MUST cubeClean | containerized wastewater treatment plant

January 2020

INTRODUCTION

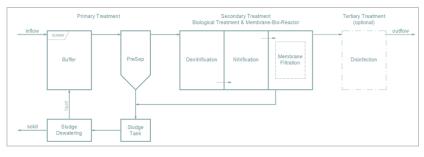
The **cubeClean system** from MUST offers a turn-key compact and mobile solution for the decentralized treatment of wastewater at remote locations.

A unique solution designed for remote municipality wasterwater treatment plants as:

- small villages
- camp sites
- construction sites

TECHNOLOGY

The **cubeClean** system combines best suitable technology for your purification demand. The main setup is based on proven cleaning technologies which can be combined for pre-, secondary and tertiary treatment.



PERFORMANCE

Unit	Range of typical inflow	Effluent requirements of EU 91/271/ECC			Minimal Degradation	Effluent cubeClean
		< 2'000 PE	2'000 – 10'000 PE	> 10'000 PE	[%]	60 – 1'000 PE*
mg/l	400 - 800	125	125	125	75	< 50
mg/l	200 - 400	25	25	25	70 - 90	< 5
mg/l	100 - 350		60	35	70-90	< 5
mg/l	15 - 60			15	70-80	< 10
mg/l	3 - 12			2	80	< 2 (1) **
	mg/l mg/l mg/l	Inflow mg/l 400 - 800 mg/l 200 - 400 mg/l 100 - 350 mg/l 15 - 60	inflow < 2'000 PE mg/l 400 - 800 125 mg/l 200 - 400 25 mg/l 100 - 350 mg/l 15 - 60	Inflow < 2'000 PE 2'000 - 10'000 PE mg/l 400 - 800 125 125 mg/l 200 - 400 25 25 mg/l 100 - 350 60 60 mg/l 15 - 60 - -	inflow < 2'000 PE 2'000- 10'000 PE > 10'000 PE mg/l 400-800 125 125 125 mg/l 200-400 25 25 25 mg/l 100-350 60 35 mg/l 15-60 15 15	inflow < 2'000 PE 2'000- 10'000 PE > 10'000 PE mg/l 400-800 125 125 125 75 mg/l 200-400 25 25 25 70-90 mg/l 100-350 60 35 70-90 mg/l 15-60 15 15 70-80

Total Nitrogen = TKN (Norganic+NH3)+NO3-N+
** With additional flocculants for precipitation

TECHNICAL RANGE

Parameter	Unit	cubeClean System 12.5	cubeClean System 25	cubeClean System 60	cubeClean System 120		
		MUST	MUST	MIST	MUST		
Wastewater treatment capacity	m³/day	12.5	25	60	120		
Population equivalent	PE	60 -100	125-200	300 - 500	600-1'000		
Buffer tank capacity	m ³	2.1-4.2	4.2-8.4	10-20	20 - 40		
Operation environmental temperature	°C	- 45°C to + 45°C					
Noise emission	dB (A)	inside / outside the container: max. 75 / 45 dB (A)					
Sludge Dry Solid (DS) content	in %	minimum 15 %					

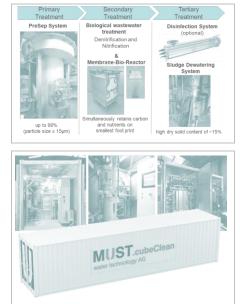
INVESTMENTS AND ROI

Due to customized systems ROI has to be calculated individually. Average ROI is below 4 years (depends on size and application).



FACTS

- Primary treatment with solid/liquid separation of up to 99%
- Simple and small treatment plant with high efficiency
- Low operation and maintenance cost (reduced OPEX)
- Up to 90% space savings to traditional treatment plants
- Stable and reliable process



KEY BENEFITS

- Flexible system for remote locations
- Increase capacity of existing wastewater treatment plants
- Modular and scalable design
- Flexibility for future growth / capacity increase
- Short delivery time, fast integration in existing facility and quick commissioning

CONTACT

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