

TeamTec

Norwegian Traditions

TeamTec is continuing a tradition of maritime industrial activity at Tangen in Tvedestrand, Norway, dating back to around year 1700.

TeamTec was founded on the Norwegian Constitution day in 1984 by a small group of ambitious and enthusiastic pioneers.

Today, TeamTec is a well-recognized name in the maritime industry. Our company has been built up around decades of manufacturing maritime waste incinerating systems as well as stripping ejectors from our inhouse foundry. TeamTec is on a continuous growth path and in recent years TeamTec has also been offering ballast water management systems (BWMS) to the maritime sector.

We are proud to supply quality products and service from our worldwide service network.







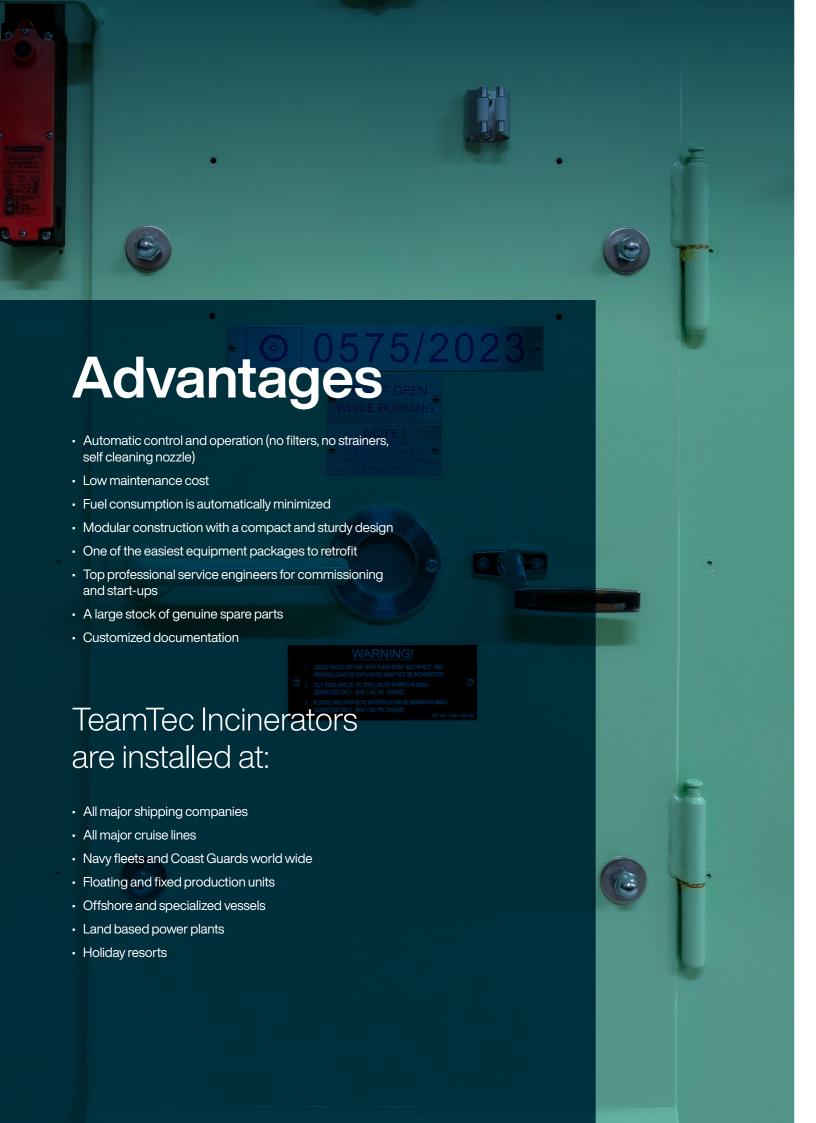
Incinerator Certification

- IMO-RESOLUTION MEPC. 244(66) adopted April 4th 2014, "Standard Specifications of Shipboard Incinerators"
- Type approved by all major societies

Technology

Onboard incineration of sludge oil and solid waste is convenient, efficient, sustainable and necessary for many types of vessels / operations. TeamTec Incinerators are computerized (PLC) to make the daily use simple, automated and safe for the user over a long service life.

All models are running at a high temperature to enable high capacity, with a compact footprint.



Incinerator Models





GS1000CX

GS900CRSX







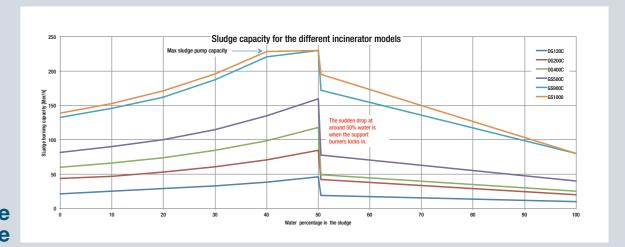


Capacity Overview



Criteria for selection of propersly sized incinerator and sludge tank:

- Sludge tank capacity: 2 % / 0.5 % of ship's HFO / MGO consumption per 24 hrs
- Incinerator capacity: Sludge capacity sufficient to burn 1 % / 0.25 % of ship's HFO/MGO consumption per 24 hrs during 8-12 hrs / day operation
- Solid waste generation: 2 kg / person / day (range 1 2.5)



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			SLUDGE	SOLID W	VASTE			WATER (Optional)	FUEL		EL. POWER	DIMENSIONS			APPROX WEIGHT		RECOMN TANK(S)	MENDED
Incinerator model	Version	Max thermal capacity [kW]	Capacity [l/h] (see certificate)	Solid waste batch feeding capacity [I/load]	Kg/batch load (IMO spec, 130 kg/m3)	Sluice load [l/load]	Solid waste capacity range [kg/h]	Bilge water [l/h]	(Sludge mode) Preheating [I*]	(Solid waste mode) Approx. max. [I/h]*****	App. rated el. Power (440V/ 60Hz) kW	Incinerator LxWxH [mm]	Minimum maintenance space LxWxH [mm]	Flue gas duct DN	Incinerator chamber [kg]	Flue gas fan [kg]	Sludge tank(s) [liters]	Diesel oil tank liters
LOGI		530	69	230	30	TBA	TBA	N/A	22*	TBA	10	1232x1326x1975	750x350x300	400/350	1319	312	1000	400
OG120C	С	220	29	200					13*		11	1033 x 1445 x 1836	2350 x 2060 x 2200	200	1268	175	700	400
	CW				26					12	7	1013 x 1445 x 1834	2350 x 2060 x 2200		1245			
OG200C	C**	560 (630**)	73 (87**)	400	52			127	8*		15	1350 x 1900 x 1960	2400 x 2475 x 2200	300	2544	326	1100	400
	CW	422								35	12	1350 x 1900 x 1960	2400 x 2400 x 2200		2503			
	CS**	560 (630**)	73 (87**)			50	20-50	127	8*		15	1697 x 1900 x 1960	2400 x 2475 x 2200		2650		1100	
	CSW	422								35	12	1697 x 1900 x 1960	2400 x 2400 x 2200		2609			
OG400C	C**	616 (727*)	87 (87.5**)	400	52			140	16*		15	1350 x 1900 x 1960	2400 x 2475 x 2200	350	2544	330	1700	400
	CW	422								35	12	1350 x 1900 x 1960	2400 x 2400 x 2200		2503			
	CS**	616 (727*)	87 (87.5**)			50	20-50	140	16*		15	1697 x 1900 x 1960	2400 x 2475 x 2200		2650		1700	
	CSW	422								35	12	1697 x 1900 x 1960	2400 × 2400 × 2200		2609			
GS500C	CS**	850 (901**)	100 (120**)	500	65	125	50-135	153	19*		27	2457 x 1902 x 2117	3300(2450***) × 2420 × 2200	400	3956	526	2000	400
	CSW	642								42		2457 x 1902 x 2117	3300(2450***) × 2420 × 2200		3926			
	CGSW	791					60-150				35	2937 x 1902 x 2167	3790 x 2440 x 2200		3880			400 or 700
	CFGSW	808					75-200				55	4587 x 2869 x 2172	6050 x 2800 x 2300		6550			700 or 1100
GS500CIC	CICS	930	105	500	65	125	50-135				31	2457 x 1902 x 2117	3300(2450***) x 2420 x 2200	400	4080	541	2000	400
GS900C	CX	1369	162	600		125			21*		45	2926 x 1807 x 2140	3740 x 2450 x 2200	500/600	4148	800	2000	400
	CSRX				78		50-135					2926 x 1914 x 2583	3740 x 2450 x 2650		4365		(+3000)	
GS1000C	CX	1500	171	600	78	125		237			45	2926 x 1807 x 2140	3740 x 2450 x 2200	500/600	4222	800	2000	400
	CSRX						50-135					2926 x 1914 x 2583	3740 x 2450 x 2650		4443		+3000	

Version codes: Code feature description

- C Standard, computerized automation / control (PLC)
- Auto feeding of solid waste (hopper, shredder, screw feeder)
- Stirrer for solid waste
- Water injection
- IC Increased capacity
- S/RS Sluice for solid waste
- W Incinerator for solid waste onlyX Large single door opening

Version codes: Possible additional features Code feature description

- A Ampere meter for flue gas fan
- B Diesel oil booster pump
- D Dual sludge tanks
- Cooling of control cabinet
 Sludge tank level readout in display panel
- 1 Flue gas fan motor heater
- Vibration dampers
- CCS centr. control station slave display
- Y Twin tanks
- Expected daily consumption when burning sludge with less than 50 % water content
- ** With optional bilge water injection (I)
- *** Front sided sluice solution
- **** The PLC will always try to minimize fuel consumption when energy release from waste is high enough

Bilge Water Injection

Purpose and benefits

- Supplement to the OWS
- Developed primarily for disposal of dirty bilge water
- Increased sludge burning capacity
- Reduced NOx emission
- No filters or strainers
- No chemicals
- No more "magic pipes"
- Inexpensive
- IMO certified
- Quick and simple upgrading of existing incinerators



Sludge Preparation Tank

Sludge heating / mixing tanks

For the best economical operation and optimal efficiency of any incinerating plant, we recommend installing twin or dual cylindrical sludge tanks. Please contact us for indepth advice.

All TeamTec tanks are complete with sludge circulation pump, level switches and thermostat.

Heating Options

Steam
 Electric
 Thermal

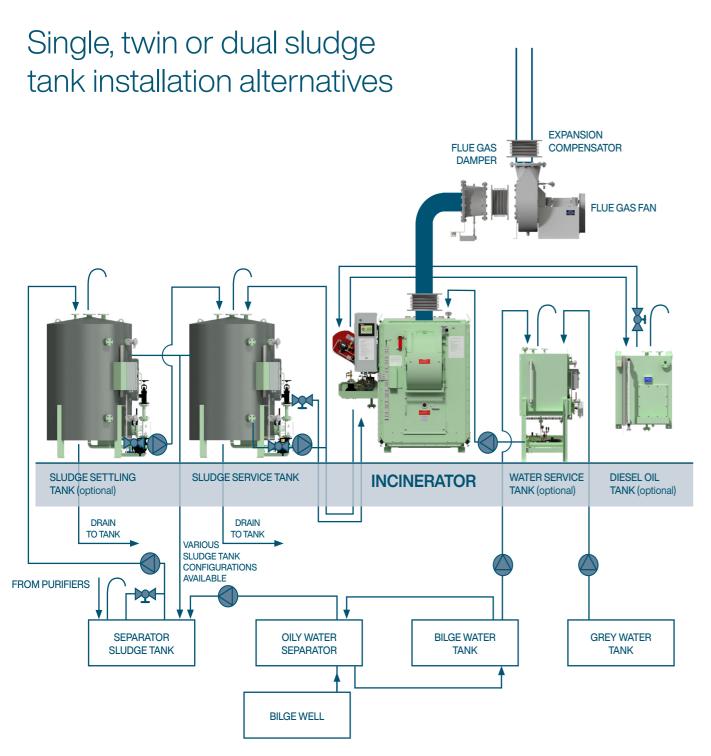
Water tank	Rectangular sludge tank	Cylindrical sludge tank	Insulated & plated
435L	700L	1100L	2000L

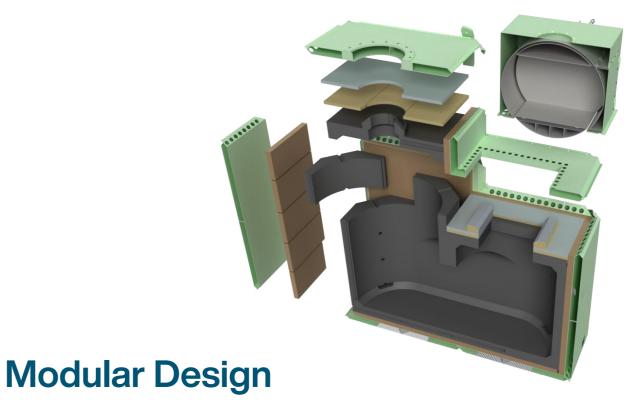
Optional Supplement

- Level transmitter for read out on incinerator display
- · TeamTec water in oil monitor for a perfect control of your sludge oil quality. Available upon request.

RATED CO	NSUMPTION	DIMENSIONS			
Туре	Heating by steam - thermal oil	Heating by el. power	Circ. pump el. power	LxWxHmm	kg
4351				1528 x 905 x 1767	370
7001		12 kW	– 2,5 kW	1422 x 836 x 2016	500
1100 I	50 kg/h - 6-10 bar			1632 x 1251 x 2050	500
1700 I	00 Ng/11 0 10 ball			1905 x 1439 x 2110	590
20001		16 kW		1815 x 1439 x 2360	630
30001				2030 x 1660 x 2470	750
4001	Diesel oil tank			910 × 750 × 1167	190
4351	Water service tank	(12 kW)		1528 x 846 x 2308	491

Recommended Ship's Incinerator Installation





Allows flexibility and many options of retrofit and extended product lifetime

Flat-Packed Incinerator

- TeamTec bolted and modular construction
- Replaceable refractory
- All parts through a normal ship door
- · Within a few days we assemble the incinerator in the final location onboard

TeamTec containerized and skid mounted incinerating plants

Self-contained units for mounting outside on weather deck, ready for operation. The complete plants are built to the highest marine standards.

Skid



Containerized



Lifecycle Service

TeamTec provides comprehensive after sales service for all TeamTec products.

Spare Parts

- Fast service
- Well-stocked
- Smart storage
- Custom kits
- Continuous improvement
- Efficient delivery

Contact us - e-mail: spares@teamtec.no

Upgrades

- Improved technology has many advantages; keywords are automation, increased capacity and lower fuel consumption
- We can offer various upgrades of both software and hardware
- Additional equipment and features can be retrofitted to further improve the versatility
- Upgrading kits make older incinerators more cost-efficient and environmentally friendly

Contact us - e-mail: spares@teamtec.no

Service

A combination of experienced and highly qualified staff plus extensive know-how guarantees our customers will receive the highest level of customer care.

Our service department provides the following:

- Commissioning
- Repair service
- Pre-installation survey

Service agreement and training:

- Annual service visits
- Technical seminars
- Required training of the crew who operates the incinerator
- Simplify acceptance by local port authorities

Contact us

E-mail: service@teamtec.no

Phone: +47 37 19 99 99 (24h technical service!)



