

COMPARATIVE ANALYSIS of MBBR vs OZO-BIOXY STP

EQUIPMENT / CIVIL TANKS / MAINTENANCE POINTS	MBBR STP	OZONE-BIOXYPLASMA STP
Bar Screen + chamber	REQUIRED	REQUIRED
Grit Chamber / O&G Trap + chambers	AS PER NEED	AS PER NEED
O&G Tank	REQUIRED	NIL
Equalisation Tank	REQUIRED	NIL
Raw Sewage storage tank	REQUIRED	REQUIRED
Aeration Tank 1	REQUIRED	NIL
Aeration Tank 2	REQUIRED	NIL
Flocculation tank	REQUIRED	NIL
Tube settler tank	REQUIRED	NIL
Chlorine contact tank	REQUIRED	NIL
Ozone cum Bio Oxygen contact tank		REQUIRED
Pumps (Transfer + Filter-feed)	REQUIRED	REQUIRED
Ozone cum Bio-Oxygen recirculation pump		REQUIRED
Filter-Feed tank	REQUIRED	REQUIRED
Filtration systems (MGF + ACF)	REQUIRED	REQUIRED
UF system	REQUIRED	NIL
Ozone cum Bio Oxygen generator and accessories		REQUIRED
Treated water storage tank	AS PER NEED	AS PER NEED
MBBR Media	REQUIRED	NIL
Biological treatment cost	REQUIRED	NIL
Tube settler media	REQUIRED	NIL
Aeration Blower(s)	REQUIRED	NIL
NaOCl	REQUIRED	NIL
Electrical Control Panel	REQUIRED	REQUIRED
Total Power consumption	VERY HIGH	AVG. 60% LOWER
Sludge recirculation pump	REQUIRED	NIL
Sludge pump	REQUIRED	NIL
Sludge bed	REQUIRED	NIL
Yearly maintenance cost of sludge-handling	REQUIRED	NIL
Total space required	MUCH LARGER SPACE	AVG. 65% LOWER
Plant Operator	REQUIRED, HIGH SKILLED	REQUIRED, LOW SKILLED
Operation hassles	REQUIRED	NIL
Pipes & plumbing fittings	REQUIRED	REQUIRED
Erection & Commissioning	REQUIRED	REQUIRED
Miscellaneous	REQUIRED	REQUIRED
Treated water Quality	FLUCTUATES WITH TIME	CONSISTENT, FORMALLY GUARANTEED OUTPUT PARAMETERS, WITH FULL RE-USABILITY
Scope of handling excess load and raw water volume	NIL	EXTENDABLE
Profit-margins for system integrators / solution providers	Very competitive	Higher profit margins, as customer RoI is fast, capital cost for making the STP is lower