

Case study :

Revamp of 500 KLD STP at Sharmanji Yarns
Pvt Ltd., Ludhiyana



TRANSCEND CLEANTEC PVT. LTD.

TRANSHIP3.0 HIGH PERFORMANCE HIGH SURFACE AREA MBBR MEDIA



INSTALLATION AT – Sharmanji Yarns STP, Ludhiana

► INFLUENT PARAMETERS

1. FLOW – 500 KLD

2. BOD – 300 ppm

3. COD – 640 ppm

► Previous treatment : SAFF Media



Problems faced with previously used media

- BOD, COD was not as per NGT norms.
- Most of the media was broken aeration tank
- More sludge volume was being generated
- MLSS development was fragile.
- Unsatisfactory results on N & P removal.



Revamp Design with Transchip3.0

- BOD in : 300 ppm
- COD in : 640 ppm
- Nitrogen : 60 ppm
- Phosphorus : 40 ppm
- OIL & Grease : 30 ppm
- Available tanks : 100 kl x 1 nos

- **Solution provided :**
- Tanks used : 100 KL x 1 no
- HRT : 4.8 hours
- Media : 2.85 m³ per tank
- MLSS achieved : 3500 ppm
- F/M achieved : 0.3



Revamp with Transchip3.0 and results observed:-

- ▶ BOD, COD are now being controlled efficiently
- ▶ **BOD of 4 ppm and COD of 31 ppm were being achieved.**
- ▶ Transchip3.0 media is properly being retained in the aeration tank by proper media retention screens
- ▶ Sludge quantity is reduced considerably as most of the active biomass is in action on the high surface of the media

Results with Transchip 3.0 in action:-



Sophisticated Analytical Instruments Laboratories Society
(Registered as Society with Registrar of Firms & Societies, Punjab, Chandigarh)
Thapar Technology Campus, Bhadson Road, Patiala-147 004 (India)



TC-5631


TEST REPORT

Test Report No.:	E(S)/20-21/082	Date:	14-09-2020	Serial no.	078
Service No.	E(S)/20-21/082 (01-02)	Customer's Ref.	Sample Submitted By Customer on dtd. 08.09.2020 dtd. ref letter no. 01.09.2020		
Customer's name and address:					
Sharmanji Yarns Pvt. Ltd Vill. Lakhwal Road, Kohara Ludhiana Kind attn: Mr. Ramesh Kumar Singh					
Sample Description		STP and Raw Water			
Condition of the sample received		O.K.			
Customer's sample identification No. (if any)		01- STP 02- Raw Water			
Quantity/number of samples		2 litre/ Two			
Test parameters		01- 02 pH, TSS, COD, BOD, Total Phosphorous			
Standard/Specification/Method followed		IS:3025, APHA 23rd.Edn			
Deviations (if any)		--			
Documents constituting this report (if any)		--			
Date of Receipt of Job		Date of Completion of Job		Total Number of Pages	
08.09.2020		11.09.2020		2	

TEST RESULTS

S. No.	Parameters	Test Method	Unit	Results	
				01	02
1	pH	APHA 23 rd . Edn.4500-H ⁺ B	--	6.9	7.1
2	Total Suspended Solid	APHA 23 rd . Edn.2540-D	mg/l	10	<10
3	Chemical Oxygen Demand (COD)	APHA 23 rd . Edn. 5220B	mg/l	12	<5
4	Biochemical Oxygen Demand for 3 days at 27°C (BOD3)	IS: 3025 (Part 44)-1993, Reaffirmed May, 2009	mg/l	<5.0	<5.0
5	Total Phosphorous as P	APHA 23rd. Edn. 4500-PC	mg/l	1.5	<0.2

.....end of report.....


M. Agarwal
Technical Manager
(Authorized Signatory)
SAI/FM/CSC-11



Thank You.....

- Forward your enquires to,
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 - Ph : 08669190129
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