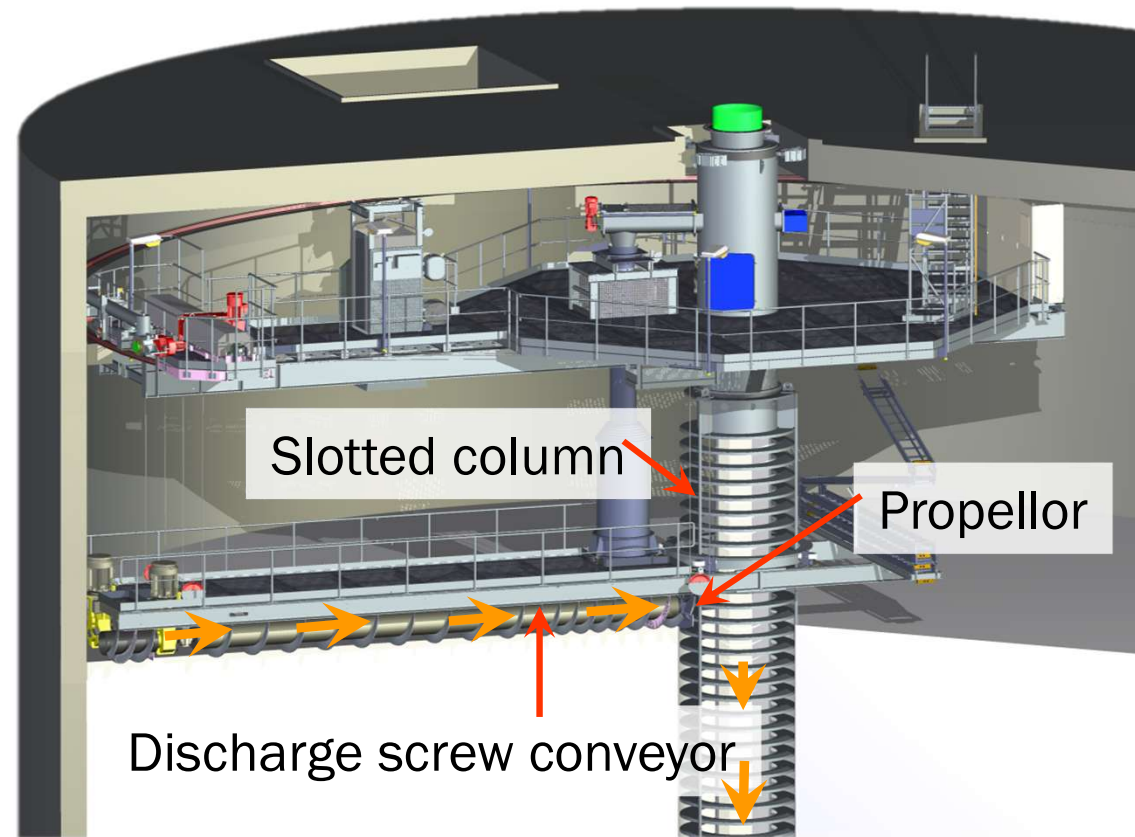
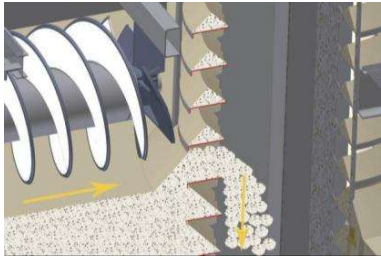
FILLING PROCESS – NON FREE FLOWING MATERIALS



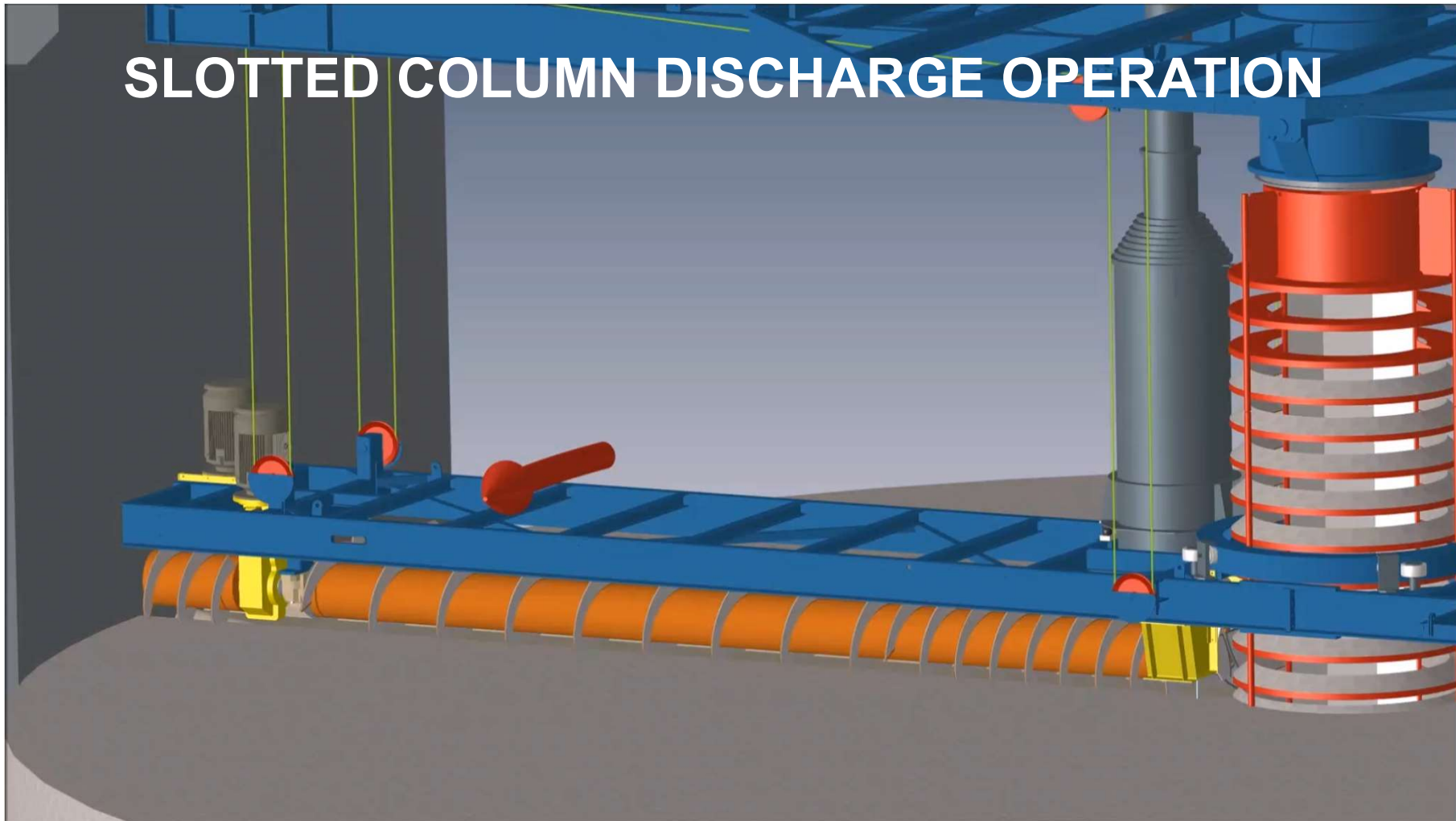
SLOTTED COLUMN - FILLING OPERATION



DISCHARGE PROCESS – NON FREE FLOWING MATERIALS



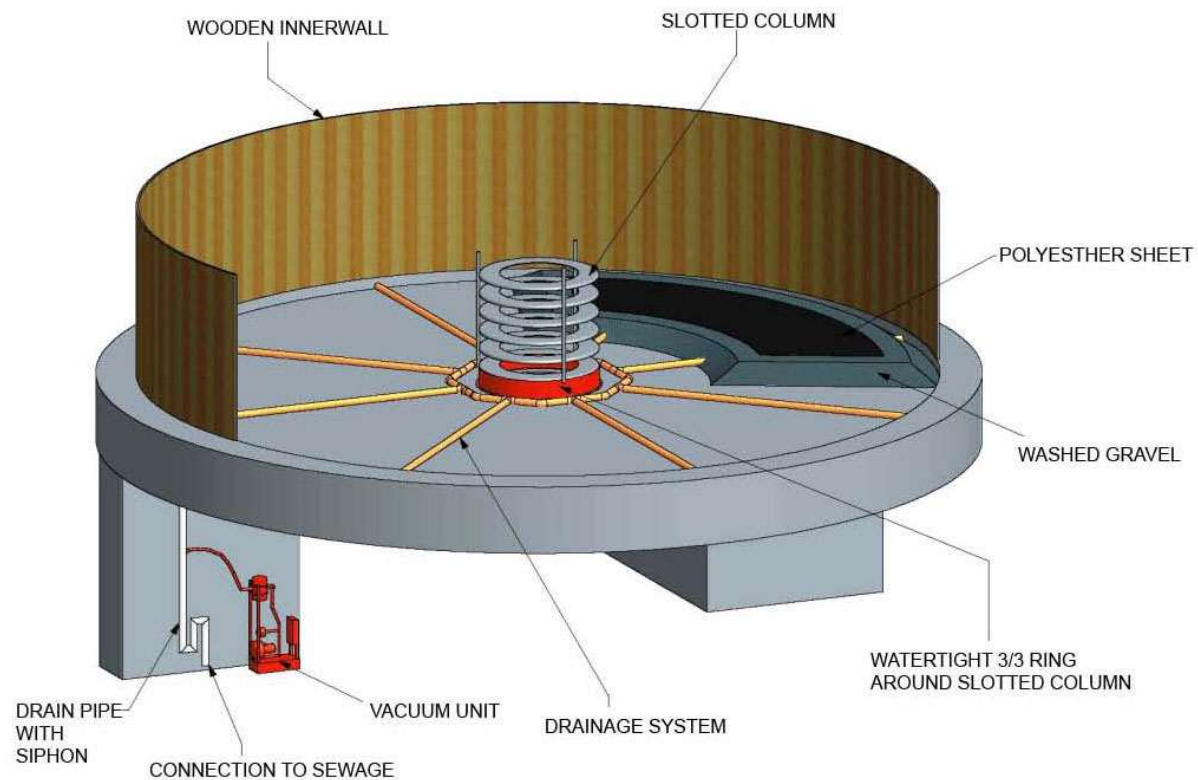
SLOTTED COLUMN DISCHARGE OPERATION



SLOTTED COLUMN DISCHARGE OPERATION



DRAINAGE SYSTEM

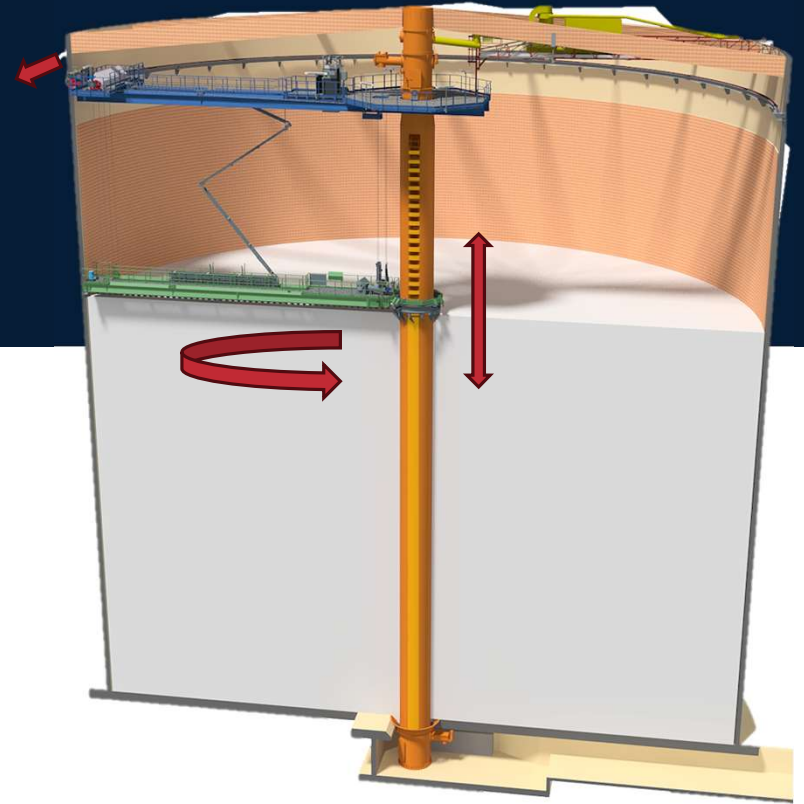


FINE POWDERED MATERIALS

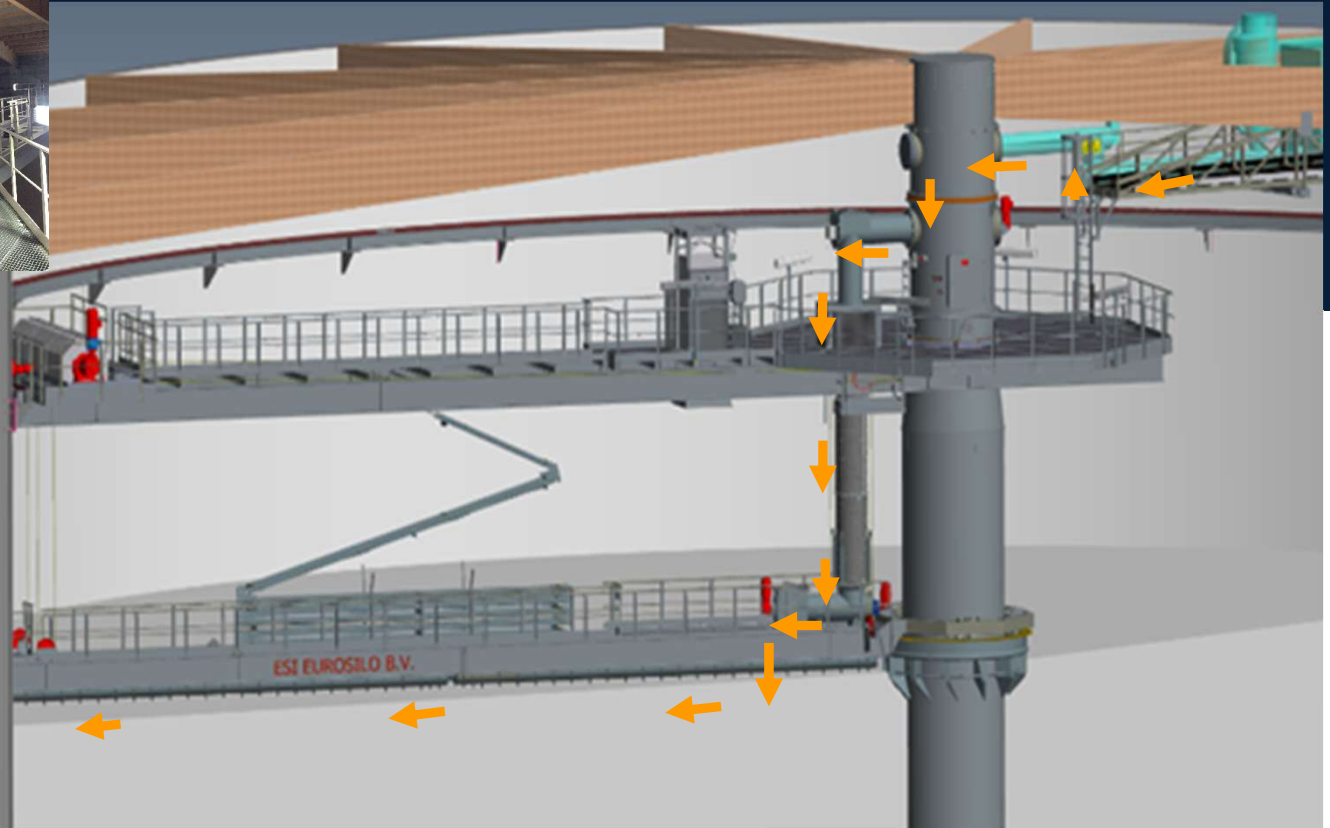
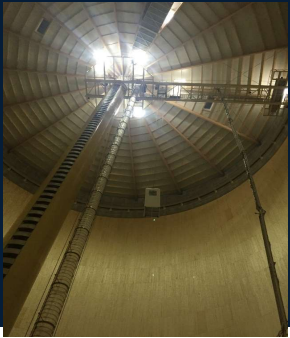
SHUTTER COLUMN PRINCIPLE

Bulk Materials like:

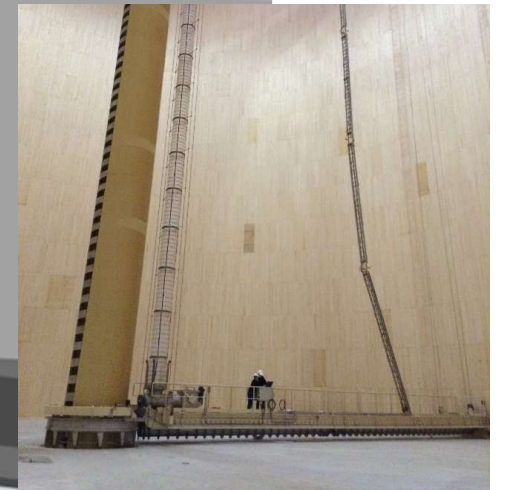
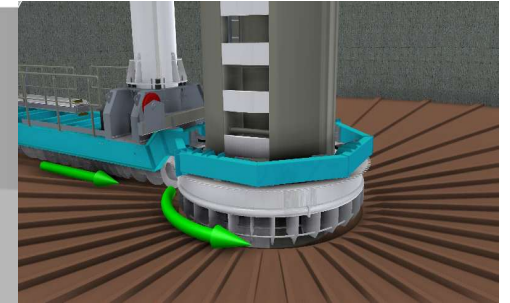
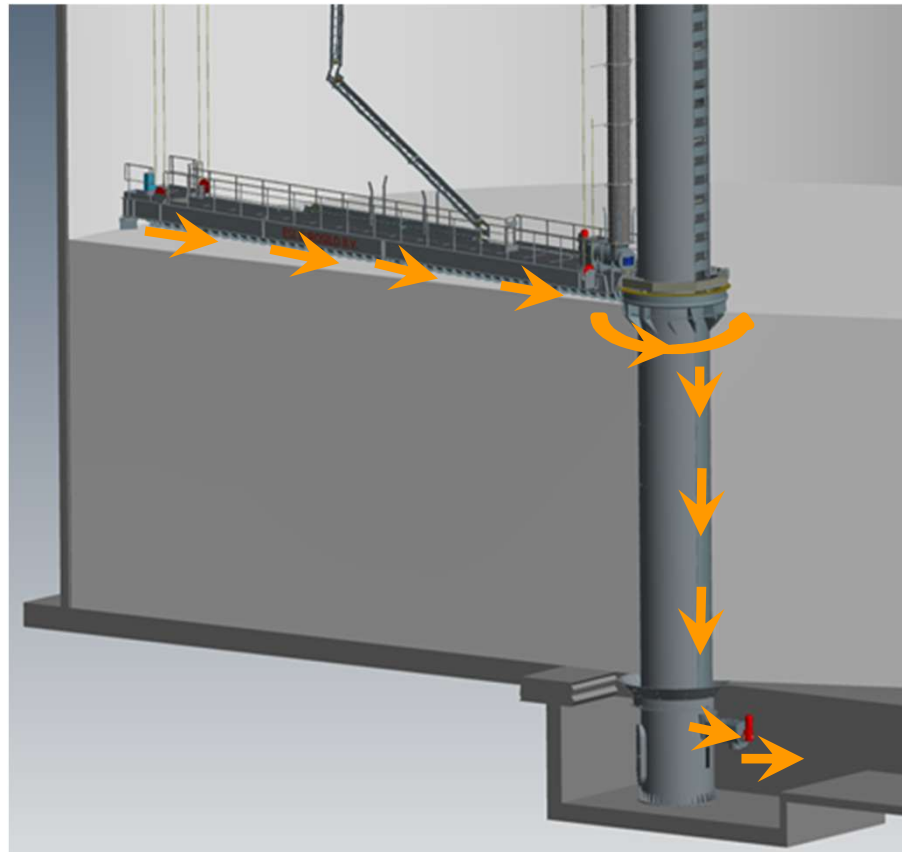
- Potato starch, sugar
- Fly ash, cement?



INFEEED PROCESS HATCHED COLUMN



HATCHED COLUMN DISCHARGE



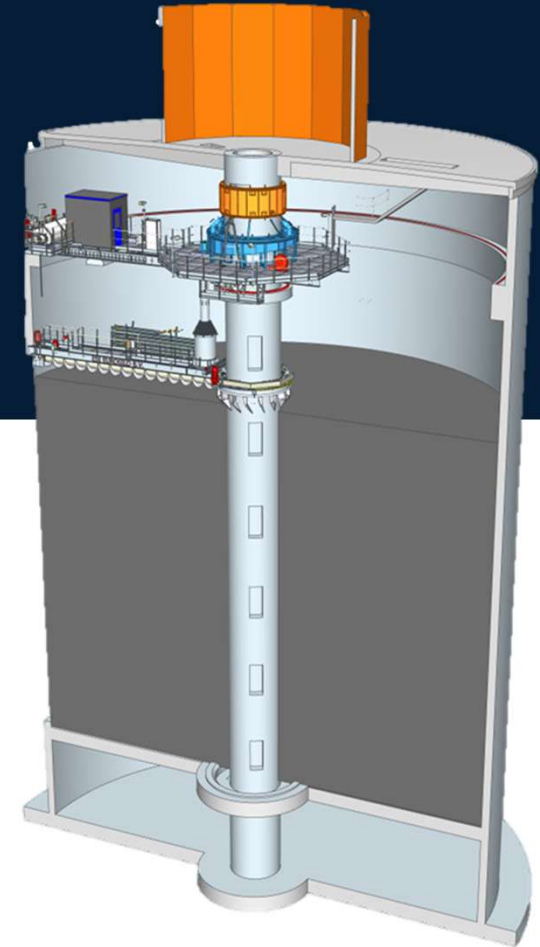
FINE POWDERED MATERIALS

WINDOW COLUMN PRINCIPLE

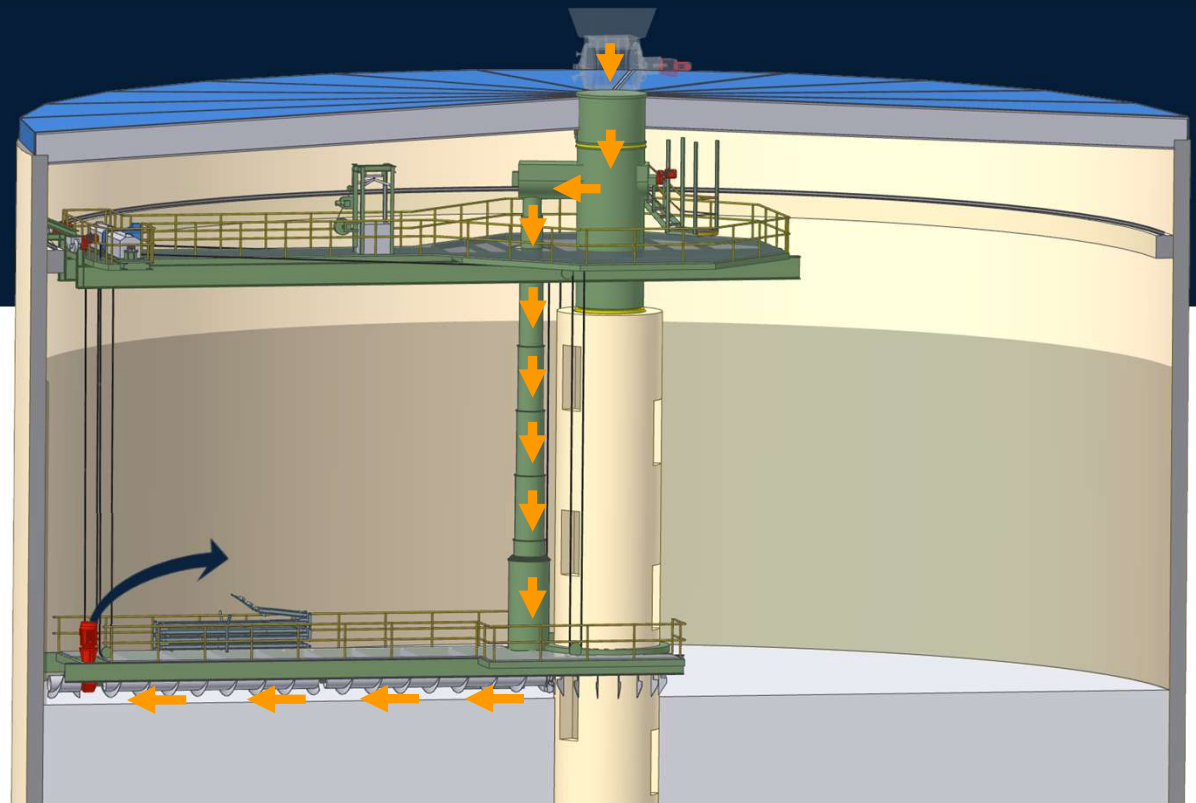
Bulk Materials like:

- Fly Ash Cement

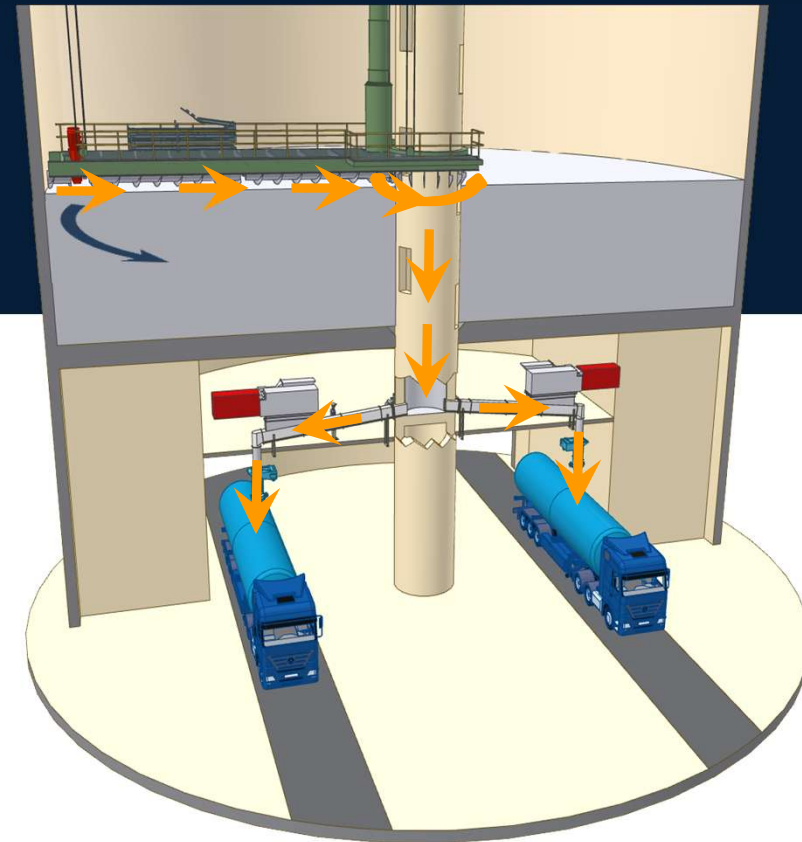
Large capacities up to 100,000 ton



INFEEED PROCESS WINDOW COLUMN



OUTFEED PROCESS WINDOW COLUMN



REFERENCES COAL/PETCOKE SILOS



Turkey Hunutlu [2022]

- 3 x 100,000 m³ Coal silo
- 2500 tph Infeed
- 750 tph outfeed
- 55 m diameter
- 42.5 m storage height



OMAN ORPIC [2020]

- 2 x 42,000 m³ Petcoke silo
- 500 tph Infeed
- 1000 tph outfeed
- 40 m diameter
- 40 m storage height



South Korea Sin Seochon [202]

- 8 x 55,000 m³ Coal silo
- 2400 tph Infeed
- 1000 tph outfeed
- 40 m diameter
- 44 m storage height

REFERENCES FLY ASH / EAFD



Germany Rohrdorf [2015]

- 20,000 m³ Fly Ash silo
- 100 tph Infeed
- 50 tph outfeed
- 30 m diameter
- 28 m storage height



Amsterdam Hemweg [1995]

- 2 x 12,500 m³ Fly Ash silo
- 100 tph Infeed
- 200 tph outfeed
- 31 m diameter
- 15.5 m storage height



Vietnam ZincOx [2012]

- 12,000 m³ EAFD silo
- 100 tph Infeed
- 28 tph outfeed
- 30 m diameter
- 17,5 m storage height

REFERENCES SLOTTED COLUMN



South Korea Ulsan

- 3 x 40,000 m³ Coal silo
- 144 tph Infeed
- 600 tph outfeed
- 46,7 m diameter
- 23,55 m storage height



Serbia Nikola Tesla

- 10,000 m³ Coal silo
- 150 tph Infeed
- 300 tph outfeed
- 30 m diameter
- 14,3 m storage height



Netherlands Rotterdam PP

- 6,000 m³ Coal silo
- 150 tph Infeed
- 250 tph outfeed
- 25 m diameter
- 17 m storage height

REFERENCES STARCH



Germany Rohrdorf [1967]

- 3 x 20,000 m3 Starch silo
- 100 tph Infeed
- 100 tph outfeed
- 46.6 m diameter
- 12 m storage height



Denmark Karup [2025]

- 3 x 100,000 m3 Starch silo
- 50 tph Infeed
- 50 tph outfeed
- 55 m diameter
- 45 m storage height



China Jiusan [2016]

- 25,000 m3 Coal silo
- 20 tph Infeed
- 20 tph outfeed
- 37,5 m diameter
- 23 m storage height

AUMUNDGROUP

WE CONVEY QUALITY

**THANK
YOU**

AUMUND