

# Filter Belts

A Division of National Filter Media Corporation  
WASTEWATER TREATMENT DEWATERING

[www.fixfilters.com](http://www.fixfilters.com)

**Rick Gallo**

Product Manager

rgallo@nfm-filter.com

**1-800-321-5223**

## BELT FILTER PRESS TROUBLE SHOOTING GUIDE

Observations	Probable Cause	Check	Correction
1. Low dryness in product cake	1a. Sludge application rate too high	1a. Check sludge feed rate	1a. Adjust influent pumping rate
	1b. Belt speed too high	1b. Check belt speed	1b. Adjust belt speed
	1c. Incorrect polymer dosage	1c. Check polymer dosage & mixing	1c. Conduct jar test to determine optimum dose; adjust dosage accordingly
2. Excessive belt wear	2a. Improper roller alignment	2a. Check belt tracking to see if it crawls to one side	2a. Adjust alignment of rollers
	2b. Sludge build-up on belt or rollers causing improper alignment	2b. Check operation of automatic belt adjuster	2b. Replace or repair faulty automatic adjuster mechanism
3. Solids in filtrate; low solids recovery	3a. Incorrect polymer dosage	3a. Check polymer dosage & mixing	3a. Use jar test to determine optimum polymer dosage
	3b. Solids running off edge of belt	3b. Check influent feed rate	3b. Reduce sludge feed rate
	3c. Application feed rate too high	3c. Check influent feed rate	3c. Reduce sludge feed rate
4. Ponding in belt	4a. Incorrect polymer dosage	4a. Check polymer feed rate	4a. Adjust polymer feed rate
	4b. Influent feed rate too high	4b. Check influent feed rate	4b. Adjust influent feed rate
	4c. Polymer too old	4c. Check polymer solution age	4c. Discard old batch of polymer; mix fresh batch of polymer
	4d. Incorrect floc mixing energy	4d. Check flocculator mixing speed or orifice opening	4d. Adjust flocculator mixing speed or orifice setting
	4e. Inadequate dilution water flow into polymer solution	4e. Check rotameter tube for dilution water flow rate	4e. Increase dilution water feed rate

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5. Belt blinding	5a. Inadequate cake removal	5a. Check belt & doctor blade clearance	5a. Reduce belt/doctor blade clearance
	5b. Overdose of polymer solution	5b. Check polymer solution feed rate	5b. Reduce polymer solution pumping rate
	5c. Belt not cleaning properly	5c. Check belt wash-water flow Check upstream water strainer	5c. Increase belt wash-water flow rate Clean strainer element
	5d. Improper washwater flow pressure	5d. Check booster pump Check washwater nozzle for plugging	5d. Repair booster pump Clean spray nozzle
6. Belt limit is on	6a. No air in tracking system	6a. Check air supply & valves to be sure they are open	6a. Open all necessary valves
	6b. Slurry extrusion trips limit	6b. Check feed rate & belt speed	6b. Reduce feed rate and/or increase belt speed
7. Extrusion of slurry	7a. Rubber sealing worn	7a. Check rubber sealing	7a. Replace worn or damaged rubber seals
	7b. No improper polymer dosage	7b. Check polymer feed rate	7b. Increase polymer feed rate
8. Extrusion of slurry from wedge section	8a. Wedges worn	8a. Check wedges for wear	8a. Replace wedges
	8b. Poor flocculation	8b. Check polymer dosage Check dilution water feed rate check mixer operation	8b. Adjust polymer feed rate Adjust dilution water feed rate Adjust mixer operation
	8c. Throughput too high	8c. Check sludge feed rate	8c. Reduce sludge feed rate
	8d. Belt speed too slow	8d. Check belt speed	8d. Increase belt speed
9. Roller lockdown	9a. No lubrication	9a. Check lubrication	9a. Lubricate, put on regular PM* checklist
	9b. Bearing worn	9b. Check bearing	9b. Replace bearing
10. Block breaking down under pressure	10a. Poor flocculation	10a. See 8b	10a. See 8b
	10b. Too much pressure on slurry by belts	10b. See 8c	10a. See 8c
11. Extrusion in high-pressure section	11a. Poor flocculation	11a. See 8b	11a. See 8b
	11b. Too much pressure on slurry by belts	11b. Check belt tension Check belt speed	11b. Adjust belt tension Adjust belt speed

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Observations	Probable Cause	Check	Correction
12. Wire slips on drive roll	12a. Not enough wire tension	12a. Check wire tension	12a. Increase wire tension (do not exceed recommended belt tensions)
	12b. Overload, too much slurry in machine	12b. Check sludge feed rate	12b. Shut down machine, remove excess slurry, & restart machine at lower feed rate
13. Cake sticking to belt	13a. Poor flocculation	13a. See 8b	13a. See 8b
	13b. Doctor blades worn	13b. Check doctor blades	13b. Replace worn blades
	13c. Belts not being cleaned	13c. See 5c	13c. See 5c
14. Doctor blades wearing heavily	14a. Misalignment of blades	14a. Check blade alignment	14a. Realign blades
	14b. Too much blade pressure on belt	14b. Check blade/belt pressure	14b. Adjust blade/belt pressure
15. Drive system gear lockdown	15a. No oil in system	15a. Check oil	15a. Add oil & put on regular PM list
	15b. Pulleys or v-belt torn or slipping	15b. Check pulleys or v-belt	15b. Repair or replace pulleys or v-belt
16. No speed variation on main drive or mixer	16a. Faulty wiring in DC or ACpanel speed control	16a. Check wiring in panel	16a. Have instrumentation or electrical crew
	16b. Mechanical speed control	16b. Check drive for mechanical failure	16b. Have mechanical maintenance crew check drive

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