

Siltbuster[®]



Mobile Solutions

HIRE, SALES AND TECHNICAL SUPPORT

01600 772256

www.siltbuster.com



Siltbuster[®] - clear solutions

Many construction activities generate silty water. The disposal of silt laden water can be a major cause of pollution to nearby rivers and watercourses unless the appropriate silt management measures are put in place.

Siltbuster is a family of award-winning, patented products designed to remove fine particles from water - including silt, raw cement fines and other solids and allow treated water to be discharged off-site in an environmentally friendly form.

No power, no moving parts, no filters and no manpower requirements - other than periodically draining the sludge, they're virtually maintenance free.

Why *Siltbuster*?

Siltbuster mobile silt traps are a major improvement over the construction industry's standard approach of using holes in the ground, straw-filled skips or ineffective settlement tanks. These skid-mounted, compact and lightweight units are ideal for construction sites, restricted spaces and temporary situations.

The benefits

- ~ Fast and simple to setup
- ~ Small footprint but large settlement area
- ~ Unique design aids rapid particle settlement and water clarification
- ~ Units outperform conventional settlement tanks and lagoons up to 20 times their plan area
- ~ Units can be linked together to cope with a wide range of flows, pump sizes and particle characteristics

What can we do for you?

- ~ Reduce the risk of silt pollution for discharges to watercourses
- ~ Reduce the risk of blocking sewers
- ~ Reduce off-site trade effluent disposal costs
- ~ Reduce the risk of breaking discharge consents



Nationwide delivery available

Technical support

Our in-house civil, process and environmental engineers can provide full technical support on silt management, fine particle settlement, laboratory testing, chemical dosing and general process support when you need it most.

For hire, sales and technical support call Siltbuster[®] on 01600 772256 or visit www.siltbuster.com

to silty problems



Typical applications include:

Construction

- ~ Pumping and dewatering
- ~ Groundwater treatment
- ~ Site run-off treatment
- ~ Cement and mortar batching waste water
- ~ Drilling, piling and coffer dams
- ~ In-river and near-river works
- ~ Desilting and dredging
- ~ Roads, pipelines and other linear projects
- ~ Sewage and water treatment works
- ~ Hydro-demolition and diamond drilling
- ~ Materials washing and recycling
- ~ Plant, vehicle and wheel washing
- ~ Site water management

Environmental remediation

- ~ Carbon and sand filter pre-treatment
- ~ Light oil separation
- ~ DNAPL separation

Industrial plants

- ~ Temporary water treatment plants
- ~ Mobile pilot units



Siltbuster[®] space-saving settlement

High performance, space-saving, economical and hassle-free silt management

Siltbuster mobile silt traps achieve outstanding results in the removal of fine particles from water using proven technology and a radical hydraulic design in a rugged unit.

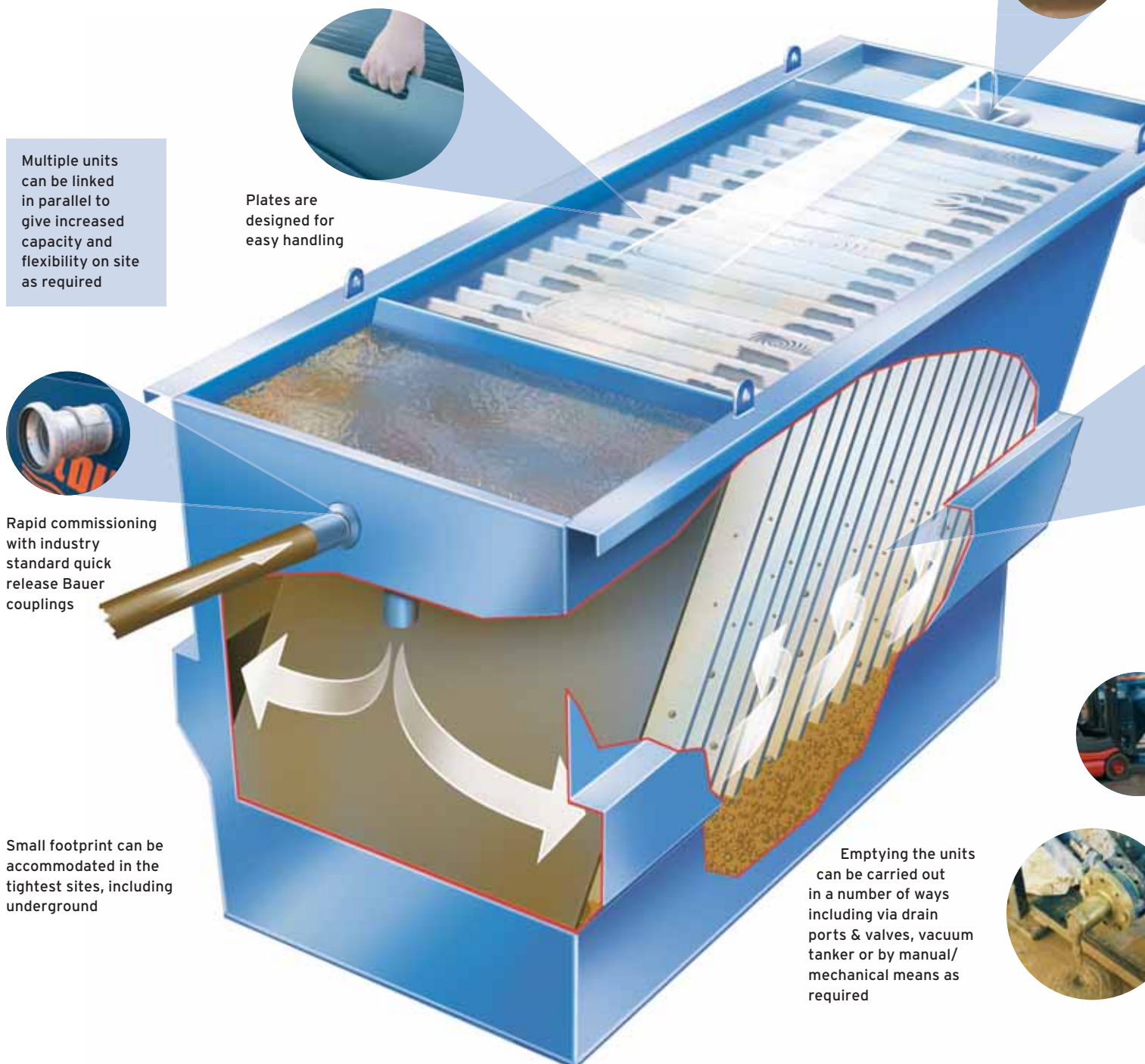
Siltbuster mobile units have been specifically designed to meet the rigours and requirements of the modern construction site.

The process

In contrast to conventional settlement tanks, **Siltbuster's** clever design stills the incoming water/solids mix and routes it upwards between a set of inclined plates for separation.

Fine particles settle onto the plates and slide down to the base for

collection, whilst treated water flows to an outlet weir after passing below a scum board to retain any floating material. The inclined plates dramatically increase the effective settling area of the unit resulting in a smaller space requirement on site and a process which unlike lagoons, is unaffected by wind disturbance, etc.



Multiple units can be linked in parallel to give increased capacity and flexibility on site as required

Plates are designed for easy handling

Rapid commissioning with industry standard quick release Bauer couplings

Small footprint can be accommodated in the tightest sites, including underground

Emptying the units can be carried out in a number of ways including via drain ports & valves, vacuum tanker or by manual/mechanical means as required



Know your particle size

	Colloids		Clay		Silt			Sand		
	0.001	0.1	2	6	Fine	Medium	Coarse	Fine	Medium	Coarse
Particle size (microns)	0.001	0.1	2	6	20	60	200	600	2000	
Settling velocity (m/hr)	Non settling		0.013	0.1	1.3	11	96	400	1050	
Settlement area required per m ³ /hr of flow (m ²)	Infinite	Infinite	80	9	0.8	0.1	0.01	0.003	0.001	

Conventional settlement tank

Swirl separator

Siltbuster

Siltbuster + Flocculant

Siltbuster + Chemical pre-treatment

Innovative outlet design maintains flow even when the unit is not exactly level

Flocculation and chemical pre-treatment

Some fine silts, clay and colloidal particles settle extremely slowly or not at all. These typically require chemical conditioning of the inflow to ensure complete removal. In such cases our Process Engineers can assist in identifying a suitable treatment scheme for your project. Contact us for more details.

Sludge dewatering

Settled sludge can be dewatered using belt or filter presses, centrifuge or chemical thickening agents. Contact us with your project's requirements.

Did you know...

Particle settlement is related to the area available, not the volume of water stored. You'd need **TEN** 3 x 2m standard settlement tanks to get the same performance as **ONE** *Siltbuster* FB50.

Did you know...

To remove clay-sized particles you require 300m² of settlement area for every 1m³/hr of flow. With a *Siltbuster* FB50 and chemical pre-treatment you can treat 50 m³/hr in an area of only 5m².



Flow distribution has been designed to meet the rigours of the modern construction site

Robust, light-weight, skid-mounted units are easy to transport and install



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The *Siltbuster*[®] mobile range

Hire, sales and technical support

Siltbuster FB50

The original *Siltbuster* unit - designed with the construction industry in mind - the flat-bottomed skid-mounted unit provides maximum settlement performance for short-term contracts, small sites and restricted spaces.



Siltbuster FB50-OWS

Based on the original award winning design these modified units trap and skim off free oil and floating materials from water and still settle solids in a simple but effective way.



Siltbuster HB50

All the benefits of the FB50 but with twin hoppers for extra sludge storage and primary thickening applications. Ideal for heavier solids loadings, constant sludge draw-off,

closed loop and recycling systems. Settled sludge can be drawn off continuously or in batches from the hoppers. Available with skids or bolt down feet, low level outlets or raised hoppers.



Siltbuster HB10

The hopper-bottom skid-mounted HB10 unit can be used for smaller construction discharges, restricted spaces and are ideal for pilot plants for industrial applications.



Siltbuster HB20

An enlarged version of the HB10, the unit provides increased flow capacity and sludge storage with the possibility of batched or continuous sludge drawoff. Also available in bolt-down form.

	Hydraulic capacity m ³ /hr	Typical operating range m ³ /hr	Effective settlement area m ²	Sludge capacity m ³	Dry weight kg	Wet weight kg	Height m	Length m	Width m
FB50	100	1 to 50	50	1.2	1,960	8,250	1.90	3.70	1.45
HB10	20	1 to 10	10	0.3	510	1,750	2.10	1.90	0.90
HB20	40	1 to 20	20	0.6	1,120	3,500	2.60	2.50	1.20
HB50	100	1 to 50	50	2.2	2,370	9,700	3.10	3.70	1.70
FB50-OWS	100	1 to 50	50	1.2	1,975	8,265	1.90	3.70	1.45

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Accessories

Walkways & Access Platforms

Hook-on & fully de-mountable access steps and side walkways for the FB50 units. Access Steps and platforms available for all units on request.



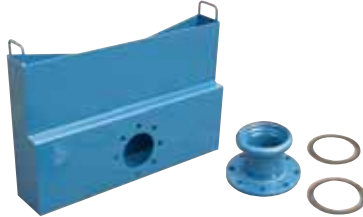
Raised Support Stands

Steel bolt-down support stands to raise the FB50 units. Units can remain fully de-mountable or fixed. Standard heights 1m or 1.5m high, others on request.



Oil/Water Separation Kits

Anti-siphon collar, outlet weir, flange, bolts and gasket designed for retrofitting to FB50 and HB50 units. Kit enables the redirection of the flow through the units to remove floating materials including free oil. Range of oil skimmers also available.



Lids & Covers

Steel, aluminium and mesh covers available for all units - contact us for details.

Flocculants, Coagulants & pH Adjustment Chemicals

Siltbuster provides a full range of specialist chemicals for slow settling solids and difficult to treat effluents. Laboratory testing, dosing equipment, flash mixers, aging tanks and technical support also available.

Pipes, Valves, Flow-meters & Quick Release Couplings

Contact us with your requirements



For larger applications, see our industrial range of clarifiers for static and semi-permanent projects.

Applications include

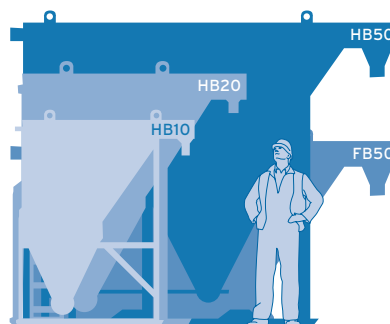
- ~ Flows up to 300m³ per hour
- ~ Heavy solids loading
- ~ Concrete batching plants
- ~ Soil, sand and ballast washing
- ~ Quarry run-off, etc.



Bespoke solutions

We design and produce settlement solutions for almost any application. Contact us with your requirements on 01600 772256 or email enquiries@siltbuster.com

Size comparison



Typical performance	Available to hire
Unit performance is material and flow specific, but typical removal rates are in excess of 90% of particles larger than 20 microns plus a proportion of the finer material.	✓
	✓
Contact us for specific performance data for your particular application	Enquire
	✓
	Enquire



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Clients include:

Aggregate Industries UK Ltd.
Alfred McAlpine plc.
Alpheus Environmental Ltd.
Alun Griffiths Contractors Ltd.
Amalgamated Construction (AMCO) Ltd.
AMEC Capital Projects Ltd.
AMEC Group Ltd.
AMEC Internal Asset Management Ltd.
AWG Construction Services Ltd.
Bairds Malt Ltd.
Balfour Beatty Construction Ltd.
Biwater - Leslie JV
Carnon Contracting Ltd.
Castle Contracting Ltd.
CDM Steels (Hippowash) Ltd.
Cementation Foundation Skanska
Central Scotland Waste Management Ltd.
Churngold Remediation Ltd.
Cleansing Services Group Ltd.
Combined Plant Services Ltd.
Commercial Marine & Piling Ltd.
Costain Civil Engineering
Cubby Construction Ltd.
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Garth Civil & Rail Ltd.
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Gleeson Construction Services Ltd.
Hanson Aggregates
Hanson Support Services Ltd
HMB Alliance
Hochtief Griffiths JV
I & H Brown Ltd.
Ingrebourne Valley Ltd.
J. Murphy & Sons Ltd.
Keller Ground Engineering
Kingcombe Aquacare Ltd.
Moreton C Cullimore Ltd.
Morgan Est plc.

Mowlem Civil Engineering
Muir Construction Ltd.
Pendennis Shipyard Ltd.
PJ Careys (Contractors) Ltd.
QDS Environmental Ltd.
Ready Use Concrete Co. Ltd.
RMC Concrete Products Ltd.
RMC Readymix (South West) Ltd.
Rockbourne Environmental Ltd.
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Skanska Civil Engineering
Skanska Derby Ltd.
Smiths (Gloucester) Plant Hire Ltd.
South Staffordshire Water plc.
Stent Foundations Ltd.
Tarmac Southern Ltd.
Tarmac Topmix Ltd.
Tarmac Western Ltd.
Vertase Ltd.
VHE Construction Ltd.
Volker Stevin Ltd.
Warings Contractors Ltd.
Warwick Contractors Ltd.

Your local representative: