

OV AFM Filtration Use in Oil Wastewater

Case 1:

Oil Pipe Wastewater Treatment Dongying China March 2018

Source water is from pipes with oil and scale inside them that have been washed. Suspended Solids and Oil Loading exact figures are unknown and believed to be below 200ppm.

Process flow is:

- High Pressure pump used to flush pipes with water collected by a channel to a sedimentation tank.
- Filtered using walnut shells in a sand filter vessel
- After this filtration, water is held in a buffer tank
- Final filtration in an OVAFM 300 filter
- After filtration water used through a high pressure pump for further use



Case 2:

Second Oil Pipe Wastewater Treatment Dongying China September 2018

This process utilizes 1 x OV AFM 700 filter, at 24m³/h.

Process in water is wastewater from the oil field. Process out water is required to meet the reinjection standard.



Case 3:

CNOOC Offshore Oilfield Wastewater Treatment May 2019

This project applies a combination of filtration and aeration systems to achieve filtration:

- Multi-media filter
- Dissolved Air Filtration System
- Micron filtration using the OV AFM 2000 filter

Water suited for reinjection



Case 4:

Daqing Oilfield Wastewater Treatment August 2020

This project combines the following:

- Sedimentation tank
- Suspended sludge filter
- OV AFM 700 Filter

Discharge standard oil <8mg/L Particle size < 2 micron
Capacity 5m³/hr.



日期 Date	进油 Oil of process in (mg/l)	出油 Oil of process out (mg/l)	去除率 Removal rate %	进水悬浮物 SS of process in (mg/l)	出水悬浮物 SS of process out (mg/l)	去除率 Removal rate %
2020.8.09	37.3	1.4	96%	62	12.5	80%
2020.8.10	127.2	3.4	97%	72	11.7	84%
2020.8.11	25.4	4.2	84%	46	7.9	83%
2020.8.12	43.4	2.4	94%	42	6.7	84%
2020.8.13	22.5	4.2	81%	46.8	7	85%
2020.8.14	81.66	4.73	94%	55.8	6.2	89%
2020.8.15	1.61	0	100%	45.7	5.6	88%
2020.8.16	27.8	4.2	85%	42.1	5.4	87%
2020.8.17	43.4	2	95%	52.8	6.8	87%
2020.8.18	2.8	0.37	87%	43	4.1	90%
2020.8.19	37.3	1.4	96%	62	8.9	86%
2020.8.20	142.9	3.1	98%	29.5	4.5	85%
2020.8.21	81.66	4.73	94%	23.5	2.9	88%
2020.8.22	39	4.7	88%	24	3.9	84%
2020.8.23	34.6	2.1	94%	28	4.3	85%