

CLEAN SOX TOWER



Futureproof hybrid EGCS in one single unit

The patented Clean Marine CleanSOx EGCS is specifically designed to meet the needs of the maritime industry and offers proven Allstream exhaust gas handling meaning all exhaust sources on board can be served by one common EGCS unit; enabling a fast return on investment.

Our EGCS system works equally well in open (liquid one time through) and closed (liquid recirculation) modes while seawater and alkali is used to regulate the sulphur trapping efficiency in both modes. The EGCS can operate in all types of water (including low alkaline and saline water) in either mode and without loss of efficiency.

The CleanSOx EGCS is therefore an optimal solution for the marine environment and represents a futureproof system for the ship owner, adhering to regulatory variety in all waters. Our system has also the ability to combine natural and added alkalinity in open loop operation. This means it will provide high cleaning efficiency while maintaining a pH>6 at the outlet, making the effluent compliant with all IMO and regional/local regulations.

Key features

No back pressure:

- No fuel penalty
- AE's can start connected to EGC unit(s)
- No restrictions running AE's in part load - no impact on engine parameters (EIAPP)
- Boilers connected

Closed loop/open loop:

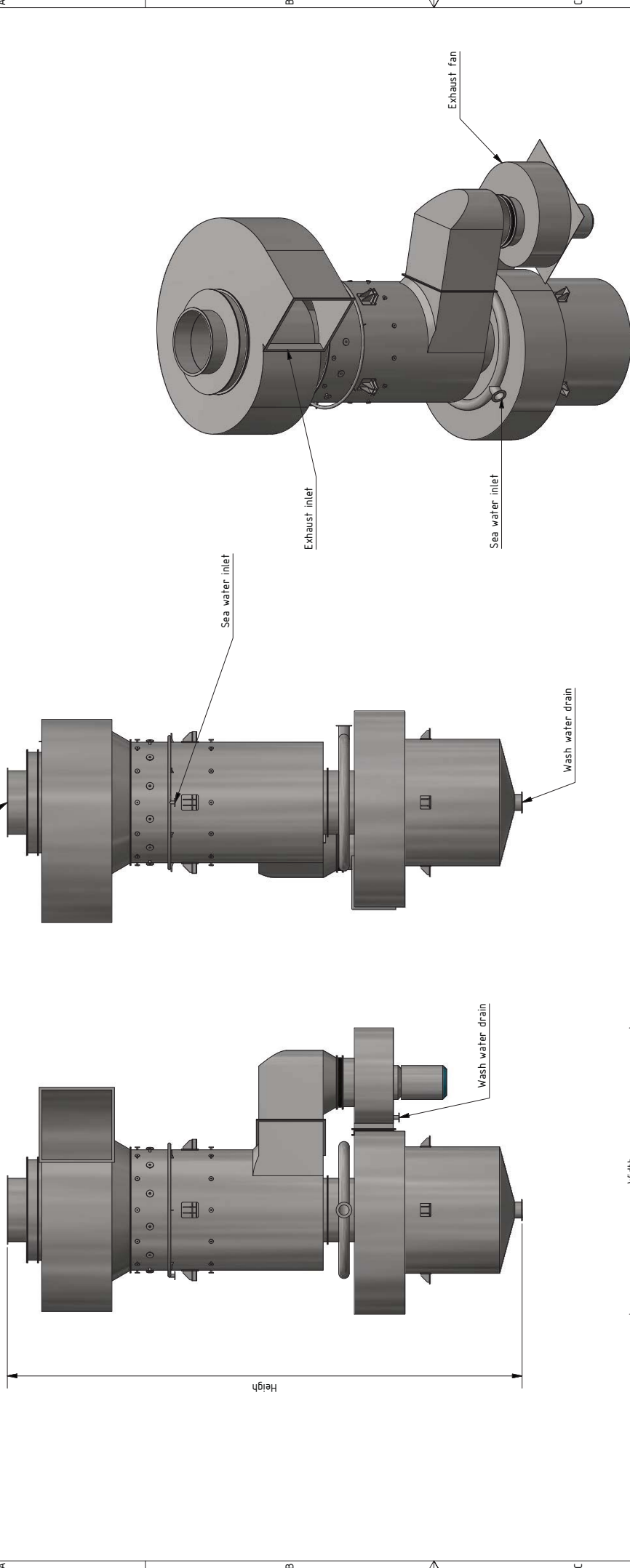
- Open loop 0,5% S - sea water < 3,5 Sulphur
- Open loop 0,1% S - sea water + NaOH, can transit any water - no alkalinity restrictions
- Closed loop - sea water + NaOH, only required where zero discharge is called for

pH:

- Open loop 0,5% S - process water + cooling water + dilution device
- Open loop 0,1% S - plus NaOH (pH 6,5 at 4m or pH 6 overboard)



System size	Typical values									
	60	70	80	90	100	120	140	160	180	200
Height [m]	10,5	10,9	11,3	11,6	12,1	12,7	13,2	13,9	14,3	14,9
Width [m]	5,2	5,3	5,8	6,0	6,5	7,1	7,4	8,1	8,3	9,1
Depth [m]	3,6	3,9	4,2	4,4	4,7	5,1	5,5	5,9	6,2	6,6
Dry mass [metric ton]	11,7	13,1	14,6	16,0	17,5	20,4	23,3	26,2	29,1	31,9



PRELIMINARY

1	25.09.2017	AKH	MADE BY	First Issue	TAM
REV	DATE	AKH	MADE BY	DESCRIPTION	APPR
Reason for issue				PROJECT NO.	HULL NO.
Issued for information				REVISION	SHEET NO.
DRAWING NO. 17000-20000-003				1	A3 1 of 1
CleanSOx Tower					
EGC-unit typical dimensions					
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<small>FIRST ANGLE PROJECTION</small>					