

 **COMETEL**

METAL CHIPS

SMART SOLUTIONS
FOR TRANSPORT AND
PROCESSING OF METAL CHIPS







COMETEL

MISSION, VISION AND VALUES	06
POTENTIAL CUSTOMERS AND MATERIALS	07
PROJECTS	08
MODULAR SYSTEM	08
LOW PRODUCTION SHORT METAL CHIPS	09
HIGH PRODUCTION SHORT METAL CHIPS	10
MEDIUM PRODUCTION LONG METAL CHIPS	11
HIGH PRODUCTION SHORT AND LONG METAL CHIPS	12
HIGH PRODUCTION LONG METAL CHIPS	14
DIFFERENT ALLOY LONG METAL CHIPS	16
TRANSPORT OF METAL CHIPS IN DIFFERENT MATERIALS	18
STORAGE, WEIGHING AND TRANSPORT OF METAL CHIPS	20
STORAGE, SEPARATION AND TRANSPORT OF METAL CHIPS	21
PRE-TREATMENT OF METAL CHIPS	22
MACHINES	24
TIPPING SKIPS	24
FEED HOPPERS	24
CONVEYORS	25
CRUSHERS	26
CENTRIFUGES	27
FILTERS	28
SEPARATING EQUIPMENT	29
BRIQUETTING MACHINES	30
DISTRIBUTION TRAYS	32
TECHNICAL TABLE	33



VALUES

1 Initiative
We are drawn towards new initiatives and projects.

2 Responsibility
We assume responsibility for our work, decisions and their results.

3 Commitment
We always keep our word.

4 Results
We make our utmost commitment to achieve results.

5 Trust
With professionalism and discretion we generate trust.

MISSION

We are a **family business** with professionalised management and a **global outlook**, dedicated to the design, manufacture, installation and servicing of **turnkey solutions** for transport and processing of scrap metal.

We will do this,

- Offering a **customised service**, with reliability and assuming the risks analysed.
- **Adapting to the needs** of our customers and exceeding expectations in each project.
- Meeting our agreed commitments with responsibility and **effort**.
- Striving for excellence, being **non-conformists** and continuously improving the image, product and service of Cometel.

In this way, we will gain our **customers' trust**, be the **reference in the sector** and become an **attractive company** for attracting and retaining talent.

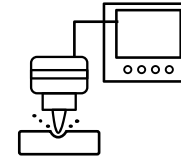
VISION

To be recognised as a great and excellent company.

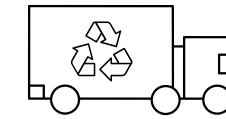
LET'S MAKE IT

EVERY PROJECT IS UNIQUE.
WE LISTEN TO YOU AND WE MAKE IT POSSIBLE.

POTENTIAL CUSTOMERS



MACHINING COMPANY



RECYCLER



FOUNDRY

MATERIALS, TYPES OF METAL CHIPS



ALUMINIUM



BRASS



IRON



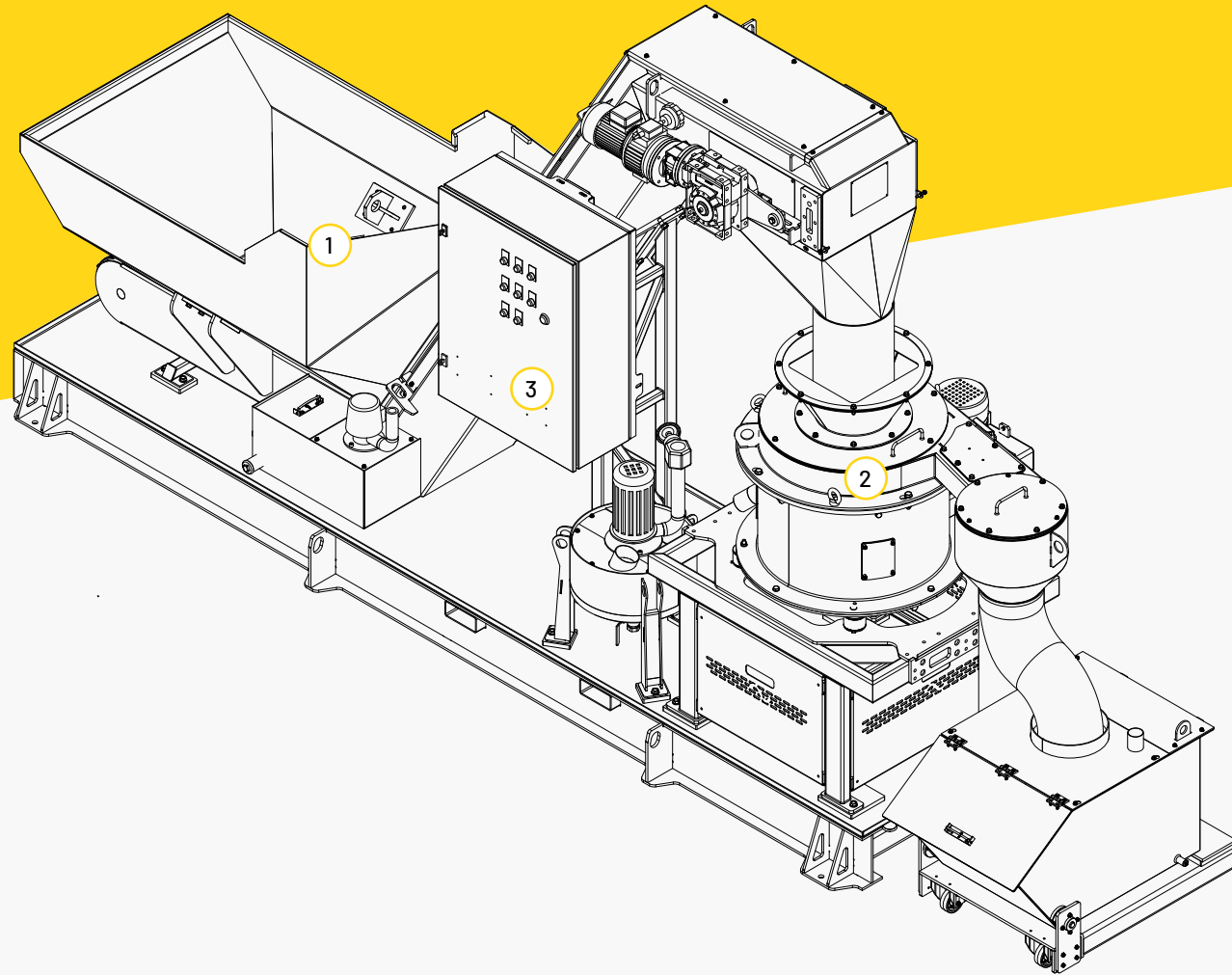
STEEL



BRONZE

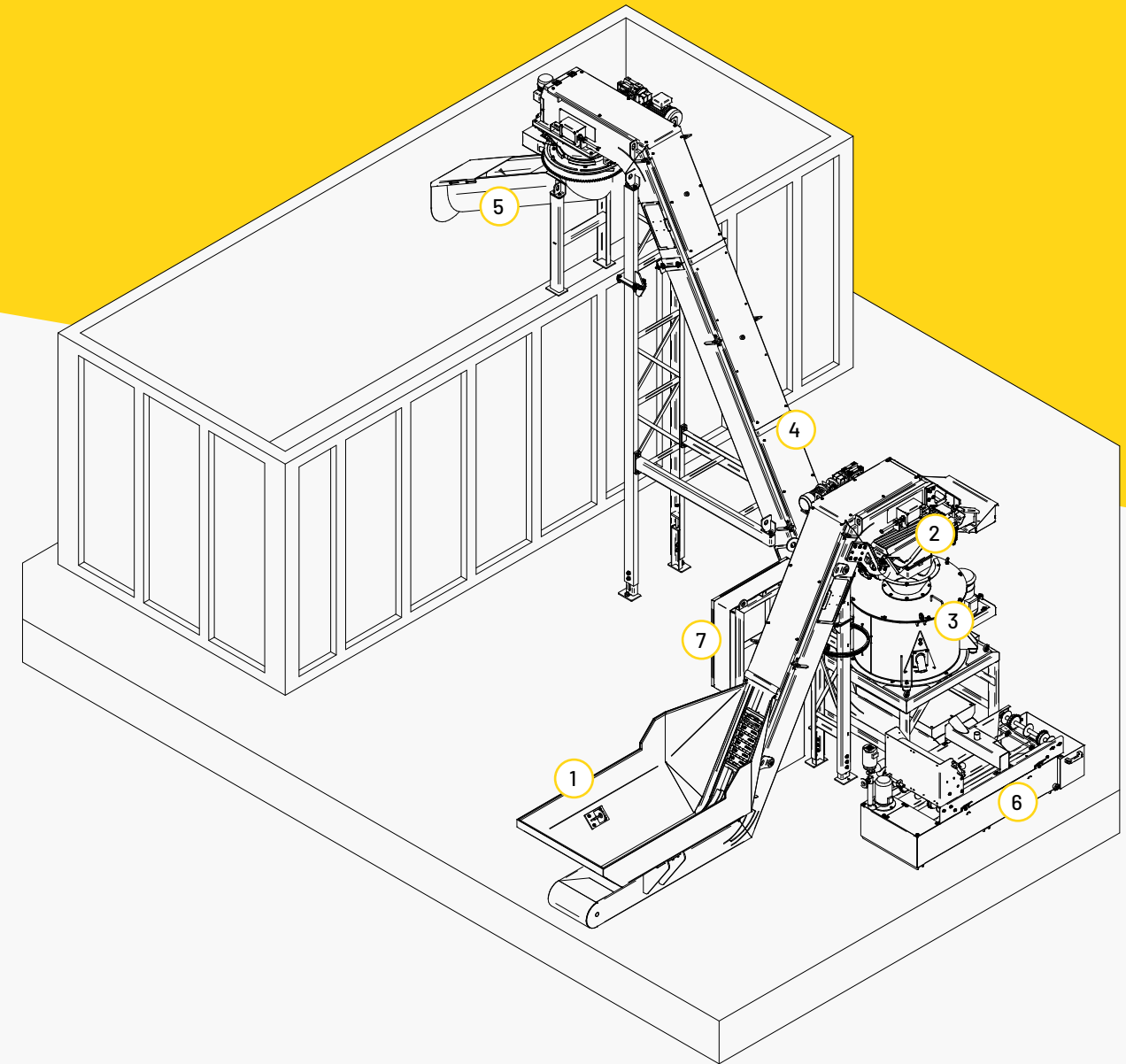


TITANIUM



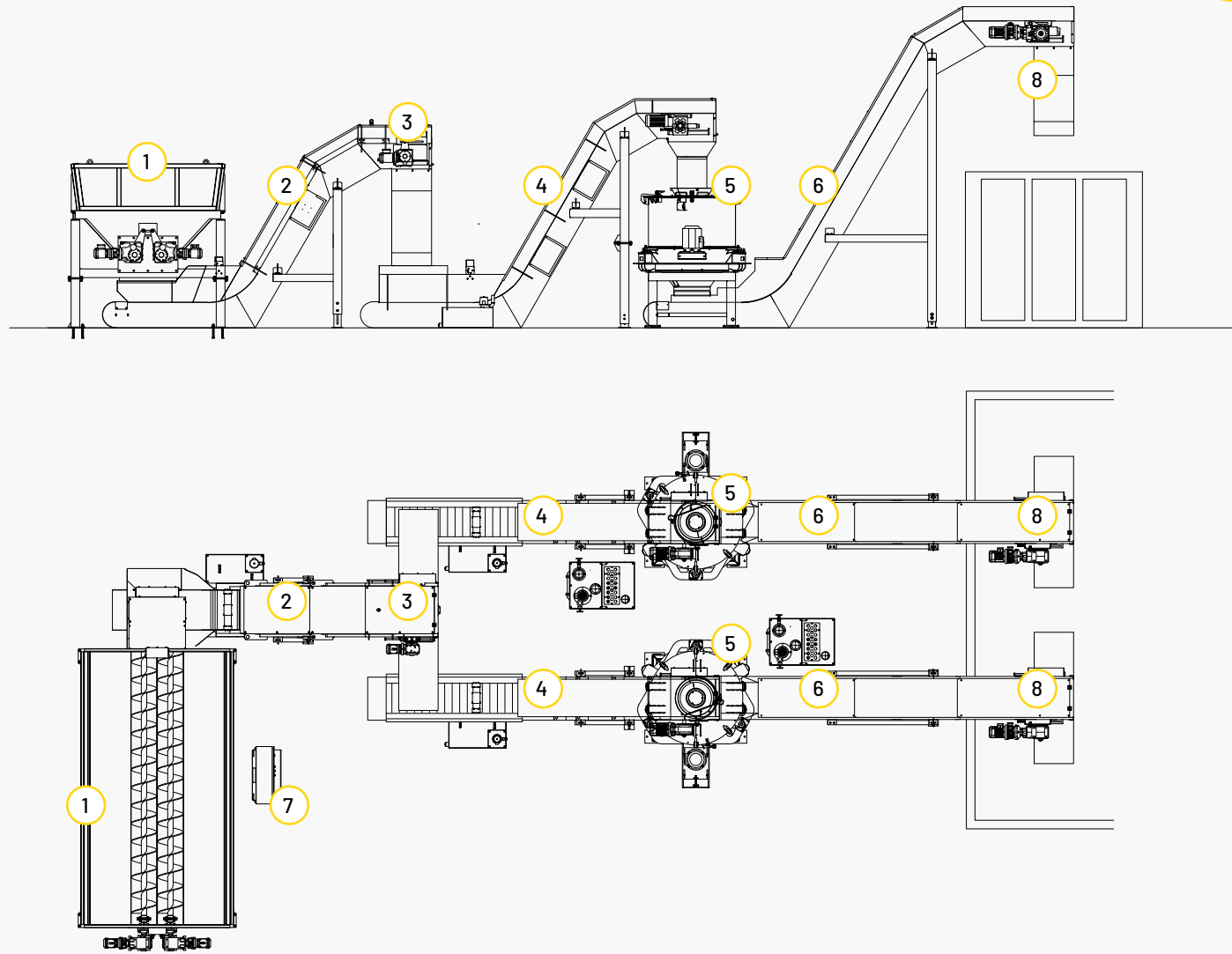
MODULAR SYSTEM

- 1 Hopper + Infeed conveyor
- 2 Lateral output centrifuge
- 3 Electrical cabinet



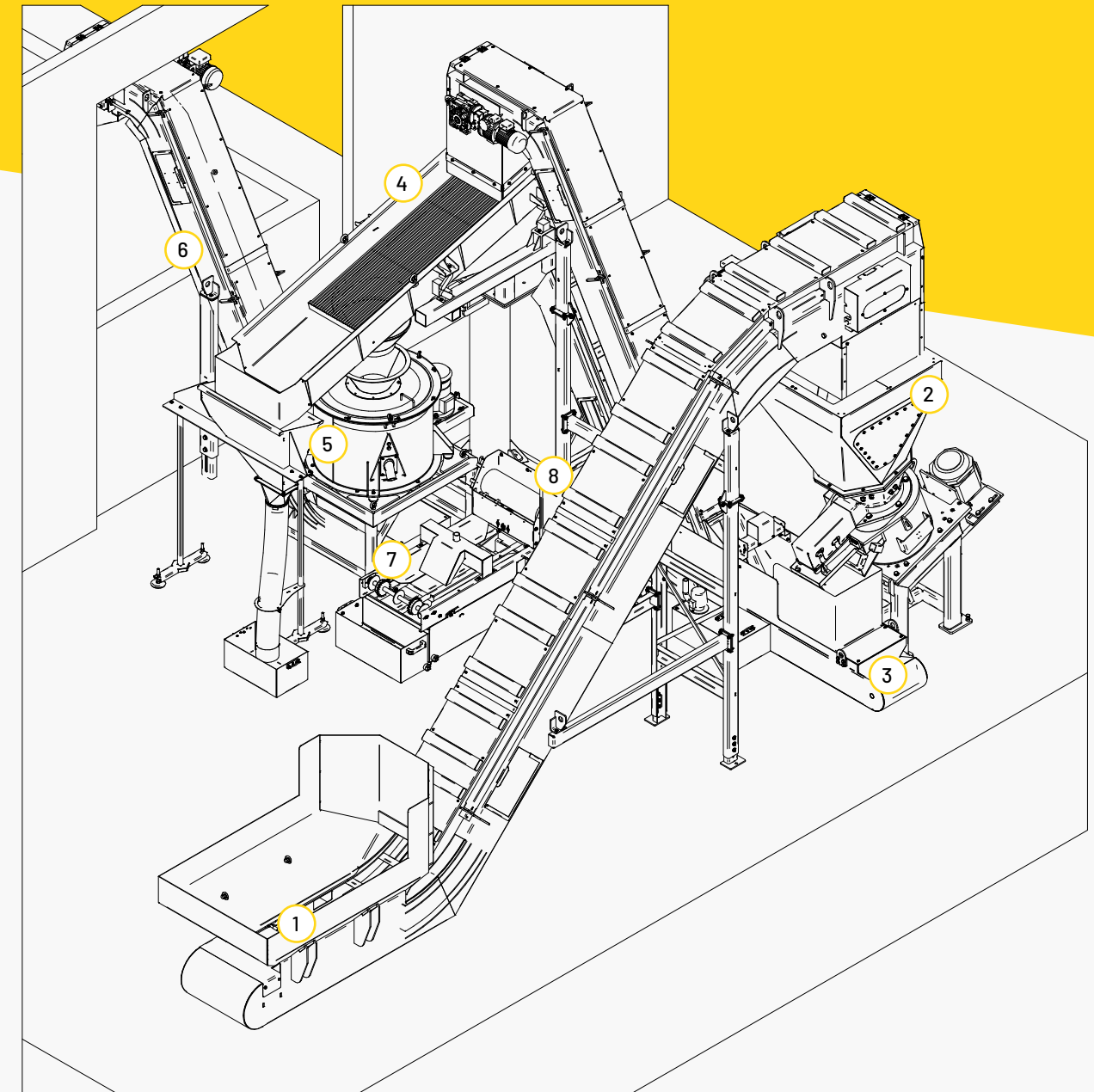
LOW PRODUCTION SHORT METAL CHIPS

- 1 Hopper + Infeed conveyor
- 2 Vibrating screen
- 3 Centrifuge
- 4 Output conveyor
- 5 Rotatory distribution tray
- 6 Filter
- 7 Electrical cabinet



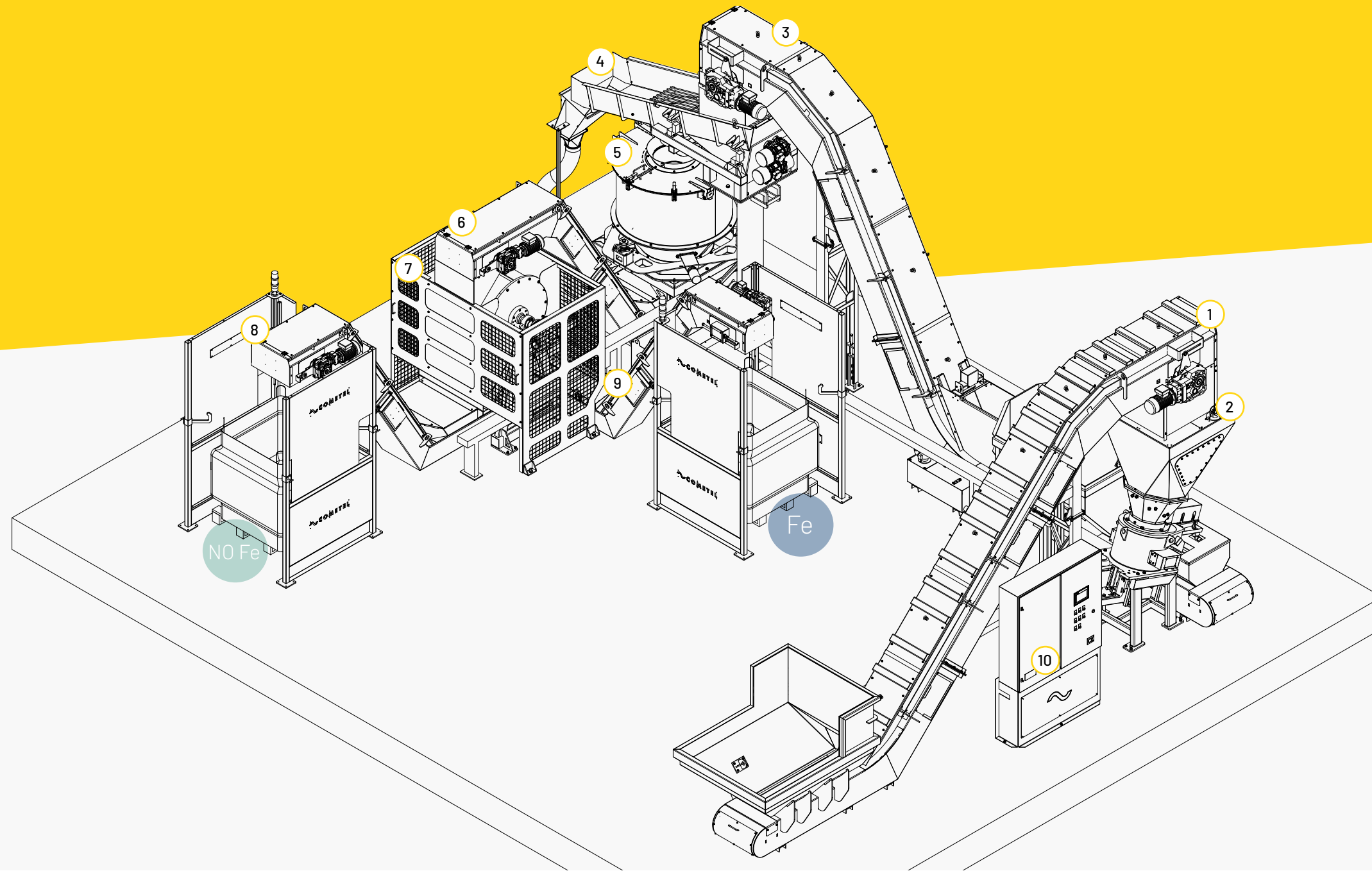
HIGH PRODUCTION SHORT METAL CHIPS

- 1 Spindle hopper
- 2 Infeed conveyor
- 3 Gable hopper
- 4 Conveyor
- 5 Centrifuge
- 6 Output conveyor
- 7 Electrical cabinet
- 8 Gable hopper



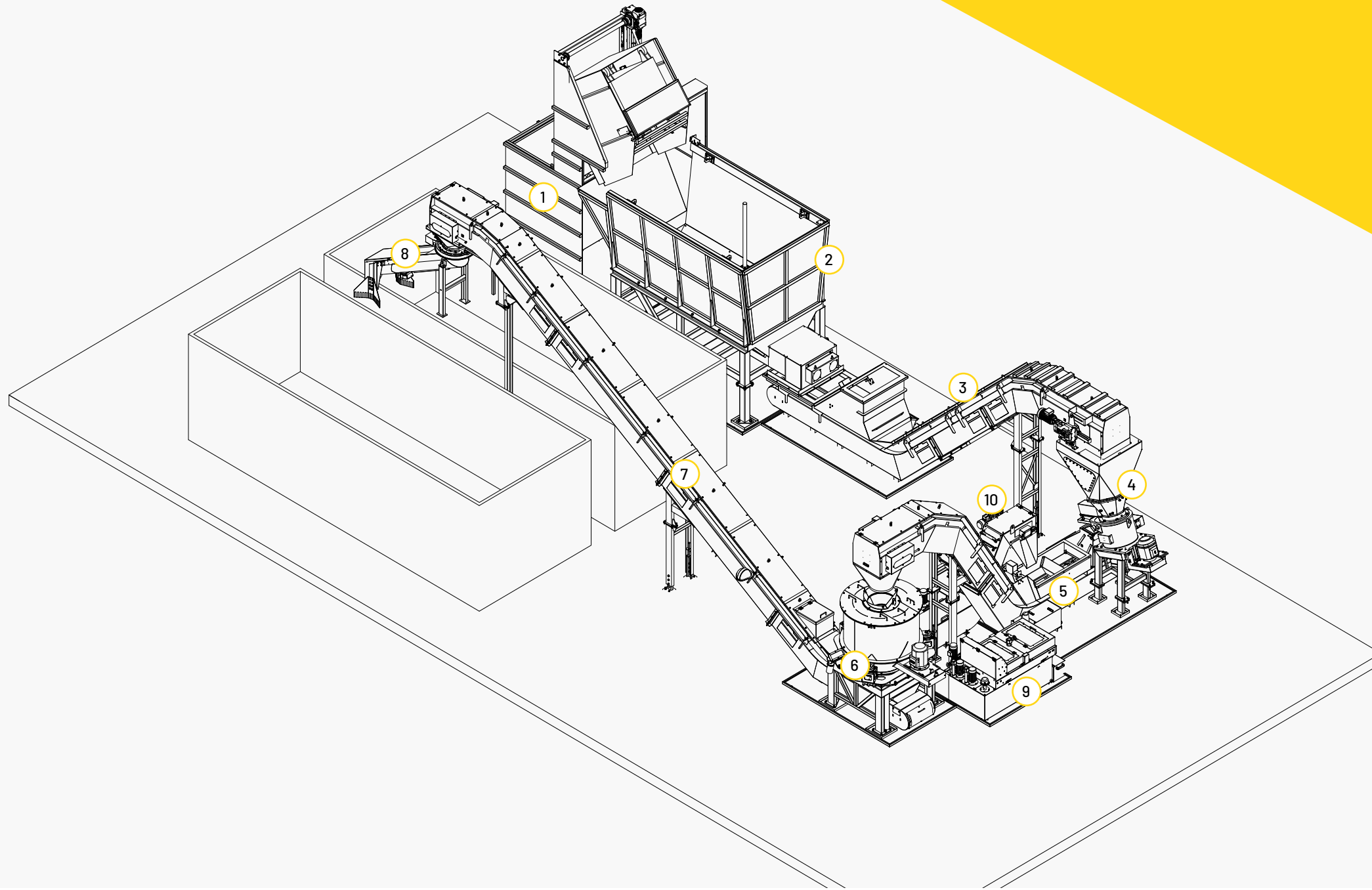
MEDIUM PRODUCTION LONG METAL CHIPS

- 1 Hopper + Infeed conveyor
- 2 Crusher
- 3 Conveyor
- 4 Vibrating screen
- 5 Centrifuge
- 6 Output conveyor
- 7 Filter
- 8 Electrical cabinet



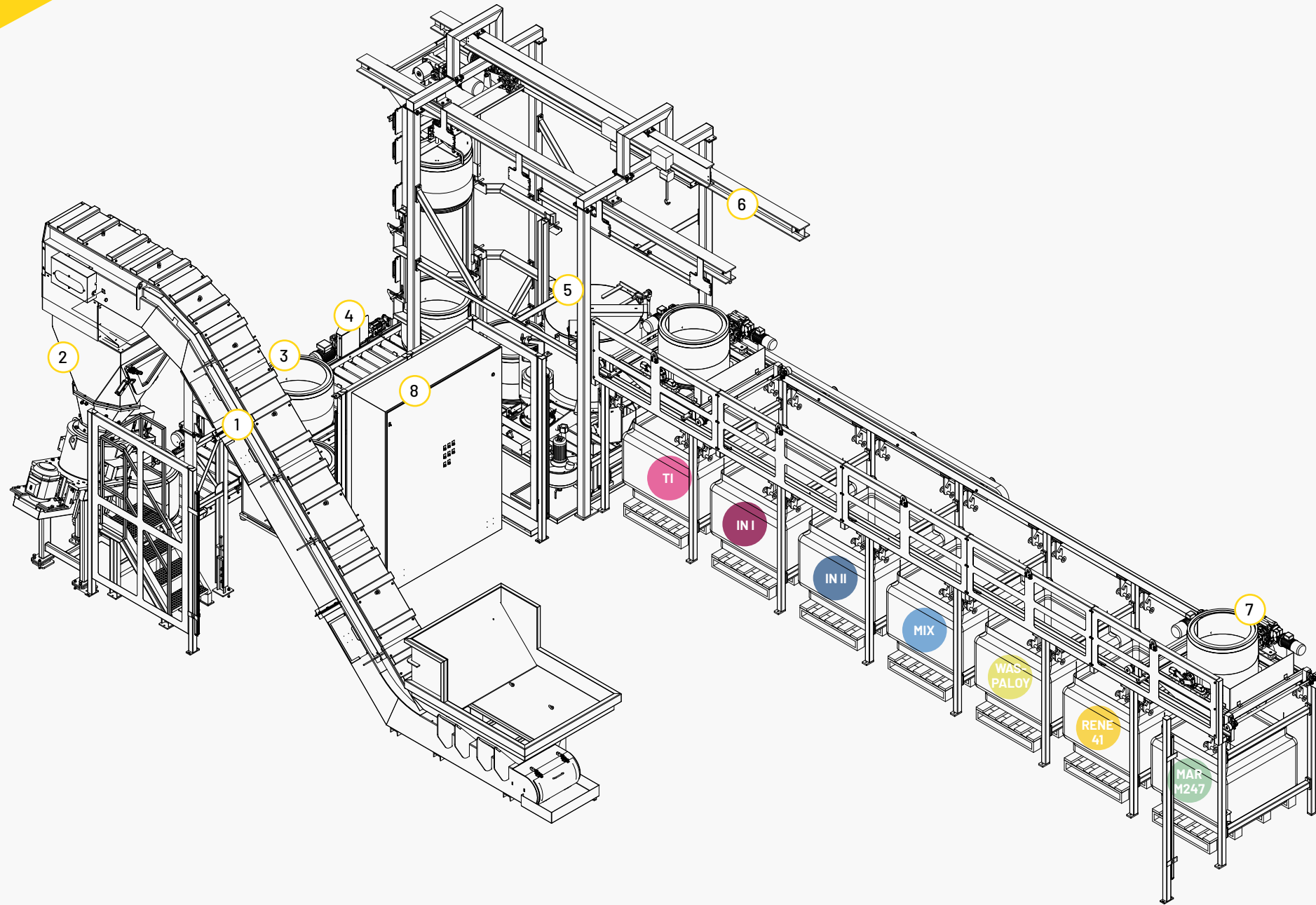
HIGH PRODUCTION SHORT AND LONG METAL CHIPS

- 1 Hopper + Infeed conveyor
- 2 Crusher
- 3 Hopper + Infeed conveyor
- 4 Vibrating screen
- 5 Centrifuge
- 6 Conveyor
- 7 Magnetic drum
- 8 Output conveyor non-ferrous materials
- 9 Ferrous materials output conveyor
- 10 Electrical cabinet



HIGH PRODUCTION LONG METAL CHIPS

- 1 Elevating - tipping skip
- 2 Spindle hopper
- 3 Infeed conveyor
- 4 Crusher
- 5 Conveyor
- 6 Centrifuge
- 7 Output conveyor
- 8 Rotatory distribution tray
- 9 Filter
- 10 Self-cleaning tank with dredger



DIFFERENT ALLOY LONG METAL CHIPS

1 Hopper + Infeed conveyor

3 Centrifuge drum

5 Centrifuge

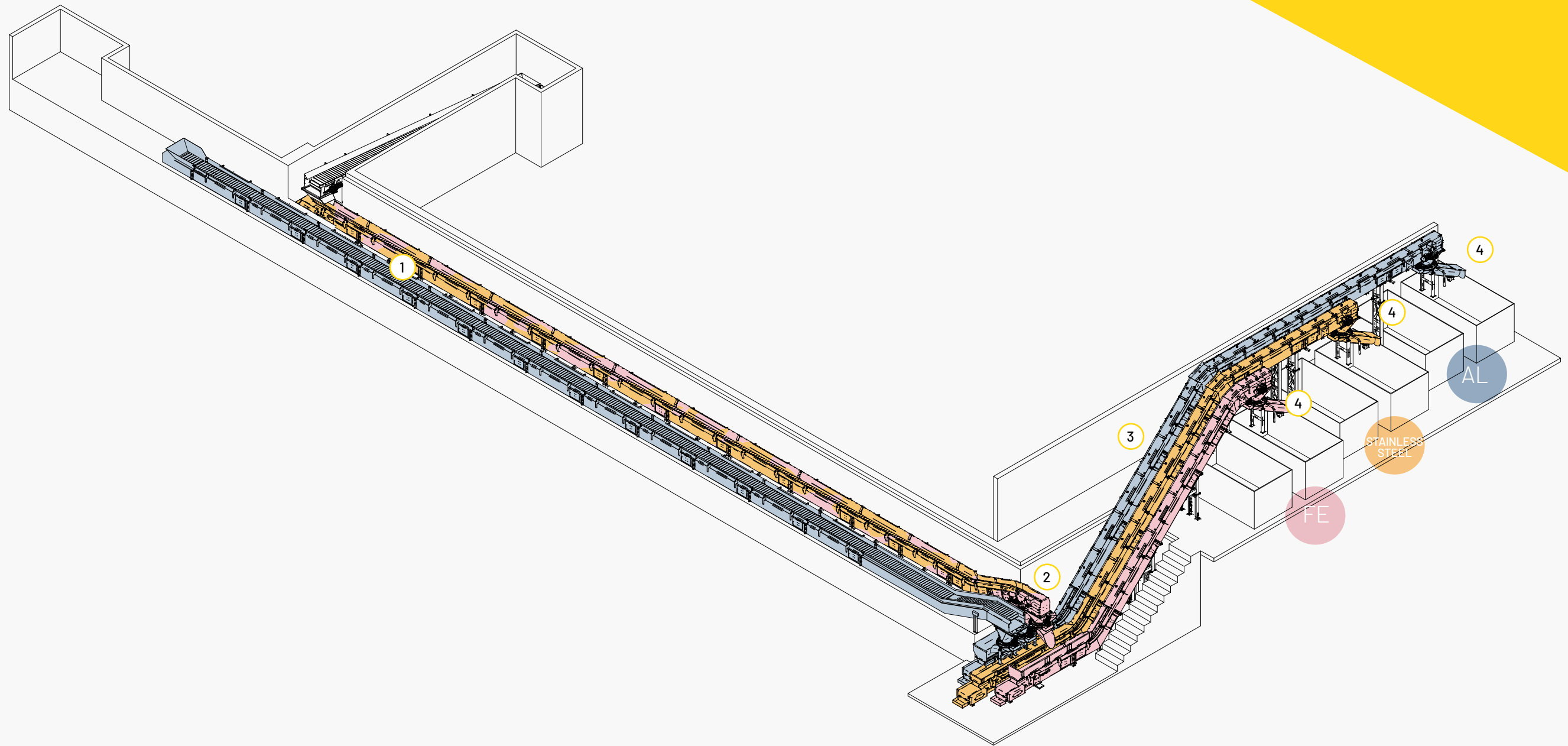
7 Tipper

2 Crusher

4 Roller table

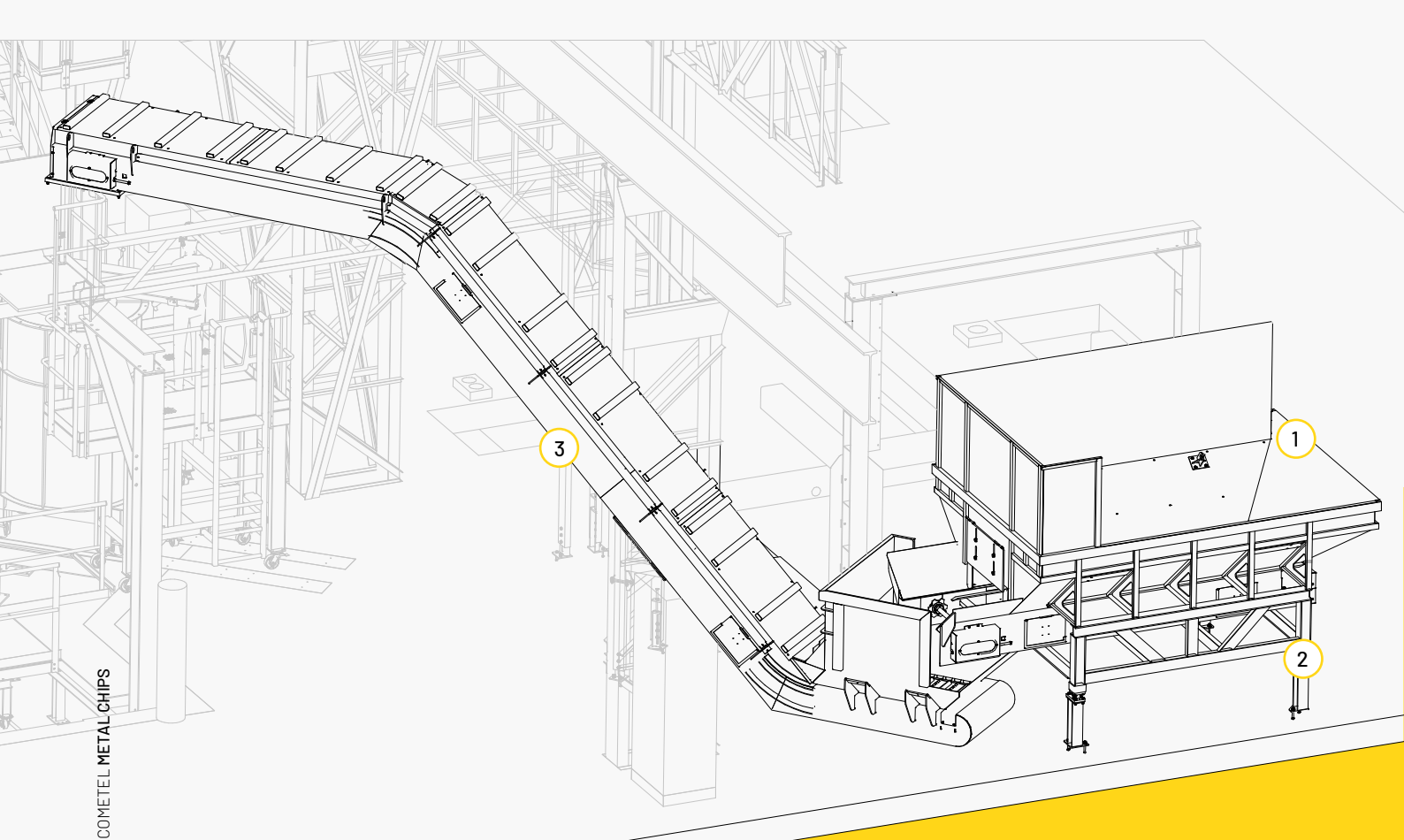
6 Handler

8 Electrical cabinet



TRANSPORT OF METAL CHIPS IN DIFFERENT MATERIALS

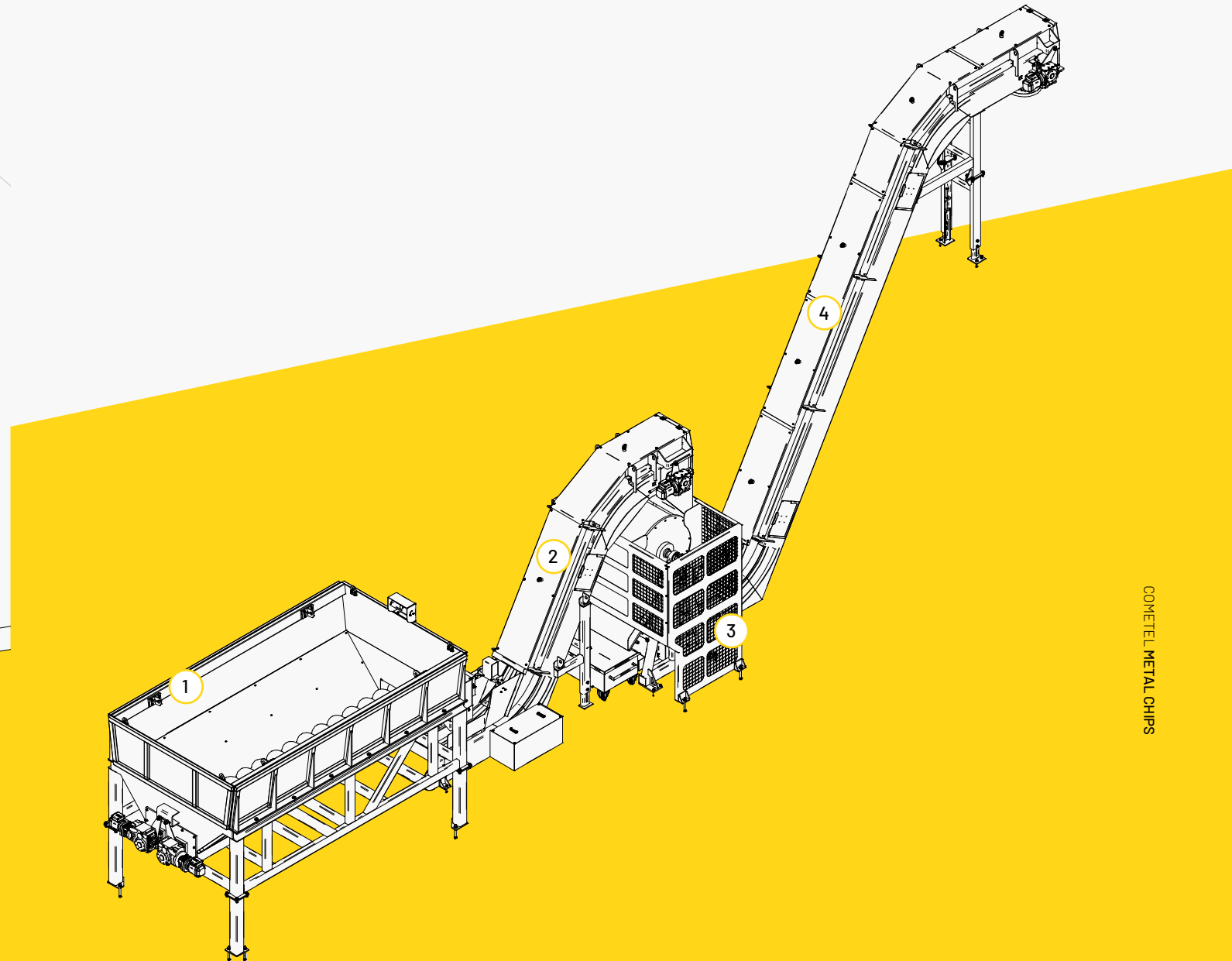
- 1 Infeed conveyor
- 2 Rotatory distribution tray
- 3 Output conveyor
- 4 Rotatory distribution tray



COMETEL METAL CHIPS

STORAGE, WEIGHING AND TRANSPORT OF METAL CHIPS

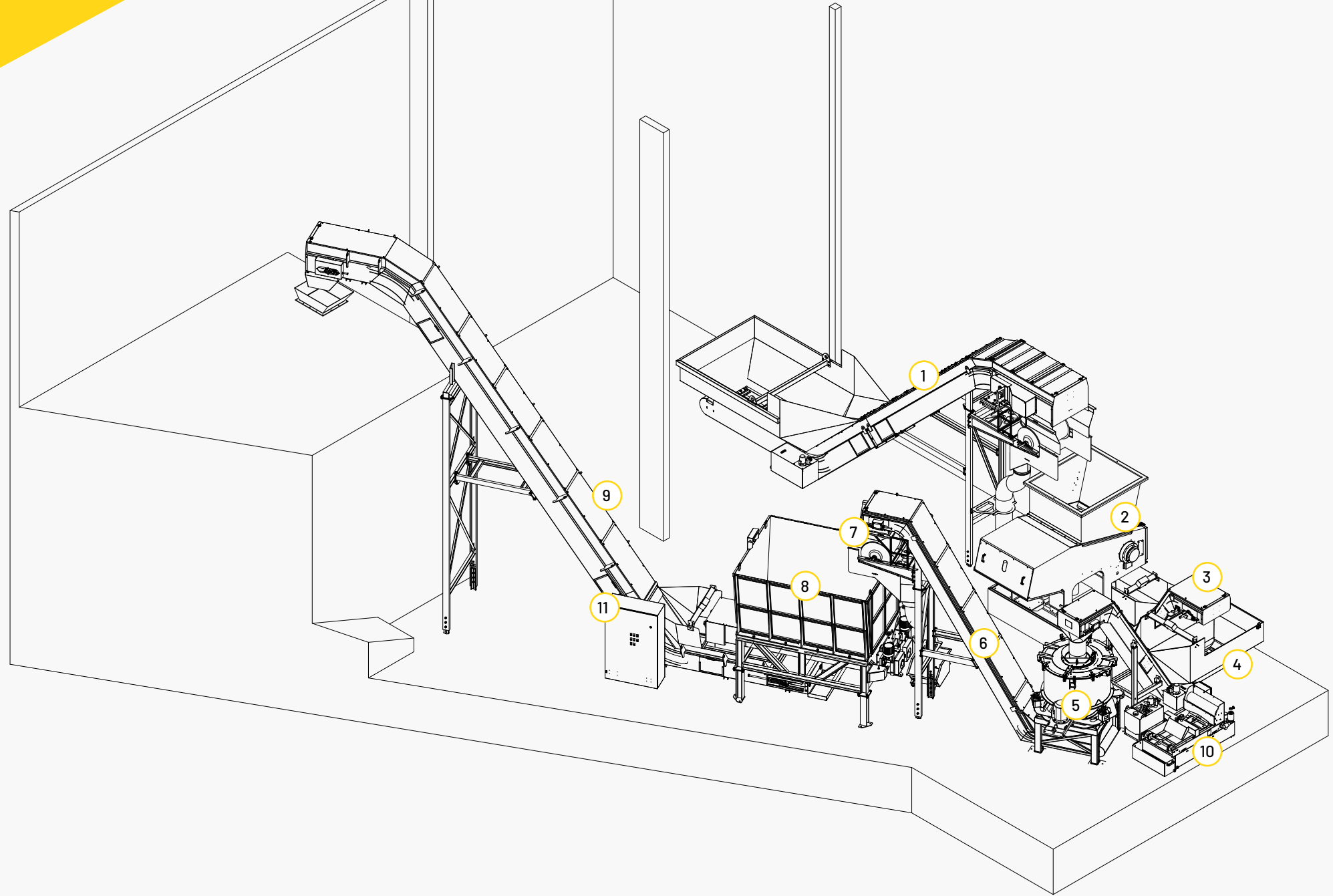
- 1 Storage hopper
- 2 Weighing system
- 3 Infeed conveyor
Furnace/Dryer



COMETEL METAL CHIPS

STORAGE, SEPARATION AND TRANSPORT OF METAL CHIPS

- 1 Spindle hopper
- 2 Conveyor
- 3 Magnetic drum
- 4 Infeed conveyor
Furnace/Dryer



PRE-TREATMENT OF METAL CHIPS

1 Hopper + Infeed conveyor

3 Conveyor

5 Centrifuge

7 Magnetic drum

9 Infeed conveyor
Furnace/Dryer

11 Electrical cabinet

2 Crusher

4 Conveyor

6 Conveyor

8 Spindle hopper

10 Filter

TIPPING SKIPS

The Skip enables fully automatic loading of the line once we have deposited the trolley full of metal chips on it. The Skip raises the trolley and then tips the metal chips to the next step of the process.



FEED HOPPERS

These depositing systems are designed for storing the metal chips and at the same time facilitating their movement towards the conveyor.



SPINDLE HOPPER

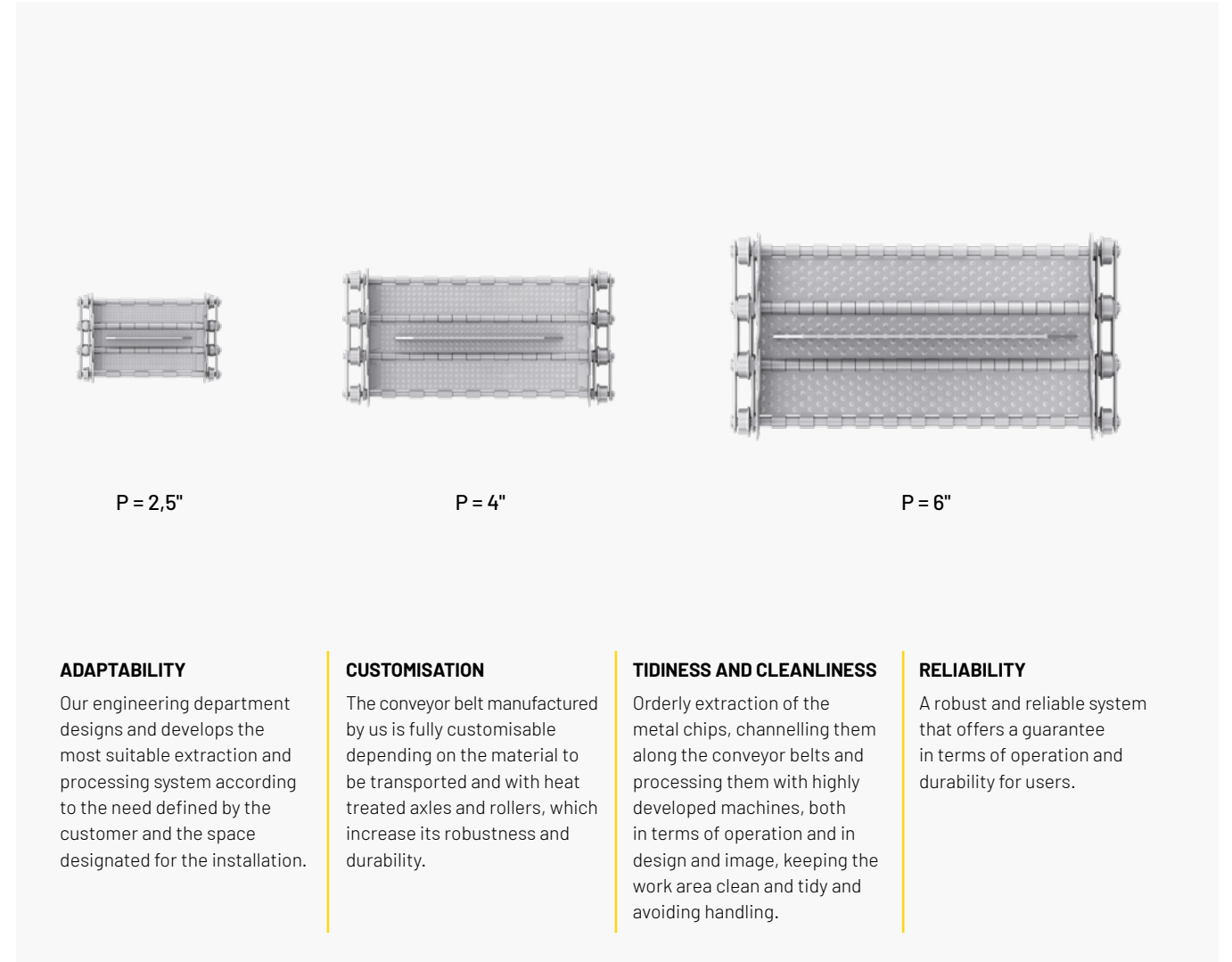
Allows storage of a large volume of material and its movement towards the next process.

STORAGE HOPPER WITH WEIGHING SYSTEM

Allows storage and movement of the material, according to the infeed requirement of the next process.

CONVEYORS

The metal hinge conveyors are suitable for both extraction of metal chips from machines, and for transport throughout the production plant to the point for pick-up or processing of the material.



P = 2,5"

P = 4"

P = 6"

ADAPTABILITY

Our engineering department designs and develops the most suitable extraction and processing system according to the need defined by the customer and the space designated for the installation.

CUSTOMISATION

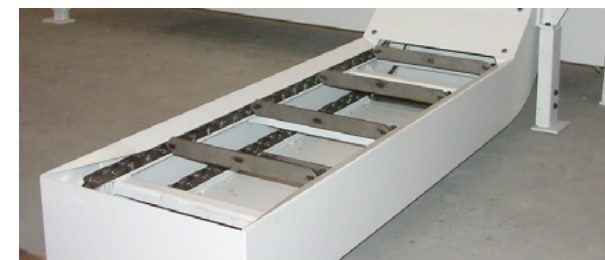
The conveyor belt manufactured by us is fully customisable depending on the material to be transported and with heat treated axles and rollers, which increase its robustness and durability.

TIDINESS AND CLEANLINESS

Orderly extraction of the metal chips, channelling them along the conveyor belts and processing them with highly developed machines, both in terms of operation and in design and image, keeping the work area clean and tidy and avoiding handling.

RELIABILITY

A robust and reliable system that offers a guarantee in terms of operation and durability for users.



SCRAPER CONVEYORS

The scraper conveyors are used for transporting short metal chips. These are made up of two lateral chains to which the blade or scraper is adapted, suitably sized, through which the metal chips are dragged along the length of the conveyor housing.

CRUSHERS

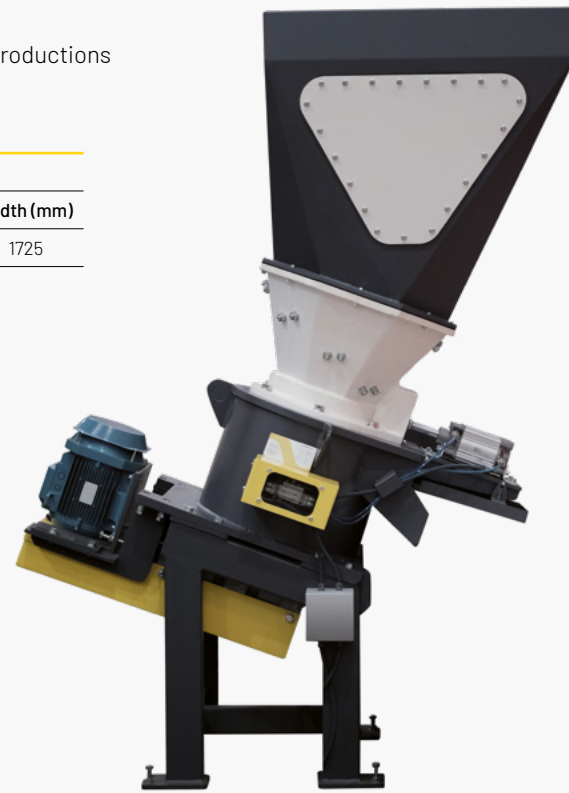
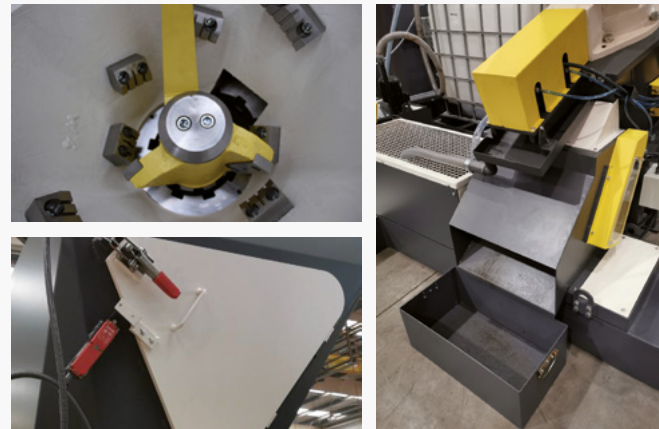
The crushing machines are used for crushing long metal chips or those in the form of skeins, with the function of reducing their volume and preparing the material for subsequent centrifuging and briquette making, where applicable.

VERTICAL AXIS

It is applied in installations for collecting complete plants or high productions of metal chips.

VERTICAL METAL CHIP CRUSHERS

	Crushing capacity (Kg/h)	Power (kW)	Height (mm)	Width (mm)
C-500-TRIT	400-1200	7.5	2290	1725

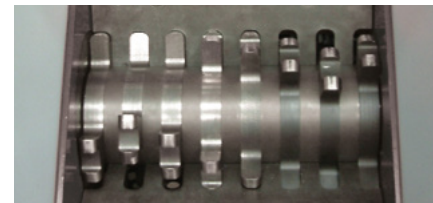


HORIZONTAL AXIS

Applied to cases where the crushing is to take place at the output from the machine.

HORIZONTAL METAL CHIP CRUSHERS

	Crushing capacity (Kg/h)	Power (kW)	Height (mm)	Width (mm)
C-300-1H-TRIT	200-300	2.2 - 4	725	855
C-500-1H-TRIT	300-400	2.2 - 4	925	855
C-400-2H-TRIT	Up to 500	Up to 5.5	1050	820



1 AXIS

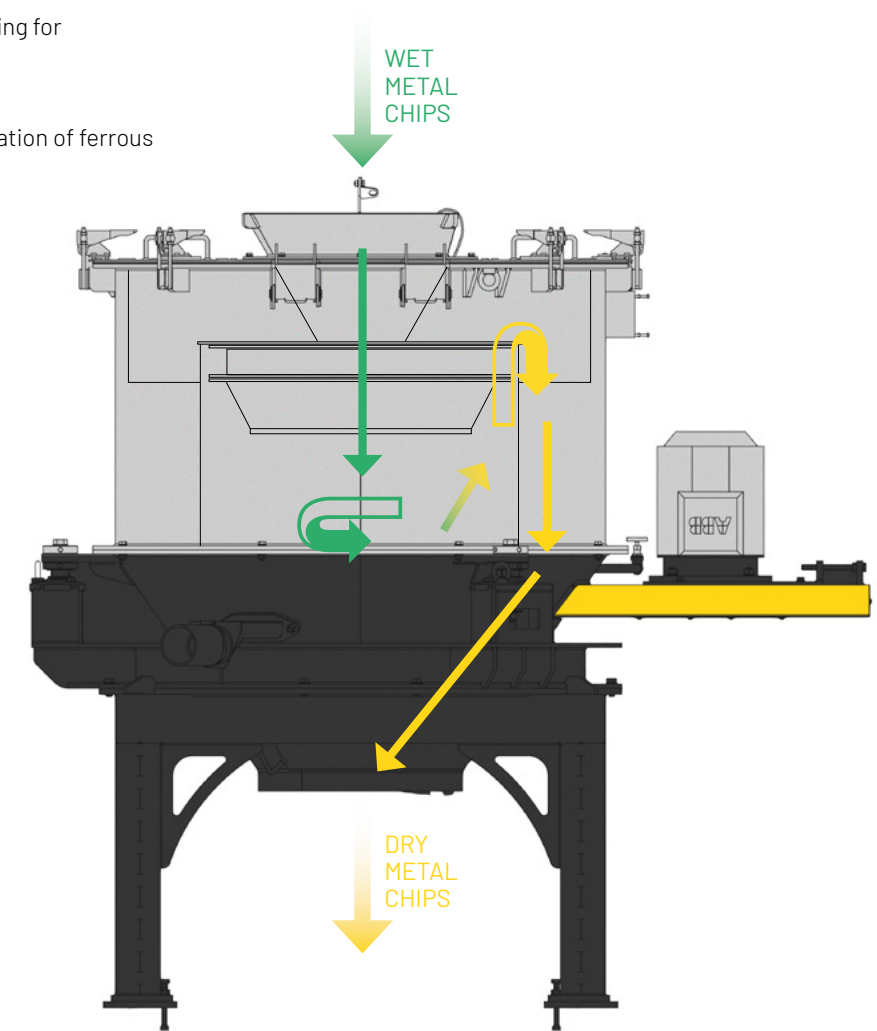
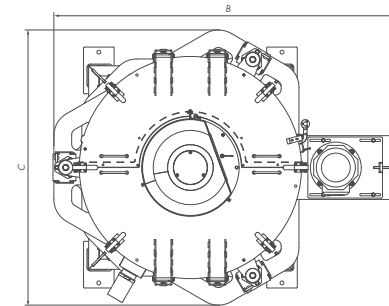
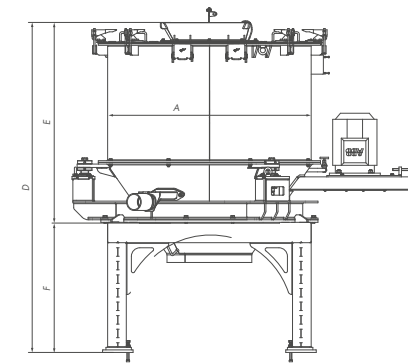


2 AXES

CENTRIFUGES

For separation of the coolant that has adhered to the metal chips from machining or crushing processes. After the centrifuging process a humidity level of less than 3% is achieved and several advantages are obtained, both financial and environmental:

- A metal chip with greater value either for subsequent sale or melting.
- Recovery of coolants used in manufacturing for subsequent reuse.
- Conversion of hazardous into inert waste.
- Efficiency in subsequent magnetic separation of ferrous and non-ferrous materials.



METAL CHIP CENTRIFUGES

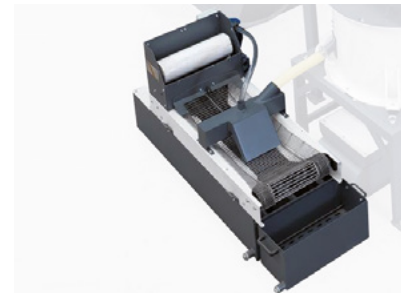
	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Production (kg/h)	Power (kW)
C-400-CCC	810	1360	1050	1500	800	700	100-600	2.2
C-500-CCC (hydraulic system)	980	1780	1260	1970	1035	935	600-1500	5.5
C-650-CCC	1200	2080	1650	2000	1195	805	1500-4000	5.5

FILTERS

Cometel filtering equipment is used for filtering and recovery of cutting fluids. The liquid is taken to a diffuser where it is distributed over a filtering fabric that retains the particles contained in the fluid.

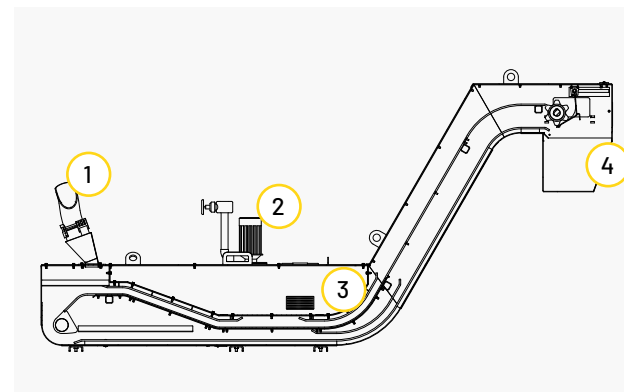
GRAVITY FILTERS

	A	B	Flow rate l/min
C-100-FP	1510	810	100



SELF-CLEANING TANK WITH DREDGER

Located next to the centrifuge, its function is to drag the fine particles that are dissolved in the liquid coming from the conveyors and the centrifuging process. The dredger pours the sludge stored on the infeed conveyor into the centrifuge, starting the centrifuging process again.



- 1 Input tube
- 2 Tank with motor pump
- 3 Scrapers
- 4 Output hopper

SEPARATING EQUIPMENT

VIBRATING SCREEN

The function of the separating screen is to avoid the parts, tips of bars or other foreign bodies that are initially present in the metal chips entering the centrifuge.



WITH PEDESTAL



SUSPENDED

MAGNETIC DRUMS

Magnetic drums are used to separate ferromagnetic materials from other types of waste, with various models available depending on the volumes of material to be treated.

- Before the furnace/dryer: Ferrite & Neodymium.
- After the dryer: Samarium & Cobalt.



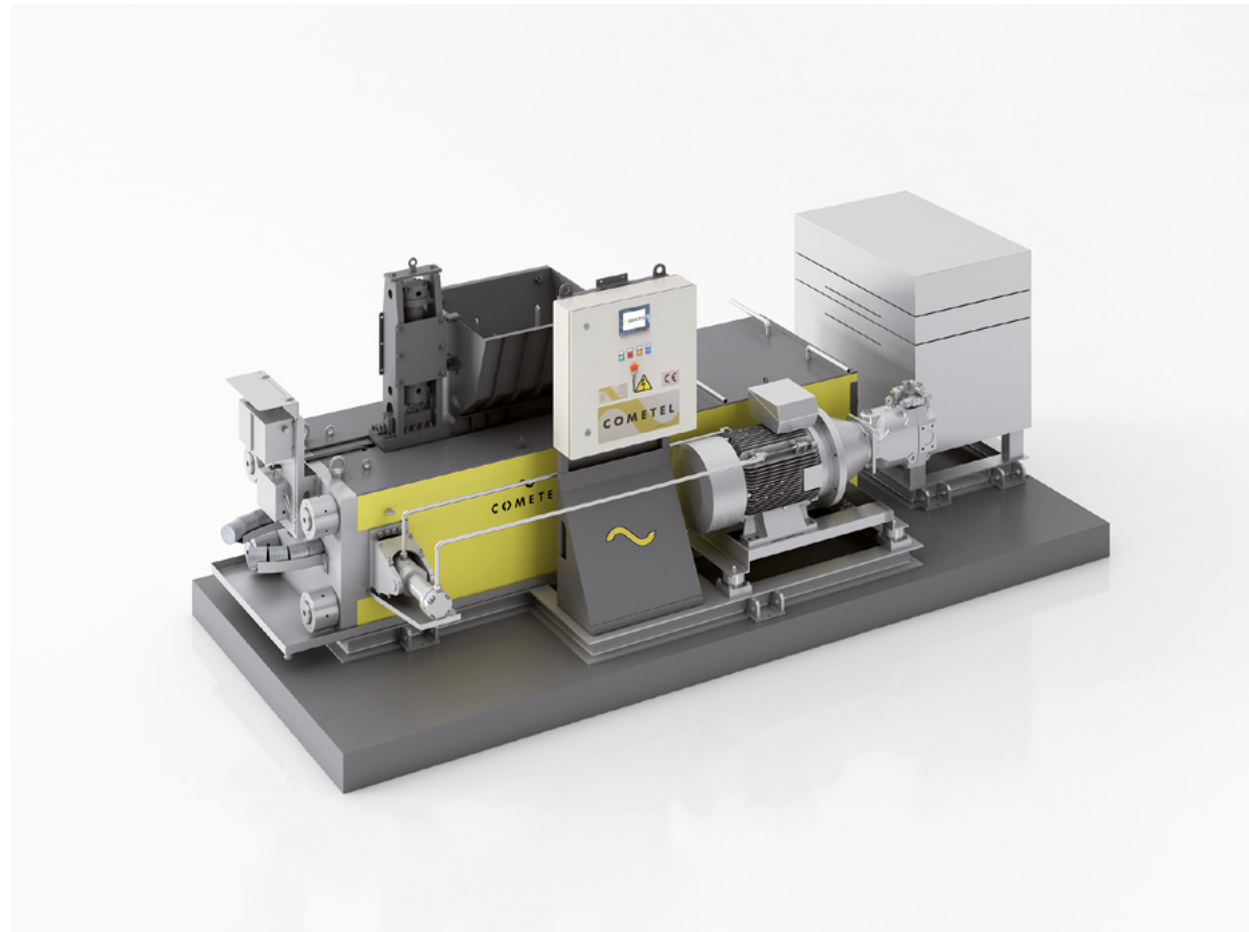
OVERBAND

The overbands are used to automatically separate ferromagnetic materials from various other materials: industrial and construction waste, electrical components, aluminium, wood, etc.



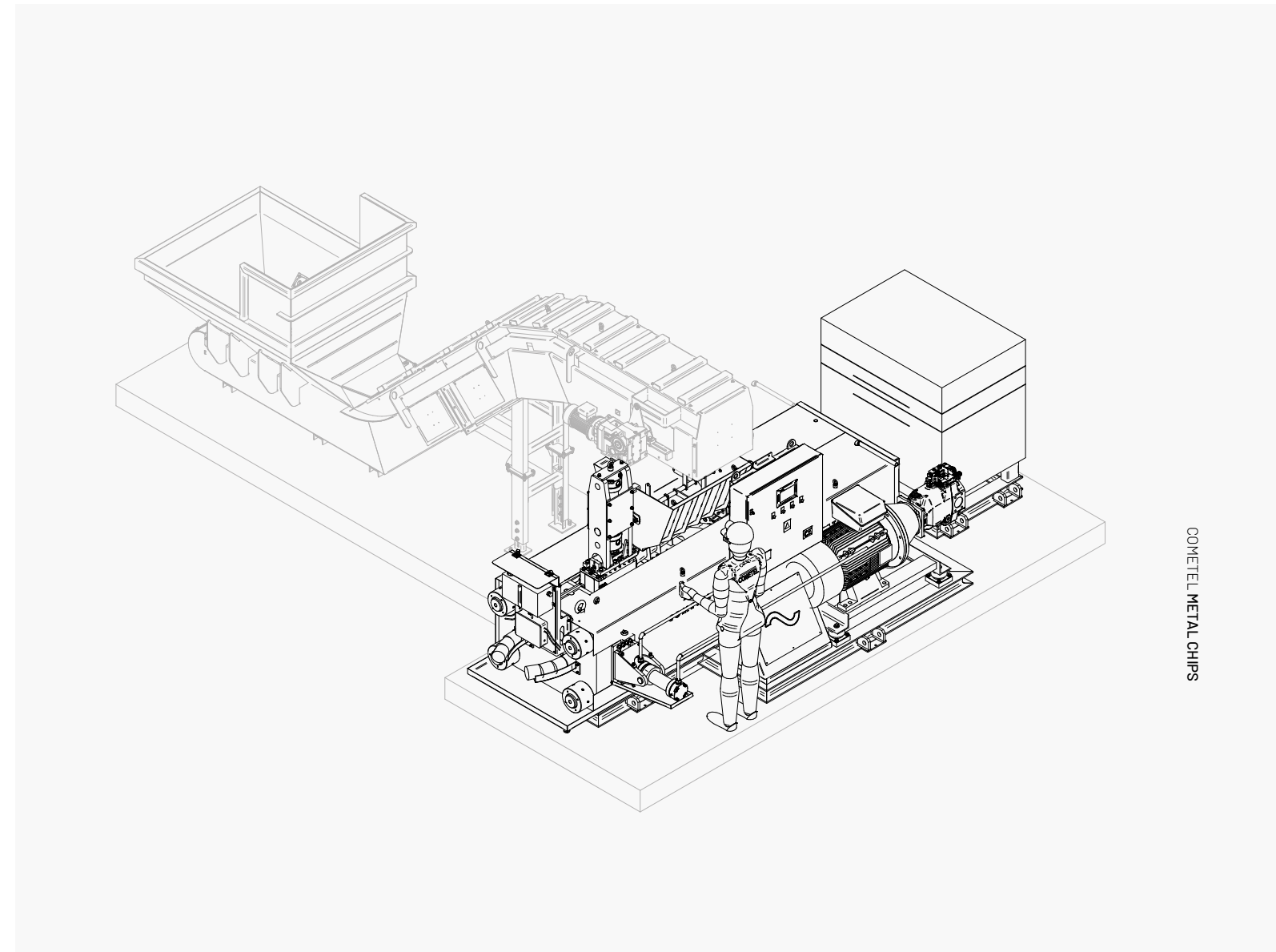
BRIQUETTING MACHINES

The function of the briquetting machine is to compact the loose metal chips to form briquettes, reducing the volume and separating during this process the cutting fluids that can be recovered for later reuse in machining.



COMETEL METAL CHIPS

METAL CHIP BRIQUETTING MACHINE					
Model	Pressure	Power	Briquette production/min	Briquette size	Plant layout
C-2000-BRIQ	+1500kg/cm ²	30kW	4-6u/min	125mm x 60mm	3500 x 1800 x 2100mm
C-4000-BRIQ	+4000kg/cm ²	75kW	3-4u/min	Ø100mm	5000 x 2000 x 1800mm



COMETEL METAL CHIPS

	C-2000-BRIQ		C-4000-BRIQ	
	Production (kg/h)	Density (kg/dm ³)	Production (kg/h)	Density (kg/dm ³)
Aluminium	250-500	2-2.3	300-600	2,3-2.6
Steel	250-400	5-5.5	800-1000	5-5.5
Cast iron	250-400	5-5.5	800-1000	5.2-5.8
Copper-Bronze	250-500	5-6.5	800-1200	5-6.5

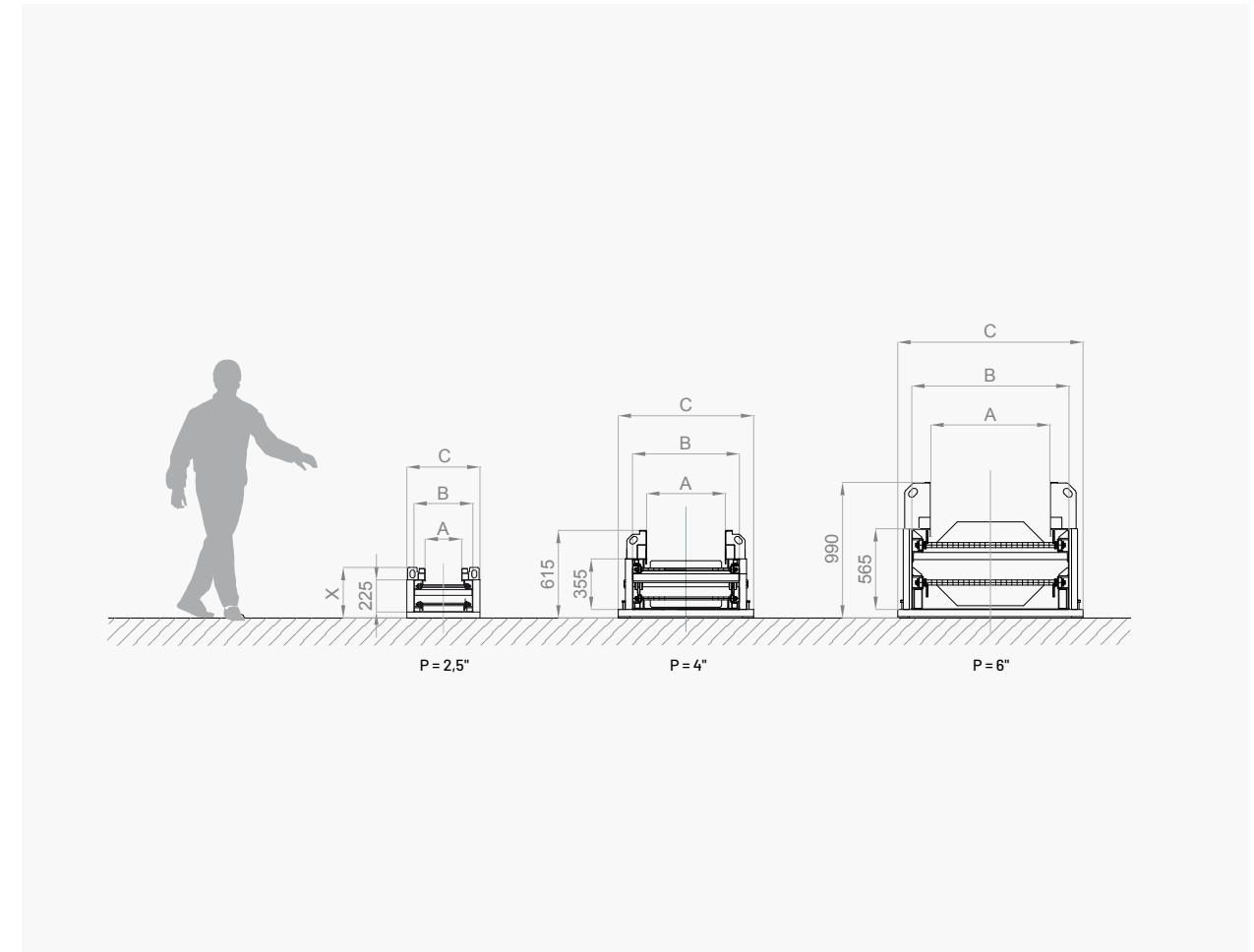
DISTRIBUTION TRAYS

The rotatory trays are used for optimal distribution of the treated metal chips in the storage containers. Position detectors are included to regulate the turning of the tray and achieve even distribution of the material along the container.



COMETEL METAL CHIPS

TECHNICAL TABLE



COMETEL METAL CHIPS

CONVEYORS P = 2,5"			
	A	B	C
C-300-CH	255	415	450
C-450-CH	405	565	600
C-600-CH	555	715	750
C-750-CH	705	865	900
C-900-CH	855	1015	1050
C-1050-CH	1005	1165	1200
C-1200-CH	1155	1315	1350

CONVEYORS P = 4"			
	A	B	C
C-300-CH	250	450	600
C-450-CH	400	600	750
C-600-CH	550	750	900
C-750-CH	700	900	1050
C-900-CH	850	1050	1200
C-1050-CH	1000	1200	1350
C-1200-CH	1150	1350	1500

CONVEYORS P = 6"			
	A	B	C
C-600-CH	535	805	950
C-750-CH	685	955	1100
C-900-CH	835	1105	1250
C-1050-CH	985	1255	1400
C-1200-CH	1135	1405	1550
C-1500-CH	1435	1705	1850





Smart solutions for transport Intelligent solutions for the transport and processing of scraps from stamping, metal chips from machining and scrap metal.



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