



Steel Belt Systems

# Extrusion & Powder Coating Division

## Cooling and Flaking Systems

### Main Characteristics:

SBS Cooling Conveyor is moveable on wheels and equipped with stainless steel belt, which is:

- > Endless welded
- > Quality BERNDORF NICRO 31 (or NICRO 12,1) according to material availability
- > Surface mill finished
- > With n° 2 guiding vee-ropes at 25 mm from the edges
- > Speed: 3÷18 m/min



### Main Technical Parameters:

Model	Capacity* (Kg/h)	Belt dimension (mm)	CC distance (mm)	Cooling length (mm)	Cooling width (mm)	Calender rolls diam. (mm)	Water consumption (m3/h)
600 x 5000	550	600 x 0.8	5000	4000	520	240	5
800 x 5670	900	800 x 1.0	5670	5000	720	240	12.5
1000 x 5670 a	1000÷1200	1000 x 1.0	5670	5000	920	240	12.5
1000 x 5670 b	1200÷1500	1000 x 0.8	5670	5000	920	400	12.5
1500 x 7000	1800÷2000	1500 x 1.0	7000	6300	1400	400	20.0

\*referred to white polyester



- > **Driving station:** in cast aluminum dia. 800 mm, shaft, supports, suitable to be driven by frequency converter

- > **Tension station:** in cast aluminium dia. 650 mm, shaft and sliding supports
- > **Cooling zone:** longitudinal tank made in stainless steel - spray nozzles, internal water pipes in PVC material, belt sliding supports in synthetic auto lubricated material
- > **Frame and finishing:** in carbon steel profiles - epoxy painted 2 + 2 coats, SBS colour turquoise blue RAL 5018 (unless differently agreed)
- > **Process Data:**
  - Water temp.: required 8°C at calendar rolls + cooled roll
  - Water temp.: required 15°-18°C at spray nozzles
  - Flakes temp. at discharge: 35°-40°C

Model	Pulleys	Motor reducer power (kW)	Voltage & Frequency
600 x 5000	3	0.75	400V - 50Hz
800 x 5670	3	1.5	400V - 50Hz
1000 x 5670 a	4	1.5	400V - 50Hz
1000 x 5670 b	4	1.5	400V - 50Hz
1500 x 7000	5	2.2	400V - 50Hz

# Cooling and Flaking Systems

## Calender roll:

- Surface rectified and hard chromium plated
- Water cooled with internal perimetral circulation
- Pneumatically adjustment of calender rollers
- Manual hand wheel for fine thickness regulation
- Motor-reducer 400 V - 50 Hz, suitable to be driven by frequency converter

## Cooled pressure roll:

- With rotating joints and protections
- Water consumption: approx. 1.0 m<sup>3</sup>/h

## Pressure roll: (not cooled)



## Rotating Breaker type Minibreak\*:

- Protecting grids
- Self-breaking electrical motor - 400 V - 6 poles - 50 Hz - IP55 protection
- Movable small container for residual chips collection on the inferior part of breaker assembly
- Execution in stainless steel AISI 304
- Breaker case with completely openable front door for easy and fast cleaning
- Reversible protection grate with additional micro switch for easier access

\* the Minibreak has the advantage to produce smaller and more calibrated flakes, with a better consequent performance of the mills and quality of the final powder

# DME (Double mixed effect) belt cooling conveyor



## Main Characteristics:

Double mixed effect cooling conveyor, equipped with BERNDORF stainless steel belt, standard rotating breaker and intermediate drum dia. 800 mm having stainless steel covering and with internal peripheral water circulation, complete of rotating joints for cooling water's inlet/outlet, suitable for coupling with steel belt (double effect steel / drum). An adapt pneumatic device is acting for drum lifting.

Model	Capacity* (Kg/h)	CC distance (mm)	Calender rolls diam. (mm)	Water consumption (m <sup>3</sup> /h)
1000 x 4800	1500	4800	240	12
1500 x 4800	2300	4800	400	5.5

\*referred to white polyester

## CONTACTS

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