



**SOLUTION**

**OIL SPILL RESPONSE**



**SAGTA ENGINEERING LTD**, as a professional supplier of oil spill response products, devotes itself to providing the optimal solutions for oil spill response and recovery.

**SAGTA's** most valuable asset is its engineering team, which has engaged in oil spill response field for over 20 years. We have our own R&D center to guarantee that **SAGTA** can keep pace with the times and innovate more efficient products for oil spill response.

**SAGTA** provides a complete range of high quality oil spill products and services, such as containment boom, recovery equipment, absorbent, and services relevant to oil spill response.

**SAGTA** team has taken part in many oil spill accidents such as Gulf of Mexico leakage accident, Conoco Dalian oil leakage accident, obtaining a lot of reputation from customers. Furthermore, We have provided environmental service for 2008 OLYMPIC SAILING RACE and got a lot praise and honor from government.

**SAGTA** aims to take care of our clients. We'll be happy to prove to you the additional value that **SAGTA** can offer for you.





**SAGTA**  
FOCUS ON YOUR NEEDS

**CONTAINMENT BOOM**

**SKIMMER**

**ABSORBENT**

**PUMP**

**SPRAYING DEVICE**

**OTHER DEVICES**



## CONTAINMENT BOOM

SAGTA BOOM series are major equipments for containing and preventing oil spills from spreading and shifting in response to an emergency. All SAGTA BOOM are manufactured according to international standards with certificate CCS and ISO approval.

### Inflatable rubber boom



Inflatable boom is important equipment for encircling oil spill and preventing oil from spreading. It is especially suitable for oil spill emergent response. It is widely used at river, harbor, offshore petroleum platform and ship salvages. It is composed of boom, blower, power pack, reel, container, towing system. Boom body is made of high strength double layer nylon canvas coated with oil resistant, aging resistant synthetic rubber. Air valve allows for easy and instant inflation with perfect air tightness. HDG Ballast chains can well resist seawater corrosion. Power pack provides hydraulic power. There are two types for power pack, electric and diesel power. The users may select it according to their requirement. The blower is used for inflating or sucking the air chambers of boom. All is put into container with front and rear door for easy operation.

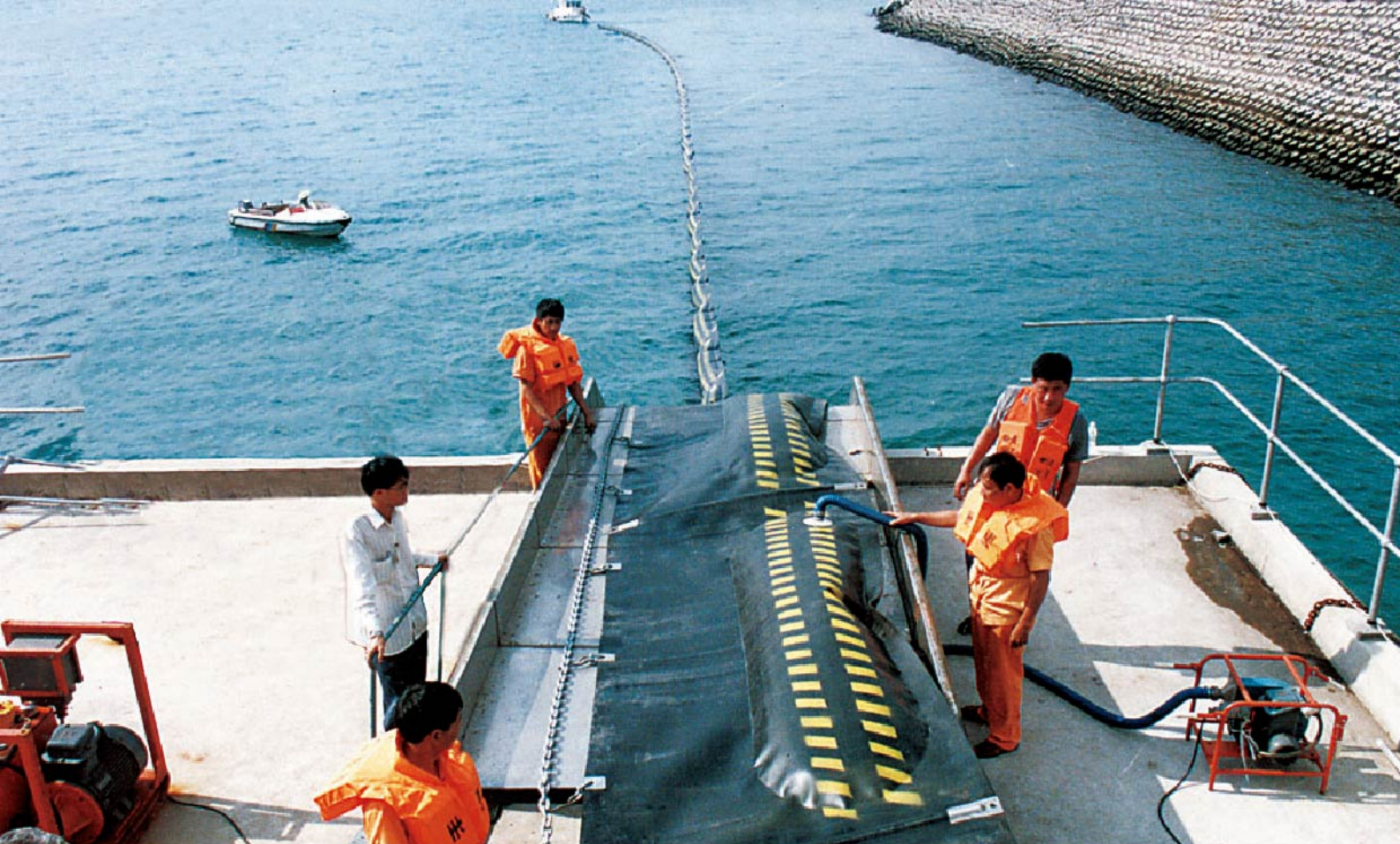
### Solid boom



It is most suitable boom for permanent deployment and frequency operation, and is perfect for adverse circumstance, such as refinery, oil terminals, water intake, bath beach, aquatics farm and other sensitive areas. It also can be emergently used to control spilt oil. The material has 2 kinds, rubber and PVC with excellent resistance to oil and ageing. Quick connector accords with ASTM standards. HDG ballast chain or ballast metal can be chose. Foam in the boom chamber is environmental material with excellent capacity. Oil-resistance: The boom is still stable on water when there is a crack in rubber or PVC sheet. High flexible ability: It gives boom better wave-response and boom is easy to bend for storage. Optional advanced luminous marker for the boom to be distinguished at night. All necessary ancillaries for boom can be selected or specially designed upon users.







### **Quick laying boom**

The boom adopts flexible floats and can be wound on reel, which not only increase flexibility of boom deployment, but also has reliability of general solid float boom. Deployment and recovery use hydraulic power, which is quick and convenient.

The boom is made of oil-resistant high-strength PVC fiber through a special welding process. Flotation is cylindrical, and the high strength ballast chains at the bottom of flotation make boom with good vertical state and strong tensile.

It is only need two people to achieve rapidly deploy, which is perfect for emergent oil spill response. This boom series is composed of power pack, reel.



### **Fence boom**

The fence boom is made of high strength PVC and oil-resistant solid foam. Support bar between chambers can guarantee stability. It has small storage volume and can be rolled on the reel or packed in the bracket. It is suitable for emergency use. It can also provide simple and convenient effective oil spill protection for ports, docks, coastal waters and rivers.

### **Beach boom**

Beach boom is largely used to prevent oil spills from spreading on beach and land. It can be used for stationary deployment and also for makeshift deployment in response to an emergency. The material can choose PVC and rubber. Main accessories include an inflating pump for air chamber and water-charging pump for water chamber. Quick connector accords with ASTM standards and can be connected with other kind boom easily.

### **Fireproof boom**

It can be used to contain burning oil spills and running fires on waters to prevent fire spreading. It particularly suitable for oil ports and wharfs, offshore drilling platforms and other sensitive areas where high fire rating is required. The boom body is made of stainless steel and flexible material, which can resist temperature up to 1000 degree. Each section can be stored in a bracket.





## SKIMMER

SAGTA SKIMMER series is applicable to recover oil spills of various viscosities. SAGTA SKIMMER is composed of power pack, skimmer head (the main unit), hydraulic oil hose, oil pipeline and other parts.

### ***Inclined-belt skimmer***

*This skimmer can recover various viscosities oil and achieve 99% recovery efficiency. It consists of power pack, skimmer head, oil hose, oil pipeline and other parts. Skimmer head pushes the oil spills on the water surface into skimmer oil groove through the loop-shaped belt. One end of the inclined belt is above the water surface while another end is below the water surface in the oil groove. Oil spill in the oil groove will be pumped into storage equipment.*

### ***Disc skimmer***

*Disc skimmer is an efficient, light device for recovering of oil spill on water. It consists of one floating head, one power pack put on the deck or the bank and linking hoses. It has same models to suit most conditions such as pond, lake, river, harbor and sea.*

*Be applicable to recover low and medium viscosity oil spill.*

*Skimmer head is made of corrosion resistant FRP, stainless steel or marine aluminum alloy.*

*Buoy is filled with foams to guarantee dual-buoyancy.*

*Be adjusted by stepless speed regulation.*

*Easily be disassembled for maintenance.*

### ***Weir skimmer***

*Weir skimmer recovers oil through separating oil water by weight. It consists of one floating head, one power pack and linking hoses. The diesel power pack converts the diesel power into the hydraulic power with a stepless speed regulation to adjust weir skimmer staying on the interface between oil and water.*

*This skimmer is applicable to recover low and medium viscosity oil spill.*

*Low cost, small in size and easy to operate.*



### **Rope skimmer**

Rope skimmer recovers oil by rope absorbing. . It consists of power pack, extruder, hydraulic oil hose, oil pipeline and the recovery rope. There are 2 kinds skimmer, desktop type for low capacity and hanging type for high capacity.

This skimmer is applicable to recover low and medium viscosity oil spill

Recovery efficiency is more than 90%.

The rope is made of oleophilic polypropylene and can be used repeatedly.

Perfect for rough wave condition.

### **Vacuum skimmer**

Vacuum skimmer is an oil spill recovery device that is suitable for sea beach, shallow and narrow water. It consists of oil tank, pump and hoses. The vacuum power pack generates vacuum condition to collect oil spills on the shore, ground or water surface into oil storage facility.

Simple structure, small size, low cost.



**Inflatable Rubber Boom**

Model	SIB800	SIB1000	SIB1200	SIB1500	SIB2000	SIB2600	SIB3200
Over height (mm)	800	1000	1200	1500	2000	2600	3200
Free board (mm)	280	360	400	500	600	810	1200
Draft (mm)	370	430	590	780	1100	1400	1500
Length per section (m)	100/200						
Tensile strength (kn)	110	140	170	190	260	280	300
Wave height (m)	2	2	2.5	3	3	4	6
Current speed (kn)	2-3	3	3-4	3-4	3-4	3-4	3-4
Wind speed (m/s)	15	15	20	20	25	25	25
Container dimension (m)	2.7x2.2x2.2	2.9x2.2x2.2	3.2x2.2x2.2	3.5x2.2x2.2	4.1x2.2x2.2	5.2x2.2x2.2	5.7x2.2x2.2

**Solid Float Rubber Boom**

Model	SRB600	SRB800	SRB1000	SRB1200	SRB1600	SRB1800	
Over height (mm)	600	800	1000	1200	1600	1800	
Free board (mm)	210	280	340	400	520	590	
Draft (mm)	280	360	480	600	810	900	
Length per section (m)	20						
Tensile strength (kn)	50	80	100	110	120	160	
Wave height (m)	1.5	2	2	2.5	3	3.5	
Current speed (kn)	1.5	2	2.5	3	3	3-4	
Wind speed (m/s)	10	15	15	20	20	25	

**Solid Float PVC Boom**

Model	SPB600	SPB700	SPB800	SPB900	SPB1000	SPB1100	SPB1500
Over height (mm)	600	700	800	900	1000	1100	1500
Free board (mm)	150	210	280	320	340	370	520
Draft (mm)	380	390	420	490	540	560	760
Length per section (m)	20						
Tensile strength (kn)	20	25	45	55	75	85	130
Wave height (m)	0.5	0.5	1.5	1.8	2	2	3
Current speed (kn)	1	1	1.5	2	2.5	2.5	3
Wind speed (m/s)	8	10	15	15	18	20	20

**Quick laying boom**

Model	SQB800	SQB900	SQB1000	SQB1200	SQB1600	
Over height (mm)	800	900	1000	1200	1600	
Water height (mm)	280	320	340	380	530	
Underwater depth (mm)	420	490	540	650	840	
Length (m)	200					
Tensile strength (kn)	60	65	70	80	100	
Laying speed (m/min)	more than 45					
Wave height (m)	0.8	1.2	1.5	1.8	2	
Current speed (kn)	0.8	1.2	1.5	1.5	2	
Wind speed (m/s)	6	8	10	12	15	

**Fence Boom**

Model	SFB400	SFB700	SFB900	SFB1100	
Over height (mm)	400	700	900	1100	
Free board (mm)	120	220	600	400	
Draft (mm)	280	480	600	700	
Length per section (m)	10/20				
Tensile strength (kn)	20	30	40	45	



### Beach Boom

Model	SBB700	SBB800	SBB900	SBB1000	SBB1200	
Over height (mm)	700	800	900	1000	1200	
Free board (mm)	200	250	300	350	400	
Draft (mm)	200	250	300	350	400	
Length per section (m)	20					
Tensile strength (kn)	30	35	40	45	50	
Wave height (m)	0.5	0.5	0.8	1.2	1.5	
Current speed (kn)	0.5	0.5	0.8	1.2	1.5	
Wind speed (m/s)	4	5	6	8	10	

### Fireproofing boom

Model	Free board (mm)	DraftTensile (mm)	strength (kn)	wave height (m)	current speed (kn)	wind speed (m/s)
SFB900	300	480	50	1	1.5	15

### Side-hanging Skimmer

Model		SSS10	SSS20	SSS30	SSS40	SSS60	SSS100	SSS200
Capacity (m3/h)		10	20	30	40	60	100	200
Power	diesel	6.3	14.5	14.5	21	21	29	56
	Electric(kw)	4	7.5	11	15	18.5	22	45
Working pressure (MPa)		3-6	3-6	5-6	5-6	5-8	5-10	8-10
Boom quantity		2						
Boom length		6	6	6	10	10	10	10
Boom arm length		6	6	6	10	10	10	10

### Disc Skimmer

Model		SDS5	SDS10	SDS20	SDS30	SDS60
Capacity (m3/h)		5	10	20	30	60
Power	diesel	4	6.3	10.3	14.5	21
	Electric(kw)	3	4	7.5	11	15
Hose Diameter		2"	2"	2.5"	3"	4"

### Weir Skimmer

Model		SWS30	SWS50	SWS100	
Capacity (m3/h)		30	50	100	
Weir depth (mm)		35-90	50-120	80-150	
Power	diesel	14.5	14.5	21	
	Electric(kw)	7.5	11	15	
Suction head (m)		8	8	8	
Cylinder pressure (MPa)		5	5	5	

### Vacuum skimmer

Model		SVS5	SVS10	SVS20	SVS30	SVS60
Capacity (m3/h)		5	10	20	30	60
Power	diesel	4	6.3	6.3	14.5	14.5
	Electric(kw)	3	4	5.5	7.5	11
Vacuum (MPa)		0.044				

### Rope skimmer

Model		SRS5	SRS10	SRS20	SRS30	
Capacity (m3/h)		5	10	20	30	
Power	diesel	4	6.3	10.3	14.5	
	Electric(kw)	3	4	7.5	11	
Rope diameter (mm)		300				

For further detail and renewing information, please contact SAGTA



# ABSORBENT

*SAGTA absorbent series are manufactured by 100% high quality absorbent meltblown polypropylene, and are suitable for rapidly absorbing and clearing up the oil and chemical spill in different places. The capacity is about 15-16 times of its own weight. It is available in different sizes and types according to the requirement of customers.*





### Sorbent pad & roll

- 1 Manufactured from high quality absorbent meltblown polypropylene,
  - a. No any processing on the surface, with one-step molding.
  - b. Dimple bonded on the surface for strength
  - c. Dimple bonded on the surface, with composite molding
- 2 Suitable for rapidly absorbing and clearing up the oil and chemical spill in ocean, river, lake, shipping terminal and crude storage
- 3 Only absorb oil, repel water and float even when fully saturated
- 4 Available in different sizes and thickness according to the requirement of customers.



### Sorbent boom

- 1 Manufactured with a strong and flexible external net and polypropylene inside fabric ( flocculus or strips) Steel snap hook on the body and strong rope, round steel link on both ends of the boom for stagger connection with other booms,
- 2 Suitable for rapidly absorbing and blocking the oil and chemical spill on the water.
- 3 Economical and effective for various fluid spill.  
Float on the water for several months without deterioration, breakage and sinkage.
- 4 Available in a range of sizes and lengths according to the requirement of customers.

SIZE	PACKAGE/bale	ABSORBENCY
12.7cmX3m	4	>125L/bale
12.7cmX6m	2	>125L/bale
20cmX3m	4	>305L/bale
20cmX6m	2	>305L/bale



### Sorbent pillow

- 1 Manufactured with a small portable wear-resisting external bag and polypropylene inside fabric.
- 2 Suitable for rapidly absorbing and clearing up the petroleum and chemical spill in different spilling area.
- 3 Economical and effective for various fluid spill.  
Anti-backflow design guarantees the absorbed fluid can't flow out  
Reasonable packing design make it suitable to low grounds, wall corners, and other uneven area.
- 4 Available in different sizes and weight according to the requirement of customers.

SIZE	PACKAGE/BOX	ABSORBENCY
23cmX23cm	20	60L/B
45cmX45cm	10	90L/B



### Sorbent sock

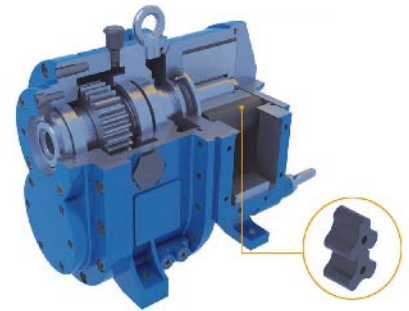
- 1 Surface is made from wear-resisting oleophilic material  
Inside made from polypropylene fiber flocculus.
- 2 Used for rapidly absorbing and clearing up the petroleum and chemical spill, particularly in the corner and uneven spilling area.
- 3 Economical and effective for various fluid spill.  
Reasonable packing design make it suitable to low grounds, wall corners, and other uneven area.
- 4 The size can be provided according to the requirement of customers.

SIZE	PACKAGE	ABSORBENCY
7.6cmX1.2m	12/box	>100L/B
10cmX3m	8/bale	>150L/B
12.7cmX3m	4/bale	>125L/B
12.7cmX6m	2/bale	>125L/B
20cmX3m	4/bale	>305L/B
20cmX6m	2/bale	>305L/B





# LOBE PUMP



## ***Wear resistance, long lifespan***

Pump body are made of marine aluminum alloy which resist corrosion of seawater, and other over current components are made of stainless steel. Surface of rotor is coated with high-polymer elastomer layer, which is high strength, acid-base resistant, oil resistant, inflaming retarding, corrosion resistant, aging resistant, seawater corrosion resistant. This pump has reliable performance and long lifespan.

## ***High self-priming and suction capability***

There is high-polymer elastomer layer in the surface of rotor made by special technology, so the gap between each rotor are smaller, even can reach interference fit, which can guarantee high self-priming and suction capability.

## ***High passing rate of large particles***

Space around rotor head is enough for large particles passing. Surface of rotor is arc-shaped structure which is flexible to push particle forward, and is insensitive to the solid and fibrous objects. It provides a high passing rate for large particle medium, such as water coal slurry and residue, and the largest diameter of particle can be up to 40mm.

## ***Suitable for delivering high viscosity medium***

Pressure head of this rotor pump is very high, and can deliver various viscosity medium, especially suitable for high viscosity medium, such as oil loam, heavy oil, fuel oil, diesel, kerosene, hydraulic oil. The delivering viscosity has reached the highest international standard, and it can reach 300000cst.

## ***Instant and convenient maintenance***

The pump is designed with a quick rear cover, which can be open conveniently to change and maintain all quick-wear parts. This feature improves the efficiency very much. Some equipments will waste more than several millions when off work suddenly, so the quick cover will help to save a lot of costs.

## Application

### **Oil field and oil delivery**

Rotor pump can be used in refinery, oil port, and tank farm etc. for delivering oil loam, heavy oil, fuel oil, diesel, kerosene, hydraulic oil.

### **Sewage treatment.**

Used in municipal or industrial sewage treatment factory to delivering sludge and concentrated sludge, lime mortar, and water-oil mixture. Also it can be used as dosing pump.

### **Other field**

Architecture and mining: mine silt, water coal slurry, oil drilling waste, lime mortar, oil drilling waste mud, mine water, floatation liquid.

Ship: ship sewage, leakage liquid, waste oil, waste water, fuel oil.





## PROCESSING TECHNOLOGY

### Pump processing

We import USA HAAS VF3 assembly CNC machine processing center to cut, polish, process the pump surface. Our production line can guarantee the processing accuracy and usage reliability.



### Equipment assembly

The pump is assembled according to the design drawing and through durableness type test. It must keep more than 1000 hours continuously working test, and each capacity keep stable. This can guarantee the reliability of pump.



### Quality inspection

Before submitted to customer, the pump must pass the factory and classification society inspection and reliability test, such as suction, output pressure, flow, torque and power test.



## TECHNICAL PARAMETER

Mode m	L mm	W mm	H mm	Shaft H mm	L Distance mm	H Distance mm	Pressure mpa	Flow m <sup>3</sup> /h	Rotary r/min	Power kw	Suction m
SP100-20	340	200	243	158.5	125	170	0-0.6	10-20	300-600	1-4.5	>6
SP100-30	421	200	286.5	158.5	160.5	170	0-0.6	15-30	300-600	1-9	>6
SP150-50	446	250	390	226.5	216	200	0-0.6	30-60	300-600	4-14	>6
SP200-100	595	300	428.5	287.5	295	245	0-0.6	60-100	300-550	3-27	>7
SP250-200	651	350	542	330	317.6	300	0-0.6	150-250	300-550	9-4.5	>7



## SPRAYING DEVICE

SAGTA SPRAYING DEVICE is mainly used to spray oil spill dispersants, clean up oil spill pollution on waters, shoal, rock, building and other site. it can also be used to clean containment booms, skimmers and other devices

Series: Portale spraying device

Hull-mounted spraying device



## OTHER DEVICE

SAGTA also makes other support equipment, such as net oil snares, floating oil tanks, mobile oil tanks, tide slides, locating buoys and high-pressure washers.







**SAGTA**

FOCUS ON YOUR NEEDS

RM 812 No.1438 North Shanxi Road Shanghai 200060 / CHINA

T. +0086 21 61639777 F. +0086 21 61639779

[www.sagta.co](http://www.sagta.co) [sales@sagta.co](mailto:sales@sagta.co)