

### Transchip 3.0

Surface Area - 5500 m<sup>2</sup>/m<sup>3</sup>, 6 to 14 times higher than conventional media

Removal Performance – 10 BOD

Clogging – Anti clogging design

Process Stability – Highly stable

Savings in construction costs – 50%.

Ease in upgradation – Very easy, can upgrade to 5 times the load

Energy savings – About 30 to 50% due to parabolic design and low mixing requirement

Savings in transportation costs – Yes, it occupies less space per m<sup>2</sup> and per m<sup>3</sup>

Durability – 20 years guaranteed life...

Reactor load rate – 3-6% of tank volume for STP



### Conventional media

Surface Area - 400 to 500 m<sup>2</sup> per m<sup>3</sup>

Removal Performance – 30 BOD

Clogging – Yes, frequently

Process Stability – Not stable

Savings in construction costs – Not much compared to ASP

Ease in upgradation – Easy

Energy savings – Not much

Savings in transportation costs – No

Durability – 3 to 5 years

Reactor load rate – 30-40 % of tank volume for STP

## Advantages of TRANSCHIP 3.0

- Protected active surface area: ~ 5,500 m<sup>2</sup>/m<sup>3</sup> • High quality PE material (virgin) • Optimal pore system and – structure
- Less carrier volume needed • Small footprint system • Simple operation • Thin, controlled biofilms
- Optimal diffusion of O<sub>2</sub> and substrate • Easy upgrading or retrofitting of existing plants
- Large diameter • No abrasion & wear • Proven technology & know-how “Made in Germany”
- Extremely high removal capacity due to maximized concentration of active biomass in smallest possible reaction volume • Process support for calculations
- Perfectly suitable for the operation with blocking-resistant and large-perforated retention screens (perforation dia. 20mm)
- Economical option with regranulated also available.

## Our Valued Customers

- TATA BSL Ltd. • Bhushan Power Ltd. • Hindustan Unilever Ltd.
- NTPC – Leachate treatment plant • Himedia Laboratories Pvt. Ltd.
- Manipal University • Eesavyasa Technologies Pvt. Ltd.
- Bhushan Steel Ltd. • Sun Pharmaceutical Industries Ltd.
- Ionex Envirotech Pvt. Ltd. • Deknomet Systems Pvt. Ltd
- Jyoti Hydrotech Pvt. Ltd. • Navkiran Techno Feeds • Shubham Inc
- Thermax Ltd. • Toshiba Water Solutions Pvt. Ltd.



BEYOND CONVENTIONAL

### Transcend Cleantec Pvt. Ltd.

S No 37/2, Shed no 463/1, Near Joshi Transformer, Narhe, Taluka Haveli, Pune-411041



+91- (0)- 8669190129



info@transcendcleantec.com



www.transcendcleantec.com

blmedias.com



In agreement with Mutag Germany

~ 5,500 m<sup>2</sup>/m<sup>3</sup>

The carrier media of the future for most compact, efficient biological water and waste water treatment systems...

+91- (0)- 8669190129



info@transcendcleantec.com



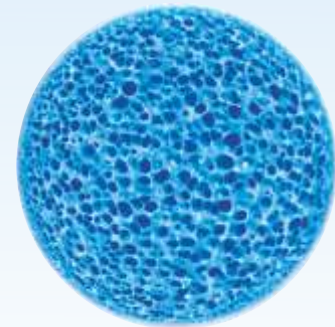
www.transcendcleantec.com



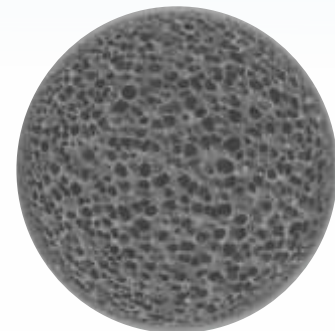


# For highest performance in biological water treatment

- Best possible removal performance
- Remarkably stable processes
- Small footprints
- High grade quality
- Ideal for easy retrofit & upgrade
- Long life material, No wear
- Best price-performance ratio



High quality pore system of TRANSCHIP 3.0



High quality pore system of TRANSCHIP 3.0 R

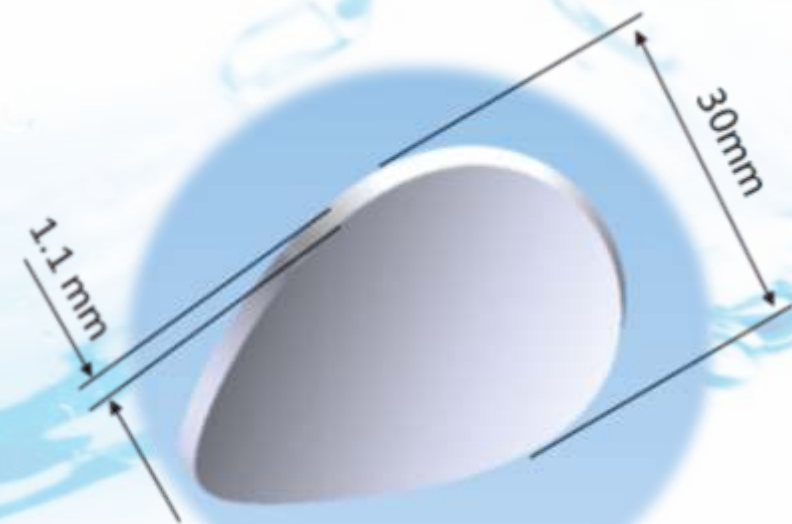
Transchip<sup>3.0</sup>

## The best carrier available

Removal rates of TRANSCHIP 3.0 are up to 13 times higher than with "CONVENTIONAL" carriers.

The TRANSCHIP is a high-performance MBBR carrier and provides a protected active surface area of ~ 5,500 m<sup>2</sup>/m<sup>3</sup> for the immobilization of micro-organisms which are in charge of the different biological water treatment processes.

Its application is characterized by extremely high removal rates and reliable process stability.



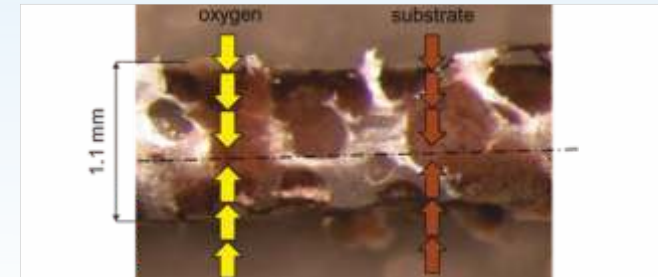
Diffusion depth from each side approx. 0.5 mm

## Transchip<sup>3.0</sup> MBBR Technology

Based on more than 20 years of experience, Transcend Cleantec offers beyond conventional technology for biological treatment



Typical scheme of a MBBR treatment tank



High quality pore system of TRANSCHIP 3.0

## Application

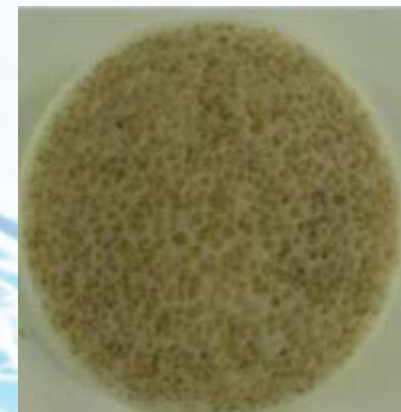
TRANSCHIP 3.0 is used in the following biological treatment processes:

- Denitrification
- Nitrification
- COD removal
- ANAMMOX



TRANSCHIP 3.0 with planctomycetes

## System components



TRANSCHIP 3.0 with biofilm



Aeration system

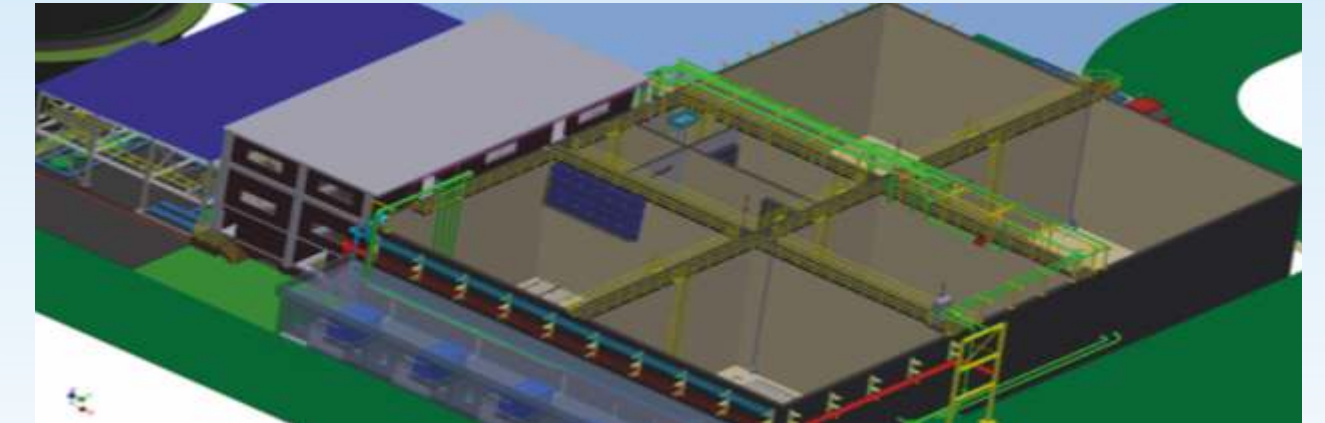


Carrier retention screen

## Design & application

The Transchip 3.0 MBBR Technology is a proven biological treatment process with numerous WWTP operators.

A lot of plants using the Transchip 3.0 MBBR Technology have been designed and engineered in basic and detailed by Transcend Cleantec's high-qualified engineering team.



3D-engineering by Transcend Cleantec

## Trendsetting and sustainable MBBR carrier technology ...



TRANSCHIP 3.0 MBBR Technology

- Pulp & paper industry
- Municipal plants
- Coke & steel production
- Petro and oil industry
- Food and beverage industry
- Pharmaceutical & chemical industry
- Aquaculture industry and fish-farming

...and many more!

## MBBR media for Recirculating Aquaculture system in fisheries

- Best performance in ammonia and nitrite removal - scientifically tested!
- Old dead bacteria are constantly replaced by young heavy feeding bacteria.
- Protective Surface Area of 5500m<sup>2</sup> - highest among all biocarrier!
- Small footprint - greatly reduce space required
- Less maintenance due to self-cleaning by shear force, never clogging!
- High Durability - High quality material that prevents abrasion!
- Extremely low energy consumption
- Increases oxygen content in the water
- 100% safe to use, BPA-free, No carcinogens leaching.