



Dynasafe Static Detonation Chamber (SDC) Demilitarization Units

UXB International Inc.
www.uxb.com

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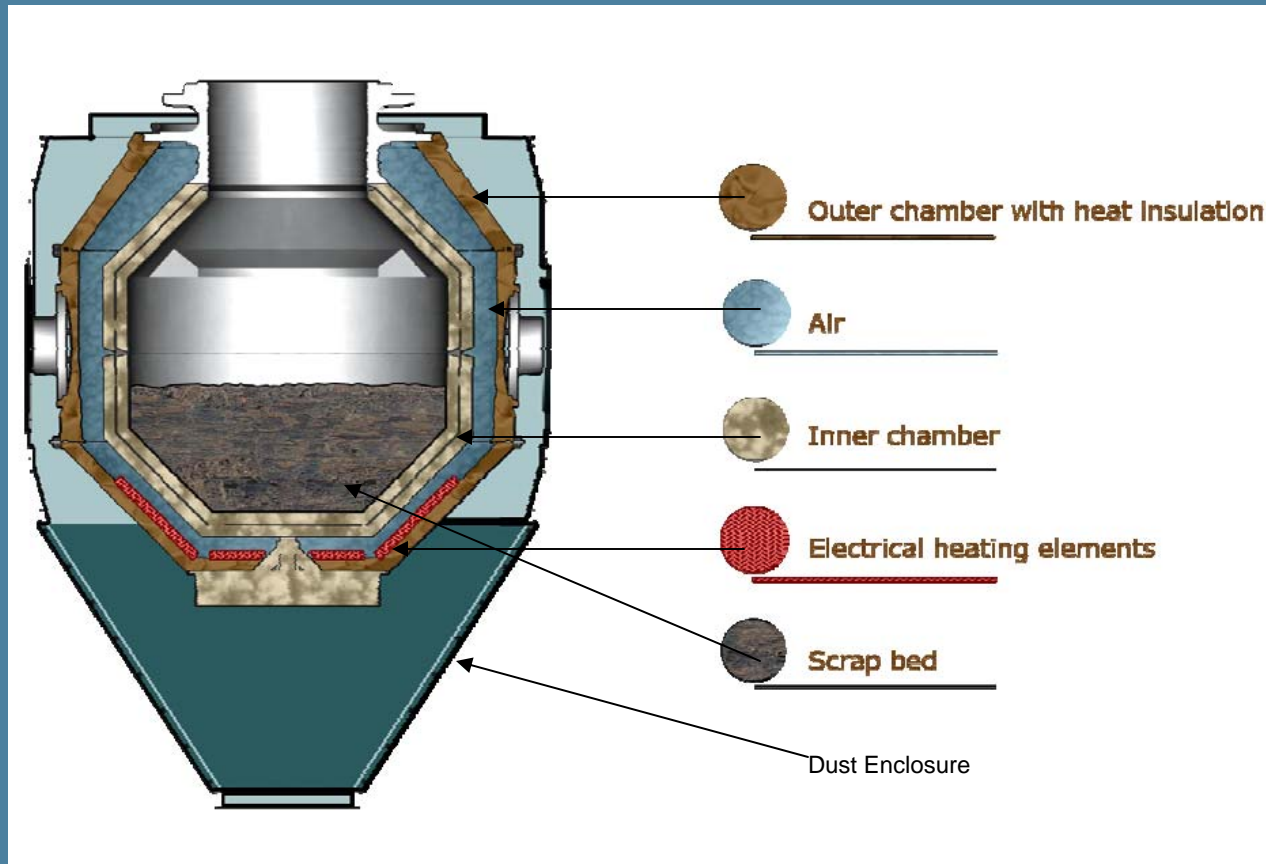
SDC Series

■ Heated System

- ▶ Temperature held above auto-initiation temperature of all known explosives and propellants
- ▶ Insures *COMPLETE* destruction
 - In one step
 - Without dismantling
- ▶ No counter charges required



Cutaway of SDC series Construction



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The SDC Series is Efficient

- Energy from materials being processed maintains temperature
 - ▶ Recycling credits
- No open flame or external fuel used
 - ▶ Indirect, clean electric heating
 - ▶ Minimizes resulting gasses needing treatment
 - ▶ Lower capital and operating costs
- Classified as a Static Detonation Chamber
 - ▶ SDC is not an incinerator (no open flame used)
 - ▶ Simplifies and speeds permitting



The SDC Series is Safe

- *Absolute minimum munitions handling*
 - ▶ *Automated feed system*
 - *interlocked*
 - *fail safe*
- *Most munitions need NO preparation*
 - ▶ *NO Cutting*
 - ▶ *NO Opening*
 - ▶ *NO Fuze removal*
- *Submunitions can be fed while still in racks*



The SDC Series is Safe

- Double walled main chamber
 - ▶ 300% safety margin
- Feed chambers made to take full rated detonation
- Interlocked feed chambers (2)
 - ▶ System is never open to outside during operation



The SDC Series is Clean

- Gas treatment system meets emissions requirements – Domestic and International
- Treatment of chemical fills possible
- Metal scrap ready for recycle without additional processing



The SDC Series is Quiet

- Total Containment = Quiet
 - ▶ cannot be heard 100 feet away
 - ▶ All metal frag contained and recycled
- Minimal footprint
 - ▶ Well suited for space limited facilities
 - ▶ Easy to set-up
 - ▶ Minimal maintenance



High production rates

SI. No.	DESCRIPTION OF REJECTED AMMUNITION/ EXPLOSIVE	ACTUAL QUANTITY DESTROYED	DEMIL PROCESS	ACTUAL SHIFTS REQUIRED	CALCULATED PLANT CAPACITY UNITS /SHIFT (10-HOUR SHIFT)
1	Cap Precussion	74,175	DIRECT FEED	0.1	741750
2	Booster Cup	26,900	DIRECT FEED	2.7	9963
3	Detonator	16,415	DIRECT FEED	2.1	7817
4	Cartg. 20mm HE	54,496	DIRECT FEED	7	7785
5	Cartg. 30mm HE	30,005	DIRECT FEED	5.5	5455
6	30mm HE	7,154	DIRECT FEED	1.8	3974
7	Cord Detonating, Meters	200	DIRECT FEED	0.1	2000
8	Cartg. 40mm	19,809	DIRECT FEED	10	1981
9	Electric Fuze	180	DIRECT FEED	0.1	1800
10	Mine M-3 (A/P)	2,316	DIRECT FEED	1.5	1544
11	Hand Grenade MK-2	3,952	DIRECT FEED	3	1317
12	Mine M-14	2,731	DIRECT FEED	3.5	780
13	Flare Trip Wire	1,200	DIRECT FEED	2.5	480
14	Mortar, 60 HE	1,995	DIRECT FEED	4.5	443
15	Cartg. 57mm Recoilless	4,795	DIRECT FEED	11.8	406
16	Cartg. 75mm Recoilless	32,149	DIRECT FEED	95	338
17	Cartg. 105mm HE	5,647	CUT / FEED	18.5	305
18	Mortar, 81 HE	293	DIRECT FEED	1	293
19	Cartg. 106mm Recoilless HEAT	18,948	CUT / FEED	65	292
20	FUZED MINE AT 1B ND	14,106	CUT / FEED	50	282
21	Mine M-2 (A/T)	924	DIRECT FEED	3.5	264
22	Rifle Grenade 73 mm HEAT	9,147	CUT / FEED	35	261
23	68mm Rocket Warhead	741	DIRECT FEED	2.9	256
24	Mortar, 4.2" HE	1,654	CUT / FEED	7.5	221
25	Cartg. 100mm HE	871	CUT / FEED	4	218
26	Cartg. 76mm HE	90	CUT / FEED	0.5	180
27	Proj. 75mm WP	5,145	DIRECT FEED	35	147
28	Mortar 60 WP	825	DIRECT FEED	7	118
29	Proj. 155 HE	874	CUT / FEED	9.2	95
30	Mortar 81 WP	276	DIRECT FEED	4	69
31	Mortar 81 Illum.	475	DIRECT FEED	7	68
32	Proj. 105 WP	1,291	DIRECT FEED	22	59
33	Proj. 155 Illum.	1,305	DIRECT FEED	26	50
34	Mortar 4.2" WP	841	DIRECT FEED	19	44
35	Proj. 155 WP	990	DIRECT FEED	65	15

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Available in Three Sizes

Size	Largest single item (NEW)	Explosive capacity/hr (NEW)
SDC800 *	800gr	10kg
SDC1200 *	1200gr	20kg
SDC2000	2300gr	40kg

* Available in Mobile Configuration

- All are re-locatable
- All are available in conventional or conventional/chemical configuration



SDC units in operation around the world

- **Swedish Defence Material Administration, FMV, Sweden, SDC800**
- Delivered in January 1999
- Used for destruction of 20 mm anti-aircraft ammunition, fuzes, detonators, pyrotechnic articles, explosives, propellants etc.





SDC units in operation around the world

- **UXB International, USA, SDC1200**
- Delivered 2003
- Installed in Asia
- Used for demil of anti-personnel mines, projectiles, mortars, fuzes, detonators, grenades, bulk explosives and propellants, rockets
- High explosives (HE), smoke, illumination, white phosphorous (WP)



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SDC units in operation around the world

- **UXB International, USA, SDC2000**
- Delivered 2004.
- Installed in Asia
- Used for demil of AP and anti-tank mines, projectiles, mortars, fuzes, detonators, grenades, bulk explosives and propellants, rockets
- HE, smoke, illumination, WP



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SDC units in operation around the world

- **GEKA, Germany,**
SDC2000
- Delivered 2005
- Used for demil of recovered Chemical Weapons, Airbags, conventional ammunition, bulk explosives and propellants
- Achieved non-detect in treated materials





SDC 1200 Mobile Configuration

- Puts the SDC 1200 in 40 ft Sea/Land containers
 - ▶ Same destruction capacities
 - ▶ Over the road capable without special permits
 - ▶ Can operate in unimproved areas
 - ▶ Can be supplied with mobile utilities
 - ▶ Integrated off-gas treatment unit



Configuration



Feed Chamber

Main Chamber

Scrap Handling

Feed Room

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Main Chamber



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Feed Chamber Configuration

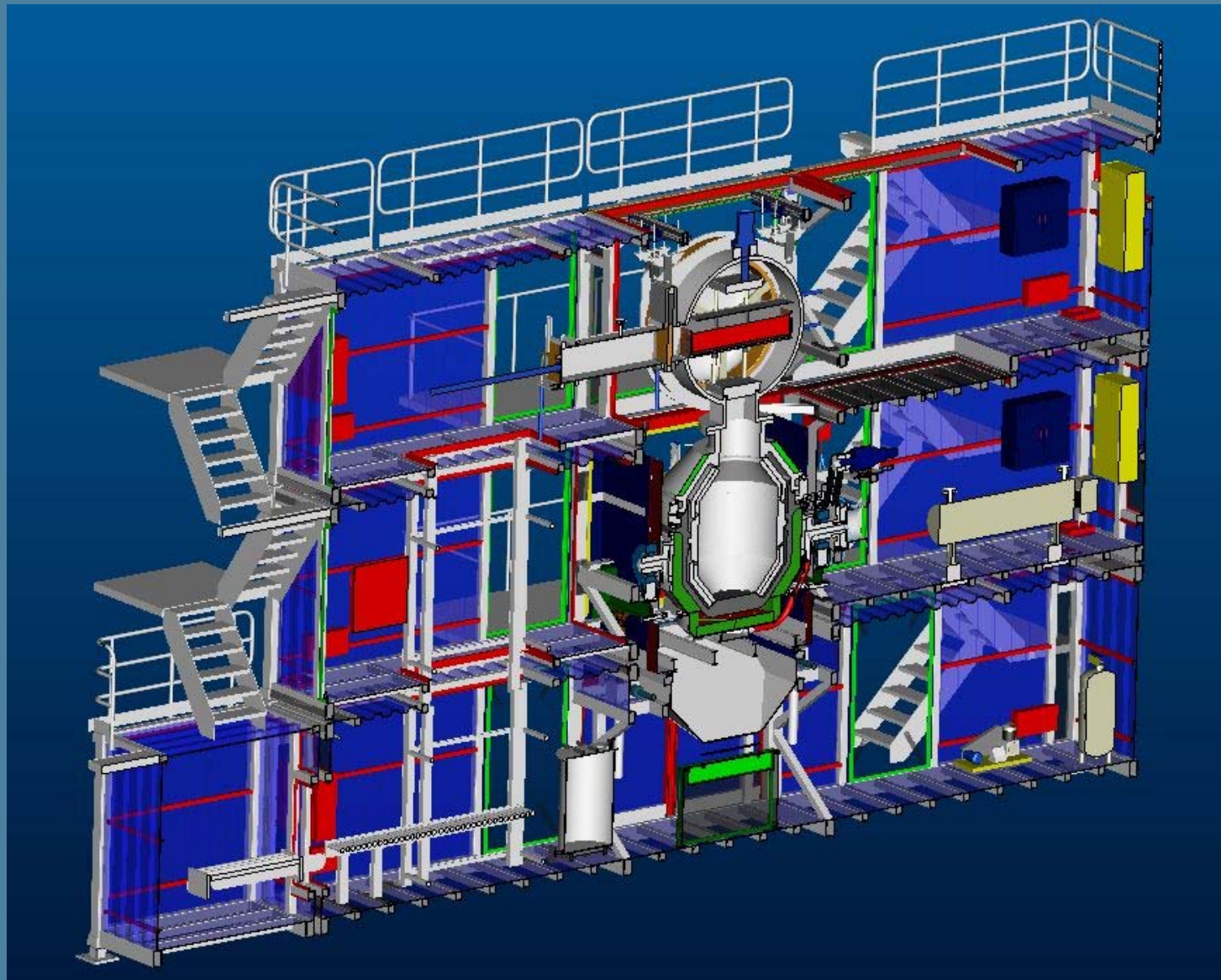


Feed Chamber

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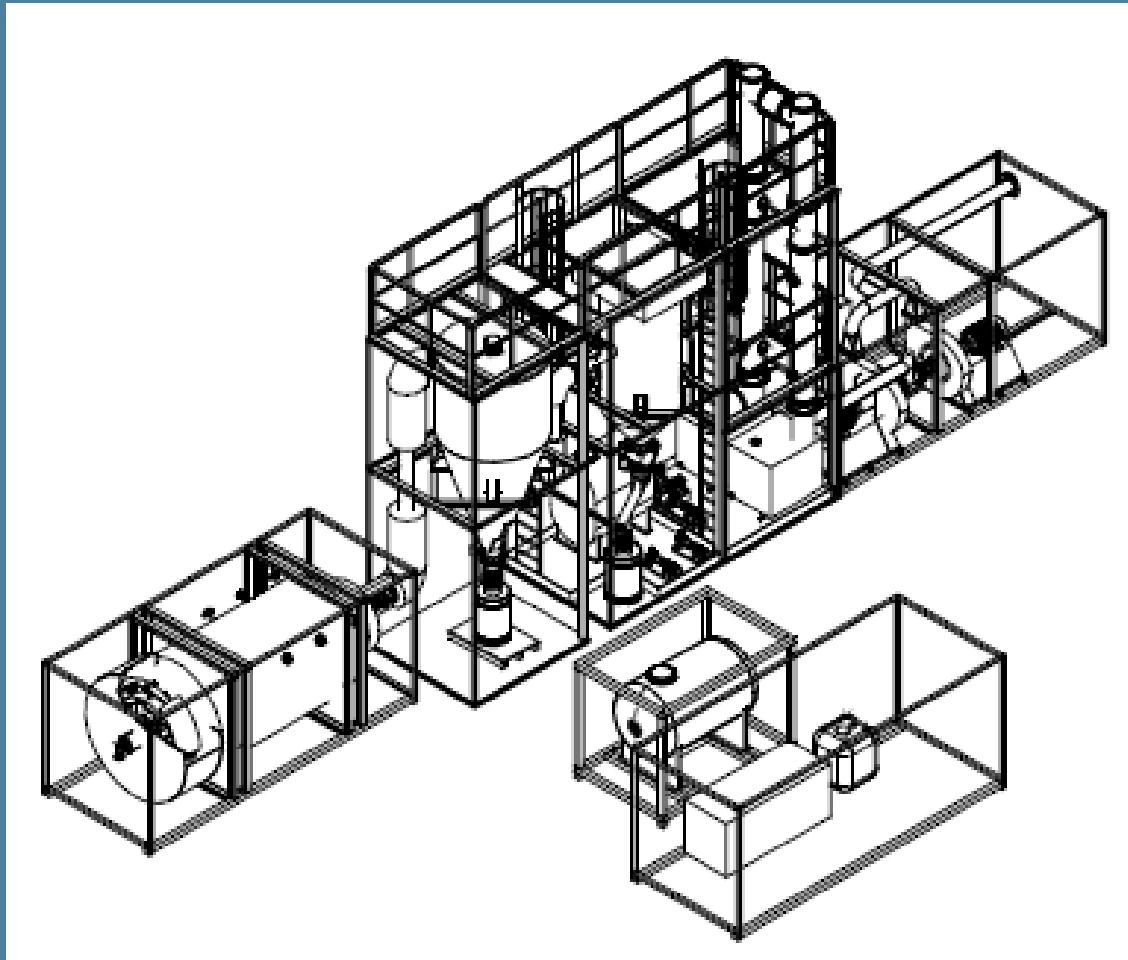
Operational Configuration



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Gas Treatment Train



Dry scrubber
Systems available

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SDC 1200 Mobile Summary

- Complete Demil plant
- Only needs ½ Acre for setup
- Minimal Quantity/Distance (Q/D) arc
(dependent on staged munition quantity)
- True 5X scrap
- Low life cycle operating costs