

Protecting the World's most precious resource

## OIL SPILL RESPONSE SOLUTIONS



## Oil Recovery Skimmers

RBS TRITON™ oil skimming systems are versatile, ideal for use in a wide range of applications from calm, protected to offshore and industrial environments.

RBS TRITON™ oil skimming systems are able to recover extremely high oil recovery rates with up to 98% efficiency and are able to respond to most oil spill needs.

Depending on the oil type to be recovered, brush, disc and drum recovery modules can be easily interchanged without tools in less than 5 minutes. New RotoX technology available for floating solids.

Model	Capacity (m3/h)	Capacity (bbl/h)	# Recovery Modules	Calm Water	Protected Water	•	Industrial Solutions	Static Hose Reel	Dynamic Hose Reel	Thrusters	Integrated Crane
RBS TRITON™ 35	38	237	1	٧			٧	٧			
RBS TRITON™ 60	63	396	1	٧	٧		٧	٧			
RBS TRITON™ 150	151	950	1	٧	٧		٧	٧			
RBS TRITON™ 150 T (Trailer-mounted)	151	950	1	٧	٧		٧	٧	٧		٧
RBS TRITON™ 150 OS (Offshore)	151	950	1	٧	٧	٧		٧	٧	٧	
RBS TRITON™ 300 OS (Offshore)	302	1,900	2	٧	٧	٧			٧	٧	
URO 300	302	1,900	2	٧	٧	٧		٧	٧	٧	٧
URO 600	604	3,800	4	٧	٧	٧			٧	٧	٧

**Power:** Diesel/hydraulic, electric/hydraulic, pneumatic, ship's hydraulic/electric power, XP Zone 1 compliant

Testing: Certified by DNV (Det Norske Veritas) & ABS (American Bureau Services) and witnessed to ASTM Standard

F631-99 for oil recovery volume & efficiency and heavy oil recovery capability

Patents: RBS TRITON™ oil skimming technology (USA Patent 7,303,688 & Canada Patent 2,578,942)



## **Industrial Water Treatment**

Aqua-Guard's industrial oil skimming systems are typically used in refinery and wastewater treatment facilities to remove oil/sludge from a "primary" or "secondary" oil recovery process.

#### **RBS TRITON™ Industrial skimmers:**

- Free-floating oil skimmer heads
- Electric/hydraulic and pneumatically powered solutions (explosion-proof/hazardous zone compliant)
- Aqua-Guard skimmers are self-adjusting to fluctuating basin levels thus reducing waste-water circulation and maximizing valuable oil recovery





RBS TRITON™ oil skimming systems out-perform the efficiency of traditional half-pipe weir skimmers and are able to operate 24/7 with minimal maintenance





RBS TRITON™ explosion-proof/hazardous zone compliant.

Aqua-Guard's skimmers have been permanently installed in refineries and settling ponds around the world for several decades.

# Oil Recovery Skimmers – Harbour & Open Water RBS TRITON<sup>TM</sup> 150

RBS TRITON™ 150 oil skimming systems are versatile, ideal for use in inshore, extremely stable for open water environments and are able to recover 150 m³/h.

#### **RBS TRITON™ 150 skimmers**

- Free-floating oil skimmer head with internal positive displacement lobe pump & power pack
- Pumps may be used independently for fluid transfer or lightering
- Optional: Road trailer with crane system and offshore protective cage, floating hose reel system, RotoX solids removal module



# RBS TRITON™ 150 T (Trailer-mounted) skimming system is extremely mobile and can be easily transported to any location that is accessible by vehicle.

The road certified trailer stores the RBS TRITON™ 150 oil skimmer head, diesel/hydraulic power pack / crane system, hose reel with hydraulic and oil transfer hose sets, and a storage box comprising of a 10m³ oil storage tank with accessories



#### **RBS TRITON™ 150 oil skimmer**

- DNV certified recovery rates
  - Brush 151m3/h (950 US bbl/h)
  - Disc 45m<sup>3</sup>/h (283 US bbl/h)
  - Drum 40m<sup>3</sup>/h (252 US bbl/h)
- Efficient oil to water recovery up to 98%
- Versatile Brush/Disc/Drum recovery modules can be easily interchanged
- Simple design easy to operate and maintain
- Flexible convertible to an offloading transfer pump



# Open Water & Offshore RBS TRITON<sup>TM</sup> 150 OS (Offshore)

RBS TRITON™ 150 OS oil skimming systems are versatile, ideal for use in both protected and open water environments and are able to recover 150 m³/h.

# **RBS TRITON™ 150 OS (Offshore) skimmers** Free-floating oil skimmer head with internal positive displacement lobe pump & power pack Propulsion – Dual 8" thrusters enable the operator to maneuver and position the skimmer Controls – wireless/wired remote and manual backup Versatile - Brush/Disc/Drum recovery modules can be easily interchanged Lightweight and mobile. Once loaded and secured on a vessel or jetty, the system can be deployed by one operator Pumps may be used independently for fluid transfer or lightering The robust design with protective tubular cage ensures optimal protection of the skimmer head from foreign objects or encounters with the deployment vessel in high wind and sea conditions SPILL RESPONSE

### Oil & Debris Containment Booms

Aqua-Guard offers a wide range of oil & debris containment barriers. Ranging from permanent port and harbour protection to emergency inshore and offshore response.

#### **LiteFlex Oil Containment Boom**

Designed for use in protected harbours, lakes, **Application:** rivers and streams with slow currents **Construction:** PVC coated polyester fabric, non-wicking Closed cell polyethylene foam segments Floatation: **Boom Colour:** Orange or yellow

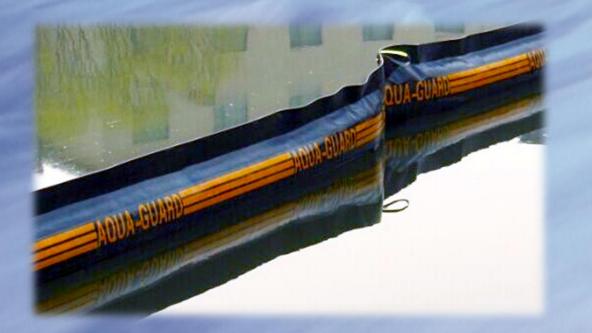
Can be deployed by small watercraft or by hand

**Ballast:** Galvanized steel chain

**Boat Deployable:** 

**Boat Access:** 





#### **AirFlex Oil Containment Boom**

Designed for use in protected harbours, **Application:** unsheltered and offshore waters **Construction:** Heavy duty Rubber/Neoprene fabric Air chambers inflated by external air blower **Floatation:** Black with yellow/orange markings **Float Colour:** 

**Ballast:** Galvanized steel chain

**Durability:** 

#### HarbourFlex Oil & Debris Containment Boom

Permanent installation barrier for petroleum

**Application:** pollution, foam, fish, silt, jellyfish, plant life, etc. UV and marine growth resistant, heavy duty fabric **Construction:** Floatation: Long lasting, polyethylene, foam filled floats **Float Colour:** Black and yellow standard – custom colours available

Boat gates allow small craft access Additional ballast not required for most applications **Ballast:** 



Highly durable compared to PU or PVC booms



### **Boom Storage and Deployment Reels**

Aqua-Guard designs and manufactures high quality containment boom reel deployment and storage **Application:** systems

All boom reels are powered by an Aqua-Guard hydraulic power pack to facilitate deployment Power: and recovery of booms

## **Pumps & Power Systems**

Aqua-Guard offers custom, specialized pumping and power systems. We work directly with the client's requirements to design a system to suit the exact site conditions.

#### **FEATURES:**

Aqua-Guard offers a range of pumping and power systems for all our oil spill response products.

We offer the best solutions for transferring fluid products using diaphragm, rotary lobe & centrifugal screw pumps.

Powered by diesel/hydraulic, electric/hydraulic or pneumatic systems and designed for the toughest environments.

#### **BENEFITS:**

#### **Pumps**

- Lobe pumps able to move complete viscosity range (low to high)
- Centrifugal screw able to move low to medium viscosities
- Diaphragm pumps able to move low to high viscosities with solids

#### Power

- All pumps can be driven by either:
  - Diesel/hydraulic
  - Electric/hydraulic (XP explosion proof available)
  - Pneumatic power



Pump and Power Systems								
Application:	Used to move hydrocarbon products from skimming							
	systems, tanks or as a lightering system							
Construction:	Marine grade aluminum / stainless steel							











## Protecting the World's most precious resource



## PROTECTING THE WORLD'S MOST PRECIOUS RESOURCE - OIL SPILL RECOVERY SOLUTIONS -

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