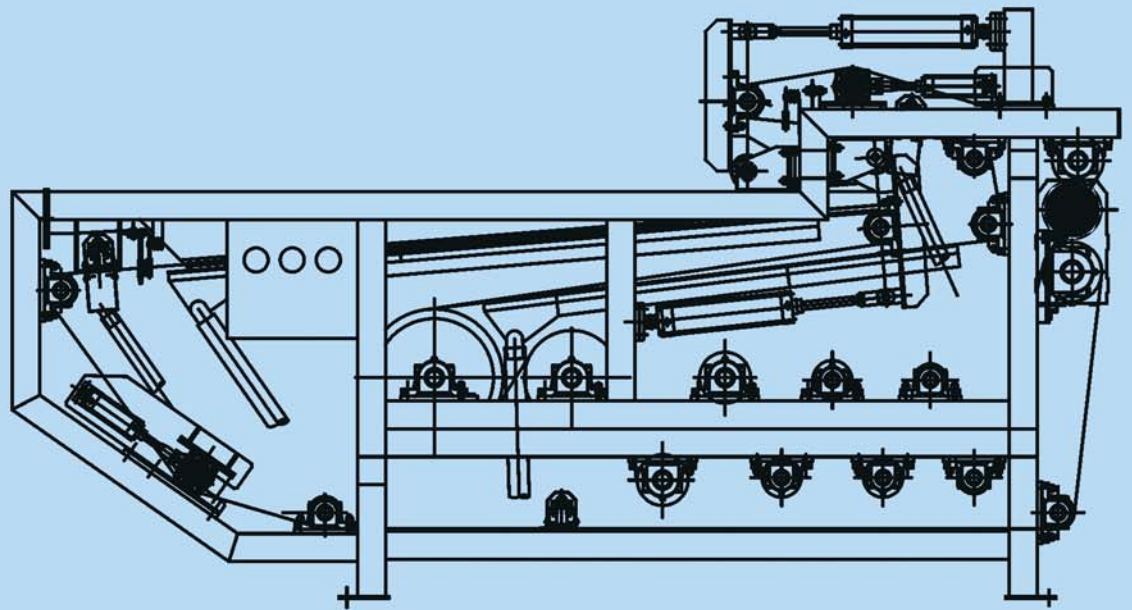




## Suspension Separation Systems



**double-belt filter presses**

CompRot's offer in scope of Suspension Separation Systems contains two types of double-belt filter presses:

**V type double-belt filter presses** – most basic machines with mechanical belt tension system, small capacity (up to 6 m<sup>3</sup>/h); offered in three sizes related to belt width – 500, 800 i 1000 mm.

**VWZ type double-belt filter presses** – machine with pneumatic belt tension system and pressing control, with 7, 9 or 11 press rolls; offered in six sizes – 1000, 1200, 1500, 2000, 2500, 3000 mm.

Additional offer of **CompRot** comprises double-belt filter presses with built-in belt thickeners (for high hydration degree sludge) or presses with shortened zone of gravitational dewatering (VW-type press) and presses with additional press column (VWZ-D-type press).



### Construction

The filter double-belt press is delivered as complete set. Installation of presses requires only placing it on prepared foundation and fixing with help of anchors.

All parts of press like connectors, rolls, effluent tub, sprayer's chambers, etc., are made with acid-proof steel.

In system of sludge pressing are used drums and rolls (7,9 or 11) which diameters are gradually reduced to optimize dewatering process.

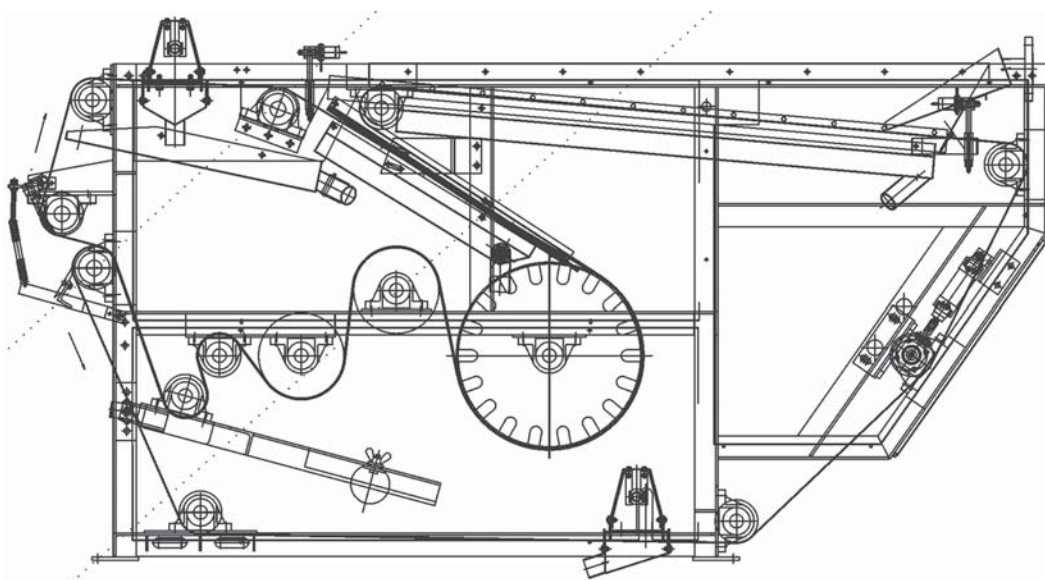
Run of belts and press force is controlled by pneumatic and electric system.

Bearings of rolls and drums are encased and specially sealed to protect them against water and sludge. Nozzles of sprayers are built in chambers with nozzle cleaning system.

Belts are driven by gear-motor with frequency inverter, giving possibility of smooth control of press belts speed and in result optimization of dewatering process.

### Construction materials of CompRot's double-belt filter presses

- Frame, brackets, effluent tub, sprayers chambers, covers and the rest of construction elements - acid-proof steel 0H18N9
- Rolls and drums – acid-proof steel 0H18N9;
- Drive roll – acid-proof steel 0H18N9; vulcanized with municipal wastes resistant gum, hardness 50 - 60° Sh;
- Control rolls – acid-proof steel 0H18N9; vulcanized with municipal wastes resistant gum, hardness 35- 40° Sh;
- Filter belts – polyester fabric;
- Connectors – steel, A2 or A4

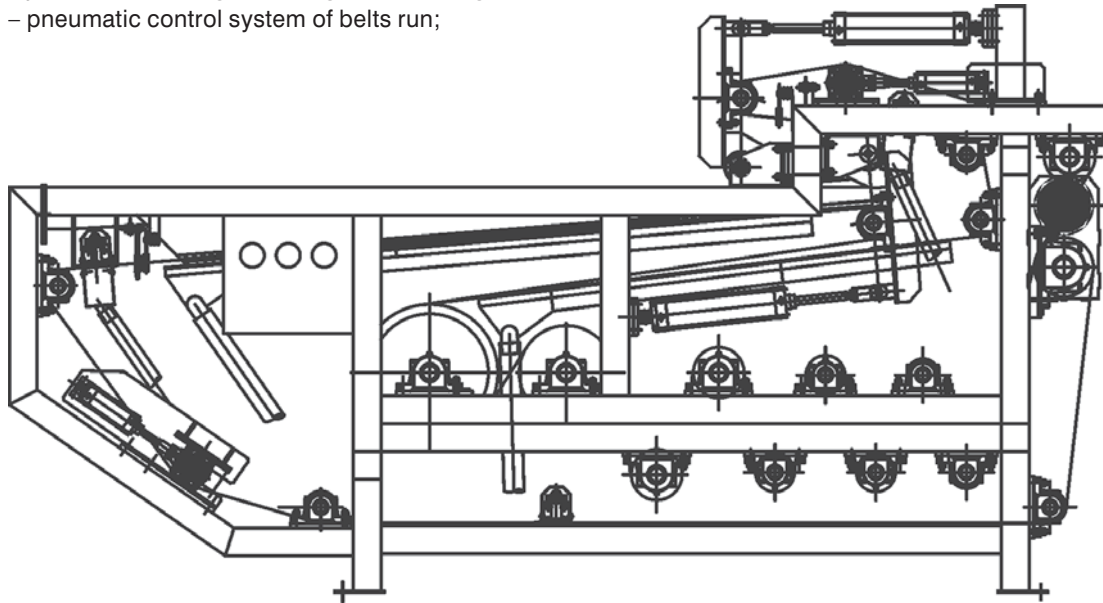


Press drive, power supply connection box and pneumatic system box are located in very convenient for user place.  
Covers of press can be easily removed.

- Protection system using inductive distance detector – acts in case of pneumatic system damage;
- Safety cut-off switch – turned on by operators in case of immediate shutdown necessity of machine and the rest of station devices.

## Protection systems

- System protecting belts against damages – pneumatic control system of belts run;



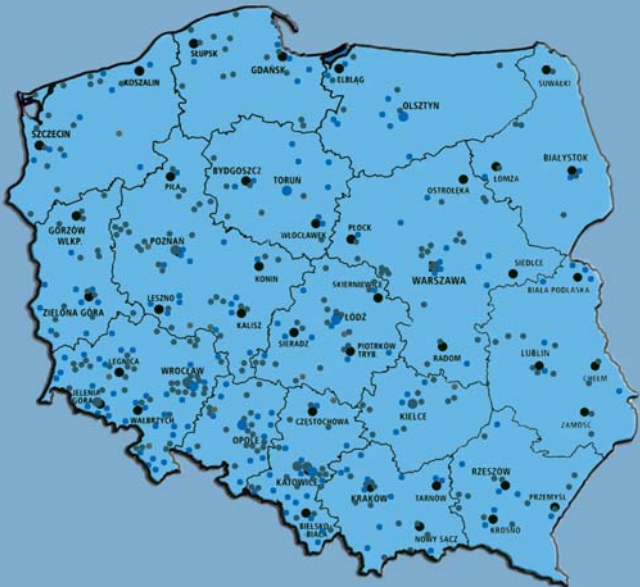
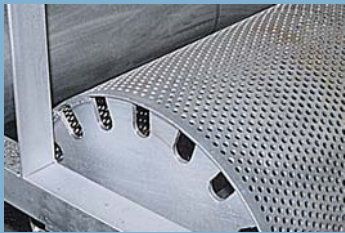
Parameters		V-50	V-80	V-100
capacity**	m <sup>3</sup> /h	1,0-2,5	2,5-4,5	4,5-6,0
dry solid in cake	% DS	15-25	15-25	15-25
device width	mm	1040	1340	1540
belt width	mm	500	800	1000
1st belt lenght	mm	4860	4860	4860
2 nd belt lenght	mm	8900	8900	8900
dewatering zone	mm	2300	2300	2300
pressing zone	mm	3110	3110	3110
motor	kW	0,37	0,55	0,75
belt speed	m/min	0,7-3,5	0,7-3,5	0,7-3,5
compressed air	m <sup>3</sup> /h	0,5-1,0	0,5-1,0	0,8-1,6
water	m <sup>3</sup> /h	ok. 2,5	ok. 4	ok. 5

Parameters		VWZ-100	VWZ-120	VWZ-150	VWZ-200	VWZ-250	VWZ-300
capacity**	m <sup>3</sup> /h	6-10	10-15	14-22	16-32	20-40	30-50
dry solid in cake	% DS	18-28	18-28	18-28	18-28	18-28	18-28
device width	mm	1840	2040	2360	2880	3410	3910
belt width	mm	1000	1200	1500	2000	2500	3000
1st belt lenght	mm	10.800	10.800	10.800	10.800	10.800	10.800
2 nd belt lenght	mm	16.200	16.200	16.200	16.200	16.200	16.200
dewatering zone	mm	5.100	5.100	5.100	5.100	5.100	5.100
pressing zone	mm	4.700	4.700	4.700	4.700	4.700	4.700
motor	kW	1.1	1.5	2.2	3.0	3.0	3.0
belt speed	m/min	1.5-9.2	1.5-9.2	1.5-9.2	1.5-9.2	1.5-9.2	1.5-9.2
compressed air	m <sup>3</sup> /h	2.0	2.0	2.0	3.0	3.0	3.0
water	m <sup>3</sup> /h	7.5	9.0	11.3	15.0	18.8	22.5

\*\* refer to sludge after fermentation



CompRot's Solutions in Poland



CompRot's Solutions



**CompRot**  
 ul. Robotnicza 72, 53-608 Wrocław, Poland  
 tel. +48 071 798 59 00, fax + 48 71 798 59 09  
 e-mail: [comprot@comprot.com.pl](mailto:comprot@comprot.com.pl)  
[www.comprot.com.pl](http://www.comprot.com.pl)