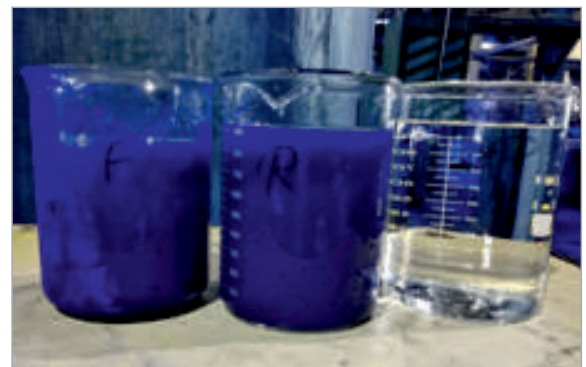


DrOplets

The pigment Recovery and COD load reduction in effluent treatment plant

SUDARSHAN Chemical Industries Ltd. is one of the largest Pigment producer in India and have been prominent in global markets for over 60 years. Environmental compliance being focus, the customer was treating 1100 ppm pigments in effluent treatment plant until YCS Technologies Pvt. Ltd. suggested them to use Technorbital's GRAFiL Ultrafiltration technology to isolate pigments (COD).

CUSTOMER	SUDARSHAN CHEMICAL
Location	Mahad Maharashtra
Capacity	1320 m ³ /d
Pigment Concentration	1100 ppm
Commissioned	Jan 28, 2020
Product	GRAFiL 6040 * 34 Nos.
Construction	2 x 30 m ³ /h Module
Filtration Mode	Cross Flow - 10%
Water Recovery	92%
Product Recovery	99%



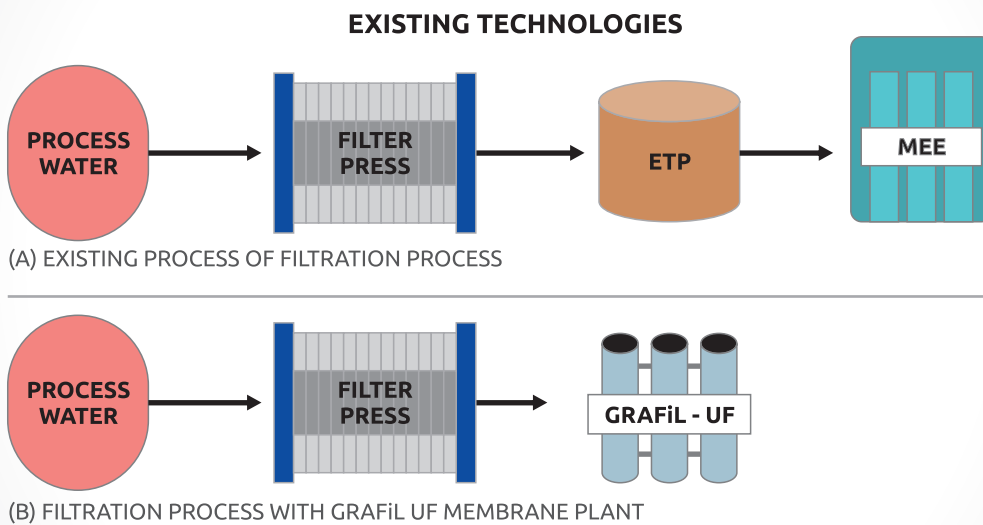
Blue pigment - lab

PROJECT DELIVERABLES

♦ Water Recovery	♦ Product Recovery
♦ Energy Reduction	♦ Sludge Reduction
♦ Better Compliance	♦ Efficient handling of feed water quality upsets
♦ Reduced capital costs	♦ Fiber ideally suited to meet stringent regulations

The target was to recover around 1.5 ton of pigment per day and also reduce the COD/BOD load because of the pigment on the Effluent Treatment Plant.

THE PROCESS DIAGRAM



It is clearly visible that, in traditional / existing scheme two separate processes are employed for the lost product recovery and waste water treatment. But, application of GRAFiL - UF membrane plant can replace both requirements for product recovery and Effluent treatment.

PIGMENT QUALITY PARAMETER

PARAMETERS	INLET	OUTLET
Pigment	1100 ppm	22 ppm
pH Range	4 to 10 pH	4 to 10 pH
Pressure	1 to 2 bar	Up to 1 bar
UF Plant Recovery	99%	

KEY SUCCESS WITH GRAFiL UF

- ♦ Better cleanability due to PolyNorbital Polymer.
- ♦ It reduces the bio-Fouling tendency and algal development on the membrane surface and improves the performance.
- ♦ Reduce energy and chemical consumption.
- ♦ GRAFiL UF Plants are low in Capex - as compared to traditional technologies.

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