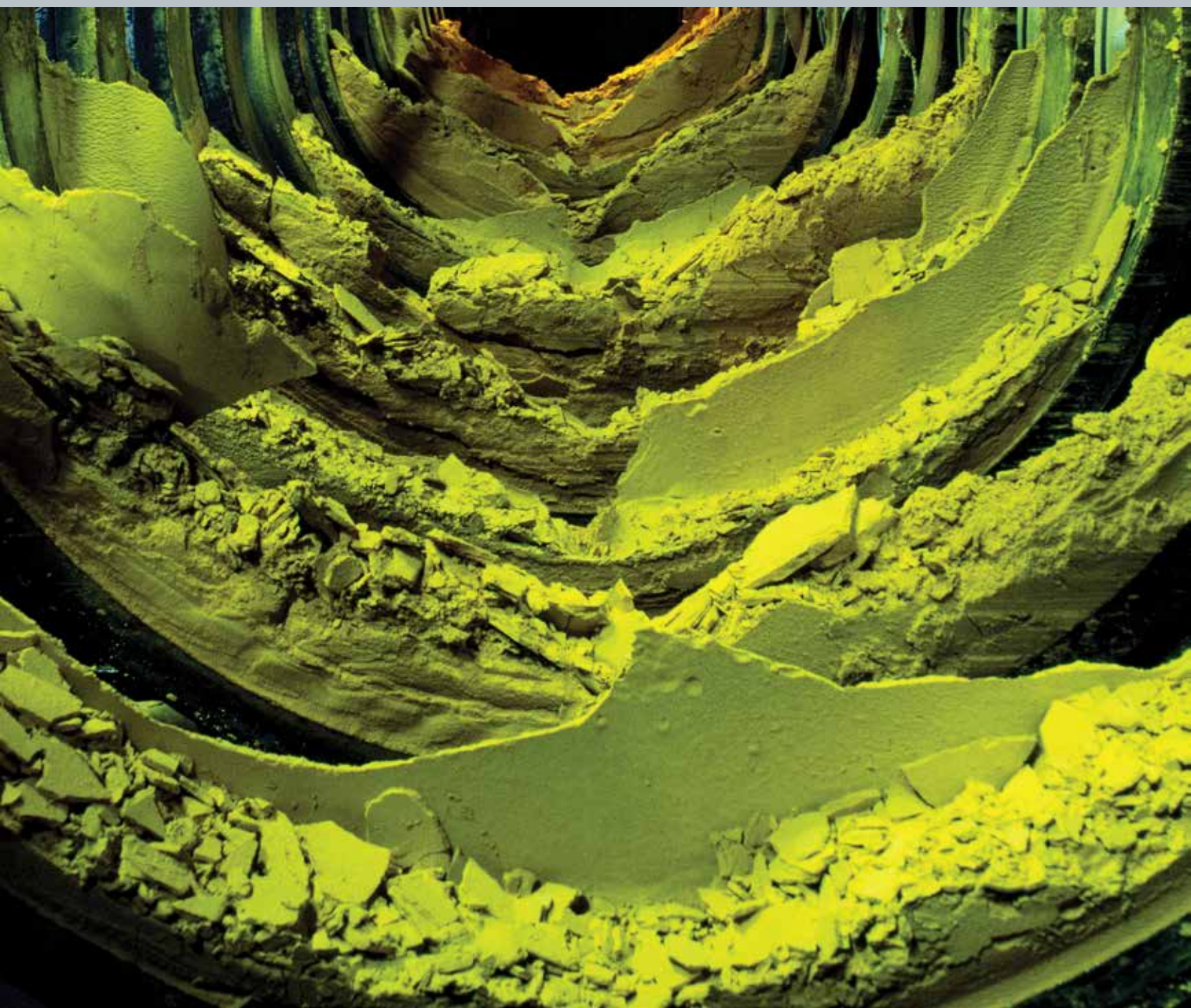
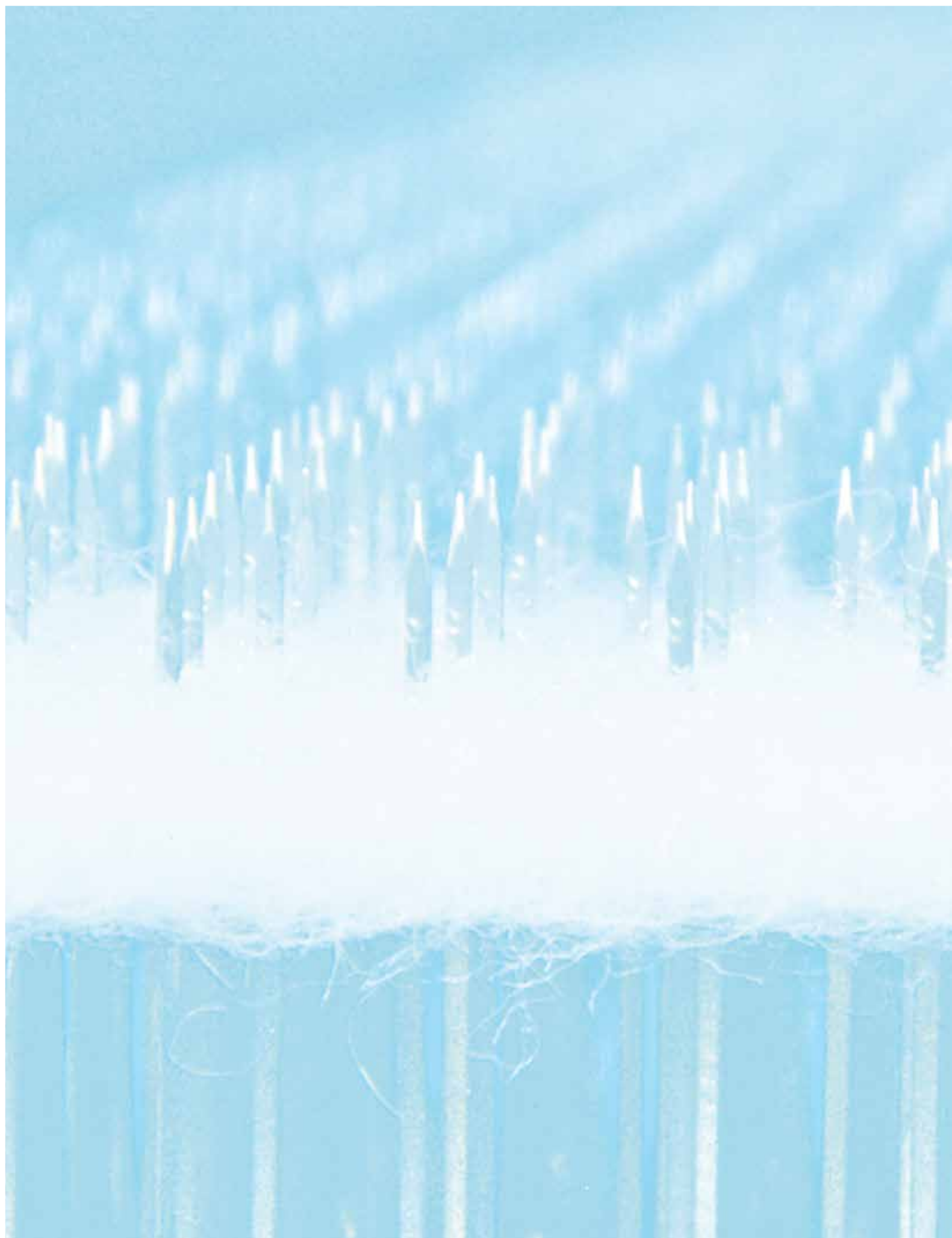


## Seeking A Sustainable Future

### Sludge Dewatering and Polymer Station Catalogue







# CANAMIDEX

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## INTRODUCTION

Canamidex in cooperation with its partners are the provider of world-class quality, latest technology sludge dewatering equipment which are used for water and wastewater treatment, refinery, paper, mine and food industries.

These systems are manufactured based on customer specifications and sludge/ water analysis. All the systems are specified and technically designed at our location in Toronto/ Canada and Ravenna/ Italy. The base components are supplied by us from a variety of known manufactures with the highest quality; the finished products are manufactured and tested at our factory in Ravenna/ Italy.

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## Sludge Thickening

Our sludge thickening system designed to reduce your sludge volume by up to 90 %. It is ideal for thickening prior to processes such as digestion or dewatering, and for reducing sludge volume prior to storage or transportation. Gravity belt thickeners are primarily used for sludge volume reduction prior to digestion, dewatering or disposal. They are a continuously operating machine which thicken sludge by gravity on a revolving porous filter belt. They generally produce a pump able thickened sludge.

They are commonly installed in waste water treatment plants, water treatment plants, food and dairy industries, abattoirs, pulp and paper industries.

### Technical Specifications

#### •PS Line

| Model                          |                   | P8 - S2 | P10 - 3S | P12 - 3S | P15 - 3S | P17 - 3S | P20 - 4S | P22 - 4S | P25 - 4S | P27 - 4S | P32 - 4S |
|--------------------------------|-------------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Sludge capacity (0.5 ÷ 1 % DS) | m <sup>3</sup> /h | 10 ÷ 20 | 14 ÷ 24  | 18 ÷ 30  | 21 ÷ 36  | 27 ÷ 45  | 30 ÷ 51  | 36 ÷ 60  | 39 ÷ 66  | 45 ÷ 75  | 54 ÷ 90  |
| Belt width                     | mm                | 800     | 1000     | 1200     | 1500     | 1700     | 2000     | 2200     | 2500     | 2700     | 3200     |
| Belt washwater                 | m <sup>3</sup> /h | 2.5     | 3.6      | 4.6      | 5.9      | 6.4      | 7.8      | 5.6      | 9.9      | 10.4     | 12.3     |
| Belt thickener power           | kw                | 0.55    | 0.75     | 0.75     | 0.75     | 1.1      | 1.1      | 1.5      | 1.5      | 1.8      | 2.2      |
| Washpump power                 | kw                | 4       | 4        | 4        | 4        | 4        | 5.5      | 5.5      | 5.5      | 5.5      | 7.5      |
| Empty weight                   | kg                | 500     | 800      | 1000     | 1200     | 1600     | 1800     | 2000     | 2100     | 2200     | 2400     |

## •P Line

| Model                          |                   | P9 - 2  | P11 - 3 | P13 - 3 | P16 - 3 | P18 - 3 | P21 - 4 | P23 - 4 | P26 - 4 | P28 - 4 | P31 - 4 |
|--------------------------------|-------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Sludge capacity (0.5 ÷ 1 % DS) | m <sup>3</sup> /h | 14 ÷ 24 | 18 ÷ 30 | 21 ÷ 36 | 27 ÷ 45 | 30 ÷ 51 | 36 ÷ 60 | 39 ÷ 66 | 45 ÷ 75 | 48 ÷ 81 | 54 ÷ 90 |
| Belt width                     | mm                | 1000    | 1200    | 1400    | 1700    | 1900    | 2200    | 2400    | 2700    | 2900    | 3200    |
| Belt washwater                 | m <sup>3</sup> /h | 3.6     | 4.4     | 5.3     | 6.3     | 7.0     | 8.6     | 9.6     | 10.3    | 11.2    | 12.5    |
| Belt thickener power           | kw                | 0.75    | 0.75    | 0.75    | 1.1     | 1.1     | 1.5     | 1.5     | 1.8     | 2.2     | 2.2     |
| Washpump power                 | kw                | 4       | 4       | 4       | 4       | 5.5     | 5.5     | 5.5     | 5.5     | 7.5     | 7.5     |
| Empty weight                   | kg                | 1000    | 1200    | 1400    | 1900    | 2000    | 2300    | 2400    | 2500    | 2600    | 2700    |

## Features

- Organic and inorganic sludge
- Both P-S and P line range of gravity belt thickeners will provide the lowest whole life cost
- For most thickening applications.
- Highest Thickening Capacity
- Maximum retention in thickening zone with sludge deflection unit and sludge plough design
- High belt speed for maximum provision of filter media
- Lowest Energy Consumption
- Possibility of single belt drive motor to drive filter belt between rollers cause lower power consumption
- Belt tracking and flocculation tank motors eliminated through machine design
- Lowest Flocculent Consumption
- No shear stresses applied to the sludge in the thickening process
- Highest Filtrate Quality
- Filtrate water and wash water can be returned separately
- Filtrate water can be used for belt washing
- Duplex stainless steel construction for maximum strength and corrosion resistance
- Minimum moving parts resulting in minimum maintenance requirements
- Unique enclosure design ensuring all mechanical and electrical components remain outside the harsh, wet and gaseous environment with the thickener
- Possibility of fully automatic operation and suitable for outdoor installation.





## Belt Filter Press

Belt filter presses are primarily used for sludge dewatering prior to drying or disposal. They are a continuously operating machine which dewater sludge by pressing it between two Porous filter belts.

Typically, a belt filter press receives a slurry ranging from 1- 5 % feed solids and produces a final product of 12-35% cake solids. Performance depends on the nature of the solids being processed and design.

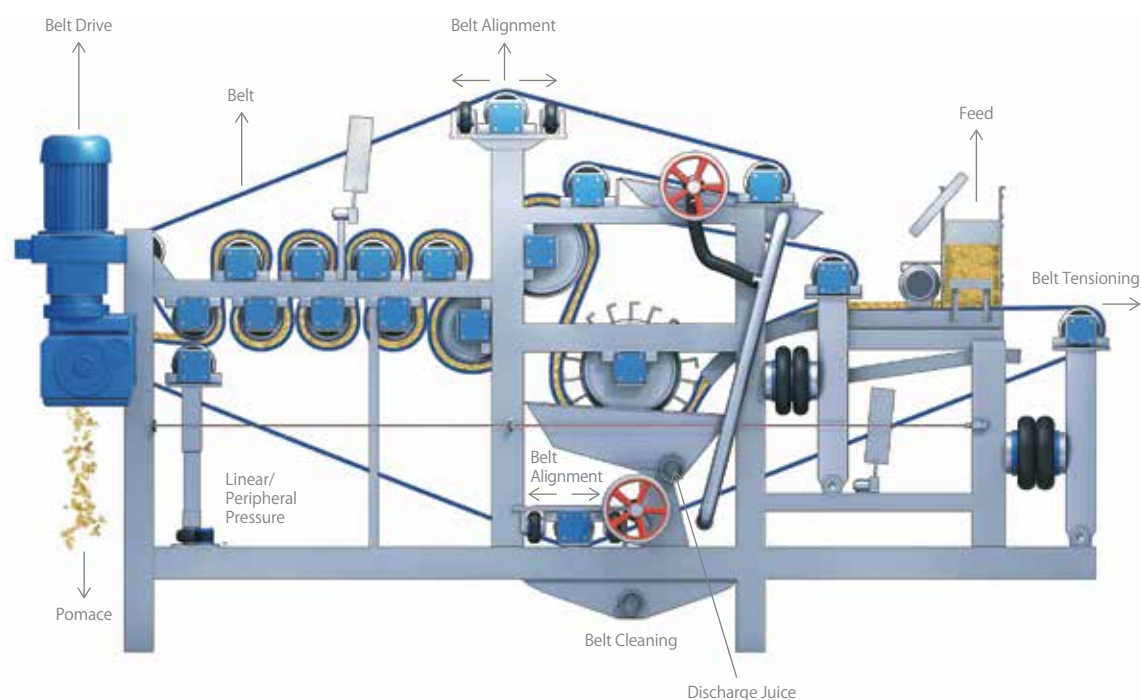
### Application

- Municipal water and wastewater treatment
- Food Processing Wastes
- Pulp & Paper Wastes
- Chemical Sludge
- Pharmaceutical Wastes
- Industrial Wastes Processing Sludge
- Petrochemical Wastes.

### Product Series and Technical Data

#### •“PN” Line

| Model                             |                   | PN 50 | PN 80 | PN 100 | PN 120 | PN 150  | PN 170  | PN 200  | PN 220  | PN 250  | PN 270  | PN 300  |
|-----------------------------------|-------------------|-------|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| Municipal sludge capacity (%3 DS) | m <sup>3</sup> /h | 3 ÷ 5 | 5 ÷ 8 | 6 ÷ 10 | 8 ÷ 12 | 10 ÷ 15 | 11 ÷ 17 | 14 ÷ 20 | 15 ÷ 22 | 16 ÷ 25 | 18 ÷ 27 | 20 ÷ 30 |
| Belt width                        | mm                | 600   | 900   | 1100   | 1300   | 1600    | 1800    | 2100    | 2300    | 2600    | 2800    | 3100    |
| Belt washwater                    | m <sup>3</sup> /h | 4.6   | 6.2   | 8.2    | 9.8    | 11.9    | 13.5    | 16.4    | 18.3    | 20.0    | 21.9    | 24.6    |
| Belt thickener power              | kw                | 2.6   | 2.6   | 3.3    | 3.3    | 4.1     | 4.1     | 5.7     | 5.7     | 5.7     | 7.3     | 7.3     |
| Washpump power                    | kw                | 4     | 4     | 5.5    | 5.5    | 7.5     | 7.5     | 11      | 11      | 11      | 13.5    | 13.5    |
| Empty weight (9R)                 | kg                | 3000  | 3400  | 4000   | 4500   | 5000    | 5400    | 8000    | 9000    | 10000   | 11500   | 13000   |



#### •“PN-S” Line (Belt width 0.5 - 1.7m)

| Model                       |                   | PN 50/S | PN 80/S | PN 100/S | PN 120/S | PN 150/S | PN 170/S |
|-----------------------------|-------------------|---------|---------|----------|----------|----------|----------|
| Capacity (Municipal sludge) | m <sup>3</sup> /h | 2 ÷ 3   | 4 ÷ 6   | 5 ÷ 8    | 6 ÷ 10   | 8 ÷ 13   | 9 ÷ 15   |
| Belt width                  | mm                | 500     | 800     | 1000     | 1200     | 1500     | 1700     |
| Belt washwater              | m <sup>3</sup> /h | 2.9     | 5.0     | 5.8      | 7.2      | 9.4      | 10.1     |
| Belt thickener power        | kw                | 1.3     | 1.3     | 1.65     | 2.05     | 2.05     | 2.35     |
| Washpump power              | kw                | 4.0     | 4.0     | 4.0      | 5.5      | 5.5      | 5.5      |
| Empty weight                | kg                | 1400    | 1700    | 2000     | 2200     | 4000     | 4300     |

#### •“PN-S” Line (Belt width 2-3 m)

| Model                       |                   | PN 200/S | PN 220/S | PN 250/S | PN 270/S | PN 300/S |
|-----------------------------|-------------------|----------|----------|----------|----------|----------|
| Capacity (Municipal sludge) | m <sup>3</sup> /h | 12 ÷ 20  | 14 ÷ 22  | 16 ÷ 26  | 18 ÷ 28  | 20 ÷ 30  |
| Belt width                  | mm                | 2000     | 2200     | 2500     | 2700     | 3000     |
| Belt washwater              | m <sup>3</sup> /h | 15.5     | 17.3     | 19.2     | 21.1     | 23.8     |
| Belt thickener power        | kw                | 3.55     | 3.55     | 4.95     | 4.95     | 4.95     |
| Reactor cylinder power      | kw                | 0.55     | 0.55     | 0.75     | 0.75     | 0.75     |
| Washpump power              | kw                | 11       | 11       | 11       | 13.5     | 13.5     |
| Empty weight                | kg                | 4800     | 5200     | 5900     | 6400     | 7000     |





#### •“PN-SL” Line (Spray Nozzle 330 l/h)

| Model                             |                   | PN 50/ SL | PN 80/ SL | PN 100/ SL | PN 120/ SL | PN 150/ SL | PN 170/ SL | PN 200/ SL | PN 220/ SL | PN 250/ SL |
|-----------------------------------|-------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|
| Municipal sludge Capacity (%2 DS) | m <sup>3</sup> /h | 3 ÷ 5     | 6 ÷ 8     | 7 ÷ 10     | 9 ÷ 12     | 12 ÷ 15    | 13 ÷ 17    | 16 ÷ 20    | 18 ÷ 22    | 21 ÷ 25    |
| Belt width                        | mm                | 500       | 800       | 1000       | 1200       | 1500       | 1700       | 2000       | 2200       | 2500       |
| Belt washwater                    | m <sup>3</sup> /h | 2.9       | 5.0       | 5.8        | 7.2        | 9.4        | 10.1       | 12.3       | 13.7       | 15.9       |
| Belt thickener power              | kw                | 1.3       | 1.3       | 1.65       | 2.05       | 2.05       | 2.35       | 4.1        | 4.1        | 4.1        |
| Washpump power                    | kw                | 4.0       | 4.0       | 4.0        | 5.5        | 5.5        | 5.5        | 11         | 11         | 11         |
| Empty weight                      | kg                | 1900      | 2100      | 2400       | 2600       | 4200       | 4500       | 5000       | 5400       | 6100       |

#### •“PN-SL” Line (Spray Nozzle 390 l/h)

| Model                             |                   | PN 50/ SL | PN 80/ SL | PN 100/ SL | PN 120/ SL | PN 150/ SL | PN 170/ SL | PN 200/ SL | PN 220/ SL | PN 250/ SL |
|-----------------------------------|-------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|
| Municipal sludge Capacity (%2 DS) | m <sup>3</sup> /h | 3 ÷ 5     | 6 ÷ 8     | 7 ÷ 10     | 9 ÷ 12     | 12 ÷ 15    | 13 ÷ 17    | 16 ÷ 20    | 18 ÷ 22    | 21 ÷ 25    |
| Belt width                        | mm                | 500       | 800       | 1000       | 1200       | 1500       | 1700       | 2000       | 2200       | 2500       |
| Belt washwater (Nozzle type 10)   | m <sup>3</sup> /h | 3.7       | 6.2       | 7.3        | 9.2        | 11.9       | 12.8       | 15.5       | 17.3       | 20.0       |
| Belt thickener power              | kw                | 1.3       | 1.3       | 1.65       | 2.05       | 2.05       | 2.35       | 4.1        | 4.1        | 4.1        |
| Washpump power                    | kw                | 4.0       | 4.0       | 4.0        | 5.5        | 5.5        | 5.5        | 11         | 11         | 11         |
| Empty weight                      | kg                | 1900      | 2100      | 2400       | 2600       | 4200       | 4500       | 5000       | 5400       | 6100       |



## Application

Our belt filter press can automate the operation by supplying the following options:

- Start up and Shutdown
- Level Control
- Flow Control
- Polymer Feed Rate
- DCS interfacing
- Alarms
- Diagnostics and Trouble Shooting
- PLC.

## Worldwide References

Canamidex contracted and delivered, in turnkey projects, a large quantity of belt presses to municipalities, paper mills and other industries in many countries and developed a wide expertise working with various sludge in combination with various polymers, belt types and press adjustments.

## Features

- Galvanized, AISI 304 or 316 stainless steel construction
- Very low electrical cost compared to centrifuges
- Relatively low equipment and installation costs
- Produces dehydrated sludge ready for further processing or for land spreading
- Operates with minimal supervision due to its high level of automation
- Provides stable and reliable operation adaptable to frequent product variations
- Requires minimal space
- A wedge section with an adjustable angle of conversion of the belts
- A choice of 2 belt or 3 belt dewatering systems
- A variable orifice polymer/sludge mixing valve to optimize polymer conditioning
- Larger standard filtration areas for greater process throughput and higher cake consistency.



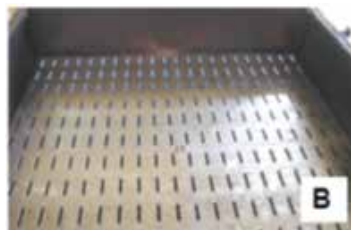
## Belt screens

Belt screens “HBS” use in mines industries especially for gold. Belt screens “HBS” are solidly built, are reliable, and adaptable to different working conditions. They are able to assure high performances. From the big rectangular flange “A”, the product that has to be filtrated, goes into the tray for a first rough separation “B”. Under the tray, the belt “C” holds back the particles with bigger diameter than holes. These particles are washed again before to be drained “E”. Fine particles and water come out from the flange “D”.



### Technical Specifications

| Model          |                   | HBS 100 | HBS 200 | HBS 300 | HBS 400 | HBS 500 | HBS 600 |
|----------------|-------------------|---------|---------|---------|---------|---------|---------|
| Max capacity   | m <sup>3</sup> /h | 100     | 200     | 300     | 400     | 500     | 600     |
| Belt width     | mm                | 1500    | 1500    | 2500    | 2500    | 2500    | 2500    |
| Belt power     | m <sup>3</sup> /h | 1.5     | 1.5     | 2.2     | 2.2     | 2.2     | 2.2     |
| Washwater      | kw                | 10.1    | 10.1    | 16.8    | 16.8    | 16.8    | 16.8    |
| Washpump power | kw                | 5.5     | 5.5     | 11      | 11      | 11      | 11      |
| Empty weight   | kg                | 4300    | 4300    | 6500    | 6500    | 6500    | 6500    |



### Features

- Excellent separation efficiency due to its perforations
- Very compact system with minimum space requirements
- AISI 304 or 316 stainless steel construction.

## Drum Filter

Water and wastewater treatment plant produce sludge as a by-product of the water and wastewater treatment. Sludge consists of suspended organic and inorganic solids as well as dissolved solids in a large amount of water. Sludge is from primary or secondary clarification or both. Whether the sludge is to be dewatered, digested or simply transported away for further treatment, it is far more economical to concentrate the suspended solids in the least possible amount of water.

Our Drum Thickeners are optimal for basic, cost-effective mechanical sludge thickening through a slowly rotating drum filter. Sludge with as low as 0.4 percent dry solids content can be easily and economically thickened from 3.0 to 12.0 percent with the aid of a modest amount of polyelectrolyte. This enormous volume reduction will help plants keep costs down as less volume has to be handled, increasing the efficiency of the digesters or reducing tanker loads per day.

The sludge to be thickened—mainly water—is mixed with the necessary amount of polymer. Mixing turbulence and contact time is allowed in order to create large, stable flocs and clear water. This is then gently fed to one side of the drum over and through a polyethylene filter cloth. The solids travel axially to the exit at the opposite end of the drum while the drum turns at a very low speed. Excess free water is drained along a filter cloth and collected at the bottom of the casing to exit via gravity. The sludge concentration can be regulated by adjusting the feed rate, angle and speed of the drum.

Our drum thickeners are designed for relatively low-throughput thickening requirements in waste water treatment plants (WWTP). Made entirely of stainless steel, they complete our thickening portfolio to provide the most economical solution for most thickening problems. Drum thickeners are well known in small waste water treatment plants (WWTP). Economic design is combined with high efficiency. The small footprint of this machine type and its enclosed design not only provide an efficient thickening process, but also minimize emissions to the environment.

### Technical Data

| Model                          |                   | BR 10  | BR 20  | BR 30   | BR 50   | BR 70   | BR 100   |
|--------------------------------|-------------------|--------|--------|---------|---------|---------|----------|
| Sludge capacity (0.5 ÷ 1 % DS) | m <sup>3</sup> /h | 3 ÷ 14 | 5 ÷ 24 | 10 ÷ 36 | 20 ÷ 56 | 30 ÷ 80 | 40 ÷ 110 |
| Drum diameter                  | mm                | 700    | 700    | 900     | 900     | 1400    | 1400     |
| Drum length                    |                   | 800    | 1500   | 2500    | 3500    | 3500    | 4500     |
| Belt washwater                 | m <sup>3</sup> /h | 0.6    | 1.0    | 1.5     | 2.2     | 2.2     | 2.8      |
| Belt thickener power           | kw                | 0.55   | 0.55   | 1.5     | 1.5     | 2.2     | 2.2      |
| Washpump power                 | kw                | 3.0    | 4.0    | 4.0     | 5.5     | 5.5     | 7.5      |
| Empty weight                   | kg                | 400    | 600    | 1300    | 1600    | 2200    | 2200     |

### Features

- Drum thickener BR line are enable to thickening both organic and inorganic sludge.
- AISI 304 or 316 stainless steel construction.
- Lower power consumption.
- Easy maintenance.
- Greater sludge recovery, while also reducing transportation costs.



# Cascades

Canamidex Cascades can be used to dehydrate sludge that have not been thickened previously (dry solid concentration between 0.5 - 1,5 %), with consequent advantages in costs and space and also to assure high performance of separation (%96) and easy maintenances

## Series and Technical Data

### •“PNPS” Line

| Model                    |                   | PNPS<br>80 | PNPS<br>100 | PNPS<br>120 | PNPS<br>150 | PNPS<br>170 | PNPS<br>200 | PNPS<br>220 | PNPS<br>250 | PNPS<br>270 | PNPS<br>300 |
|--------------------------|-------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Sludge capacity (1 % DS) | m <sup>3</sup> /h | 16 ÷ 18    | 20 ÷ 22     | 24 ÷ 26     | 30 ÷ 32     | 34 ÷ 36     | 40 ÷ 43     | 44 ÷ 47     | 50 ÷ 53     | 54 ÷ 58     | 60 ÷ 64     |
| Belt width               | mm                | 900        | 1100        | 1300        | 1600        | 1800        | 2100        | 2300        | 2600        | 2800        | 3100        |
| Belt washwater           | m <sup>3</sup> /h | 9.8        | 12.6        | 15.2        | 18.2        | 20.7        | 25.0        | 27.8        | 30.2        | 33.0        | 37.1        |
| Belt thickener power     | kw                | 3.55       | 4.25        | 4.25        | 5.05        | 5.40        | 6.40        | 7.20        | 7.85        | 9.85        | 9.85        |
| Washpump power           | kw                | 5.5        | 7.5         | 11          | 11          | 11          | 13.5        | 13.5        | 15          | 15          | 17          |
| Empty weight (11 R)      | kg                | 4400       | 5200        | 5900        | 6700        | 7100        | 10000       | 11100       | 12200       | 14000       | 16100       |

### •“PNSPS” Line

| Model                    |                   | PNSPS<br>80 | PNSPS<br>100 | PNSPS<br>120 | PNSPS<br>150 | PNSPS<br>170 | PNSPS<br>200 | PNSPS<br>220 | PNSPS<br>250 | PNSPS<br>270 | PNSPS<br>300 |
|--------------------------|-------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Sludge capacity (1 % DS) | m <sup>3</sup> /h | 12 ÷ 16     | 16 ÷ 20      | 20 ÷ 24      | 24 ÷ 30      | 30 ÷ 34      | 34 ÷ 40      | 40 ÷ 44      | 44 ÷ 50      | 50 ÷ 56      | 56 ÷ 62      |
| Belt width               | mm                | 800         | 1000         | 1200         | 1500         | 1800         | 2000         | 2200         | 2500         | 2700         | 3000         |
| Belt washwater           | m <sup>3</sup> /h | 7.5         | 8.7          | 10.8         | 14.1         | 15.2         | 23.3         | 25.6         | 29.1         | 31.5         | 35.1         |
| Belt thickener power     | kw                | 1.5         | 1.85         | 2.25         | 2.6          | 2.6          | 4.5          | 4.5          | 5.9          | 6.2          | 6.6          |
| Washpump power           | kw                | 5.5         | 5.5          | 7.5          | 7.5          | 11           | 13.5         | 13.5         | 15           | 15           | 17           |
| Empty weight (7 R)       | kg                | 2200        | 2800         | 3200         | 5200         | 5900         | 6600         | 7200         | 8000         | 8600         | 9300         |



## •“PNP” Line

| Model                    |                   | PNSPS<br>80 | PNSPS<br>100 | PNSPS<br>120 | PNSPS<br>150 | PNSPS<br>170 | PNSPS<br>200 | PNSPS<br>220 | PNSPS<br>250 | PNSPS<br>270 | PNSPS<br>300 |
|--------------------------|-------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Sludge capacity (1 % DS) | m <sup>3</sup> /h | 16 ÷ 18     | 20 ÷ 22      | 24 ÷ 26      | 30 ÷ 32      | 34 ÷ 36      | 40 ÷ 43      | 44 ÷ 47      | 50 ÷ 53      | 54 ÷ 58      | 60 ÷ 64      |
| Belt width               | mm                | 900         | 1100         | 1300         | 1600         | 1800         | 2100         | 2300         | 2600         | 2800         | 3100         |
| Belt washwater           | m <sup>3</sup> /h | 9.8         | 12.6         | 15.2         | 18.2         | 20.7         | 25.0         | 27.8         | 30.2         | 33.0         | 37.1         |
| Cascade power            | kw                | 3.55        | 4.25         | 4.25         | 5.05         | 5.40         | 6.40         | 7.20         | 7.85         | 9.85         | 9.85         |
| Washpump power           | kw                | 5.5         | 7.5          | 11           | 11           | 11           | 13.5         | 13.5         | 15           | 15           | 17           |
| Empty weight (11 R)      | kg                | 4500        | 5400         | 6100         | 7000         | 7400         | 10300        | 11400        | 12600        | 14400        | 16500        |

## •“PNS-BR” Line

| Model                              |                   | PN50S-<br>BR10 | PN80S-<br>BR10 | PN100S-<br>BR10 | PN120S-<br>BR10 | PN120S-<br>BR20 | PN150S-<br>BR20 | PN170S-<br>BR20 | PN200S-<br>2 BR20 | PN220S-<br>2 BR20 | PN250S-<br>2 BR20 |
|------------------------------------|-------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|
| Capacity (municipal sludge 1 % DS) | m <sup>3</sup> /h | 5 ÷ 7          | 8 ÷ 12         | 13 ÷ 15         | 15 ÷ 18         | 18 ÷ 22         | 22 ÷ 25         | 25 ÷ 28         | 28 ÷ 34           | 34 ÷ 38           | 38 ÷ 42           |
| Belt width                         | mm                | 500            | 800            | 1000            | 1200            | 1200            | 1500            | 1700            | 2000              | 2200              | 2500              |
| Belt washwater                     | m <sup>3</sup> /h | 3.5            | 5.6            | 6.4             | 7.8             | 8.2             | 10.4            | 11.1            | 14.3              | 15.9              | 22                |
| Cascade power (Nozzle type 9)      | kw                | 1.85           | 1.82           | 2.2             | 2.6             | 2.6             | 3.05            | 3.15            | 5.2               | 5.2               | 5.2               |
| Washpump power                     | kw                | 4              | 4              | 4               | 5.5             | 5.5             | 7.5             | 7.5             | 11                | 11                | 13.5              |
| Empty weight (7 rollers version)   | kg                | 1550           | 1850           | 2150            | 2300            | 2350            | 4200            | 4600            | 5200              | 5600              | 6300              |

## Features

- Galvanized, AISI 304 or 316 stainless steel construction
- Very low electrical cost
- Relatively low equipment and installation costs
- Produces dehydrated sludge ready for further processing
- Requires minimal space
- lower polyelectrolyte powder consumption
- Easy maintenance

## Filter Press

A filter comprises a set of vertical recessed plates, presses against each other by hydraulic jacks at one end of the set. The pressure applied to the joint face of each filtering plate must withstand the chamber internal pressure developed by the sludge pumping system.

This vertical plate layout forms watertight filtration chambers allowing easy mechanisation for the discharge of cakes. Filter clothes finely or tightly meshed are applied to the two grooved surfaces in these plates. Orifices feed the sludge to be filtered under pressure in the filtration chamber. They are usually placed in the center of the plates allowing a proper distribution of flow, right pressure and better drainage of sludge within the chamber. Solids sludge gradually accumulates in the filtration chamber until the final compacted cake is formed. The filtrate is collected at the back of the filtration support and carried away by internal ducts. This includes 5 cycle which are Closing of the press, Filling, Filtration, Filter opening and Washing. The production capacity of a filter press is somewhere between 1.5 and 10 kg of solid per m<sup>2</sup> of filtering surface. For every filter press model the chamber volume and the filtering surface depend on the number of plates in the filter with pressing times are less than four hours. Filtration time depends on cake thickness, sludge concentration, specific resistance and compressibility coefficient. Our filter press frame consists mainly in two horizontal side beams, support legs, fixed header, cylinder header and sliding header. The closing-opening system of the filter consists in a double-acting hydraulic cylinder, manually controlled by hydraulic unit with hand lever. The filtering plates are made of high density polypropylene, and their handles are supported on sliding guides, every plate is covered with polypropylene filtering cloths and is equipped to discharge the filtrate into the gutter or into the closed manifold.

### Technical Data and Series

#### •AAAM Series

| Model               |                 | AA - AM - MM 500 | AA - AM - MM 630 | AA - AM - MM 800 | AA - AM - MM 1000 | AA - AM - MM 1200 |
|---------------------|-----------------|------------------|------------------|------------------|-------------------|-------------------|
| Plate size          | mm              | 500 x 500        | 630 x 630        | 800 x 800        | 1000 x 1000       | 1200 x 1200       |
| Cake thickness      | mm              | 25 + 32          | 25 + 35          | 25 + 35          | 25 + 35           | 25 + 35           |
| Polypoplene plates  | n               | 5 + 50           | 10 + 50          | 20 + 80          | 20 + 100          | 20 + 100          |
| Filter volume       | dm <sup>3</sup> | 16 + 273         | 64 + 497         | 225 + 1332       | 356 + 2625        | 501 + 3722        |
| Filtration pressure | bar             | 15               | 15               | 15               | 15                | 15                |







#### •MM Series

| Model                   |                 | MM 500    | MM 630    | MM 800     | MM 1000     |
|-------------------------|-----------------|-----------|-----------|------------|-------------|
| Plate size              | mm              | 500 x 500 | 630 x 630 | 800 x 800  | 1000 x 1000 |
| Cake thickness          | mm              | 25 + 32   | 25 + 35   | 25 + 35    | 25 + 35     |
| Polypylene plates       | n               | 5 + 50    | 10 + 50   | 20 + 80    | 20 + 100    |
| Filter volume           | dm <sup>3</sup> | 16 + 273  | 64 + 497  | 225 + 1332 | 356 + 2625  |
| Max Filtration pressure | bar             | 15        | 15        | 15         | 15          |
| Hydfaulic unit power    | kw              | 1.1       | 1.1       | 2.2        | 3.0         |



#### Features

- Filter press is suitable for almost all types of sludge
- Hydrophilic organic sludge: inorganic conditioning is often recommended to enable satisfactory cake release due to minimal adherence to filter cloth.
- Hydrophilic inorganic sludge: the filter press generally requires the addition of lime only.
- Hydrophobic inorganic sludge: it is very dense and ideal for the filter press. It is dewatered without any preliminary conditioning.
- Oily sludge: the filter press can be used to treat sludge containing light oils.



## Screw Conveyors

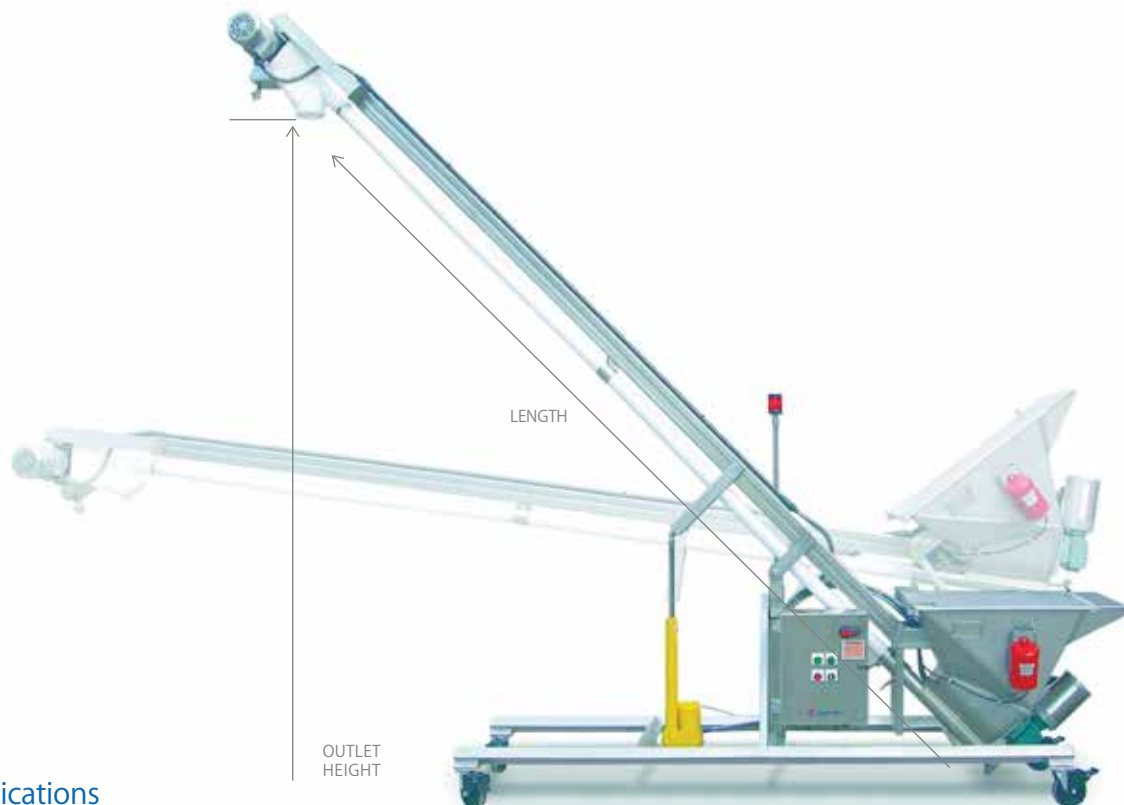
Canamidex Screw conveyors are easily adapted to congested locations, due to their compact and flexible design; enabling horizontal, inclined and vertical installations. Screw conveyors are used for dust and odor free transport of numerous materials such as dewatered sludge, pulp, wood chips, sawdust, chemicals, slaughter-house refuse, garbage, scrap metal, pellet fuel etc. The conveyors are particularly suited for transporting materials which tend to jam, material containing particles of varied sizes which often tend to form “bridges”, hygienic material, and material of a sticky nature. Since it is possible to feed directly into the side of a second conveyor and even transport vertically, compact, space-saving installations are possible.

### Working Principles

The material has to be transported enters the conveyor through the inlet into the Utrough. The drive unit rotates the spiral, usually at a relatively slow speed, transporting the material to the outlet. The replaceable wear liner protects the trough and assures smooth, quiet operation.

The motor mounting flange allows for safe and easy service. The cover is bolted to the trough for easy removal and can be fitted with inspection lids.

| Diameter<br>Length | mm<br>mm          | 200  | 200  | 200  | 200  | 250  | 250  | 250  | 300  | 300  | 300  |
|--------------------|-------------------|------|------|------|------|------|------|------|------|------|------|
|                    |                   | 2000 | 4000 | 6000 | 8000 | 4000 | 6000 | 8000 | 4000 | 6000 | 8000 |
| Length             | m <sup>3</sup> /h | 2.6  | 2.6  | 2.6  | 2.6  | 6.5  | 6.5  | 6.5  | 10.4 | 10.4 | 10.4 |
| Type               | m <sup>3</sup> /h | 2.0  | 2.0  | 2.0  | 2.0  | 4.9  | 4.9  | 4.9  | 7.8  | 7.8  | 7.8  |
| Inclination        | m <sup>3</sup> /h | 1.7  | 1.7  | 1.7  | 1.7  | 3.7  | 3.7  | 3.7  | 6.8  | 6.8  | 6.8  |
| Speed              | rpm               | 36   | 36   | 36   | 36   | 36   | 36   | 36   | 36   | 36   | 36   |
| Instalied power    | kw                | 1.5  | 1.5  | 1.5  | 2.2  | 1.5  | 2.2  | 3.0  | 2.2  | 3.0  | 4.0  |



## Applications

- Fast Food Processing
- Sludge dewatering
- Municipal water and wastewater treatment plant
- Building industry
- Winery
- Sea Food and Fish processing
- Meat Processing/Abattoirs
- Sugar / Mill Refining
- Glass/Ceramics
- Machining
- Composting / Incineration
- Brewery
- Petrochemical
- Rendering
- Textile

## Features

- Carbon steel, stainless steel or abrasion resistant steel are available.
- "U" shaped or to provide a wider opening "V" shaped trough can be manufactured.
- Engineered to handle fine or coarse, granular or flaky, wet or dry, pellet or slurry materials.
- Fully enclosed trough ensures dust-free environmentally friendly operation.
- Low maintenance costs
- Construction using high quality and wear resistant materials
- Continuous transportation
- Ability to transport larger sized materials



# Filter Bag

The filter bags SM line are enable to dehydrate organic and inorganic sludge.

## •Technical Data

| Model            |    | SM 2       | SM 3       | SM 4       | SM 6       | SM 8       | SM 12      |
|------------------|----|------------|------------|------------|------------|------------|------------|
| Number of bags   | mm | 2          | 3          | 4          | 6          | 8          | 12         |
| Dimensions A     |    | 1100       | 1500       | 1900       | 1500       | 1900       | 2700       |
| Dimensions B     | mm | 1700       | 1700       | 1700       | 1700       | 1700       | 1700       |
| Dimensions C     | mm | 550        | 550        | 550        | 1000       | 1000       | 1000       |
| Bag Dimensions A | mm | 300 x 1000 | 300 x 1000 | 300 x 1000 | 300 x 1000 | 300 x 1000 | 300 x 1000 |
| Empty weight     | kg | 160        | 180        | 200        | 240        | 340        | 440        |





## Static Mixer

Canamidex static mixer equipped with clapet valve designed for self-adjusting according to delivery requirement, this product provide a better condition to mix a media with injected chemical or added material in process.

### •Static Mixer Designed for Sludge Dewatering Process

| Model                           |                   | MAE 65 | MAE 80 | MAE 100 | MAE 120  | MAE 150  |
|---------------------------------|-------------------|--------|--------|---------|----------|----------|
| Delivery                        | m <sup>3</sup> /h | 3 ÷ 20 | 5 ÷ 40 | 10 ÷ 80 | 20 ÷ 130 | 30 ÷ 160 |
| Inlet - outie sludge connection |                   | DN 65  | DN 80  | DN 100  | DN 125   | DN 150   |
| Inlet poly Valve                | inch              | 1°     | 1°     | 1°      | 1° ½     | 1° ½     |
| Sample Valve                    | inch              | 1°     | 1°     | 1°      | 1° ½     | 1° ½     |
| Empty weight                    | kg                | 22     | 26     | 30      | 40       | 50       |

### Features

- Low maintenance costs
- Available in stainless steel, carbon steel and hot galvanized material

## Belt Conveyor

Our belt conveyors designed for transport of dewatered sludge, racking or sludge cakes, also they manufactured according to the requirements of the process can be either in stainless steel or carbon steel with coating. Different sizes and inclinations are applicable. Flat conveyor is one of the simplest and oldest handling equipment for bulk materials. It can be also used to control the flow of bulk materials in many chemical processing and storage operations.



| Belt Width      | mm    | 400        | 400        | 500        | 500        | 600        | 600      | 800        | 800       |
|-----------------|-------|------------|------------|------------|------------|------------|----------|------------|-----------|
| Length          | m     | 2 ÷ 10     | 2 ÷ 8      | 2 ÷ 10     | 2 ÷ 8      | 2 ÷ 12     | 2 ÷ 8    | 2 ÷ 15     | 2 ÷ 8     |
| Type            |       | Horizontal | Inclined   | Horizontal | Inclined   | Horizontal | Inclined | Horizontal | Inclined  |
| Inclination     | .     | 0° ÷ 5°    | 5° ÷ 25°   | 0° ÷ 5°    | 5° ÷ 25°   | 0° ÷ 5°    | 5° ÷ 25° | 0° ÷ 5°    | 5° ÷ 25°  |
| Speed           | m/min | 15 ÷ 20    | 15 ÷ 20    | 15 ÷ 20    | 15 ÷ 20    | 15 ÷ 20    | 15 ÷ 20  | 15 ÷ 20    | 15 ÷ 20   |
| Instalied power | kw    | 0.55 ÷ 1.1 | 0.75 ÷ 1.5 | 0.75 ÷ 1.5 | 0.75 ÷ 2.2 | 0.75 ÷ 2.2 | 1.1 ÷ 3  | 1.1 ÷ 4    | 1.1 ÷ 5.5 |

### Features

- Very low electrical cost
- Requires minimal space
- Conveying and elevating equipment for bulk materials
- Suitable for handling a wide variety of materials from fine chemicals to screenings and sludge cakes, from wet to dry.
- Completely stainless steel frame and supports can be supplied.
- Shuttle type conveyors and belt hipper are available



## Polymer Station/ Feeder/ Preparation

Canamidex polymer systems are made completely from high quality stainless steel. They are available in a batch system, automatic and semi automatic systems to suit the needs of every customer. Batch systems comprise a single tank and are most suitable for small plants. Semi automatic systems comprise a single tank with a 30 - 40 minute make up time for each cycle and are best suited for small to medium plants.

Fully automatic systems comprise a mix tank, storage tank and are capable of continuous 24 hour production. The units are suitable for easy change over from one polymer to another. Each unit equipped with feeding hopper with bridge breaker, mixer venture device for dispersion of powder and three communicating tanks: dilution, maturing, storage.

### • "SP" Line

| Model                                     |                 | SP600     | SP1000    | SP1500    | SP2000    | SP2500    | SP3000    | SP4000    | SP6000    | SP6000    | SP8000    |
|---|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Solution delivery                         | lt/h            | 500       | 1000      | 1500      | 2000      | 2500      | 3000      | 4000      | 5000      | 6000      | 8000      |
| Solution Concentration                    | %               | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 |
| Hopper Capacity (power poly)              | dm <sup>3</sup> | 80        | 80        | 80        | 80        | 80        | 80        | 100       | 100       | 100       | 100       |
| Tank divided into 3 parts, total capacity | dm <sup>3</sup> | 500       | 1000      | 1500      | 2000      | 2500      | 3000      | 4000      | 5000      | 6000      | 8000      |
| Installed power (with 3 stirrers)         | kw              | 1.35      | 1.35      | 1.35      | 1.35      | 1.35      | 1.35      | 1.9       | 2.02      | 2.02      | 2.62      |
| Empty weight                              | kg              | 240       | 300       | 350       | 400       | 500       | 700       | 800       | 900       | 1000      | 1200      |



## •“SL” Line

| Model   |                 | SL500     | SL1000    | SL1500    | SL2000    | SL2500    | SL3000    | SL4000    | SL6000    | SL6000    | SL8000    |
|---|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Solution delivery                               | lt/h            | 500       | 1000      | 1500      | 2000      | 2500      | 3000      | 4000      | 5000      | 6000      | 8000      |
| Solution Concentration                          | %               | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 |
| Piston pump for emulsion polyelectrolyte dosage | lt/h            | 1 ÷ 5     | 2 ÷ 10    | 3 ÷ 15    | 4 ÷ 20    | 5 ÷ 25    | 5 ÷ 25    | 5 ÷ 30    | 5 ÷ 38    | 5 ÷ 45    | 10 ÷ 60   |
| Tank divided into 3 parts, total capacity       | dm <sup>3</sup> | 500       | 1000      | 1500      | 2000      | 2500      | 3000      | 4000      | 5000      | 6000      | 8000      |
| Installed power (with 3 stirrers)               | kw              | 1.36      | 1.36      | 1.36      | 1.36      | 1.36      | 1.36      | 1.9       | 1.9       | 1.9       | 2.5       |
| Empty weight                                    | kg              | 200       | 250       | 300       | 350       | 400       | 500       | 600       | 700       | 800       | 1000      |

Polyelectrolyte Dosing In Emulsion at 40 - 50 % Active

## •“SPL” Line

| Model   |                 | SPL500    | SPL1000   | SPL1500   | SPL2000   | SPL2500   | SPL3000   | SPL4000   | SPL5000   |
|---|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Solution delivery                               | lt/h            | 500       | 1000      | 1500      | 2000      | 2500      | 3000      | 4000      | 5000      |
| Solution Concentration                          | %               | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.4 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 | 0.1 ÷ 0.3 |
| Hopper Capacity (power poly)                    | dm <sup>3</sup> | 80        | 80        | 80        | 80        | 80        | 80        | 100       | 100       |
| Piston pump for emulsion polyelectrolyte dosage | lt/h            | 1 ÷ 5     | 2 ÷ 10    | 3 ÷ 15    | 4 ÷ 20    | 5 ÷ 25    | 5 ÷ 25    | 5 ÷ 30    | 5 ÷ 38    |
| Piston pump for emulsion polyelectrolyte dosage | dm <sup>3</sup> | 500       | 1000      | 1500      | 2000      | 2500      | 3000      | 4000      | 5000      |
| Installed power (with 3 stirrers)               | kw              | 1.58      | 1.58      | 1.58      | 1.58      | 1.58      | 1.58      | 2.27      | 2.27      |
| Empty weight                                    | kg              | 260       | 310       | 360       | 410       | 480       | 560       | 670       | 770       |

Polyelectrolyte Dosing In Emulsion at 40 - 50 % Active





#### • “SP - PD” Line

| Model  |                 | SP - PD<br>500 | SP - PD<br>1000 | SP - PD<br>1500 | SP - PD<br>2000 | SP - PD<br>2500 | SP - PD<br>3000 | SP - PD<br>4000 | SP - PD<br>5000 | SP - PD<br>6000 |
|--|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Concentration Solution<br>delivery at 0.4 %  | lt /h           | 250<br>500     | 500<br>1000     | 750<br>1500     | 1000<br>2000    | 1250<br>2500    | 1500<br>3000    | 2000<br>4000    | 2500<br>5000    | 3000<br>6000    |
| Diluted Solution<br>delivery at 0.1 %        | lt /h           | 1000<br>2000   | 2000<br>4000    | 3000<br>6000    | 4000<br>8000    | 5000<br>10000   | 6000<br>12000   | 8000<br>16000   | 10000<br>20000  | 12000<br>24000  |
| Hopper Capacity<br>(power poly)              | dm <sup>3</sup> | 80             | 80              | 80              | 80              | 80              | 110             | 110             | 110             | 110             |
| Tank divided into 3 parts,<br>total capacity | dm <sup>3</sup> | 500            | 1000            | 1500            | 2000            | 2500            | 3000            | 4000            | 5000            | 6000            |
| Installed power<br>(with 4 stirrers)         | kw              | 2.25           | 2.25            | 2.45            | 2.45            | 2.80            | 3.95            | 3.95            | 4.65            | 4.65            |
| Empty weight                                 | kg              | 300            | 360             | 420             | 470             | 580             | 790             | 890             | 1000            | 1100            |

#### Features

- Very low electrical cost
- Requires minimal space
- Electric resistance to prevent condensation
- Up to fully automatic package (PLC).

Committed to superior quality  
and smart design



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