# SERIES INDC/E

#### **BELT FILTER PRESSES**

# **BUILDING RAW MATERIALS – MINING**

Efficient dewatering



www.comec.it



## TASK

Comec-Binder belt filter presses are used for the dewatering of highly diverse types of sludge.

#### SOLUTION

The operation of Comec-Binder belt filter presses is based on continuous mechanical filtration. The sludge is first pressed by two roller-operated filter belts and then mixed in the sludge reactor with a polyelectrolyte flocculant. The sludge is distributed evenly over the width of the belts and pre-dewatered in the gravity zone. In a subsequent step, the sludge cake is turned over, enabling additional water to drain out when the cake is crushed. In the ensuing angle zone, the belts converge and thus exert slight pressure on the sludge to prepare it for entry into the alternating pressure zone. The roller diameters decrease in the direction of the sludge flow and the sludge is subjected to increasing pressure to achieve maximum possible dewatering. At the machine outlet, doctor blades remove the dewatered sludge from the belts, which are subsequently cleaned by high-pressure nozzles. Pneumatic units with sensors guarantee the centering of the belts, tensioned using pneumatic cylinders.

### BENEFIT

Comec-Binder belt filter presses allow for a continuous dewatering process ensuring high throughput and extremely durable filter belts.

| Technical data |                          |               |                         |                          |                          |             |                                       |                        |  |
|----------------|--------------------------|---------------|-------------------------|--------------------------|--------------------------|-------------|---------------------------------------|------------------------|--|
| Туре           | Width of filtering belts | Type of belts | Width of the machine mm | Length of the machine mm | Height of the machine mm | Weight<br>t | Belt drive (kW)<br>(adjustable speed) | Sludge reactor<br>(kW) |  |
| NPC 2000/E     | 2000                     | jointed       | 3100                    | 5520                     | 3000                     | 9,5         | 3                                     | 1,5                    |  |
| NPC 2500/E     | 2500                     | jointed       | 3600                    | 5500                     | 3200                     | 10,8        | 4                                     | 1,5                    |  |
| NPC 3000/E     | 3000                     | jointed       | 4685                    | 6035                     | 3240                     | 11,8        | 4+4                                   | 2,2                    |  |

| Technical data |  |                                      |  |                                    |  |  |  |  |  |
|----------------|--|--------------------------------------|--|------------------------------------|--|--|--|--|--|
| Туре           | $H_2O$ consumption for belt washing at 6 bar $$\rm m^3/h$$ | Air consumption<br>m <sup>3</sup> /h | Dewatering capacity* (quarry sludge)<br>m³/h | Flocculant consumption<br>t/h S.S. |  |  |  |  |  |
| NPC 2000/E     | 15   | 8                                    | 7-14   |                                    |  |  |  |  |  |
| NPC 2500/E     | 25   | 8                                    | 10-17  | according to the type of sludge    |  |  |  |  |  |
| NPC 3000/E     | 30   | 10                                   | 13-21  |                                    |  |  |  |  |  |

\* according to the type of sludge







COMEC offers the opportunity to customize both your equipment and production lines with your desired colours, in order to support your own corporate design.

Features and sizes are not binding and Comec-Binder S.r.l. reserves to effect modifications or improvements for commercial and technical reasons at any moment and without notice.



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