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PRODUCT **CATALOGUE**

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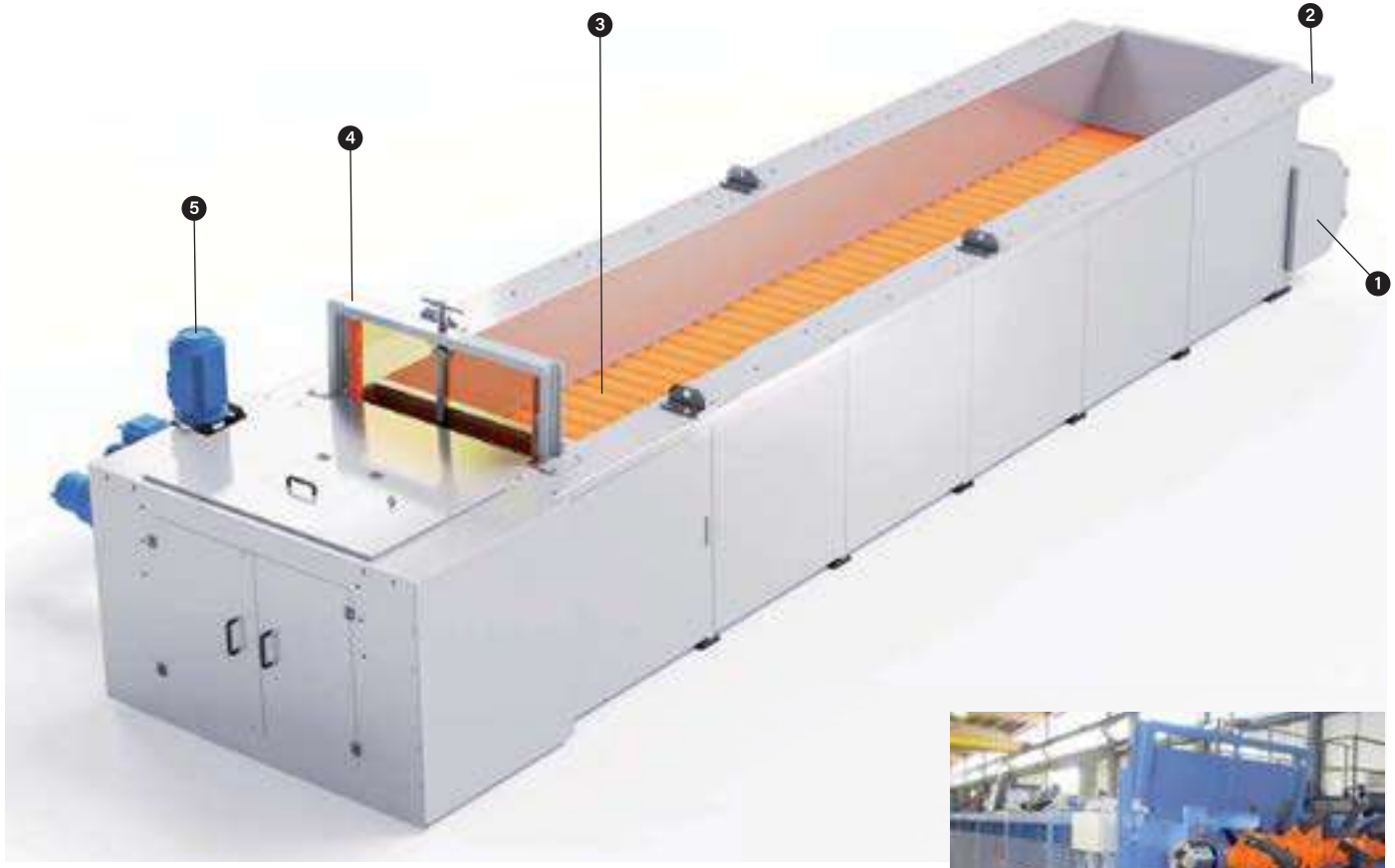
ARAL LINE STANDARD MACHINES

METAL DOSING CONTAINER **CDM**

The metal dosing container supplies the production line with raw material.

Structural Features:

- Welded steel construction
- Steel structure
- Heavy gauge feeder belt
- Belt tensioning device
- Shafts mounted to oscillating roller bearings
- Distributor with interchangeable forged steel reels mounted to shaft
- Reel-holder shaft mounted to supports with oscillating roller bearings



KEY ELEMENTS

-1- RETURN HEAD UNIT
-2- STRUCTURAL FRAME
-3- METAL CONVEYOR BELT UNIT
-4- REGULATING DAMPER
-5- DRIVE HEAD UNIT

SPECIFICATIONS

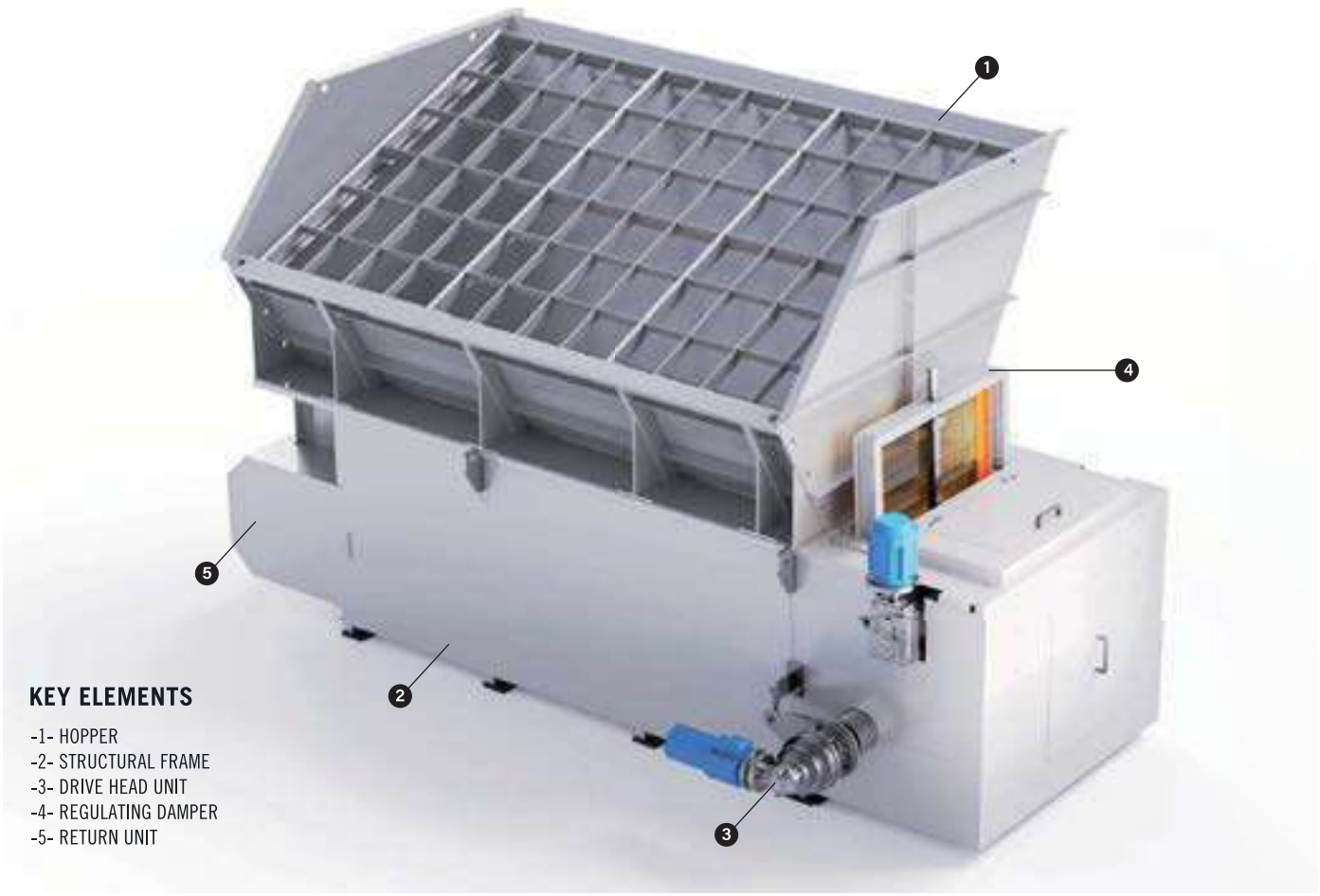
Model	CDM 3100 •	CDM 4100	CDM 5100 •	CDM 6100	CDM 5120 •	CDM 6120	CDM 7120 •	CDM 8120 •	CDM 6150	CDM 7150 •	CDM 8150
Belt Width [mm]	1000	1000	1000	1000	1200	1200	1200	1200	1500	1500	1500
Belt Length [mm]	3000	4000	5000	6000	5000	6000	7000	8000	6000	7000	8000
Height [mm]	630	630	630	630	630	630	630	630	630	630	630
Belt Power [kW]	0,75÷4	0,75÷4	0,75÷4	0,75÷4	1,5÷5,5	1,5÷5,5	1,5÷5,5	1,5÷5,5	2,2÷7,5	2,2÷7,5	2,2÷7,5
Reel Power [kW]	3÷4	3÷4	3÷4	3÷4	4÷5,5	4÷5,5	4÷5,5	4÷5,5	5,5÷7,5	5,5÷7,5	5,5÷7,5
Belt Speed [m/min]	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5
Production [t/h]	5÷50	5÷50	5÷50	5÷50	7÷70	7÷70	7÷70	7÷70	15÷100	15÷100	15÷100
Weight [kg]	3000÷5500	3000÷5500	3000÷5500	3000÷5500	5000÷8000	5000÷8000	5000÷8000	5000÷8000	7000÷10000	7000÷10000	7000÷10000

RUBBER DOSING CONTAINER **CDG**

The metal dosing container supplies the production line with additives.

Structural Features:

- Welded steel construction
- Steel structure
- Feeder belt in three-ply rubber
- Belt tensioning device
- Shafts mounted to oscillating roller bearings
- Variable motor speed (and therefore production) controlled by inverter
- Distributor with interchangeable forged steel reels mounted to shaft
- Reel-holder shaft mounted to supports with oscillating roller bearings



KEY ELEMENTS

-1- HOPPER
-2- STRUCTURAL FRAME
-3- DRIVE HEAD UNIT
-4- REGULATING DAMPER
-5- RETURN UNIT

SPECIFICATIONS

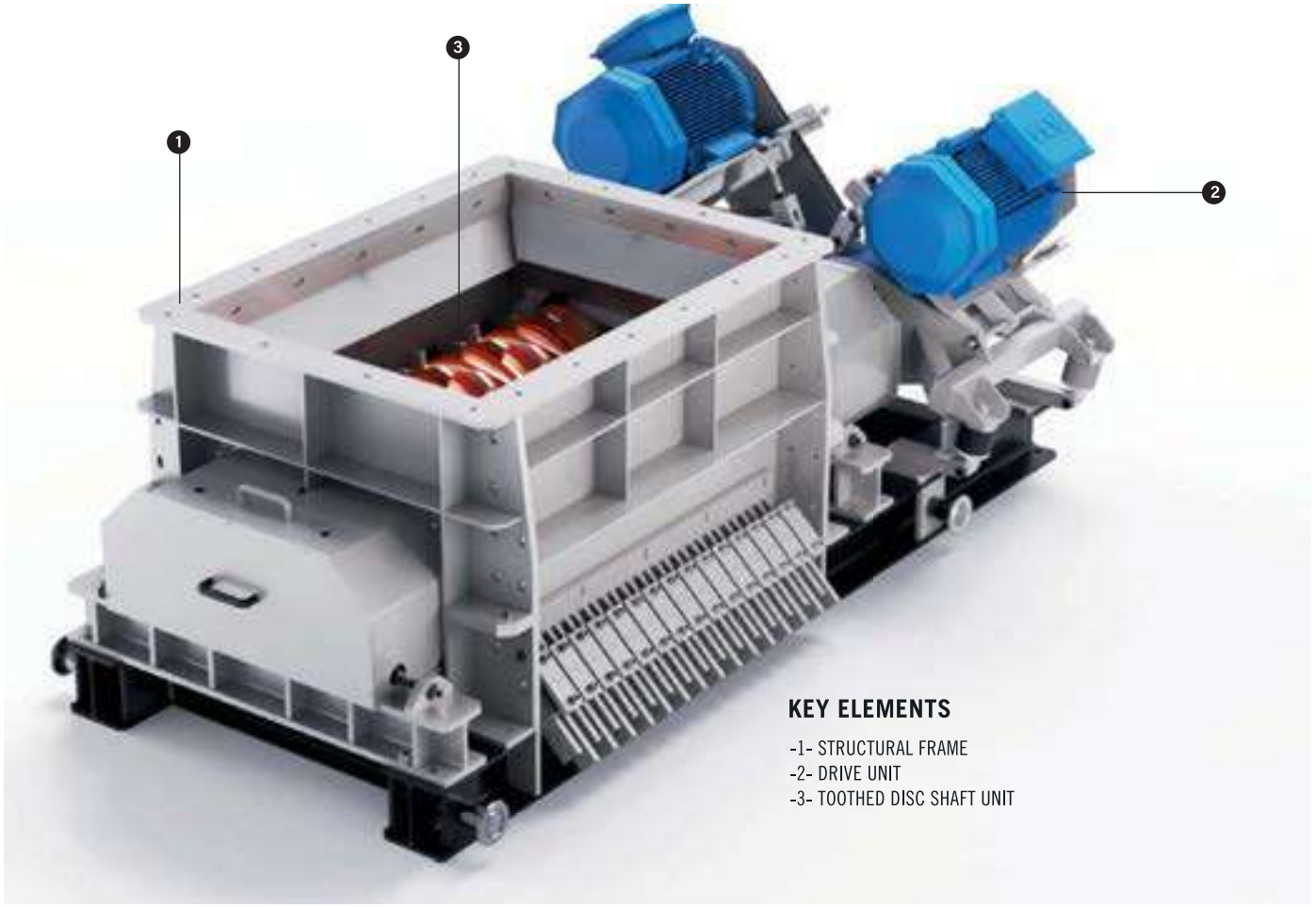
Model	CDG 3100 •	CDG 4100	CDG 5100 •	CDG 6100 •	CDG 7100 •
Belt Width [mm]			1000		
Belt Length [mm]	3000	4000	5000	6000	7000
Height [mm]			650		
Belt Power [kW]	0,75	1,1	1,5	2,2	3
Reel Power [kW]			3		
Belt Speed [m/min]	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5	0,2÷2,5
Production [t/h]	4÷40	4÷40	5÷50	5÷50	5÷50
Weight [kg]	2000	2500	2900	3500	4500

TOOTHED DISC CRUSHER **FD**

The toothed disc crusher is one of the primary machines in the preparation and pre-processing of raw material from the quarry. Its main function is to reduce lumps, and any impurities they contain, to suitable sizes for finishing and storage.
The machine consists of 2 counter-rotating rotors fitted with toothed discs set inside a sturdy housing; the distance between the two rotors determines the size of the output material.

Structural Features:

- Structure in high-strength welded steel plate, includes seats and supports for shafts and all accessories
- Set of discs and blades mounted to shafts in high-grade steel
- Adjustable scrapers
- Drive units include motors, gears, belts, and pulleys



KEY ELEMENTS

-1- STRUCTURAL FRAME
-2- DRIVE UNIT
-3- TOOTHED DISC SHAFT UNIT

SPECIFICATIONS

Model	FD 60.10	FD 60.15	FD 60.20 •
Rotor Diameter [mm]		600	
Rotor Length [mm]	1000	1500	2000
Tank Size [mm]	1000 x 1200	1000 x 1500	1000 x 2000
Rotor Power [kW]	45+30	55+37	90+55
Rotor Speed [rpm]		50+80	
Input Sizing [mm]	400	400	500
Output Sizing [mm]	30÷100	30÷100	50÷150
Production [t/h]	70	120	150
Weight [kg]	7500	12000	14000

DISINTEGRATOR ROLLING MILL **LD**

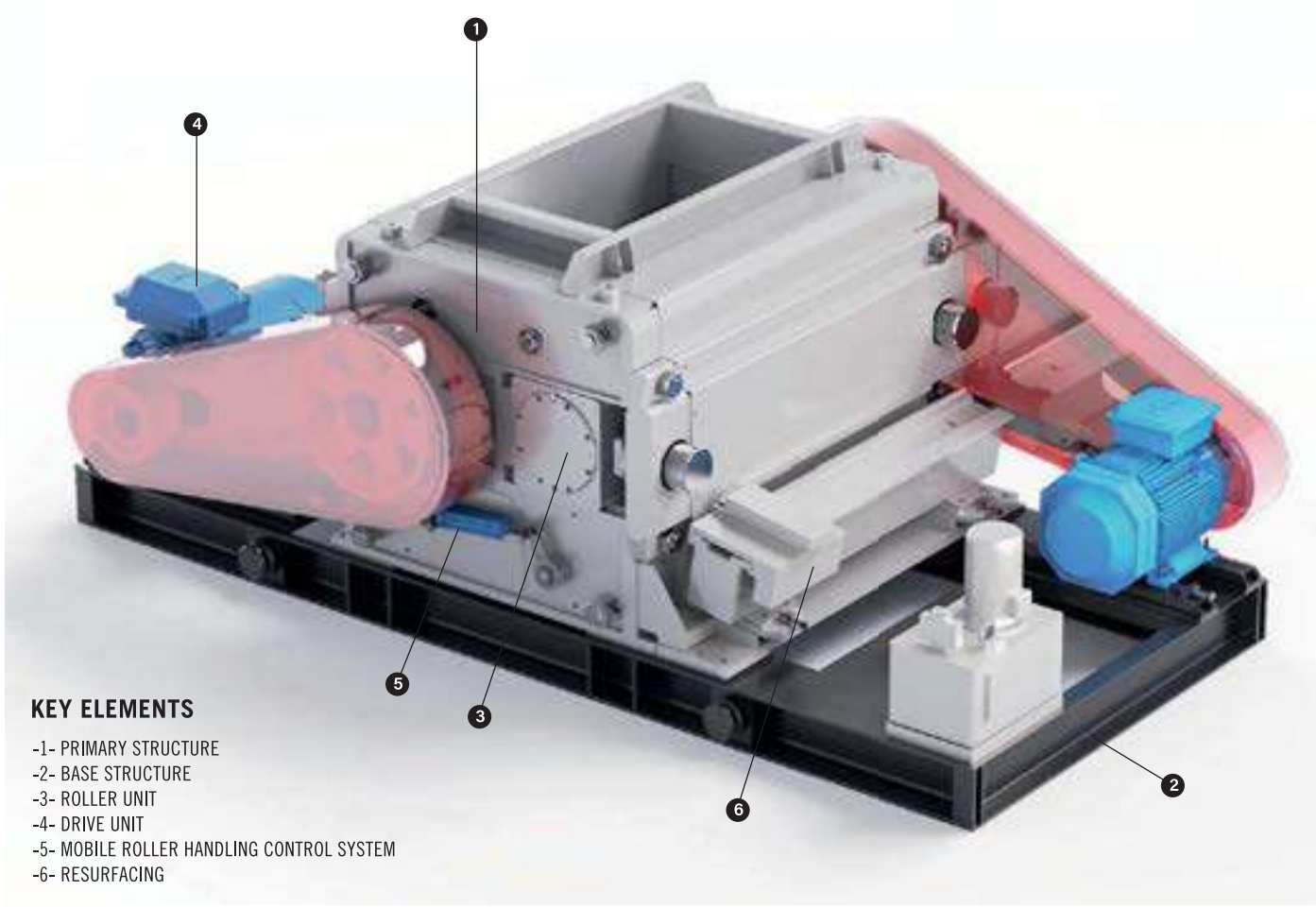
The disintegrator rolling mill reduces the grain size of the clay to a homogeneous thickness of 15 to 30 mm. The overall design of the machine is very similar to a rolling mill.

Structural Features:

- Base in welded steel profiles
- Primary structure in welded steel, including seats and supports for shafts and all accessories to control and guide rollers
- No.1 smooth roller in steel or tempered cast iron with hardness of approximately HV500; rotation speed approximately 250 rpm; cylinder driven by electric motor
- No.1 roller supplied with 8 interchangeable hammers keyed in longitudinal grooves and anchored with bolts

Hammers from steel rods with wear-resistant finish
Roller speed approximately 700 rpm

- Distance between rollers adjustable by screw on fast roller supports
- Control system for mobile roller handling by hydraulic unit and two hydraulic cylinders
- Series of pneumatically-controlled, interchangeable, and adjustable scrapers
- Automated lathe for periodic resurfacing of slow roller



KEY ELEMENTS

-1- PRIMARY STRUCTURE
-2- BASE STRUCTURE
-3- ROLLER UNIT
-4- DRIVE UNIT
-5- MOBILE ROLLER HANDLING CONTROL SYSTEM
-6- RESURFACING

SPECIFICATIONS

Model	LD 1008 •	LD 1208
Slow Roller Dimension [mm]	Ø 800 - Length 1000	Ø 800 - Length 1200
Fast Roller Dimension [mm]	Ø 500 - Length 1000	Ø 500 - Length 1200
Slow Roller Power [kW]	22	30
Fast Roller Power [kW]	55	75
Slow Roller Speed [rpm]	125	180
Fast Roller Speed [rpm]	650	680
Roller Distance [mm]	25	25
Production [t/h]	90	140
Weight [kg]	10000	14000

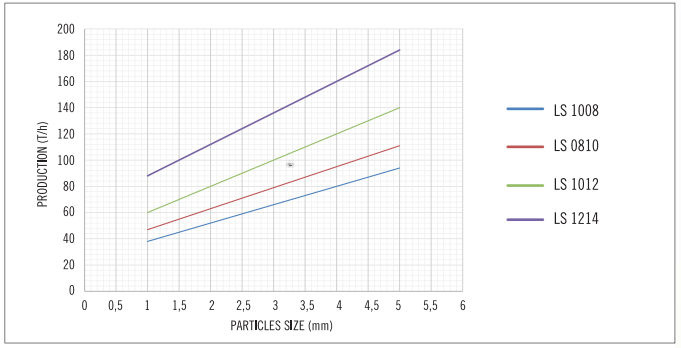
STANDARD ROLLING MILL **LS**

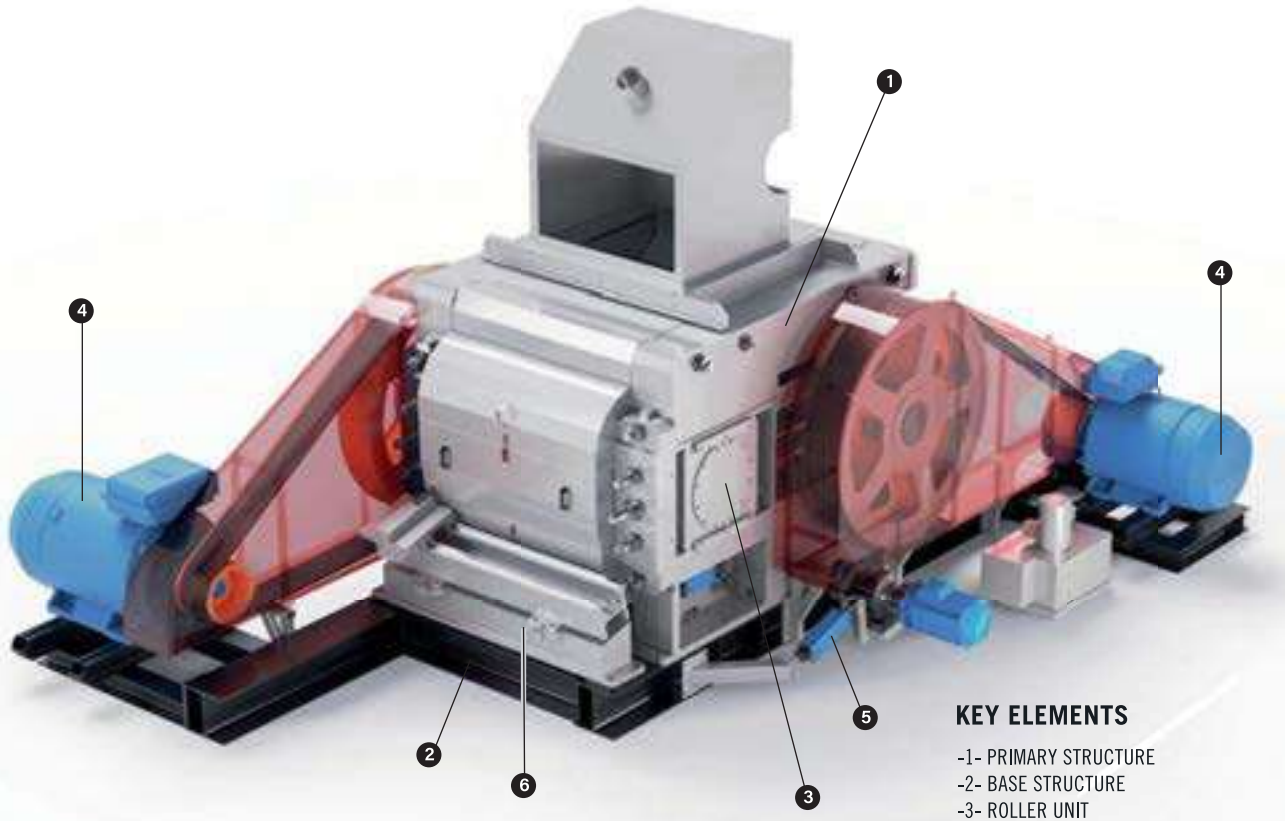
The standard rolling mill is a high productivity machine for processing particles with a rolling thickness of just a few millimetres.

Structural Features:

The rolling mill has No.2 counter-rotating rollers that operate at different speeds and a mechanical device that regulates the distance between them.

- Rollers have high hardening depth
- Steel shafts mounted to double oscillating roller bearings
- Automatic shut off in case of opening to safeguard against roller accidents
- Automatic shut off by hydraulic pistons with bottled nitrogen device





KEY ELEMENTS

-1- PRIMARY STRUCTURE
-2- BASE STRUCTURE
-3- ROLLER UNIT
-4- DRIVE UNIT
-5- ROLLER HANDLING CONTROL SYSTEM
-6- RESURFACING

SPECIFICATIONS

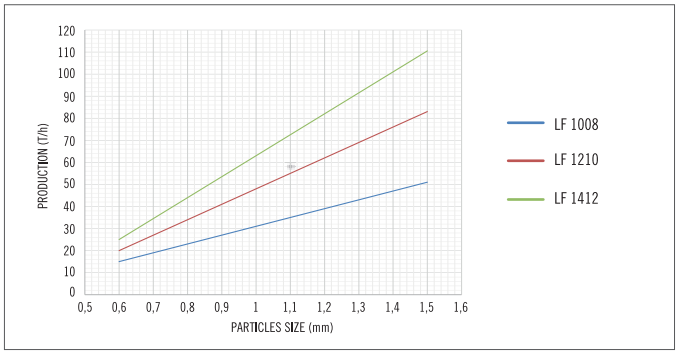
Model		LS 1008	LS 0810	LS 1012	LS 1214
Roller Dimension Ø / Length [mm]		800 / 1000	1000 / 800	1200 / 1000	1400 / 1200
Slow Roller	Speed [rpm]	200	200	170	150
	Power [kW]	45÷55	55÷75	75÷90	90÷110
Fast Roller	Speed [rpm]	250	250	200	200
	Power [kW]	90÷110	90÷110	110÷132	132÷160
Rollers Distance [mm]		1÷5	1÷5	1÷5	1÷5
Production [t/h]		45	55	70	100
Weight [kg]		18000	19000	25000	34000

FINISHER ROLLING MILL **LF**

The fast finisher rolling mill is used to obtain highly refined clay.

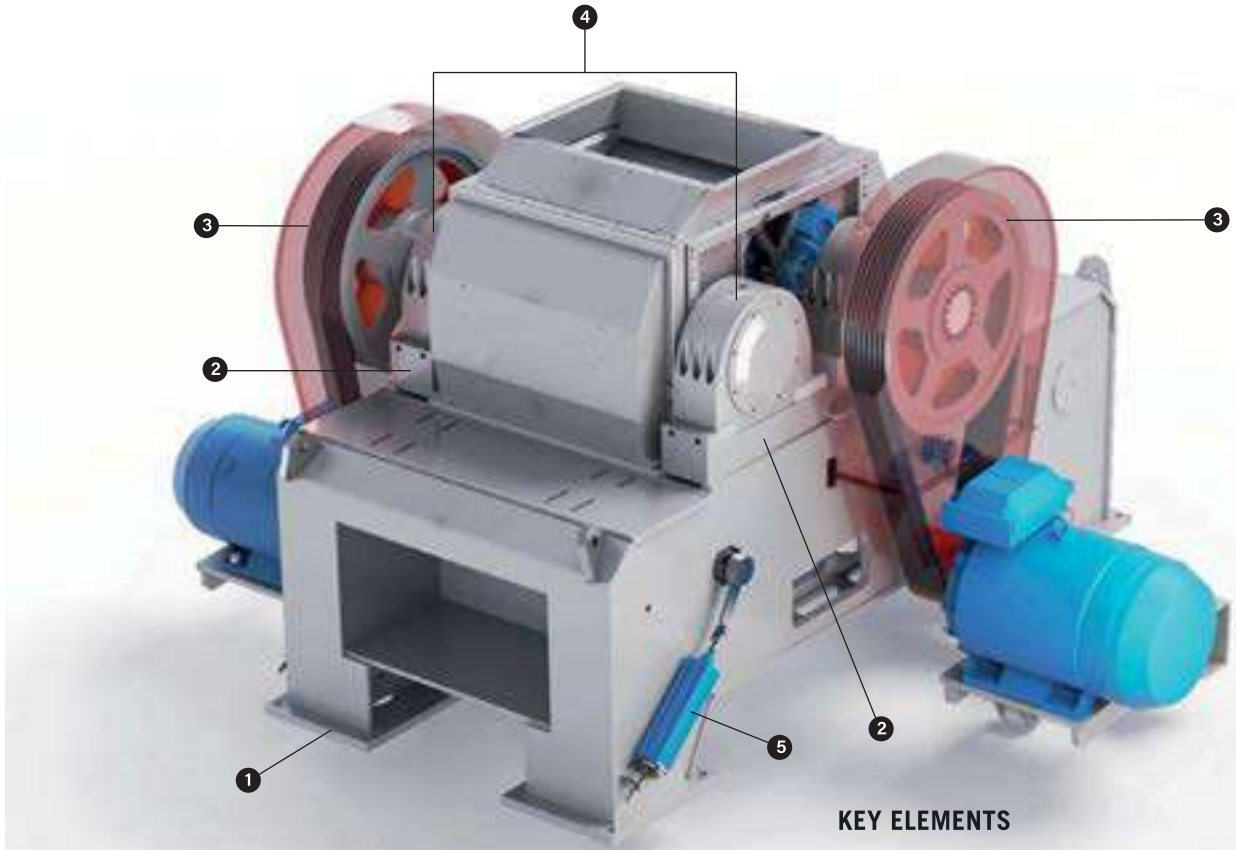
Structural Features:

The LF Series finisher rolling mill ensures total control of the rolling thickness. The heart of the system is the double balancer, one on each side of the machine and rigidly connected.
This configuration enables the machine to operate with a tiny distance between the rollers (up to 0.7-0.8mm), with guaranteed consistency for the entire cylinder length.
Alarms and an automatic shut-off protect the machine from intrusions of foreign matter.



SPECIFICATIONS

Model		LF 1008	LF 1210 •	LF 1412 •
Roller Dimension Ø / Length [mm]		800 / 1000	1000 / 1200	1200 / 1400
Slow Roller	Speed [rpm]	200	170	150
	Power [kW]	45÷55	75÷90	90÷132
Fast Roller	Speed [rpm]	300	250	220
	Power [kW]	90÷110	132÷160	160÷200
Rollers Distance [mm]		0,8÷1,5	0,8÷1,5	0,8÷1,5
Production [t/h]		50	80	110
Weight [kg]		27000	35000	45000



KEY ELEMENTS

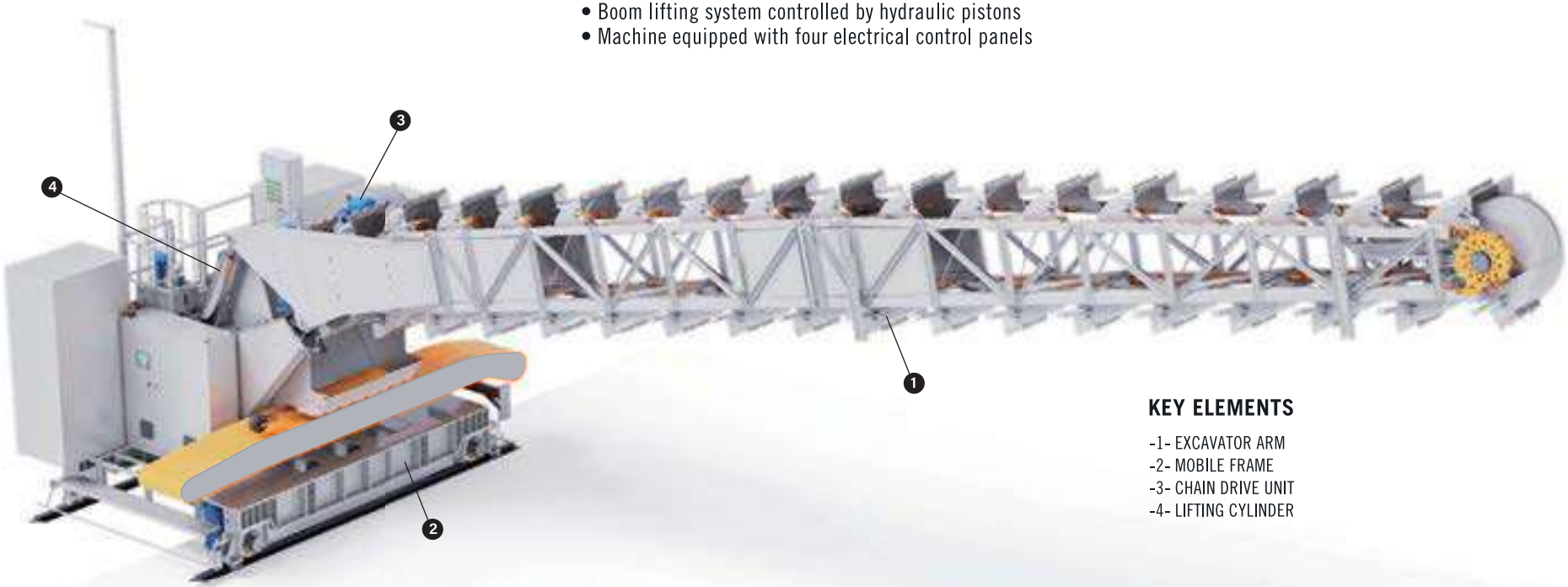
-1- BASE
-2- BALANCER
-3- ROLLER DRIVE UNIT
-4- ROLLER UNIT
-5- ROLLERS CONTROL UNIT
-6- RESURFACING

BUCKET EXCAVATOR **ETL**

The bucket excavator extracts the raw material from storage.

Structural Features:

- Carriage made of welded steel profiles with wheels for lateral movement on supports
- Motors and supports for mobile arm chain controlled
- Arm with bucket and teeth
- Boom lifting system controlled by hydraulic pistons
- Machine equipped with four electrical control panels



KEY ELEMENTS

-1- EXCAVATOR ARM
-2- MOBILE FRAME
-3- CHAIN DRIVE UNIT
-4- LIFTING CYLINDER

SPECIFICATIONS

Production [t/h]	**20÷40**	**50÷80**	**100÷150**
Arm Length [mm]	TBD based on production and customer requirements		
Buckets Capacity [dm³]	40	60	120
Installed Power [kW]	Project contingent		

BUCKET EXCAVATOR WITH OVERHEAD BRIDGE CRANE
ETC

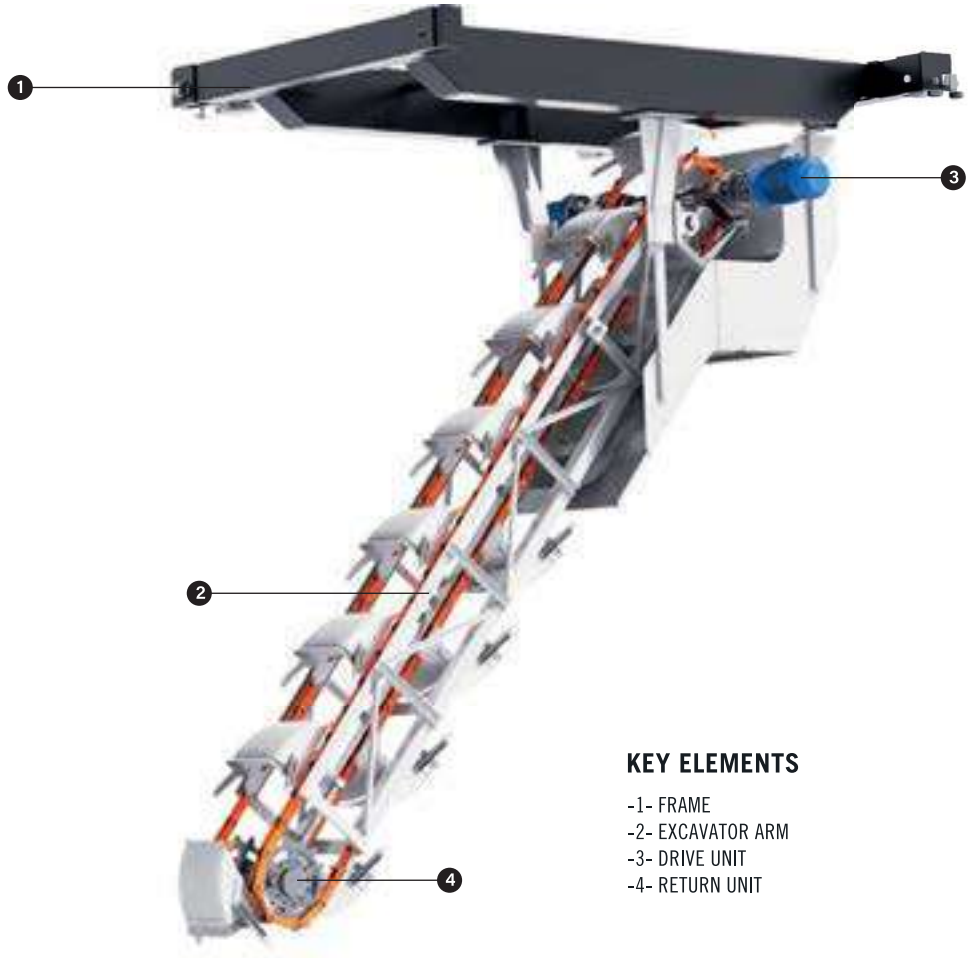
The bucket excavator extracts the raw material from storage.

Structural Features:

The bucket excavator includes an overhead bridge crane that moves on tracks positioned over silo walls.

The structure includes:
• Carriage made of welded steel profiles, complete with wheels for lateral movement mounted on supports and bearings. Mobile arm motors and supports
• Arm with bucket and teeth
• Boom lifting system controlled by steel cables or hydraulic pistons
• Machine equipped with four electrical control panels

• No.2 bridge cranes for conveyor belts (shuttles) including 2 beams + 2 connector beams with:
- Tracks
- Rubber conveyor belt
- Onboard electrical system
- Transport wheels and lateral guides with supports and bearings
- Gear motors



KEY ELEMENTS

-1- FRAME
-2- EXCAVATOR ARM
-3- DRIVE UNIT
-4- RETURN UNIT

SPECIFICATIONS

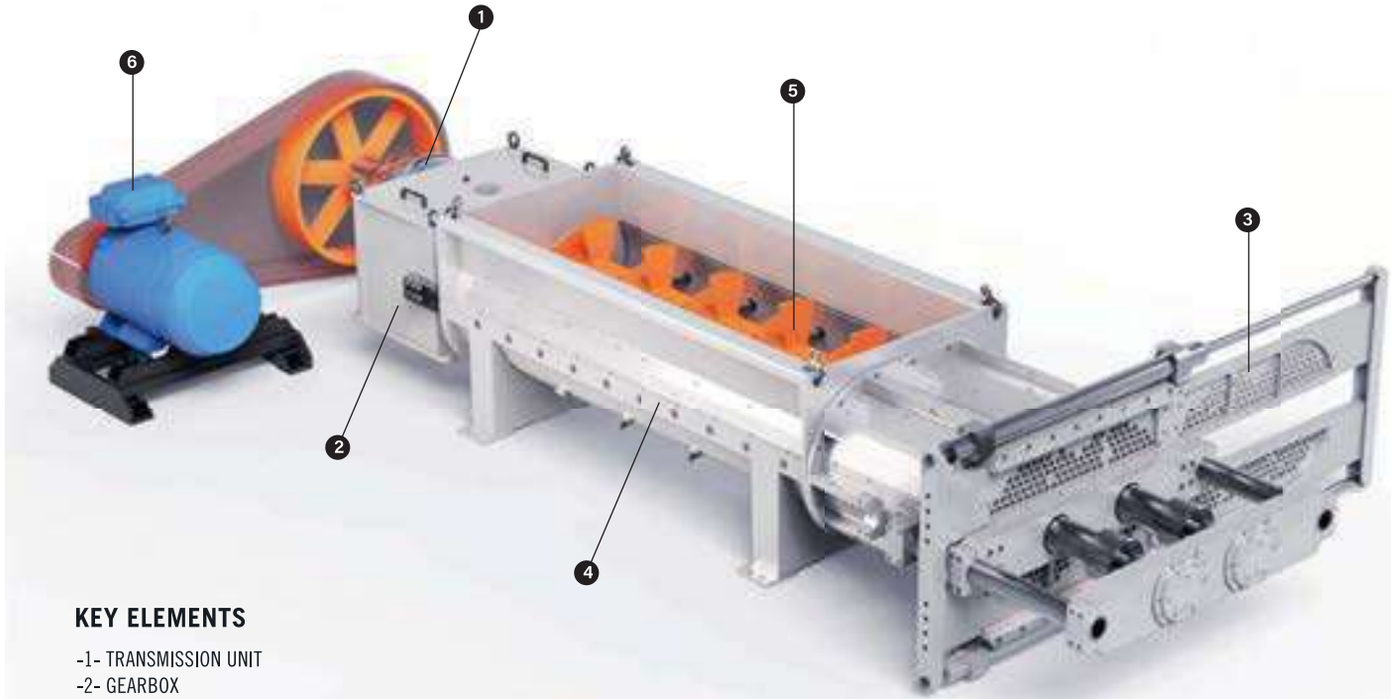
Production [t/h]	**20÷40**	**50÷80**	**100÷150**
Arm Length [mm]	TBD based on production and customer requirements		
Buckets Capacity [dm³]	40	60	120
Installed Power [kW]	Project contingent		

FILTER MIXER **MF**

The filter mixer mixes the clay and water. The grates help eliminate impurities and improve clay consistency.

Structural Features:

- Mixer with tank and No. 2 counter-rotating shafts equipped with reels to mix clay and push towards outlet
- Blades at shaft ends push clay against grate to compact and filter it
- Transmission unit with gearbox constructed in welded steel profiles and removable cover for inspection and maintenance
- Grate frontally positioned
- Ready to accept wetting system with automatic moisture control



KEY ELEMENTS

-1- TRANSMISSION UNIT
-2- GEARBOX
-3- GRATE UNIT
-4- MIXING TANK
-5- SHAFTS COMPLETE WITH BLADES AND REELS
-6- DRIVE UNIT

SPECIFICATIONS

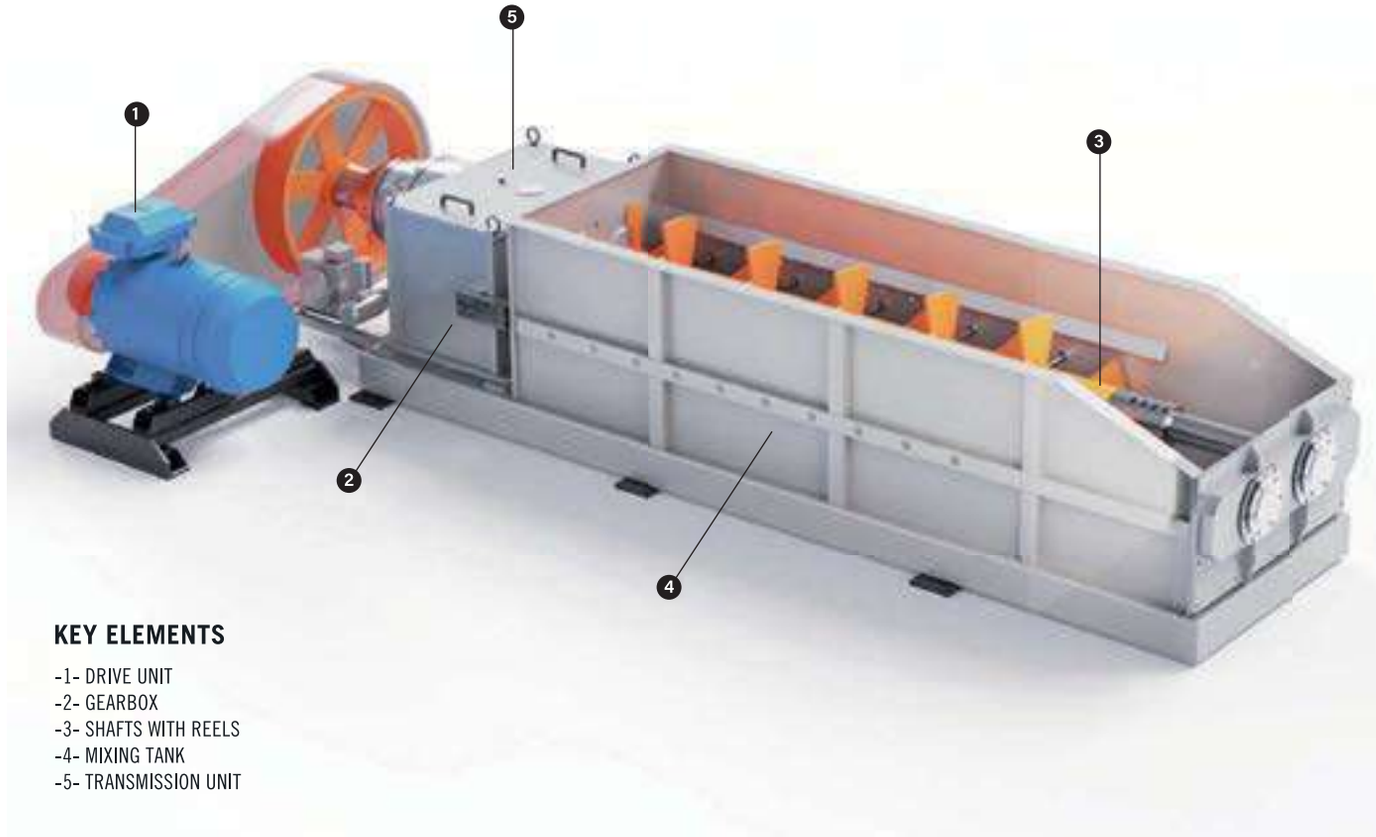
Model	MF 400	MF 600	MF 800 *
Blade Diameter [mm]	420	640	800
Tank Size [mm]	700 x 2500	1000 x 3600	1600 x 5000
Shaft Speed [rpm]	30	24	21
Power [kW]	37	90	160
Production [t/h]	25	60	80÷120
Weight [kg]	4000	10000	18000

DAMPENING MIXER **MB**

The dampening mixer ensures the raw material is mixed with the right amount of water so that the subsequent processing stations are supplied with a homogeneous and plastic mix.
The machine includes a long tank containing two shafts fitted with counter-rotating blades of intersecting paddles.
The overall setup is sturdy and straightforward to ensure reliable operation and easy maintenance.
To optimize clay moisture levels, the machine can be paired with an automatic water dosing system.

Structural Features:

- Mixer with tank and No. 2 counter-rotating shafts equipped with reels to mix and push clay towards outlet
- Transmission unit with gearbox constructed in welded steel profiles and removable cover for inspection and maintenance
- Ready to accept wetting system with automatic moisture control



KEY ELEMENTS

-1- DRIVE UNIT
-2- GEARBOX
-3- SHAFTS WITH REELS
-4- MIXING TANK
-5- TRANSMISSION UNIT

SPECIFICATIONS

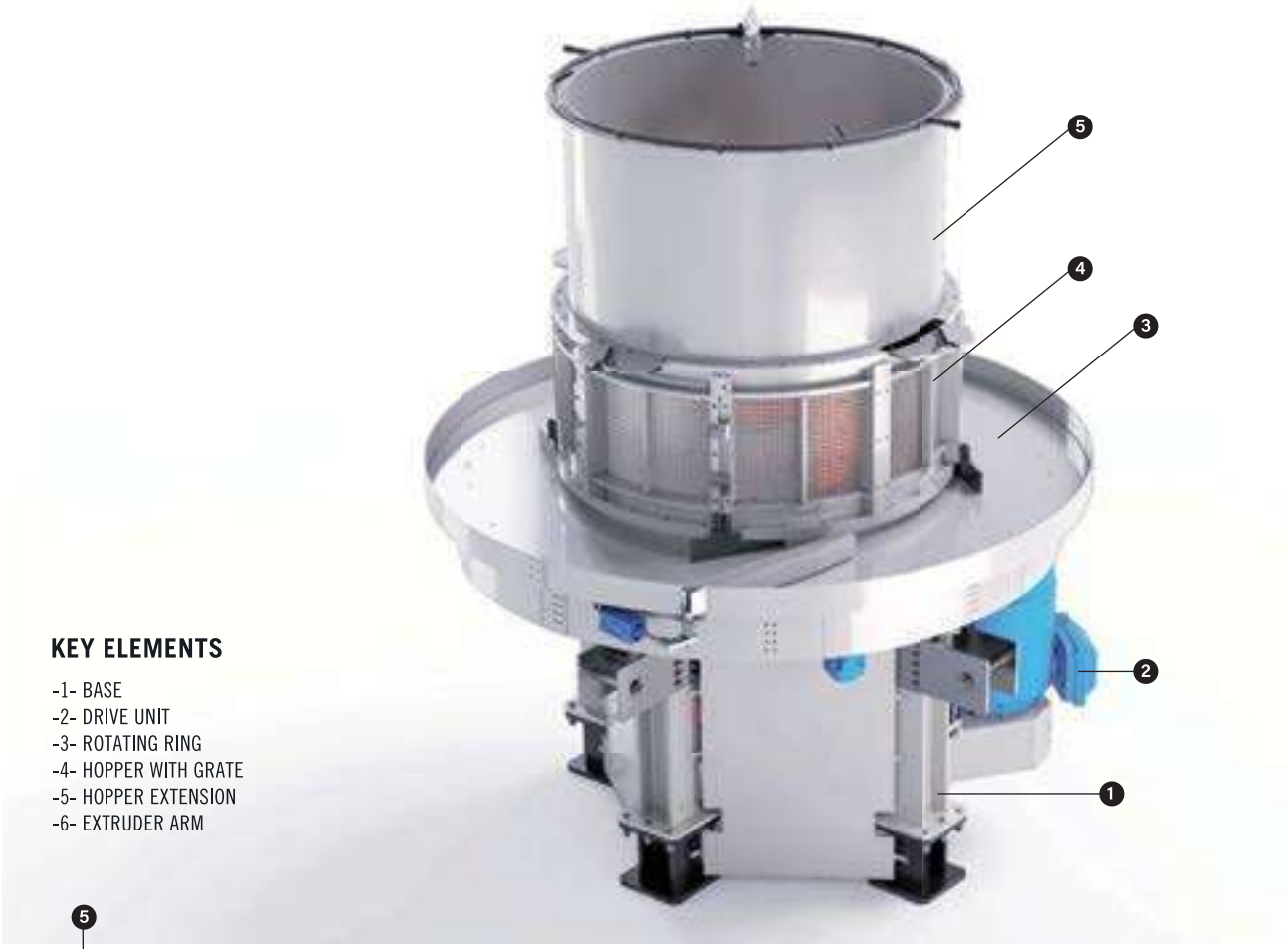
Model	MB 400 •	MB 500 •	MB 600
Blade Diameter [mm]	420	500	640
Tank Size [mm]	750 x 2500	920 x 3000	1100 x 3500
Shaft Speed [rpm]	30	28	25
Power [kW]	45	55	75
Production [t/h]	25	35	60
Weight [kg]	4500	6000	8000

VERTICAL MIXER **MV**

The new vertical mixer was primarily designed for brick production, to elevate product quality by combining the mixing and agglomerating phases of clay preparation into a single machine. The design focuses on robustness, energy efficiency, the specific properties of clay, and simple maintenance and cleaning to maximize reliability.

Strengths:

- Long service life of parts subject to wear
- Reduced need for replacement parts
- Automated protection system in case of malfunction
- Significant reduction in routine maintenance events



KEY ELEMENTS

-1- BASE
-2- DRIVE UNIT
-3- ROTATING RING
-4- HOPPER WITH GRATE
-5- HOPPER EXTENSION
-6- EXTRUDER ARM

SPECIFICATIONS

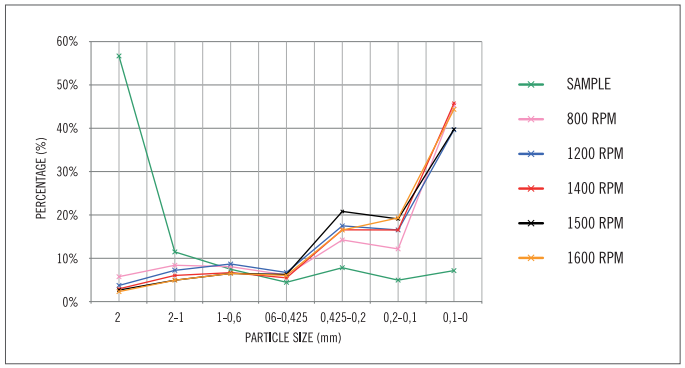
Model	MV 1900
Tank Diameter [mm]	1900
Tank Height [mm]	2500
Shaft Length [mm]	1700
Machine Total Height [mm]	5000
Rotating Plate Speed [rpm]	6
Rotating Plate Power [kW]	4,5
Arm Motor Power [kW]	90÷132
Production [t/h]	50÷60
Weight [t]	13000

HAMMER MILL **MM**

The hammer mill is used for processing raw materials to markedly reduce grain size.
It lends itself to different compositions and consistencies of clay. The frame is constructed in high-thickness sheet metal, with a special wear-resistant liner.
Inside, wear-resistant hammers seated on a group of rotors act in combination with special lump-breaking devices and sieving grates to ensure the correct reduction in grain size.

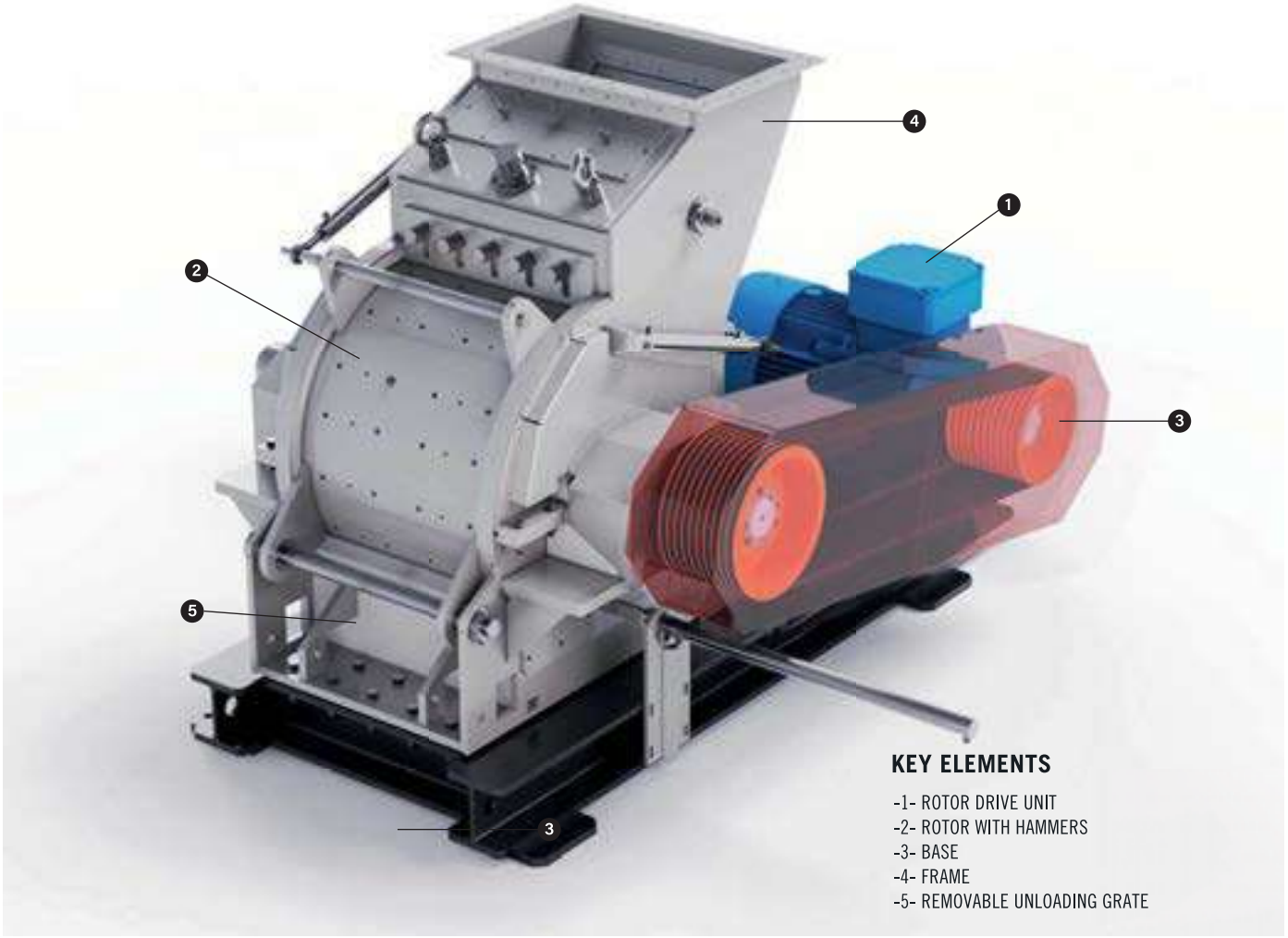
Structural Features:

- Mill has robust structure, rotor, hammers and armour-reinforced sides
- Variable number of hammers installed on main rotor depending on model
- Hammers in high hardness materials according to type of mineral or clay to be crushed



SPECIFICATIONS

Model	MM 6008
Footprint Dimension [mm]	3000 x 2100 x 2050
Power [kW]	75÷250
Production [t/h]	10÷100
Weight [kg]	10000



KEY ELEMENTS

-1- ROTOR DRIVE UNIT
-2- ROTOR WITH HAMMERS
-3- BASE
-4- FRAME
-5- REMOVABLE UNLOADING GRATE

CIRCULAR BATHER **BC**

The circular bather brings the raw material to the right moisture level; it is particularly well-suited for systems that use dry grinding.

The frame is constructed with steel profiles and thick sheet metal. Inside, a series of rotating reels mixes the product with water.

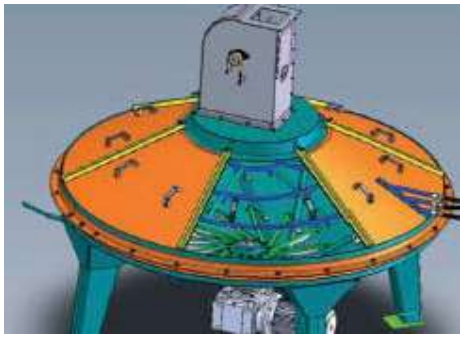
A spinning nebulizer works alongside the rotating reels to regulate moisture levels.

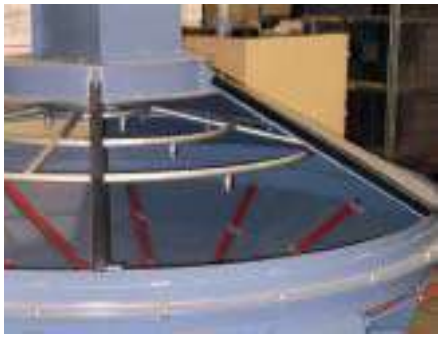
KEY ELEMENTS

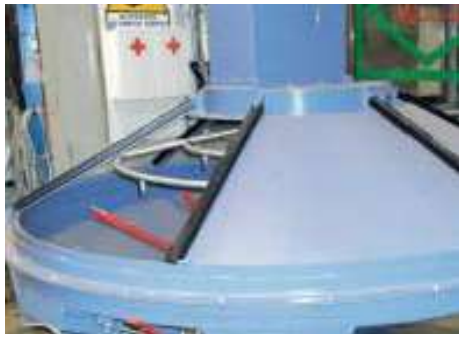
-1- BASE
-2- DRIVE UNIT
-3- ROTOR ASSEMBLY
-4- FEEDING TANK

SPECIFICATIONS

Model	BC
Volume [m3]	6,2
Power [kW]	2,2÷5
Production [t/h]	12÷15
Moisture Level [%]	2÷10
Weight [kg]	630







BRICKMAKER **M**

The Brickmaker Series M has the following parts:

MIXER GROUP

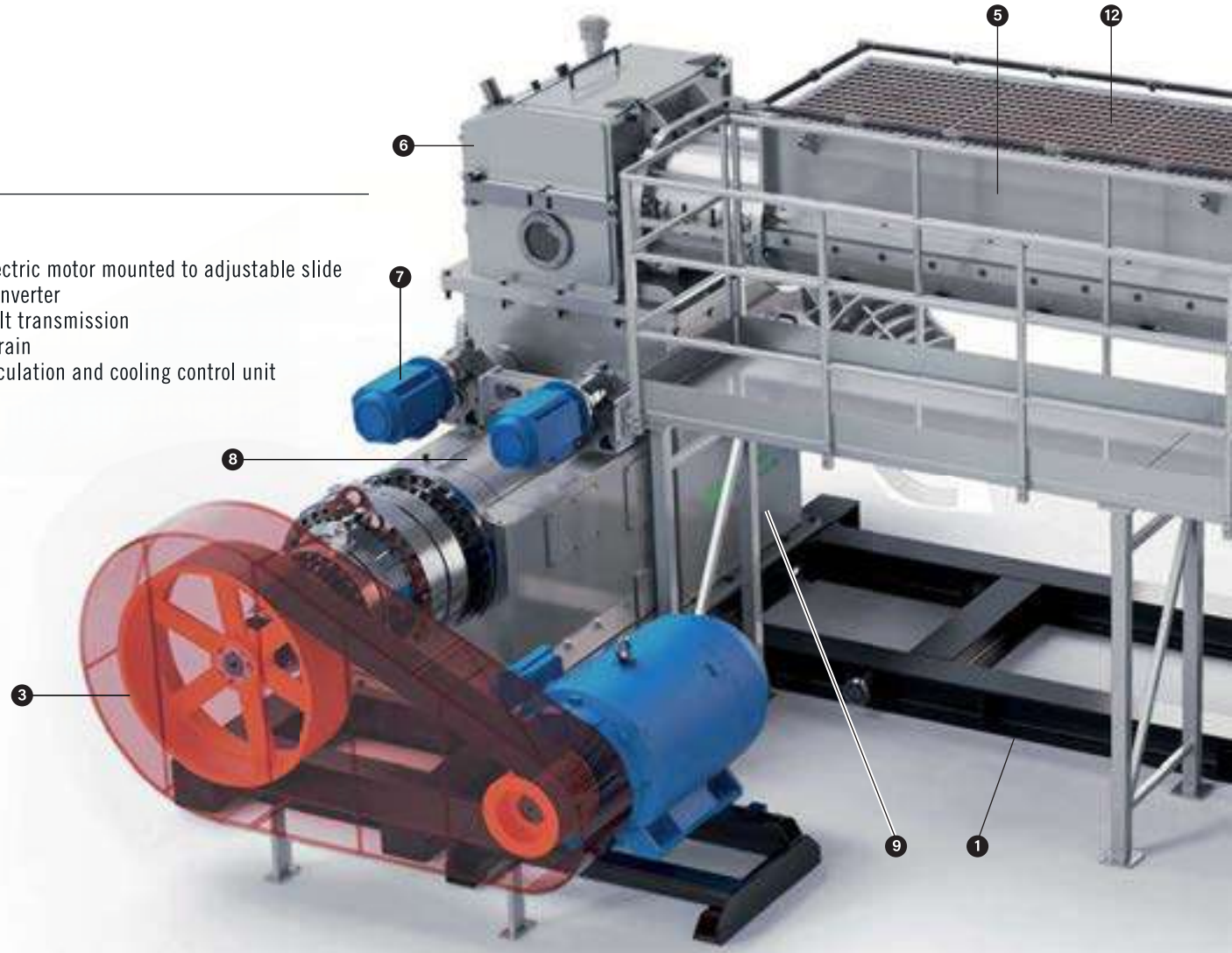
- Structural base in arc welded steel
- Drive housing in welded sheet metal, including supports with radial bearings and axial bearings with adjustable rollers, lubricating oil sump, covers, and seal rings
- No.2 shafts with tempered steel blades equipped with synchronizing gears. Shafts extend into vacuum chamber and are supported at ends by roller bearings
- Series of interchangeable mixing blades with wear-resistant finish and chrome plating
- Mixing tank in arc welded sheet metal with steel liner
- Telescoping connection to vacuum chamber in arc welded steel with steel liner
- Ready to accept automated wetting system
- Ready to accept misting system

DRIVE UNIT

Three-phase electric motor mounted to adjustable slide
Drive motor by inverter
Pulley and V-belt transmission
Epicyclic gear train
Oil reducers circulation and cooling control unit

SPECIFICATIONS

Model	M 450	M 550	M 650	M 750
MIXER GROUP				
Blade [mm]	Ø 420	Ø 500	Ø 500	Ø 640
Shaft Speed [rpm]	30	25	22	20
Power [kW]	37	55	90	132
EXTRUDER GROUP				
Blade [mm]	Ø 450	Ø 550	Ø 650	Ø 750
Shaft Speed [rpm]	25	22	18	15
Power [kW]	75	160	250	315
Extruder Pressure [bar]	18÷25			
Green Production [t/h]	25÷35	40÷55	55÷70	70÷90
Vacuum Pump [kW]	5,5÷7,5	11÷15	18,5÷22	22÷30
Weight [kg]	17000	20000	28000	35000



KEY ELEMENTS

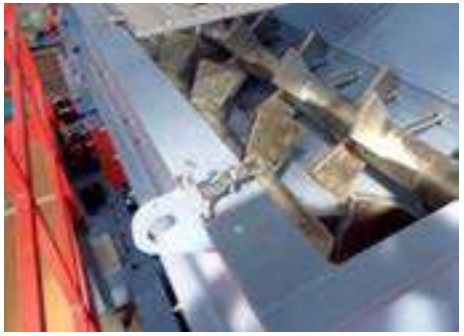
-1- MIXER AND EXTRUDER STRUCTURE
-2- MIXER DRIVE UNIT
-3- EXTRUDER DRIVE UNIT
-4- MIXER GEARBOX
-5- MIXING TANK
-6- VACUUM CHAMBER
-7- REEL UNIT
-8- EXTRUDER GEARBOX
-9- EXTRUSION CHAMBER
-10- EXTRUDER MOUTH
-11- EXTRUSION SHAFT WITH BLADES
-12- MIXER SHAFT WITH BLADES

EXTRUDER GROUP

- Structural base in arc welded steel
- Drive housing in welded sheet metal, including supports with radial bearings and axial bearings with adjustable rollers, lubricating oil sump, covers, and seal rings
- Vacuum chamber in arc welded steel, complete with inspection doors, portholes, and separation grate
- Central section in steel, including No.2 side chambers for reels and No.1 lower chamber for extrusion blade
- No.2 reels, each with shaft and paddles, sealed supports, and epicyclic gear motors
- Shaft with oversized blades in tempered steel
- Series of interchangeable mixing blades with wear-resistant finish and chrome plating
- Extrusion chamber divided in half for complete maintenance of interchangeable wear-resistant liners

DRIVE UNIT

Three-phase electric motor mounted to adjustable slide
Drive motor by inverter
Pulley and V-belt transmission
Epicyclic gear train
Oil reducers circulation and cooling control unit

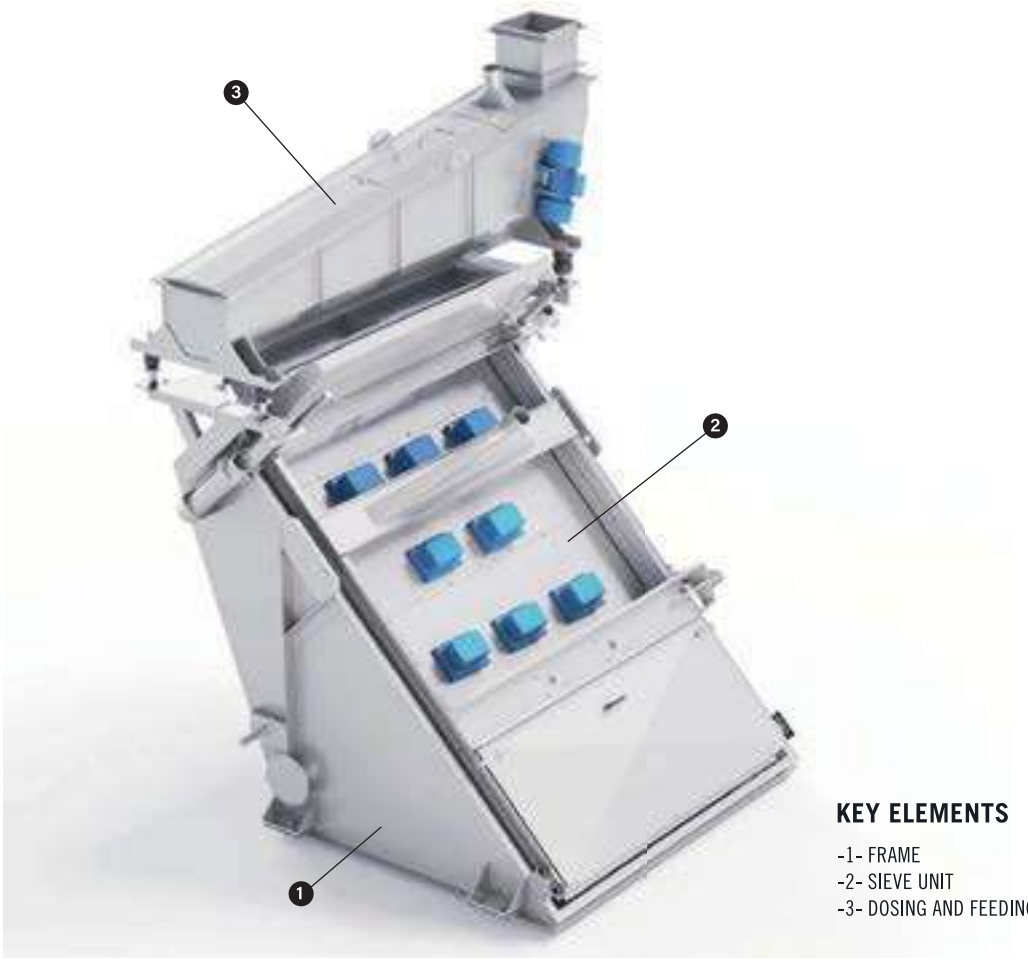


HEAD SCREEN **VT**

The head screen sorts a wide range of products, with different separation profiles obtained by overlaying several pieces of mesh at the same time.

Electromagnetic heads arrayed along the support bridges generate high frequency oscillating energy.
This energy is applied directly to the sifting mesh at several strategically placed points across the mesh surface. This means the vibration type can be adapted to the needs of the specific material to achieve the desired separation target.

The sifting surface angle and mesh size are carefully selected to achieve the exact separation profile while optimizing feed rates.



KEY ELEMENTS

-1- FRAME
-2- SIEVE UNIT
-3- DOSING AND FEEDING UNIT

SPECIFICATIONS

Model	VT-10T	VT-14T
Head Number	10	14
Installed Power [kW]	4	6

Accessories

Box Feeder
Brush for Automated Cleaning
Hydraulic Opening System

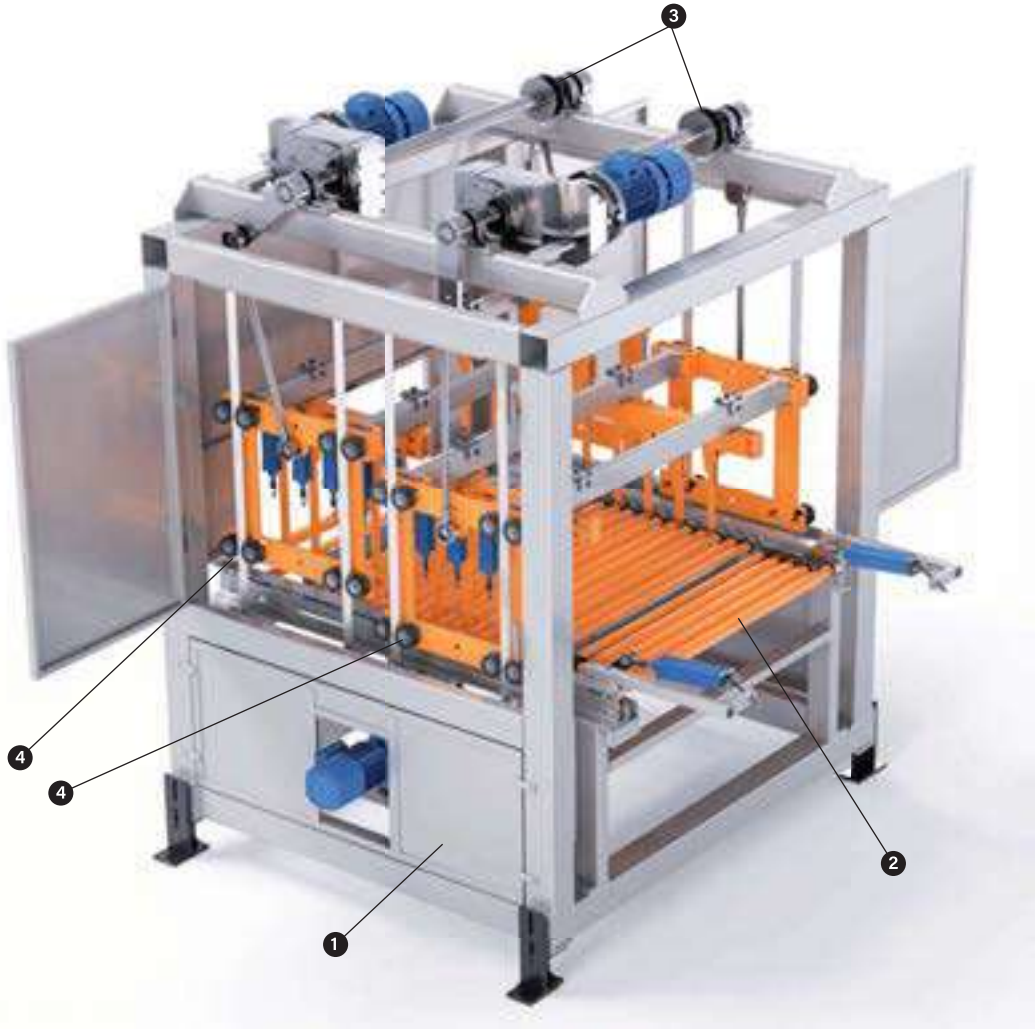
AUTOMATION SYSTEMS

CUTTERS

The line of Capaccioli cutters can perform cutting operations for the following product categories:

- Generic brick and block, solid and perforated
- Brick elements for flooring, including split tiles

Depending on the machine type, the cut can be done “in place” (with a single or multi-wire cutting arc) or “in series” with individual pieces following one another along a moving transport line, continuously.



KEY ELEMENTS

-1- FRAME
-2- ROLLER CONVEYOR
-3- CUTTER DRIVE UNIT
-4- CUTTER UNIT

LOADING/UNLOADING SYSTEMS

For over 30 years, Capaccioli has designed and manufactured automated systems for loading and unloading stations for material from both proprietary and non-proprietary transport lines, using both Pick & Place technology with robots, as well as traditional Cartesian multi-axis systems.

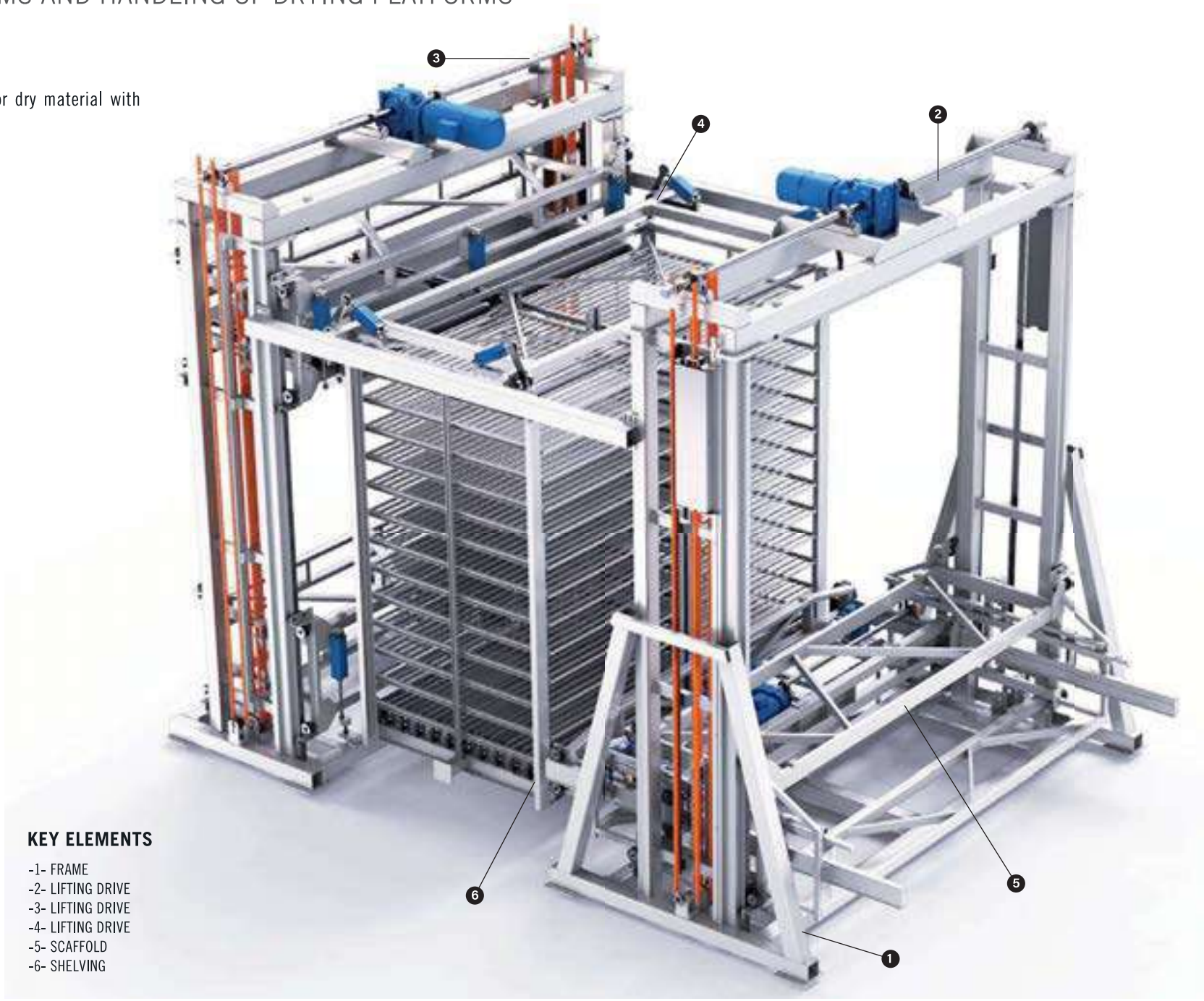
KEY ELEMENTS

-1- FRAME WITH RUNNERS
-2- CARRIAGE
-3- CALIPER

LOADING/UNLOADING SYSTEMS AND HANDLING OF DRYING PLATFORMS

Design and manufacture of loading systems for dry material with traditional technology and robots for:

- bricks of all types
- flooring
- tiles



KEY ELEMENTS

-1- FRAME
-2- LIFTING DRIVE
-3- LIFTING DRIVE
-4- LIFTING DRIVE
-5- SCAFFOLD
-6- SHELVING

BRICK UNLOADING SYSTEMS

Design and manufacture of unloading systems for cooked material from kiln carriages with traditional technology and robots for:

- bricks of all types
- flooring
- tiles

PALLETIZING AND PACKAGING

Design and manufacture of automation systems with traditional and robotic technologies for palletizing, packaging, and handling of brick, food, and paper products.

ROBOTS

The company has substantial experience in robotic technology for multiple uses in the brick, food, and paper sectors.

Among the many possible applications are robots for palletizing, packaging, material loading and unloading, handling and storage, including the use of sophisticated applications such as video movement control and automated search for specific pieces.

KEY ELEMENTS

-1- PLATFORM
-2- ROBOTS
-3- CALIPER

EASYMUD

SOFT MUD SYSTEMS

The patented EASYMUD Capaccioli technology makes it possible to produce "soft mud" brick i.e., a product made by mold rather than extrusion for a "handmade" quality.
With a completely automated process of piece forming, mold handling, and material loading/unloading, our EASYMUD plants make it possible to produce ordinary elements like brick, thin brick, and floor tiles, as well as special shapes including corners for exposed masonry applications. Different surface finishes are also available.

SPECIFICATIONS

Production [pieces/h]	4.000	8.000	12.000 pieces and multiples
Pavers and Special Shapes			
Closed Molds with Sand			
Open Molds without Sand (Spanish Style)			
Closed Molds (Dutch Style)			

KEY ELEMENTS

-1- FRAME
-2- VERTICAL AXIS MIXER
-3- PRESS

DRYERS

DRYER **CONDOR**

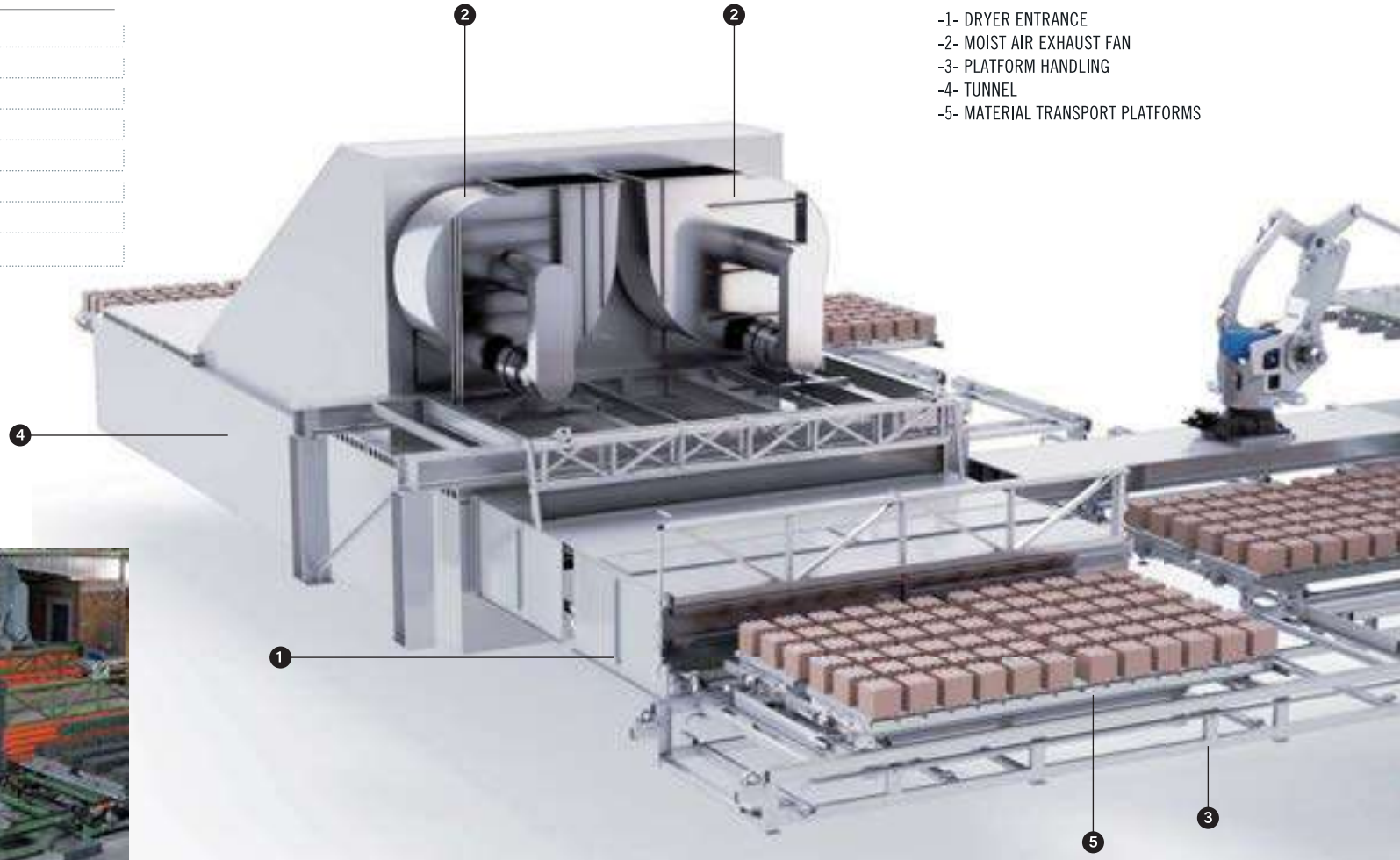
The raw materials analysis conducted in our laboratories and the selection of the best drying technology have come together to create the CONDOR: the world leader for performance, reliability, and economy.

FEATURES

- Low Start-up Cost
- Simple Construction
- Simple Use and Maintenance
- Low Specific Energy Consumption
- Versatility and Production Quality
- Adaptable to all Fuel Types
- Specific Electric Consumption up to 8-10 kw/ton per Cooked Product
- Oven Recovery

KEY ELEMENTS

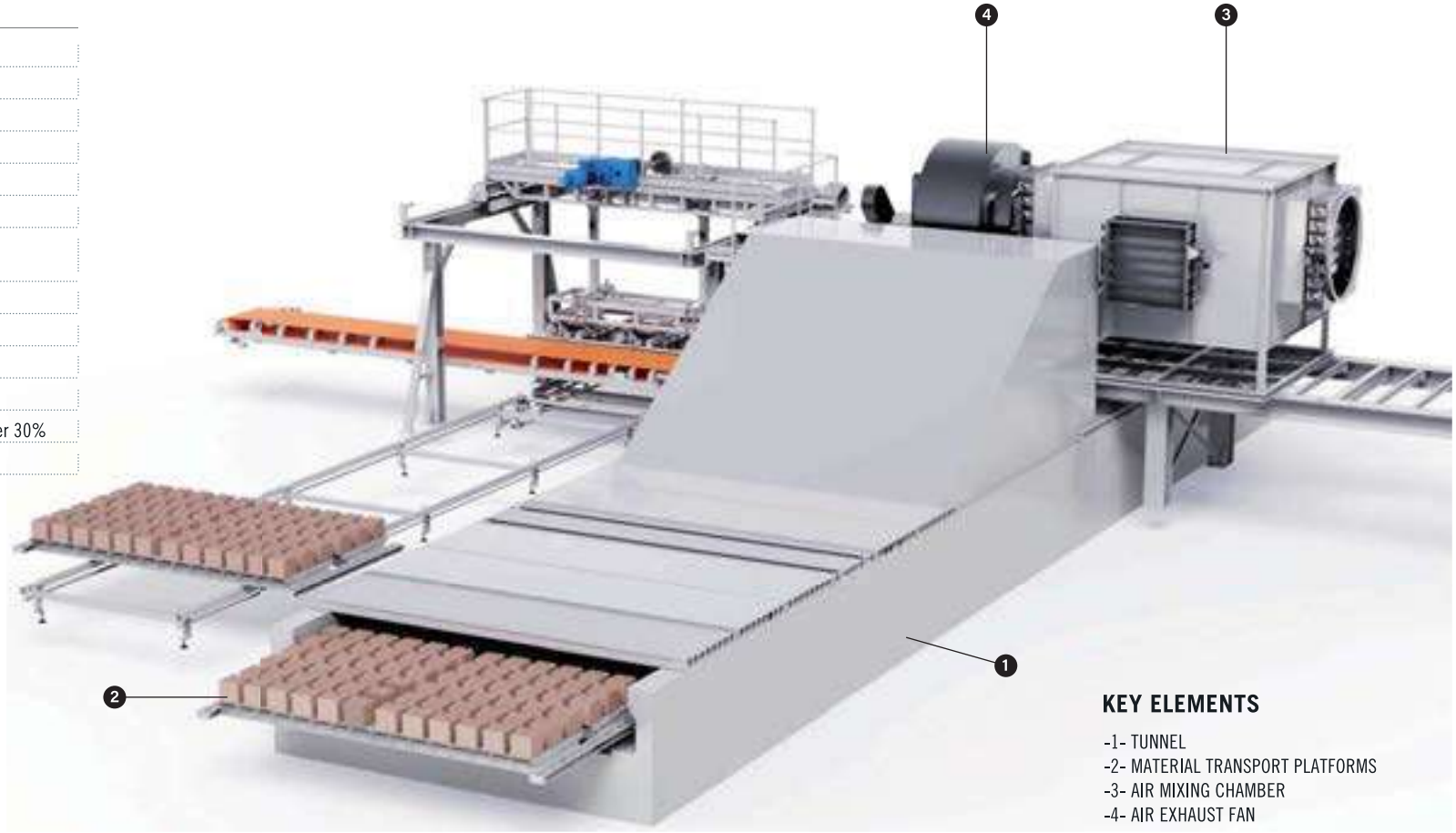
-1- DRYER ENTRANCE
-2- MOIST AIR EXHAUST FAN
-3- PLATFORM HANDLING
-4- TUNNEL
-5- MATERIAL TRANSPORT PLATFORMS



DRYER **CONDOR**

SPECIFICATIONS

No. Channel Dryer	from 1 to 4 channels
Width [m]	starting at 4
Length [m]	variable
Specific Consumption [kWh/t]	8-10 of cooked product
Stacking	Robotic/Traditional
Unstacking	Robotic/Traditional
Return Line and System Handling	Automated
Transport System	Automated
Heat Exchange System	Countercurrent
Drying Cycle [h]	45'-3 h
Product Output [ton/g]	from 300-1,200
Products to be Dried	All types of perforated shapes over 30%
Fuel Type	Liquids, solids, and gaseous



KEY ELEMENTS

-1- TUNNEL
-2- MATERIAL TRANSPORT PLATFORMS
-3- AIR MIXING CHAMBER
-4- AIR EXHAUST FAN

OTHER TYPES OF DRYERS PRODUCED BY US

Type	STATIC	SEMI-CONTINUOUS and CONTINUOUS (Tunnel Dryers)	RAPID	ULTRA RAPID
Product	ALL	ALL	PERFORATED (max density 1000 ton/mc)	PERFORATED (max density 1000 ton/mc)
Consumption [kWh/t]	40 - 70	30 - 45	15 - 22	8 - 10
Drying Times [h]	up to 72	up to 60	from 3 to 6	from 45 min. to 3 h

KILNS

Scrupulous assessment of results obtained together with the raw material analysis at our laboratories mean our technicians are equipped to create the best cooking solution for brick kilns.

Using traditional and/or prefabricated structures, we design and manufacture the following kilns:

- All brick and tile kilns
- **U**-shaped container kilns
- **H**-shaped container kilns
- Single-layer kilns

We also perform retrofits and increase production capacity of existing kilns.

BURNERS

SINGLE JET BURNERS

These are high speed “nozzle mix” burners.
The combustion agent and fuel are mixed in the combustion head, producing a taut flame for high heat penetration within the combustion chamber.

The JET burners can be used in cooking chambers with both fibre insulation as well as dense and low-density refractory materials. They can be positioned along the kiln sides or vault.

Ignition of the JET burners is primarily by high voltage discharge from an ignition electrode; a pilot light ignition system could also be used.

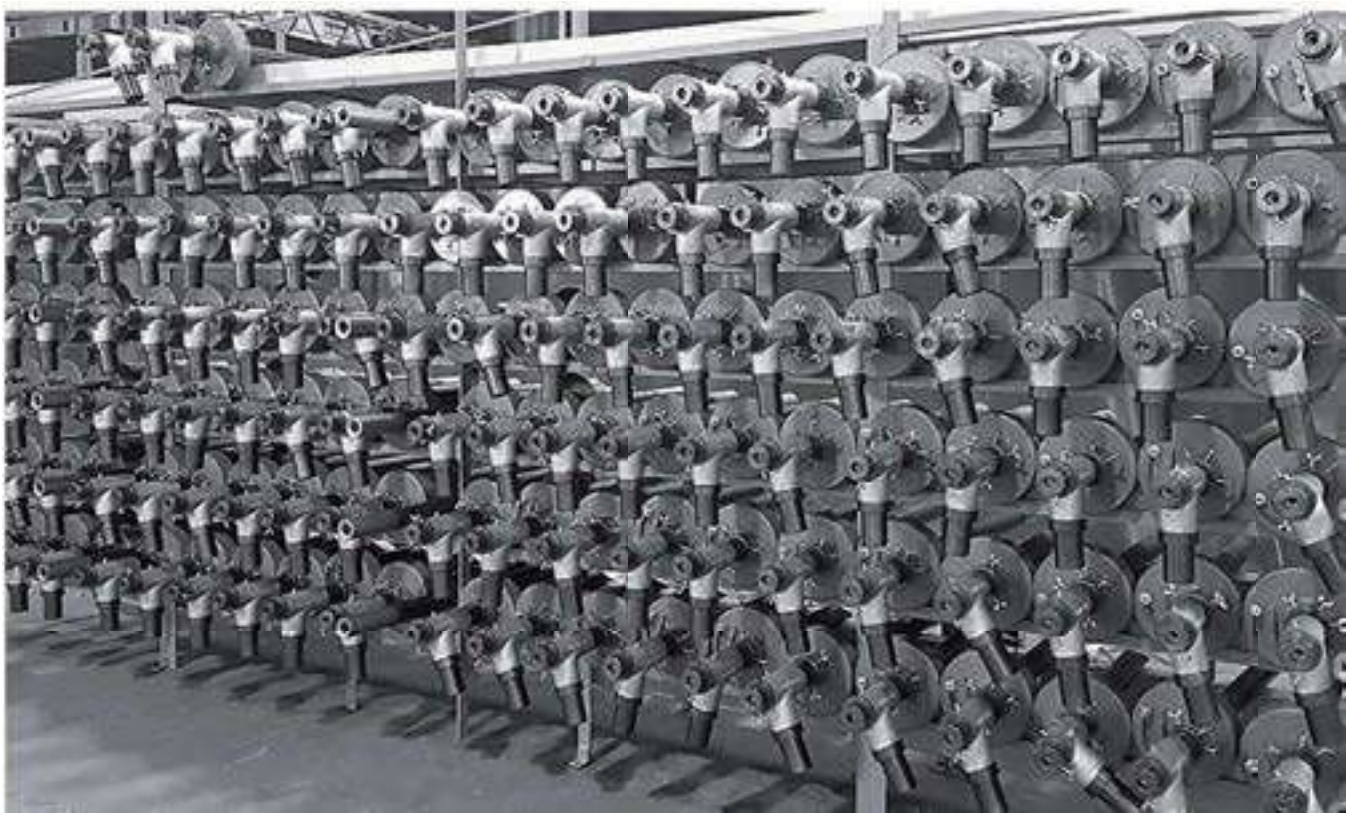
Flame detection generally occurs through a special electrode; an ultraviolet photocell could also be used.

Flame control is essential in all systems operating with temperatures below 750°C.

JET burners can operate with different combustion profiles depending on the application:

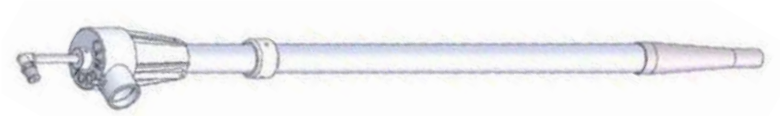
- On-off, with power ratio equal to 1:20
- Pulses, with ratio valve to dose gas and pneumatic control of air-combustion agent valve
- Modulating, with regulation of air-combustion agent by motorized valve and dosing of gas with ratio valve

The JET burners can operate with pre-heated combustion air up to 400°C for a higher flame temperature and therefore decreased fuel consumption.



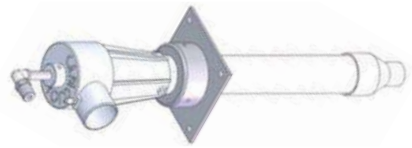
BR-70JET-VG

IN VAULT installation, gas supply



BR-70JET-LG

SIDE installation, gas supply

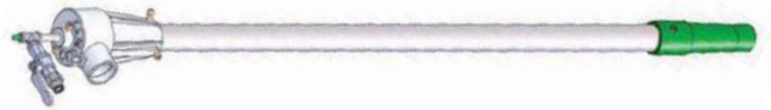


SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	81,5	81,5	81,5
Nominal Value [kW]	70	70	70
Minimum Value [kW]	17	17	17
Maximum Temperature [°C]	1000	1000	1000
Maximum Flame Speed [m/s]		220	
Maximum Flame Length [mm]	750	600	600

BR-70JET-LG-PLUS

SIDE installation, gas supply



SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	81,5	81,5	81,5
Nominal Value [kW]	70	70	70
Minimum Value [kW]	17	17	17
Maximum Temperature [°C]	1200	1200	1200
Maximum Flame Speed [m/s]		200	
Maximum Flame Length [mm]	680	500	500

BR-95JET-VG

IN VAULT installation, gas supply with controlled ignition

BR-95JET-LG

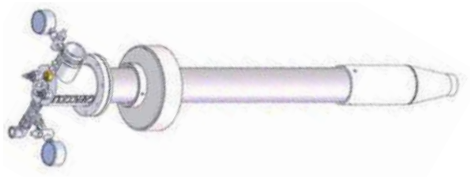
SIDE installation, gas supply with controlled ignition

SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	100	100	100
Nominal Value [kW]	95	95	95
Minimum Value [kW]	15	15	15
Maximum Temperature [°C]	1250	1250	1250
Maximum Flame Speed [m/s]		220	
Maximum Flame Length [mm]	860	780	780

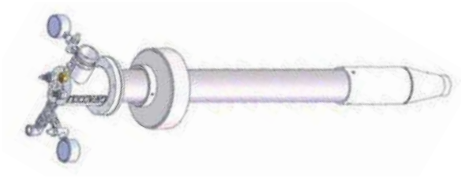
BR-105JET-VG

IN VAULT installation, gas supply with controlled ignition



BR-105JET-LG

IN VAULT installation, gas supply with controlled ignition

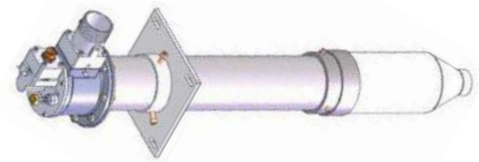


SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	122	122	122
Nominal Value [kW]	105	105	150
Minimum Value [kW]	15	15	15
Maximum Temperature [°C]	1100	1100	1100
Maximum Flame Speed [m/s]		220	
Maximum Flame Length [mm]	860	780	780

BR-220JET-LG

SIDE installation, gas supply with controlled ignition

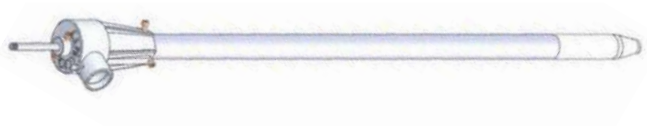


SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	255	255	255
Nominal Value [kW]	220	220	220
Minimum Value [kW]	20	20	20
Maximum Temperature [°C]	1250	1250	1250
Maximum Flame Speed [m/s]		200	
Maximum Flame Length [mm]	910	800	800

BR-70JET-VO

IN VAULT installation, gas supply with controlled ignition

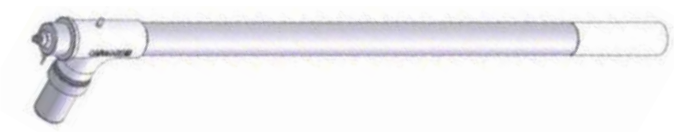


SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	81,5	81,5	81,5
Nominal Value [kW]	70	70	70
Minimum Value [kW]	17	17	17
Maximum Temperature [°C]	1000	1000	1000
Maximum Flame Speed [m/s]		140	
Maximum Flame Length [mm]	480	600	400

BR-100JET-V0

IN VAULT installation, oil supply

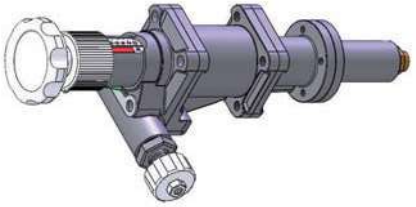


SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	120	120	120
Nominal Value [kW]	100	100	100
Minimum Value [kW]	20	20	20
Maximum Temperature [°C]	1000	1000	1000
Maximum Flame Speed [m/s]		180	
Maximum Flame Length [mm]	520	680	480

BR-70JET-4 (RATIO 1-3 / 1-4)

IN VAULT installation, oil supply, mechanical pulverization



SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	110	110	110
Nominal Value [kW]	70	70	70
Minimum Value [kW]	17	17	17
Maximum Temperature [°C]	1000	1000	1000
Maximum Flame Speed [m/s]	48	48	48
Maximum Flame Length [mm]	2800	2800	2800

BR-T8

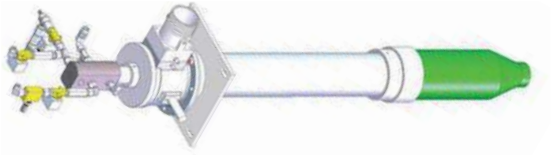
IN VAULT installation, oil supply with controlled ignition

SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	150	150	150
Nominal Value [kW]	105	105	105
Minimum Value [kW]	25	25	25
Maximum Temperature [°C]	1000	1000	1000
Maximum Flame Speed [m/s]		180	
Maximum Flame Length [mm]	520	680	480

BR-LATERALE

SIDE installation, oil supply with controlled ignition



SPECIFICATIONS

Parameter	NATURAL GAS	PROPANE	BUTANE
Maximum Value [kW]	250	250	250
Nominal Value [kW]	220	220	220
Minimum Value [kW]	25	25	25
Maximum Temperature [°C]	1000	1000	1000
Maximum Flame Speed [m/s]		140	
Maximum Flame Length [mm]	480	600	400

MULTIPLE JET BURNERS

High speed burners for use with all gaseous fuel types.
SIDE installation with or without flame control for use in areas with temperatures lower or higher than that of fuel ignition.
Flame control by electrodes and photocells.

BR-F-JET-LG

Side Oven Burner
SIDE installation, gas supply
with controlled ignition

SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	765
Nominal Value [kW]	660
Minimum Value [kW]	60
Maximum Temperature [°C]	1250
Fuel	Natural Gas / Propane / Butane

BR-F-JET-VG-CA

Vault Oven Burner
VAULT installation, gas supply
with controlled ignition

SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	1050
Nominal Value [kW]	950
Minimum Value [kW]	170
Maximum Temperature [°C]	1000
Fuel	Natural Gas / Propane / Butane

BR-F-JET-VG-AA

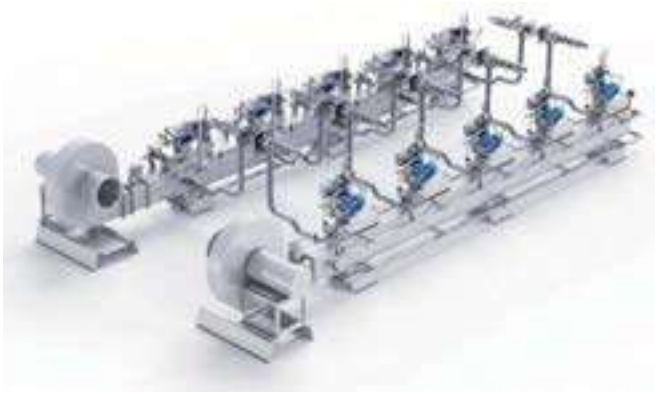
Vault Oven Burner
IN VAULT installation, gas supply

SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	800
Nominal Value [kW]	700
Minimum Value [kW]	170
Maximum Temperature [°C]	1000
Fuel	Natural Gas / Propane / Butane

BR-LATERALE

Side Oven Burner
SIDE installation, oil supply with auto-ignition



SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	1400
Nominal Value [kW]	1000
Minimum Value [kW]	170
Maximum Temperature [°C]	1000
Fuel	Heavy and light oil, diesel

BR-F-JET-VO-AA-PLUS

Side Oven Burner
In VAULT installation, oil supply with auto-ignition

SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	2100
Nominal Value [kW]	1400
Minimum Value [kW]	340
Maximum Temperature [°C]	1000
Fuel	Heavy and light oil, diesel

BR-F-JET-VO-AA

Vault Oven Burner
IN VAULT installation, oil supply with continuous pulses

SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	1630
Nominal Value [kW]	1400
Minimum Value [kW]	340
Maximum Temperature [°C]	1000
Fuel	Heavy and light oil, diesel

BR-F-JET-4 (RATIO 1-3 / 1-4)

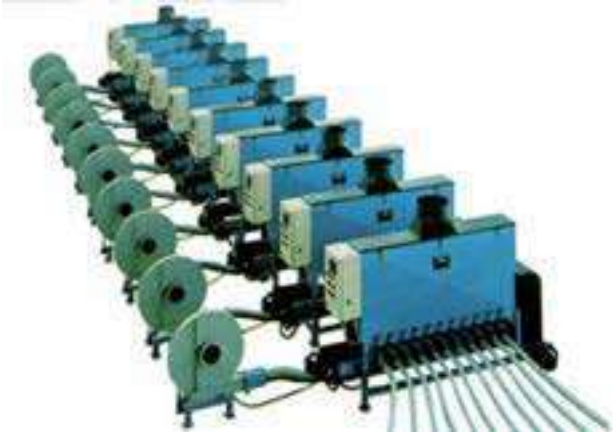
Vault Oven Burner
IN VAULT installation, oil supply with pulses

SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	1100
Nominal Value [kW]	700
Minimum Value [kW]	170
Maximum Temperature [°C]	1000
Fuel	Heavy and light oil, diesel

BR-S.F.B.

IN VAULT installation, solid fuel supply



SPECIFICATIONS

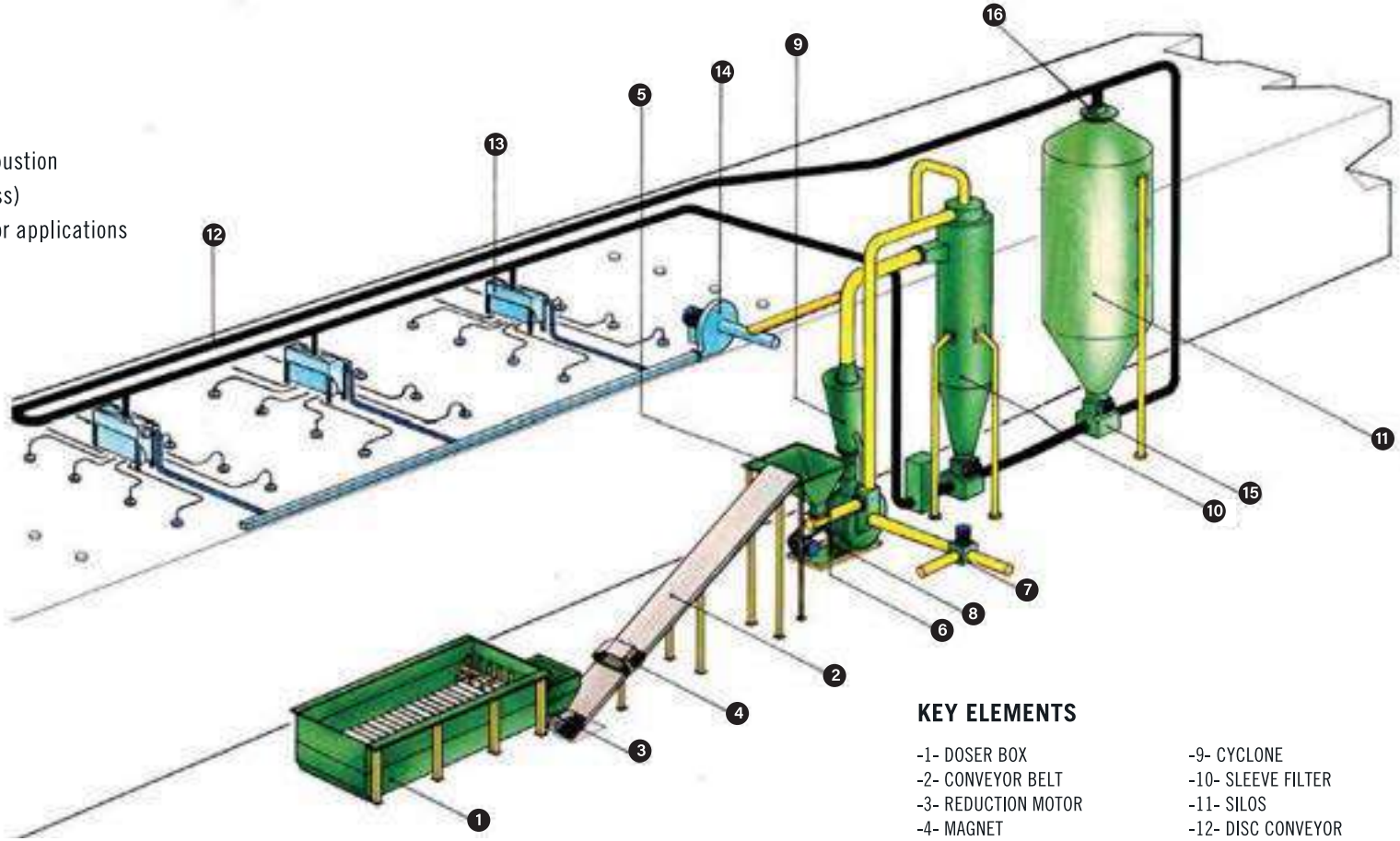
Parameter	CARBONE (PET COKE)	SEGATURA (LEGNO)	SANSA (OLIVE)
Maximum Value [kW]	1100	1100	1100
Nominal Value [kW]	770	770	770
Minimum Value [kW]	170	170	170
Maximum Temperature [°C]	1000	1000	1000

GRINDING SYSTEMS

GRINDING, STORAGE, AND DISTRIBUTION OF SOLID FUEL

Burners with solid fuels for different types of industrial ceramic kilns

- Systems for grinding and distributing fuel
- Dosing and electronic control system
- Burners and auto-ignition for cooking area
- Burner heads specifically designed to optimize combustion
- Compatible with coal and plant-based fuels (biomass)
- Different power levels available for all ceramic sector applications



KEY ELEMENTS

-1- DOSER BOX
-2- CONVEYOR BELT
-3- REDUCTION MOTOR
-4- MAGNET
-5- LOADING HOPPER
-6- AUGUR CONVEYOR
-7- AUTOMATIC VALVE
-8- HAMMER MILL
-9- CYCLONE
-10- SLEEVE FILTER
-11- SILOS
-12- DISC CONVEYOR
-13- SOLID FUEL BURNER
-14- FAN
-15- DOSING VALVE
-16- LOAD–UNLOAD SILOS

HEAT GENERATORS FOR DRYING CHAMBERS

The design and manufacture of heat generators for drying chambers and dryers compatible with all fuel types.

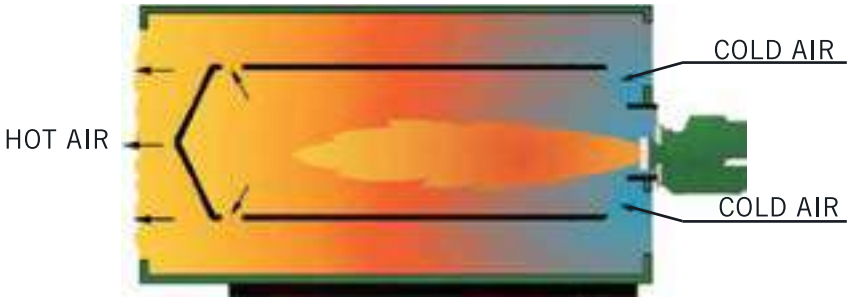
The thermal power of the burners and motorized valves determines the regulation and mixing of air flows, temperature control, and quantity of heat emitted.

The regulation and controls are automated with a PLC or supervision system.

A set of sensors detects temperature and pressure.

DIRECT HEAT GENERATORS

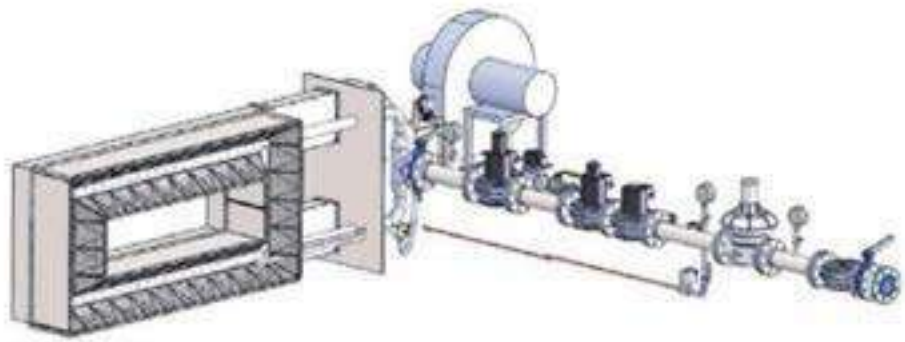
Direct heat generators for drying chambers and dryers using liquid fuel. Different power levels available for all ceramic sector applications. Compatible with heavy and light oil and diesel



DIRECT HEAT GENERATORS

BR-E-JET-LG-1

Ducted Burner Dryer with side or channel installation, gas supply

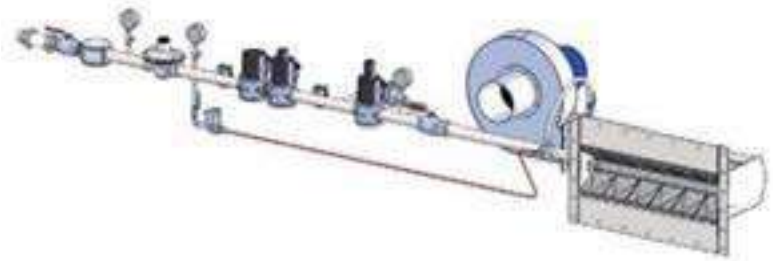


SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	3500
Nominal Value [kW]	3488
Minimum Value [kW]	200
Maximum Temperature [°C]	250
Fuel	Natural Gas / Propane / Butane

BR-E-JET-LG-2

Ducted Burner Dryer with side or channel installation, gas supply

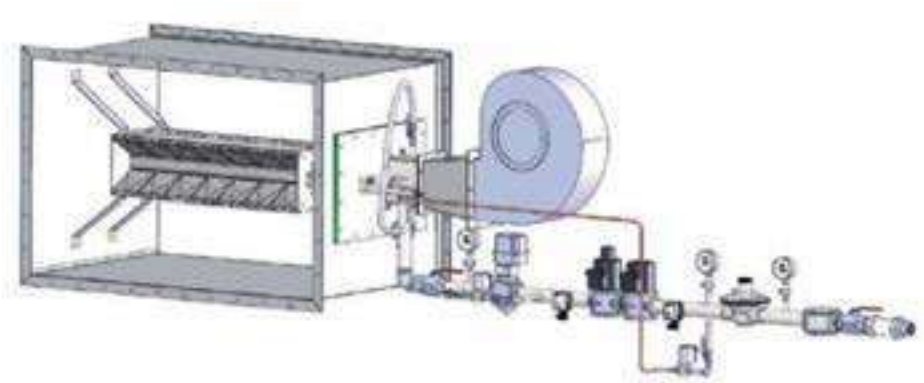


SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	2400
Nominal Value [kW]	2325
Minimum Value [kW]	200
Maximum Temperature [°C]	250
Fuel	Natural Gas / Propane / Butane

BR-E-JET-LG-3

Ducted Burner Dryer with side or channel installation, gas supply

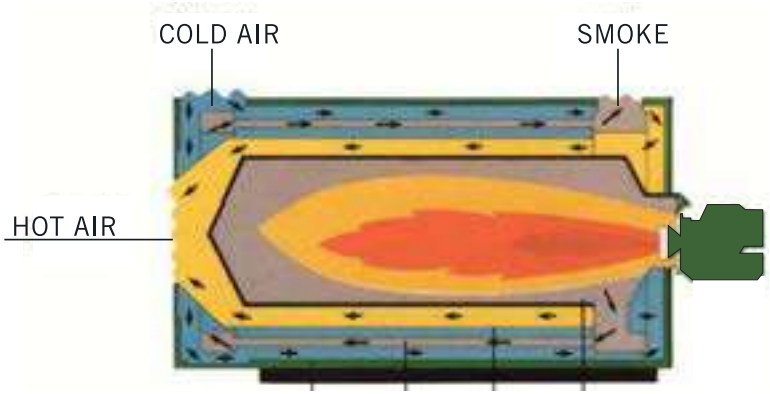


SPECIFICATIONS

Parameter	VALUE
Maximum Value [kW]	1200
Nominal Value [kW]	1160
Minimum Value [kW]	200
Maximum Temperature [°C]	250
Fuel	Natural Gas / Propane / Butane

INDIRECT HEAT GENERATORS

Heat generators and indirect exchangers for drying chambers and dryers using liquid fuel. Different power levels available for all ceramic sector applications. Compatible with heavy and light oil and diesel.



DIRECT AND INDIRECT HEAT GENERATORS USING SOLID FUEL

Fuel grinding and distribution system
Electronically controlled dosing system
Burner heads designed to optimise combustion
Compatible with coal and plant-based fuels (biomass)
Different power levels available for all ceramic sector applications.

BURNERS FOR DIRECT AND INDIRECT HEAT GENERATORS

The NOVANTA and CINQUECENTO series Low NOx Class 3 (< 80 mg/kWh) has been designed and manufactured to meet the current and future need for low NOx emissions.

Combustion head innovations have resulted in significantly reduced emissions while retaining flame stability and superior reliability.

The correct air/gas mix within a specially designed area inside the head enables a truly homogeneous flame that performs in all operational conditions.

These industrial burners, one-piece and single cast aluminium with built-in fan, are available in an oil version for viscosities of up to 50 cSt at 50°C (7°E at 50°C) as well as a low sulphur version for viscosities between 110 cSt and 50°C (15°E and 50°C).

There is also a heavy oil model available for 400 cSt at 50°C (50°E at 50°C).
Given the specific viscosity and the need to keep oil fluid, this burner has a pre-heater with a low-heat armoured electric element to avoid carbonizing the oil.

The product is easy to maintain and simple to install/uninstall thanks to attachments on the aluminium casting that accept components such as the electromagnetic valve unit, which intercepts fuel that collects under the block and is designed for quick removal during maintenance.

TECHNICAL SUPPORT

Our customer focus has led Capaccioli to develop an efficient and continuous support service for kilns, dryers, and automation systems, including using the Internet and modems to verify system status.
In this way, we can ensure swift response times by specialised technicians, including tele-tech support, to identify the issues and guide the user to a solution.

PARTS

Our parts service is at the ready to supply customers with replacement parts for their machinery without delay, thanks to our in-stock inventory of components, accessories, and replacement parts.
Upon the customer's request, we can also provide a list of strategic spare parts for the specific system at start-up.

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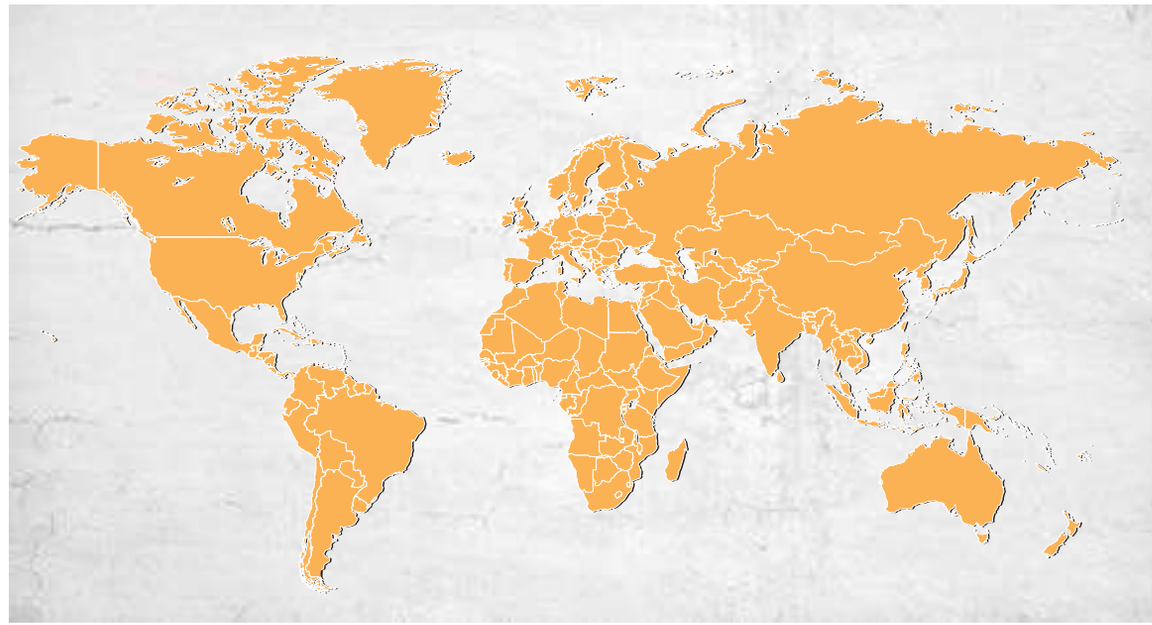

CAPACCIOLI
Innovating industries

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