



# **APRON – OVERLAPPING PLATES CONVEYORS**

**CONVEYORS WITH PLATES CONNECTED  
TO EACH OTHER THANKS TO A SPECIAL  
GEOMETRIC JOINT**

**WITHOUT CONNECTING PINS**

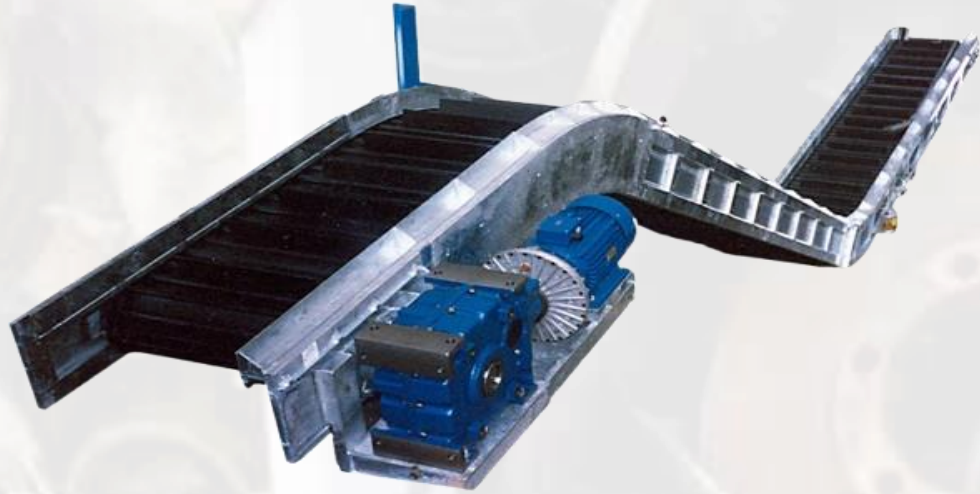
**TO BE STURDIER AND EFFICIENT EVEN  
IN THE MOST SEVERE OPERATING  
CONDITIONS**

**YOUR EXPERTS  
IN METAL CHIPS**



## TECHNICAL DESCRIPTION AND OPERATION

The plates of **APRON conveyor series** have a profile that allows them to rotate along curves without the need for a connecting pins, and are connected to the chain with bolts. So, material **can't either fall or get wedged between plates thanks to the absence of space, ensuring strength and efficiency even under the most severe operating conditions and with high load capacities.**

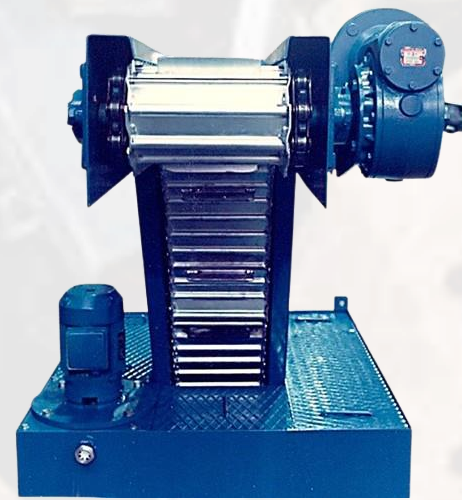


APRON belt conveyors can also be conveniently used to realize **centralized systems** consisting of a network of very long evacuators, for example to feed melting or reheating furnaces.

These types of conveyors are composed of a frame, inside which there's a sliding belt with steel plates connected to a double chain with a **50- or 100-mm pitch**, depending on the capacity or the type of material to be transported.

**TA50 frame** is made of **electro-welded sheet metal** and TA100 one is made of **profiled steel** instead to make the structure more solid and robust. All frames are also equipped with **eyebolts** screwed at appropriate distances to facilitate conveyor lifting and handling.

**Side tabs welded** onto the plates protect chain and sliding rollers from material leaks, that would accelerate their wear; **plates** have a special shape allowing them to keep joined to each other, forming a solid belt and allowing free rotation on curved sections.



**TA50** conveyors with 50 mm-pitch chain are used to transport **medium-weight materials** such as chips, swarf, and hot metal parts from forging or foundry processes. If necessary, they can also include an **integrated coolant collection tank.**

**TA100** conveyors with 100 mm-pitch chain are used on long paths to transport **heavy and burdensome materials**, such as sheet metal scraps, high-temperature parts from forging or foundry processes, sprues, laser or plasma cutting pieces, swarf from press forming processes, building parts, bricks and cement products, waste or recyclable materials such as paper, cardboard, plastic, aluminum, scrap metal and similar.

All conveyors are equipped with **safety guards** in compliance with current legislation. In particular, drive heads and frames are covered, so that no moving parts of the conveyor come into contact with operators.

A **motor protection switch** is also included to protect gearmotor from any overloads.





**APRON conveyors** can have a **loading hopper** of various sizes for charging and storing material to be transported, moreover its frame can be equipped with **upper** and **lower covers**. On conveyors with curves, a certain number of **flights** are usually welded at appropriate distances to let material to be lifted even on inclined sections, thus avoiding damaging backward falls.

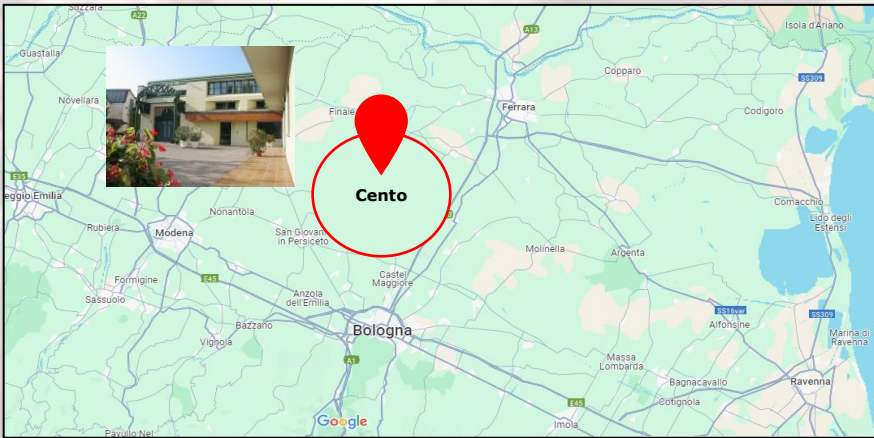
These systems can also be equipped with the following **optionals**: **side walls** bolted to the frame and properly shaped to prevent material from leaking out of the conveyor, a **brush** for discharge to remove material residue from belt, **anti-sway side guides** to stabilize belt during its drive especially for long sections and one or more **liquid-tight joints** to divide the system and easily disassemble it.

If coolant is present, it is possible to equip conveyor with **perforated plates** to let fluid flow into the lower part inside the frame and then reach an **integrated tank with pump and levels** under conveyor inclined section where it is collected.

Another available option is **spray lubrication system** which reduces friction on drive chains safeguarding their life even without coolant.

Finally, upon request, it is possible to supply an interfaceable **junction box** or a **logo electrical panel** that can manage start-stop-reverse commands, motor protection switch and emergency button for power supply interruption.

SERIES	MODELS	
APRON BELT COVEYOR	TA50	TA100
CHAIN PITCH (mm)	50	100
ROLLER (mm)	31	40
MIN BELT CLEAR WIDTH (mm)	150	300
MAX BELT CLEAR WIDTH (mm)	700	1800
ELECTRO-WELDED SHEET METAL FRAME	✓	-
PROFILED STEEL FRAME	-	✓
OVERLAPPING STEEL PLATES	✓	✓
LIFTING EYEBOLTS	✓	✓
WELDED SIDE TABS	✓	✓
MOTOR PROTECTION SWITCH	✓	✓
SAFETY GUARDS	✓	✓
LOADING HOPPER	optional	optional
UPPER COVER	optional	optional
LOWER COVER	-	optional
FLIGHTS	optional	optional
SIDE WALLS	optional	optional
BRUSH	optional	optional
ANTI-SWAY SIDE GUIDES	-	optional
LIQUID-TIGHT JOINT	optional	optional
PERFORATED PLATES	optional	-
INTEGRATED TANK WITH PUMP AND LEVELS	optional	-
SPRAY LUBRICATION SYSTEM	-	optional
ELECTRICAL JUNCTION BOX	optional	optional
LOGO ELECTRICAL PANEL	optional	optional



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## Products

- Centralized screw systems for metal chips transport
- Centralized pneumatic vacuum systems for metal chips transport
- Chips treatment and oil recovery kits
- **Apron belt conveyors**
- Hinged belt conveyors
- Machine tools evacuators
  - Hinged belt evacuators
  - Screw evacuators
  - DUO evacuators
- Coolant filtration
  - Magnetic filters
  - Gravity band filters
  - Self-cleaning drum filters
  - Centralized filtration systems
- Shredders
  - Single-shaft shredders
  - Double-shaft shredders
  - Vertical shredders
- Centrifuges
- Cart lift dumpers
- Chip storage silos

