



» Fluidization systems:

- 2 sets Fluidization system for aeration of buffer bin 10 m3
- 2 sets Fluidization system for aeration of weighing bin 2,5 m3
- Distribution piping and components

Customer: S.C. CARMEUSE HOLDING S.R.L., Brasov, Romania

Implementation site: FIENI plant

» Separation of coarse particles for transport line from elevator to grader Rotation sieve for bypass dust removal Supply of trough screw conveyor ø 320x15500 mm

Customer and installation site: CRH (Slovakia) a.s., Rohožník, Slovakia



» Sampling station SSM 01-120 for lime hydrate sampling including commissioning

Customer: CARMEUSE CZECH REPUBLIC s.r.o.

Implementation site: Lime Plant Mokrá, Czech Republic

» Modernization of shipping — Fluidslide transport of cement with equipment:

Fluidslide transport line 01-03 to vibration sieve

Bottom drain from the current trough 01-01

Fluidslide transport line 01-10 to silos

Fliudslide transport line 04-02 from silos to nozzle

Discharge of silos

Output from elevator

Customer and implementation site: Českomoravský cement, a.s., Mokrá plant, Czech Republic



» Closure valves, blade-type, pneumatic, ø 950 mm and ø 1000 mm, for Chlorine dust removal management Chain conveyor 500x6000 mm, with chutes for RP-E5c line modernization

Manual cut-off gate, dimensions 650x650 and 890x400 mm

Screw conveyor on MKM line tubular, ø 300x6200 mm

Customer and implementation site: **Považská cementáreň, a.s., Ladce, Slovakia**

» ATEX gearboxes, right and left version
Customer and implementation site: Považský cukor a.s., Trenčianska Teplá, Slovakia

» Trough screw conveyors dimensions ø 630x14400 mm Cut-off gates 700x700 mm, manual Parts for grader DTIM 1250 and LTRM 1250 Customer: MELKOV s.r.o., Mokrá, Czech Republic

» Trough screw conveyors \emptyset 320x3490 mm and \emptyset 320x9225 mm, cut-off gates size 300 pneumatic and pneumatic fluidslide transport parts

Customer: **MELKOV s.r.o., Mokrá, Czech Republic** Implementation site: **CARMEUSE Romania, Deva plant**

» Process and dust removal lines, chutes, compensators, cut-off gates

Customer: Köppern Aufbereitungstechnik GmbH & Co. KG, Freiberg, Germany Implementation site: Vils, Schretter, Austria

» Shipping modernization — equipment for cement sampling from fluidslide transport lines chutes beneath the new storage silos — 3 sets screw sampling stations SSM 01-120 Dosage to mill CM6 - rotary feeder 1000x1000 mm

Customer and implementation site: Českomoravský cement, a.s., Mokrá plant, Czech Republic





Piping for pneumatic transport

Customer: CARMEUSE COMPTABILITE FOURNISSEURS, Belgium

Implementation site: MOHA plant

Manufacture and installation of coal chutes in coaling tower

Customer: TON - ENERGO, a.s., Bystřice pod Hostýnem, Czech Republic

Implementation site: Holešov plant

Supply of tubular screw conveyors ø 200x4035 mm and ø 250x2131 mm, and rotary feeder Customer and Implementation site: Lhoist-Vápenka Čertovy schody a.s. Tmaň, Czech Republic

Equipment for manufacture and loading of small fractions of bulk lime:

screw conveyors:

tubular ø 400x10200 mm: tubular ø 324x2900 mm:

trough ø 320x3600 mm

trough ø 320x3600 mm; trough ø 320x4700 mm;

trough ø 320x2800 mm

cut-off gates

branching chutes two- and three-way

rotary feeder

output chutes for screw conveyors

Customer: LV - MONT, s.r.o., Topoľčany, Slovakia

Implementation site: Calmit Tisovec

Safety guardrails for shipping - filling positions of scales 1 and 2

Customer: CEMEX Czech Republic, s.r.o.

Implementation site: Prachovice cement plant

Reconstruction of transport to mill – steel structures, belt feeder weighing, rotary feeder, chutes

Customer: Kalcit, s.r.o., Brno, Czech Republic

Implementation site: Líšeň quarry

Discharge equipment for new milled lime silo - Aeration of silo, Silo discharging, Fluidslide line

Customer: S.C. CARMEUSE HOLDING S.R.L. Brasov, Romania

Implementation site: DEVA plant

Trough chutes beneath filters

Customer and implementation site: CEMMAC a.s., Horné Srnie, Slovakia

Screw conveyors with dimensions ø 200x4500 mm and ø 200x6365 mm for project Repair of fabric filter no. 4

Customer: BFE Technology, s.r.o., Milevsko, Czech Republic

Implementation site: České lupkové závody a.s.



2018

» Trough screw conveyors ø 320 x 2,791 mm and ø 320 x 3,440 m Customer: Fels-Werke GmbH / Fels Izvest LLC Russia Implementation site: Tovarkovo Lime Works, Russia

» Hand-operated cut off gates and with air drives 650 x 650 mm Customer: PSP Engineering a.s., Přerov Implementation site: Považská cementáreň, a.s., Ladce, Slovakia

» Parts for repair of the Maerz two-shaft furnace

Customer: TEPLOTECHNA Ostrava a.s.

Implementation site: VÁPENKA VITOŠOV s.r.o., Czech Republic

» Rotary tourniquet feeder 740 x 600/740 x 740, ø rotor 650, 8 cells, electric drive with support and sensor Customer: Fels-Werke GmbH / Fels Izvest LLC Russia Implementation site: Tovarkovo Lime Works, Russia

» Parts for screw conveyor no. 04H160 ø 500 mm, length 10,000 mm, including technical analysis and assembly

Customer and implementation site: Považský cukor a.s., Trenčianska Teplá, Slovakia

» 66 pieces of furnace burners in a total volume of CZK 2 million Customer: Fels-Werke GmbH, Goslar, Germany Implementation site: Lime Works - Kalkwerk Kaltes Tal

» Safety guardrails for transfer to tankers - installation project, manufacturing documentation, manufacturing and assembly

Customer: CEMEX Czech Republic, s.r.o.

Implementation site: Prachovice Cement Works, Czech Republic







» System for separation of inadequately milled products and metallic bodies and fluidslide transport to the grader

Fluid transport to the silos with unloading device - set of trough transport lines Cement sampling - 3 sets of automatic screw sampling stations Overpressure - negative pressure valve

Customer: **PSP Engineering a.s., Přerov, Czech Republic**Implementation site: **ČEČENCEMENT Cement Works, Russia**

» Parts for grader DTIM 1650 Parts for grader VTP 1100 H Frame for new cooler drive

Trough screw conveyors of size ø 630 x 14,400 mm, manual slide valves of size 700 x 700 mm

Customer: MELKOV s.r.o., Mokrá

Implementation site: Mokrá Cement Works, Czech Republic

» Bucket rim for mill KTM 1600 Pre-mixer and bucket drier

Customer: **PSP Engineering a.s., Přerov** Implementation site: **NAVASHINO Russia**





Container, chutes, dedusting tube, steel structure Screw feeder ø 320 length 1,300 mm for calcined petroleum coke

Customer: **PSP Engineering a.s., Přerov**

Implementation site: Norway

Separation of inadequately milled and metallic particles in the milling circuit of the raw material mill - Separation for raw material mill no. 2

Customer: Českomoravský cement, a.s., Mokrá

Implementation site: Mokrá Cement Works, Czech Republic

- Regulation of the calcination stage to improve the conditions for co-incineration
 - louvre regulation valve ø 1,250 mm, regulation valve 930 x 1,000 mm
 - 9 pieces of compensators of size ø 4,090 mm, 4,090 x 2,540 mm, ø 3,930 mm Customer: **PSP Engineering a.s., Přerov** Implementation site: Považská cementáreň, a.s., Ladce, Slovakia
- Closing of the chute in the transport of dry limestone under the silos for dry raw material slide valves:
 - 650 x 650 100 mm, hand-operated, with scraper, covered
 - 890 x 400 100 mm, hand-operated, with scraper, double Customer and implementation site: Povážská cementáreň, a.s., Ladce, Slovakia
- Automatic screw-type sampling station including vibrators, chutes and supporting structures Components for the pneumatic transport of fly ash

Trough screw conveyors:

ø 200 x 2,200 mm

ø 400 x 5,300 mm

ø 400 x 4,800 mm

ø 400 x 7,400 mm

ø 400 x 8,100 mm

Customer and implementation site: S.C. CARMEUSE HOLDING S.R.L. - Fieni, Romania

Trough screw conveyors under the new fabric filter for the grader and transport route

Customer: BFE Technology, s.r.o., Milevsko

Implementation site: cement works CEMMAC Horné Srnie, Slovakia

Tubular screw conveyors of size ø 320 x 6,880 mm and ø 320 x 4,380 mm, including chutes and supporting structures

Customer: MONTÁŽE PŘEROV, a.s., Přerov

Implementation site: the company Kotouč Štramberk, Czech Republic



2017

» Trough screw conveyors ø320x2790 mm and ø320x3440 mm, support structure and chutes for the connection to the existing technological equipment, with focus on the existing technology and the delivery to the site location

Customer: Fels-Werke GmbH Germany

Site location: Fels Izvest LLC Russia, Tovarkovo lime works

» Fluidslide conveyor, size 500 with a swivel gravity flap, double-wing, size 650, including the weight

Customer: MONTÁŽE TRENČÍN, a.s., Trenčín, Slovakia

Site location: CRH Rohožník, Slovakia

» Selected supplies for the established customer:

Burners for the furnaces no. 1, 2, and 3

Parts for pin mills

Tube mill jacket ø3,1x4,5 m

Grinding medium for ball mills

Screw conveyors $\emptyset 250x3600$ mm to convey the dust under the filter

Pipe bends for the furnace Maerz no. 3

Screw conveyor $\emptyset 250x13220$ mm to convey the hydrate

Chimney-air flaps and a chimney-dust removal flap for the furnace no. 3 and double-wing flaps for the furnace no. 1 burners

Pipe bends from the splitter to the burners

Customer and Site location: VÁPENKA VITOŠOV, s.r.o., Czech Republic



DTP 1400 and DTIM 1650 separator parts

Grinder case

Clinker cooler inlet pipe

Customer: MELKOV, s.r.o., Mokrá

Site location: Českomoravský cement, a.s, Mokrá cement works, Czech Republic

» Production of screw shafts with various sizes both for inland and foreign customers:

PSP Engineering a.s., Přerov

TON - ENERGO a.s.

PSP Engineering a.s., Přerov

PRECHEZA a.s., Přerov

MATOF, s.r.o.

PSP Engineering a.s., Přerov

IBAU Hamburg, Germany

Screw shaft ø450x4000

Screw shaft ø500x2760

Screw shaft for the project of AUTOEXPORT WKG, Poland

Screw shaft for laboratory dispensing

Screw shaft ø500x3000

Screw shaft, 3 pcs for the coal mill in Provyko

Screw shafts, 2 pcs for the Tong Yang project

Lower and middle screw shafts ø726 mm for a shipunloader



Messer Eutectic Castolin spol.s.r.o

Screw shaft ø350, 4 pcs for Veolia, Krnov heat genera tion plant

Rebuilding of the screw shaft ø400x5700





» Flow control gates, size 300x300, motorized, for storage and dispatching

Customer: KOHUT Třinec, s.r.o.

Site location: SEIF Ceramic, a.s., MKZ Šamotka plant, Rájec - Jestřebí, Czech Republic

» Trough screw conveyors including drawings for a new floating (fluming) water separation with the following dimensions

ø 320x7272 mm

ø 320x8463 mm

ø 250x3070 mm

ø 250x3700 mm

Customer: Hanácká potravinářská společnost s.r.o., Prosenice

Site location: **Prosenice sugar factory, Czech Republic**

» Selected supplies for the established German business partner:

IB-UL 400 shipunloader including the transport braces and the screw shaft and spare part supplies Foldable stairs with the safety rail and the pneumatic lifting, dimensions 5500x1850x2000, 4000x1850x2000 and 2000x1850x2000 mm including the drawing modifications for the Simplex 5 m loading equipment

Parts for the shipunloader IB-UL300/14 as a part of the Tong Yang project

VS vertical screw conveyor 300x12675 mm

18 pcs of single-stage radial-flow fans, type HPF

Customer: IBAU Hamburg, Germany

» Screw conveyors - trough ø250x5100 mm and tube ø200x5200 mm

Customer: **ZVVZ-Enven Engineering, a.s., Milevsko**Site location: **ZA03022 – Žatec, Czech Republic,**

The cement silo output and cement transport equipment - screw conveyors, fluidslide lines, fans, air distribution systems, flow control gates, and cut-off gates

Customer: **BEUMER Maschinenfabrik GmbH & Co. KG, Beckum, Germany**

Site location: **HOLCIM LUGAIT Philippines**

» Dust removing tubes with the diameter of 1400, 500-1000, 850, 1000, 220, and 1250 mm to convey the air volume in the dolomite, lime, and anhydrite milling circuit

Customer: PSP Engineering a. s. Magyarországi Fióktelepe, Hungary

Site location: Nitrogénmüvek, Pétfürdö, Hungary



» The HPV dust removal tube and extending the pneumatic transport route

Customer: **CARMEUSE SA Seilles, Belgium**Site location: **CARMEUSE SA Moha**

» Production of the parts for conveyors and an oil drain tank for a new customer Customer: NEUHÄUSER Magnet- und Fördertechnik GmbH

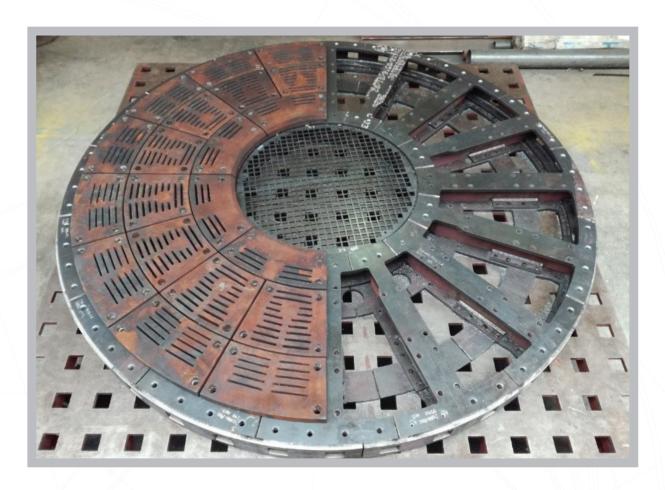
» Equipment for project "Mill Cooling Reconstruction CM3" - cutt-off gate, shutter flap, leaf flap, trough screw conveyors

Customer and Site location: Považská cementáreň, a.s., Ladce, Slovakia

» Partition wall ø4000 mm for a raw material mill no. 4

Customer: CEMEX Polska Sp. z o.o., Rudniki, Poland

Site location: Rudniki cement works



» Cut-off gates, size 650 for dispensing SRF (Solid Recovered Fuel) in a CC (Calcinate Channel)

Customer: **PSP Engineering a.s., Přerov**Site location: **Ladce cement works, Slovakia**

» Flow control gates with pneumatic actuation

Customer and Site location: CEMMAC a.s. Horné Srnie, Slovakia



2016

» Sampling of the power station fly-ash from the COV-03 conveyor belt - AKLS-800 sampling station with a hammer-type sampling

The set includes: - KLT800 Hammer sampling

- PD400 Belt conveyor, inclined
- LD500x180 Shovel divider
- DL400 Belt conveyor, inclined
- A holder with sample containers
- A distribution box with the Simatic S7-1214C control system
- Load-bearing structure with platforms
- Chutes with vibrators

Including the conveyor heating, assembly, electric installation, commissioning, and the operator' training, software modifications and delivery of the additional parts

Customer: BEUMER Group Czech Republic a.s., Ústí nad Labem

Location: Flémalle, Belgium



» Technology supply in the total volume of 11 million CZK for an important customer:

Manufacturing and assembling of the parts, devices and dust-removing pipes for the steel structure repair for the furnaces no. 1 and 2.

Pneumatically controlled Y-shaped flap as a part of the stabilization mixture supply Mixers under the turnstile.

Burners for the furnace no. 3 with a design modification and filling of the U-profile with Tribet, burner parts for the furnace no. 1

Piping from the separator to the fan and from the fan to the blow-out head.

Bleeding relief shutter

Trough screw conveyor, ø400 x 8,580 mm

Pipe bends from the distributor to the burners

KLM800 Pin mill

Customer: VÁPENKA VITOŠOV, s.r.o., Czech Republic





- » Manufacture of 2 sets of fluidslides for hydrated lime silos, Lime resources management ÚV Podhradí Customer: Sigmainvest, spol. s r.o., Prague, Czech Republic
- » Screw conveyors for the filter dust transport, tubular, ø 400, length 8,000 mm Customer: Carmeuse Slovakia s.r.o., Košice plant, Slovakia
- 66 pcs of the burners for the Kaltes Tal lime works
 66 pcs of the burners for the Saal an der Donau lime works

Customer: Fels-Werke GmbH, Goslar, Germany

» Technology for separation of milling loses and foreign objects - phase II

Customer: Českomoravský cement, a.s, Mokrá plant, Czech Republic

» Trough screw conveyors for the filter dust transport, ø320 x 8,900 mm

Customer: Carmeuse Slovakia s.r.o., Slavec lime works

» Delivery of the fan service platforms, dimensions $3,300 \times 4,300 \text{ mm}$ and $800 \times 4,250 \text{ mm}$, including the ladders

Customer: CEMEX Cement, k.s., Prachovice, Czech Republic

- » Within the project "Cement grinding on the vertical mill" the delivery of equipments for:
 - Slag mill and vertical mill plant
 - Lime, calcium sulphate and clinker transport and storage plant
 - Transport to the slag mill plant
 - Metering and transport of the furnace filter dust plant
 - Metering of the grinding intensifier plant

Customer: Českomoravský cement, a.s, Mokrá plant, Czech Republic

 $^{\rm w}$ 3 sets of SSM 01-120 screw sampling stations for sampling on the despatch locations from the ground limestone silos S0231 - S0234

The set includes: - Motorized screw sampling equipment

- Ball cock with actuator
- Holder with sample containers
- Vibrator
- Chutes, supports
- Distribution box with the Siemens SIMATIC LOGO! automated control system

Including heat cladding and isolation of the chute piping, installation, commissioning, and operator's training

Customer: CARMEUSE CZECH REPUBLIC s.r.o., Mokrá lime works

- » 2 sets of SSM 01-120 screw sampling stations for sampling on the despatch locations of silos no. 6 and no. 7 The set includes: - Motorized screw sampling equipment
 - Ball cock with actuator
 - Holder with sample containers
 - Vibrator
 - Chutes, supports
 - Distribution box with the Siemens SIMATIC LOGO! automated control system Including heat cladding and isolation of the chute piping, installation, commissioning, and operator's training

Customer: CARMEUSE CZECH REPUBLIC s.r.o., Prachovice lime works



» The storage silo with the volume of 53 m 3 , dimensions ø 3,000 x 5,020 mm, with a service platform 4,425 x 3,425 x 1,100 equipped with rails and a ladder Parts for the 8RCC packing machine

Customer: **HAVER & BOECKER OHG, Oelde, Germany**Location: **Vracs de L'Estuaire cement works – Oudalle**

» Manufacturing of the cones for the 2-chamber storage bins

Customer: MONTEMA, spol. s r.o., Otrokovice, Czech Republic

» Manufacturing of 4 pcs of the screw shafts ø 350 x 4,099 mm, made of the abrasion-resistant material with welded surplus material at the shovels edges, around the tube perimeter in the shovels interspace and at the rear edge of the shovels. The 100% visual inspection to be carried out including the run-out test.

Customer: Messer Eutectic Castolin spol. s r.o., Prague

» Trough screw conveyors for the transport of the hydrated lime, dimensions: Ø 320 x 3,677 mm, Ø 320 x 5,160 mm, Ø 400 x 7,475 mm

Customer: Carmeuse SA Moha, Belgium



Customer: AS Kunda Nordic Tsement, Estonia, (HEIDELBERGCEMENT Group)

» Solution proposal, 3D modelling and 2D manufacturing documentation of placement and testing stations (S-10 and S-115) within the Full Led Assembly project

Customer: TRYSTOM, spol. s r.o., Olomouc, Czech Republic

2 silo aeration sets for the Philippines project
 A technical solution for the silo drop-out retreatment and the pneumatic transport

Customer: BEUMER Maschinenfabrik GmbH & Co. KG, Beckum, Germany

- » Pipe bends with the inner surface fitted with Tahokov network for Tribet lining, a delivery to Spain Customer: TRIBO s. r. o., Nový Jičín, Czech Republic
- » Grinder rotor ø 1,600 x 2,250 mm for the Honduras project

Customer: BRASILEX, s.r.o., Prague

PragoTec - Projetos, Equipamentos & Serviços Ltda, Recife, Brasil

» HPF fan stations and the noise covers for the dispatch fluidslide lines from the silos no. 51 and 61

Customer: Aliacem s.r.o., Přerov

Location: Cement Hranice, Czech Republic

» Equipment manufacturing for the regular Germany business partner, the total amount of 535,000 EUR:

Spare parts for VS300

Spare parts for Shipunloader IB-M1000

2 pcs - cut-off gate, size 840, manually operated and motorized

Parallel distributor, size 2000, H = 1,000 mm, hopper with ø 3,000, H = 3,900 mm

6 pcs - screw shaft for VS400

6 pcs - Y-shaped chute, size 500, motorized

6 pcs - collecting container with ø 1,000 x 2,080 mm



Silo bottom aeration

9 pcs of bins with the size of ø 2,500, H = 3,240 mm, ø 2,500, H = 3,240 mm, ø 1,350, H = 3,550 mm, ø 1,200, H = 1,700 mm, ø 1,200, H = 1,700 mm, α 1,250, H = 1,430 mm, ø 1,200 mm

Bins ø 3,200, H = 4,750 mm a ø 4,000, H = 3,787 mm and $2x 2,650 \times 2,838 \text{ mm}$

Manufacturing documentation of various bins

2 pcs - VS 300 vertical screw conveyor, H = 11,430 mm, performance 30 - 120 t/h

VS 400 vertical screw conveyor, H = 6,500 mm

Parallel distributor \emptyset 2,500, H = 1,000 mm and bin \emptyset 3,500, H = 4,392 mm

8 pcs - cut-off gate, size 500, pneumatically actuated

6 pcs - fans, type HPF

Fluidslide diverter ø $1,200 - 840 / 500 / 6^{\circ}$, motorized

118 pcs of fluidslides and trapezoidal slides with sizes of 100 and 200

Customer: IBAU Hamburg, Germany

» A supply of screw conveyors, cut-off gates, rotary screen, chutes, service platforms to sort the bypass filter dusts in connection to the existing machinery within the "Removing foreign objects from chloride filter dust generated during the clinker production" project, including engineering, disassembly and assembly operations.

Customer: Cemex Cement, k.s., Prachovice, Czech Republic





- » Delivery of silos including the design and manufacturing documentation and the static calculation for OS O3 Limestone system and OS O4 Desulphurisation product treatment as a part of the project "Flue Gas Desulphurisation of the Heat Station in České Budějovice":
 - A silo with the limestone dust \emptyset 6 000 (a total silo volume = 475 m²)
 - 2 pcs silo with the fly ash \emptyset 6 000 (a total silo volume = 339 m²)
 - Hydrated lime bin $\emptyset 3 600$ (a total bin volume = 60 m^2)
 - Technical equipment of the silos

Customer: Montáže Přerov a.s., Czech Republic

» Manufacturing and delivery of the parts for the project "Reconstruction of the Shaft Kiln Coating and Piping"

Customer: VÁPENKA VITOŠOV, s.r.o., Czech Republic

Sampling station of the limestone with a shovel sampler

Composition: - Shovel samplers

- Cut off gate
- Belt feeders
- Vertical skip conveyor
- Vibrating feeder
- Crusher
- Hammer mill
- Disk divider
- Screw conveyors
- Set of chutes
- Supporting structure with platforms

Customer: Fels-Werke GmbH, Kalkwerk Rübeland, Germany

» Sampling station SSM 01-120, with automated control, for sampling from the mixing station

Composition: - Motorized screw sampler

- Ball cock with drive
- Stand incl. sample containers
- Chute piping, supports
- Vibrator NO
- Switchboard with SIMATIC LOGO! control system

Customer: CARMEUSE CZECH REPUBLIC s.r.o., Mokrá, Czech Republic

» Sampling station SSM 01-120 in version of Atex

Composition: - Motorized screw sampler

- Ball cock with drive
- Carousel box for sample containers
- Set of chutes
- Vibrator NO
- Switchboard with SIMATIC LOGO! control system

Customer: ANTEA CEMENT Sh.A., KASHAR, TIRANE, Albania



» Sampling station SSM 01-120, with automated control, for sampling of lime in the silo no. 6

Composition: - Motorized screw sampler

- Ball cock with drive

- Stand incl. sample containers

- Switchboard with SIMATIC LOGO! control system

Customer: CARMEUSE CZECH REPUBLIC s.r.o., Mokrá, Czech Republic

» Filter discharging device ENVEN 2-RP-14-429-D6

Customer: CEMEX Czech Republic, s.r.o., cement works Dětmarovice

» Fly ash silo PS 09 — Safety flaps for silos no. 1, 2, and 3 - Yunus Emre, Turkey Customer: VÍTKOVICE GEARWORKS a.s., Ostrava – Vítkovice, Czech Republic

» Automatic sampling station SSM 01-120 in version of Atex — end customer: Turkey

Composition: - Motorized screw sampler

- Ball cock with drive

- Stand incl. sample containers

- Chute piping

- Switchboard with SIMATIC LOGO! control system

Customer: PSP Engineering, a.s., Přerov, Czech Republic

» Transport of raw meal for Českomoravský cement, a.s., cement works Radotín Customer: MOKO-HK, s.r.o., Hradec Králové, Czech Republic

- » Bulk cement transport and storage equipment supply including compilation of the manufacturing documentation and the static calculation:
 - Fluidslide line including accessories, air distribution system
 - Cement silo ø3 500 mm with fluidslides
 - Cement silo ø4 000 mm
 - Dosing rotary closures
 - Blower
 - Weighing system
 - Supporting structure with ladders, rails, and service platforms

 Customer: BEUMER Maschinenfabrik GmbH & Co. KG, Beckum, Germany

» Replacement of the kiln fan I. including the inlet and outlet piping Customer: CEMEX Cement, a.s., Prachovice, Czech Republic

Replacement of the kiln fan II. including the inlet and outlet piping

Customer: CEMEX Cement, a.s., Prachovice, Czech Republic

» Loading system and cut off gates for the project "Granitas Litva"

Customer: PSP Engineering, a.s., Přerov, Czech Republic

- » Separation in the cement grinding plant with vibrating separator VTR 550, including supervision Customer: HOLCIM (Schweiz) AG, Zürich, Switzerland
- » Engineering for the project " $\operatorname{\mathsf{MAERZ}}$ Shaft $\operatorname{\mathsf{Kiln}}-\operatorname{\mathsf{Coal}}$ System Installation"

Customer: Jelen Do, Serbia



Supply and installation of the parts for repairs of the kilns no. 1 and 2 $\,$

Customer: VÁPENKA VITOŠOV, s.r.o., Czech Republic

384 pcs - fluidslides, size 200

Parts of the ship loader for the project "Mogadishu - SOMALIA"

Vertical screw conveyer IB-VS 300, H=11 130 mm, complete

10 pcs - fluidslide diverters, sizes 350, 500, and 650

2 pcs - weighing bins ø2 200, H=2 932 mm; expansion bin ø1 200, H=2 888 mm; storage silo

 $2\ 000x1\ 250x3\ 226\ mm$; weighing bin ø1 000, H=1 110 mm; additive bin ø1 300, H=3 450 mm

640 pcs - fluidslides, size 200, length of 755 mm and 2 120 mm

Design work for the ship loader IB-UL800

4 pcs - weighing bins for limestone ø2 500x4 275 mm

Vertical screw conveyer ø575x19 000 mm and horizontal screw conveyer ø725x24 000 mm,

including accessories

Vertical screw conveyer VS 400 H=11 600 mm for the project "Antilles Cement"

2 pcs - weighing bins ø 2 300 mm, H=3 150 mm

Parallel distributor ø 1 850 mm, H=1 200mm

Collecting bin ø3 000 mm, H=3 000 mm

Customer: IBAU Hamburg, Germany



» Vertical cement cooler VCC-DSD 2900 x 7500 mm including the accessory for distribution of the clarifying and cooling air and the water treating equipment

Customer: Českomoravský cement, a.s. – cement works in Mokrá, Czech Republic

» Cement transport tracks from / to the cooler — fluidslide lines, cut-off gates, circular fluidslide flap, cylindrical bottom unloaders, fans, air distribution system

Customer: Českomoravský cement, a.s. – cement works in Mokrá, Czech Republic

» Delivery for the plant Berniky, Russia

6 pcs - rotary feeder, size 500 x 500

5 pcs - rotary feeder, size 400 x 400

Customer: PSP Engineering, a. s., Přerov, Czech Republic

» Aeration of the fly ash bin bottom with fluid slides

Customer: Holcim (Slovensko), a.s., Rohožník, Slovak Republic

- » Coal system installation of the kiln complete manufacturing, delivery and installation including the documents intended for inspection of the following traces:
 - 1) Piping lines on the wagon and truck unloading stations
 - 2) Piping lines fuel transport to silo
 - 3) Piping lines fuel transport from dosing system to 3 way diverters
 - 4) Piping lines fuel transport to lances ("spaghetti pipes")
 - 5) Piping lines 6 bar compressed air to consumers
 - 6) Piping lines CO2 inerting
 - 7) Piping lines 6 bar compressed air for cleaning of fuel transport pipes
 - 8) Cooling air pipes
 - 9) Cooling air distribution to kiln's shafts
 - 10) Natural gas distribution to kiln's shafts
 - 11) Cooling air and natural gas rings around kiln's shaft
 - 12) Water pipe net for fire protection
 - 13) Lifting console on top of silo

Customer: Carmeuse Slovakia, s.r.o. - lime works in Slavec, Slovak Republic

» Processing the project documentation to issue the building approval for the action of Reconstruction of the three stack kiln No. 2

Customer: VÁPENKA VITOŠOV, s.r.o., Czech Republic

» Screw conveyor ø 500 x 9500 mm

Customer: Fels-Werke GmbH Goslar - lime works in Münchehof, Germany

» Rotary feeder RTP 140 x ø150 in version of ATEX

Customer: VÁPENKA VITOŠOV, s.r.o., Czech Republic

» Pneumatic transport out of the sorter LTRR to the cement grinding room 1 for the cement plant Turňa nad Bodvou

Customer: CEMDESIGN, spol. s r.o., Slovak Republic



- » Screw sampling station SSM 01-160, automatic mode of operation, located in the lime grinding room at the chute behind the filter for the plant Terex, Russia
 - composition: motorized screw sampler
 - ball cock with drive
 - chute piping
 - vibrator NO
 - stand incl. sample pots

Customer: PSP Engineering, a. s., Přerov, Czech Republic

» Screw conveyors, sizes: ø 630 x 3158 mm, ø 200 x 5420 mm, ø 200 x 3020 mm Cut off gate, size 200, manual and 650, manual Rotary feeder 150, motorized Set of transition pieces

Customer: Carmeuse s.a., Belgium - Carmeuse Majan LLC (SFZ), Oman

» Automatic sampling station ALOS-01_VP_KM_TD for stone lime sampling

composition: - pneumatically driven shovel sampler LO500x150

- vibrating feeder PVB with a vibrator including gripping
- hammer mill KM 60/3, with driving equipments
- tube-type divider TRD10-2, with driving equipment
- reversible screw conveyor ø 80 x 1920 mm, with driving equipment
- carousel magazine KS 10/6, with sample pots and driving equipments
- supporting structure
- set of chutes and supports, adaptation of the existing platform, air distribution
- disc mill DM 400
- sample channel-type divider RT 6,5
- laboratory desk

Customer: **OOO Fels Izvest - Tovarkovo, Russia**

» Hammer sampling station AKLS-1000

composition: - hammer sampler KLT1000

- vibration feeder EVP 210x1400
- bearing structures, chutes, downpipes

Customer: Fels-Werke GmbH – limes works in Saal an der Donau, Germany

» Delivery of 4 innovated fans, type HPF 630

Customer: YUGcement, PJSC, Ukraine

- » Fluidslide line 150/8° for transporting fly ash from electric filter hoppers to gathering bin Customer: **Sklenář, s.r.o.**, **Dlouhoňovice - Syntesia Pardubice**, **Czech Republic**
 - Customer. Skienar, S.1.0., Diounonovice Syntesia Faradoice, Czech neput
- » Screw conveyor ø 250 x 2500 mm

Screw shaft ø 250 mm, length 3290 mm

Customer: VÁPENKA VITOŠOV, s.r.o., Czech Republic

» Screw sampling station SSM 01-120, automatic mode of operation

composition: - motorized screw sampler

- ball cock with drive
- chute piping, supports
- vibrator NO
- switchboard with SIMATIC LOGO control system

Customer: S.C. Carmeuse Holding SRL – lime works in Campulung, Romania



» Screw sampling station SSM 01-120, automatic mode of operation

composition: - motorized screw sampler

- ball cock with drive
- chute piping, supports
- vibrator NO
- switchboard with SIMATIC LOGO control system

Customer: S.C. Carmeuse Holding SRL – lime works in Deva, Romania

- » Screw sampling station SSM 01-120, automatic mode of operation
 - composition: motorized screw sampler
 - ball cock with drive
 - chute piping, supports
 - vibrator NO
 - switchboard with SIMATIC LOGO control system

Customer: Carmeuse Hungária Kft's – lime works in Beremend, Hungary

- » Screw sampling station SSM 01-120, automatic mode of operation
 - composition: motorized screw sampler
 - ball cock with drive
 - chute piping, supports
 - vibrator NO
 - switchboard with SIMATIC LOGO control system

Customer: Fabrika kreča Carmeuse Integral a.d. – lime works in Doboj, Bosnia and Herzegovina

- » Delivery of 3 fans, type HPF 545, for pneumatic transport including air distribution components Customer: **Sklenář, s.r.o., Dlouhoňovice, Czech Republic**
- » Restoration of the existing foreign body trap within the CM3 line by means of replacing with new equipments Customer: Českomoravský cement, a.s., Mokrá, Czech Republic
- » Delivery of 60 burner bars for the kiln No. 2 and 72 internal tubes for the burners of the kiln Maerz Customer: VÁPENKA VITOŠOV, s.r.o., Czech Republic
- » Components for agriculture equipments at a total value of 2.6 million CZK approximately Customer: AKP, s.r.o., Brno, Czech Republic
- » 2 pcs of weighing bin ø 2200 x 2930 mm
 - 1 pc of expansion bin ø 1200 x 2888 mm
 - 2 pcs of cyclon bin ø 1088 x 2400 mm
 - 7 pcs of screw shafts for ship unloader

Vertical screw conveyor ø 500 x 12454 mm

Vertical screw conveyor ø 400 x 6060 mm

Weighing bin \emptyset 2000 x 3000 mm with a supporting structure and a ladder including compilation of the related manufacturing documentation

2 pcs of hydrated lime dosing tank inc. silo fluid slides

Modification of the manufacturing documentation for cement silos

Screw conveyor ø 500 x 4870 mm, tube-type

Technological equipments, for example:

77 pcs of cut off gates of different sizes and versions

103 pcs of F-pipes

8 kits of aeration bottoms, inc. silo

Customer: IBAU Hamburg, Germany



» Vertical screw conveyor size: 400 x 16 980 mm
Vertical and horizontal screw conveyor for the ship unloader Shipunloader IB-UL 800
Vertical screw conveyor size 300 x 14 000 mm
Parts of the ship unloader Shipunloader IB400
Parts and screws with the lengths of 6 300, 9 500, and 7 200 mm of the ship unloader Shipunloader 18
Transport cart for the ship unloader screw conveyors
Movable screw conveyor ø 508, 5 x 13 000 mm
Customer: IBAU Hamburg, Germany

3 sets of DN 200 cooling circuits
Screw conveyors (ø 320, length 5 000 mm and ø 320, length 7 000 mm)

Customer: CARMEUSE s. a. – Aisemont Kiln, Belgium

Loading equipment with the product separator and subsequent tube screw conveyor
 size 500 x 6,500 mm and fluid transport
 Rotational containers ø 1 700 x 5 725 mm – Height installation through the furnace coating
 Customer: VÁPENKA VITOŠOV, s. r. o.

» 15 screw conveyors for the Berniki plant — Russia of these sizes: $200 \times 4500 \text{ mm} / 320 \times 6300 \text{ mm} / 320 \times 2900 \text{ mm} / 320 \times 3450 \text{ mm} / 500 \times 5730 \text{ mm} / 500 \times 5200 \text{ mm} / 320 \times 3,550 \text{ mm} / 320 \times 4980 \text{ mm} / 320 \times 5700 \text{ mm} / 320 \times 9800 \text{ mm} / 250 \times 2300 \text{ mm} / 320 \times 6500 \text{ mm} / 250 \times 1900 \text{ mm} / 400 \times 11100 \text{ mm} / 400 \times 18600 \text{ mm}$ Customer: **PSP Engineering, a. s., Přerov**

» Screw conveyor prototype \emptyset 200 mm, length 3 700 mm, supplemented with a discharging hopper and a flap

Customer: VSB - Technical University of Ostrava, CENET Rector's Office

» Spare parts for biogas station equipment — vertical agitator, tank extension, transport screw, filling hopper, screw shaft

Customers: Mrázek firm, Slovácký statek s.r.o., Renergie s.r.o., Bureš firm, Příložany s.r.o.

Tubing for lime transport in a tunnel, including installation Aerating systems for CaOH2 silos with volumes of 60 m³, 80 m³, and 120 m³ Customer: CARMEUSE s. a. – Moha Kiln, Belgium



- » Automatic TAP sampling station for the KAMARI cement works:
 - Composition: Shovel sampler LO-1 000 x 160 with a cover strip
 - Knife closure with the pneumatic drive
 - Inclined belt DL400 x 6 600 with a brush
 - Dosing machine D 300 x 850 with a magnetic separator
 - Dosing machine 300 x 850
 - Dosing machine D 300 x 1 900
 - Inclined belt DL400 x 5 500
 - Shovel sampler LO-500 x 160
 - Carousel box for sample containers KS 10/2
 - Exchangeable sample containers
 - Distributor box Siemens with the SIMATIC control system
 - Chutes, gravity piping
 - Supporting structures

Customer: TITAN CEMENT COMPANY S.A., Athens, Greece

» Filling equipment Big Bag, weighing containers, movable platform with tracks, stainless slide, telescopic loaders

Customer: **HAVER & BOECKER, Oelde, Germany**

- » Dispensing of ground slag downstream the cement mill
 - Composition: Flow control gate
 - Inclined screw conveyor
 - Vertical screw conveyor
 - Slip scale
 - Rotary feeder
 - Fluidslide

Customer: Českomoravský cement, a.s., Mokrá plant



» Horizontal screw conveyors (ø 700, length 23 m) and vertical screw conveyors (ø 500, length 21 m) for the large-capacity unloader from vessels of conveying capacity 800 t/h. Delivery of 2 sets of parts of equipment was special from the point of view of extent, demanding technology of manufacture with maximum degree of quality realized in a very short time.

Customer: IBAU Hamburg, Germany

- » Separation of strange particles from the air slide before the homogenization silo and cement transport by screw conveyors from under the silos
 - delivery of the separator size 300, connected cut of gates and set of chutes, vibrating separator with the supporting structure
 - delivery of the horizontal and iclined screw conveyors of these parameters:
 - horizontal screw conveyor, tube ø 320 x 11 436 mm, capacity: 20 m³/h
 - inclined screw conveyor, tube ø 400 x 8 190 mm, capacity: 66 m³/h

Customer: CEMMAC, a. s., Horné Srnie, Slovakia

» Sampling station with an automatic operation, type ALOS 02 sampling solid alternative fuels (SAF) provides regular sampling of partial samples and preparation of a representative sample of material, material is sampled by the shovel sampler.

Customer: HOLCIM (Slovakia), a.s., ecorec Česko, s.r.o., Třemošnice

- » Delivery and supervision of equipment of the pneumatic transport and screw conveyors for the project New fluidslide transport of grit Cement grinding plant for VSH, a. s., Turňa nad Bodvou
 - screw conveyors ø 250 x 4 000 mm and ø 250 x 6 020 mm
 - transport fluidslides size 500 and 650 were designed with a reserve that allows transport capacity of 600 t/h for a short time
 - equipment of the pneumatic transport dosing rotary closure, cut of gate, asymmetric fluidslide flap, fluidslide diverter, fans incl. pressure air distribution system.

Customer: CEMDESIGN, spol. s r. o., Trenčín, Slovakia

- » Bypass equipment
 - equipment for aeration of 2 silos of inner dia. 5 m and height 15 m incl. inner
 - and outer distribution systems of aerating air
 - transport fluidslides size 300
 - cut of gates
 - rotary feeders with a motor drive
 - rotary dosing closures with a pneumatic drive

Customer: CEMMAC, a. s., Horné Srnie, Slovakia

» Parts of separators VTP 1800, VTP 3100 and VTP 2700 — zoning, covers with the frame, material inlets, chambers, bottom parts and separator houses, armoring

Customer: PSP Engineering, a. s., Přerov

» Cement transport from the cement grinding plant no. 5-8 to the cooler and elevator is designed with the vertical screw conveyor VS 300, H=14 079 mm with the central lubrication and connected elements for the existing technology.

Parts of fluidslides size 350, connected chutes, double flap, Y-flap controlled by air, fans, piping and components of the air distribution system were manufactured and supplied for cement transport from the screw conveyor 6315 to the cooler and cement transport from the cooler to the elevator.

Customer: Cement Hranice, a. s.



» Screw conveyor ø 400 x 16 000 mm for transport of kiln dust to silos 5, 6, 7 Vertical screw conveyor ø 250 x 14 100 mm

Customer: CEMMAC, a. s., Horné Srnie, Slovakia

» Delivery of separation and parts of transport of ground cement from the mill to the distribution flap and from the vibrating screen to the elevator — transport fluidslides size 600, separator size 500, cut of gates, chutes, fans, air distribution system incl. assembly supervision

Customer: Holcim (Slovakia), a. s., Rohožník, Slovakia

- » Lime works Moha
 - piping from the silo to the rotary kiln DN 100, DN 150
 - piping from the lignite bin to the buffer silo DN 150, DN 175
 - piping from the Maerz shaft kiln no. 2 to burners ø 76 x 8 mm
 - pressure air distribution system to the storage

Lime works Aisemont

- coal piping distribution system in the Maerz kiln $4-DN\,60$, $DN\,50$ Delivery of parts of the piping, piping bends, supporting structures, anchoring, suspending and connecting elements and follow-up assembly of piping distribution systems approx. 950 bm and approx. $1\,500$ bm long.

Customer: Carmeuse Europe, Louvain-La-Neuve, Belgium

» Delivery and assembly of transport fluidslides size 300 and 150 mm for chemical operation producing titanium dioxide

Customer: Precheza, a. s., Přerov

- » Delivery of 10 pcs of screw conveyors:
 - 9 pcs of screw conveyors of these parameters:
 - ø 250–3 800 mm, ø 320–8 300 mm, ø 500–5 100 mm, ø 630 4 700 mm
 - ø 250-2 000 mm, ø 320-6 675 mm, ø 630-5 300 mm
 - ø 320-6 240 mm, ø 630-6 650 mm
 - 1 pc of the weighing screw conveyor \emptyset 320 4 500 mm with assembled flow rate meter measuring the amount of bulk / granulated material transported via the conveyor connected to the control unit with the software and control display

Customer: Carmeuse Europe, Louvain-La-Neuve, Belgium

Separation system for the cement grinding plant 2 — design of a new technology of separation, dismantling of the existing separation system, coordination activities with a complete supply and assembly of the separator unit, cut of gates, vibrating separator, connected elements of the fluislide transport, connection of air distribution systems, preparation of the technological documentation, training of operators, equipment testing and implementation of electric parts incl. control system and measurement and regulation

Customer: Východoslovenské stavebné hmoty, a. s., Turňa n/B., Slovakia

» Transport line size 300, 15 200 mm long for cement transport from the mill no. 3 – delivery of transport fluidslides to exchange the line section

Customer: Lafarge Cement S.A., Cementownia KUJAWY, Poland

» Separation of coarse particles and metal parts in the return branch of pneumatic transport in grinding cement — dismantling of the existing separator, delivery of a new system of separation incl. assembly, connection to the existing technology and equipment testing.

Customer: Cement Hranice, a. s.



- Screw conveyor ø 250 x 6 775 mm Customer: JSC Mikolaivcement, Ukraine
- Regulation equipment of the lateral discharge from the cement silo Customer: Cement Hranice, a. s.
- Trough screw conveyor ø 500 x 24 700 mm transporting cement from silos to the elevator of the packaging plant Customer: Ivano-Frankivskcement, Ukraine
- Reconstruction of the rotor of the fan M1421 Venti Oelde fan, type DHRV 35-1400K Customer: Východoslovenské stavebné hmoty, a. s., Turňa n/B., Slovakia
- 7 pcs of noise-damping covers of fans Customer: Povážská cementáreň, a. s., Ladce, Slovakia
- Vertical screw conveyor ø 300 x 6 600 mm of solid alternative fuels Customer: CEMMAC, a. s., Horné Srnie, Slovakia
- Sampling station of bypass dust, type SSM 01-120 cement plant Čížkovice 1 set / sampling by the screw sampler Customer: PSP Engineering, a. s., Přerov
- Separation of metal parts and non-ground pieces in the cement grinding plant CM1 Customer: Povážská cementáreň, a. s., Ladce, Slovakia
- Screw conveyors ø 500 x 4 700 mm and ø 350 x 5 300 mm, with the ATEX certificate Customer: Carmeuse Europe, Louvain-La-Neuve, Belgium
- 2 sets of metal indicators in trough lines behind elevators incl. vibrating separator Taifun Customer: Holcim (Slovakia), a. s., Rohožník, Slovakia
- Trough screw conveyor ø 250 x 8 540 mm for the limestone grinding plant 4 pcs of dosing rotary closures size 350 for dispatch of ground limestone Customer: Vápenka Čertovy schody, a. s., Tmaň
- Parts of the ship unloader F-pipes, silo fluid slides and transport fluid slides Vertical screw conveyor ø 300 x 7 930 mm Rins

Customer: IBAU Hamburg, Germany

- Crushers and screens incl. spare parts Customer: FORPLEX INDUSTRIE, Bethune Cedex, France
- 7 pcs of HP fans with noise-damping covers for transport fluid slides Customer: Lafarge Cement, a. s., Čížkovice
- Inclined screw conveyors ø 200 x 5 665 mm and ø 200 x 5 627 mm for the project Transport of dust from the lime kiln Parts of burners

Bent piping

Tube screw conveyor ø 250 x 7 280 mm Customer: VÁPENKA VITOŠOV, s. r. o.



» The supply of equipment of technological units 02, 03, 04, 05, 06 for the Production plant of dry mortar mixtures amounting the total price 0,5 mil. EUR, incl. manufacturing documentation of non-standard pieces, covering documentation, technical assistance and coordination of assembly work, training of employees and assistance in commissioning.

The supply includes the following equipment:

10 pcs / tube screw conveyors ø 400, 3946 to 7780 mm long

44 pcs / hand slide gates or with a chain wheel, sizes 160, 200, 300, 400

7 pcs / Y-shaped flaps with a pneumatic drive

4 pcs / rotary feeders of size 160x160 with a motor drive

8 pcs / segmented closures with a pneumatic drive

16 pcs / bins ø 800, 8109 mm high

8 pcs / bins ø 900, 5045 mm high

5 pcs / weighing and agitating vessels

discharging hopper under the agitating machine

separating T-pieces

butterfly and safety flaps

aeration of bin cones

filling and gravity piping incl. anchoring

transition pieces

3 pcs / mobile debig-bagging machine

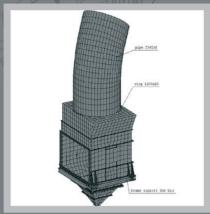
3 pcs / mobile fume chamber

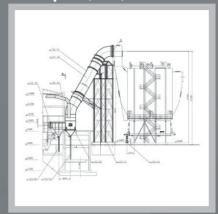
Customer: KM BETA, a.s., Hodonín

DSD | REFERENCE LIST



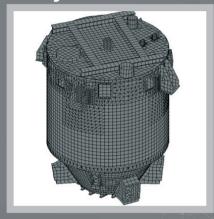
» Dust control of Clinker Cooler at Tupi cement plant (Brazil)

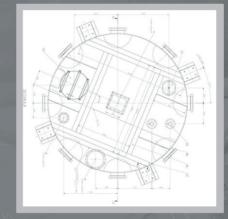


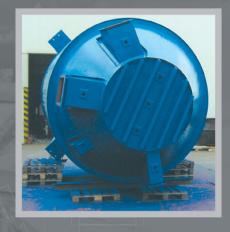




» Storage bin of bulk material with aerated bottom







» Silo Aerated Bottom

