BundlePro

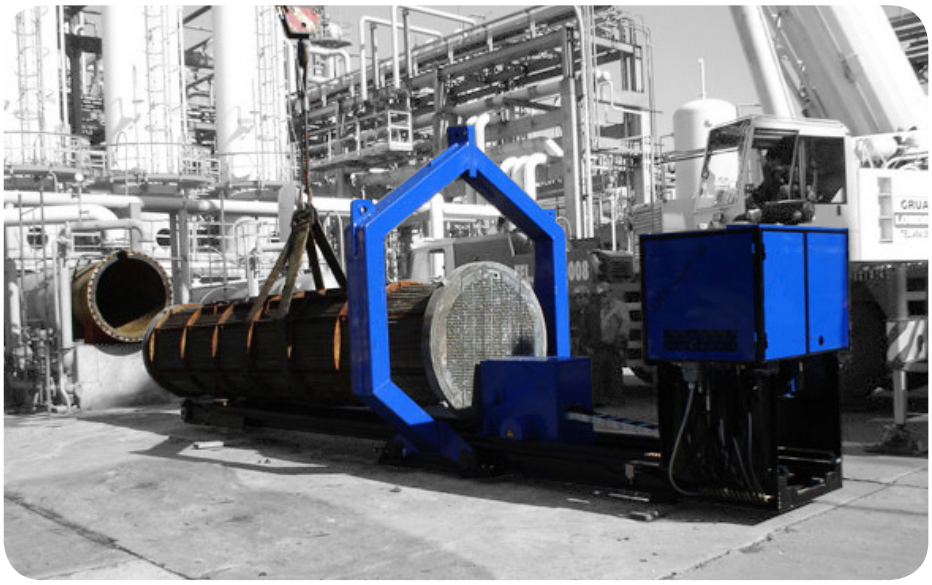
Bundle Extractor and Cleaning Equipment

CALDER

A PG FLOW SOLUTIONS COMPANY

BUNDLEPRO

From Start to Finish



Calder's extensive range of tube bundle cleaning equipment is all you need for safe, efficient cleaning of tube bundles. From our versatile tube bundle extractors and movers, to our low maintenance, high pressure internal and external bundle cleaners and water jet machines, the Calder range of equipment is tried, tested and trusted worldwide.

To suit varied industry requirements we offer light, heavy, mobile and truck-mounted tube bundle extractors for the removal and re-insertion of bundles both large and small. Our bundle movers range from the simple lift arm to the mobile straddle carrier. We also manufacture an extensive range of water jetting machines and accessories for both internal tube and external shell-side high pressure cleaning.

We have many bundle pulling, moving and cleaning models available. Please contact us to discuss your requirements to ensure correct selections are offered for your application.

EXTRACTORS

HOOK-LIFT EXTRACTOR

This unit is lifted into position by crane and the tube pulling and pushing operations are achieved through its integrated power unit. Hydraulic operation is through remote control to aid operator safety. The machine has a facility to ensure the load and machine are balanced. The unit's slim design allows good access to the tube bundle.

Designed for use with a range of bundle sizes:

- *Minimum bundle diameter . . . . . 50 mm*
- *Maximum bundle diameter . . . . . 1,000 mm*
- *Maximum bundle weight . . . . . 10,000 kg*
- *Machine weight . . . . . 1,800 kg*
- *Standard machine length . . . . . 7,000 mm*
- *Optional machine length . . . . . 12,000 mm*

SELF-PROPELLED MOBILE EXTRACTOR

This versatile, remotely controlled machine is designed for manoeuvrability. Tube bundles can be extracted and moved whilst the operator is stood a safe distance away. This self-contained unit can handle a range of bundle sizes and operate at height:

- *Maximum bundle diameter . . . . . 2,000 mm*
- *Maximum bundle length . . . . . 6,600 mm*
- *Minimum working height . . . . . 610 mm*
- *Maximum working height . . . . . 6,000 mm*
- *Maximum bundle weight (at maximum height operation) . . . . . 22,000 kg*
- *Maximum bundle weight (at minimum height operation) . . . . . 25,000 kg*
- *Max winch pulling force . . . . . 50,000 kg*

SELF-PROPELLED LARGE MOBILE EXTRACTOR

This robust, mobile, large capacity tube bundle extractor is ideal for multi-site operations. Tube bundles can be extracted and moved with the minimum of effort. Capacities are:

- *Maximum bundle length . . . . . 8,000 mm*
- *Minimum working height . . . . . 610 mm*
- *Maximum working height . . . . . 7,000 mm*
- *Maximum bundle diameter . . . . . 2,000 mm*
- *Maximum bundle weight (at maximum height operation) . . . . . 25,000 kg*
- *Maximum bundle weight (at minimum height operation) . . . . . 40,000 kg*
- *Max winch pulling force . . . . . 62,000 kg*

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TRUCK-MOUNT EXTRACTOR

In addition to the usual features of our extractors, this road-going machine can be used at various locations reducing the replication of machines across different sites. This truck-mounted extractor can handle:

- *Minimum working height . . . . . 610 mm*
- *Maximum working height . . . . . 7,000 mm*
- *Maximum bundle diameter . . . . . 2,000 mm*
- *Maximum bundle weight (at maximum height operation) . . . . . 15,000 kg*
- *Maximum bundle weight (at minimum height operation) . . . . . 25,000 kg*
- *Max winch pulling force . . . . . 40,000 kg*

MOVERS

BUNDLE ARM LIFT

The bundle arm lift unit is a new design capable of lifting tube bundles up to 50,000 kg.

- *Height . . . . . 4,754 mm*
- *Width . . . . . 3,590 mm*
- *Maximum bundle diameter . . . . . 3,000 mm*
- *Bundle weight capacity . . . . . 50,000 Kg*
- *Weight . . . . . 4,500 Kg*

STRADDLE CARRIER

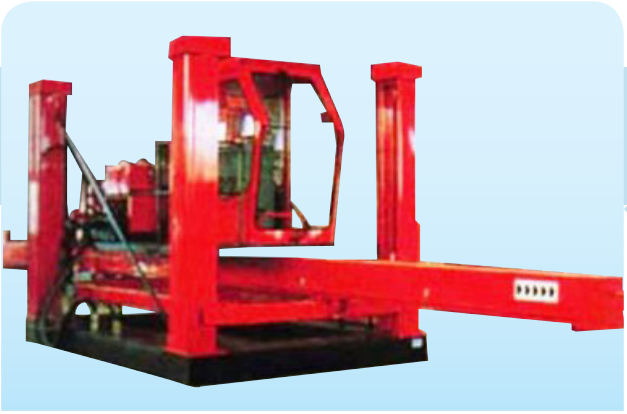
The straddle carrier is designed specifically for the onsite movement of a large range of tube bundles up to 25,000 kg. A 5-speed gearbox, dual circuit air brakes and power steering make this unit very operator friendly.

- *Tubeless tires (12,00 x 24) . . . . . n. 4*
- *Steering wheels . . . . . n. 4*
- *Driving wheels . . . . . n. 2*
- *Max translation speed . . . . . 40 Km/h*
- *Max hill climbing 5%*
- *Max pressure on the soil . . . . . 8 Kg/cmq*
- *Working stroke . . . . . 1.30 mt*
- *Water cooled diesel engine . . . . . 128 HP*
- *Removable cabin*

INTERNAL CLEANING

INTERNAL BUNDLE CLEANING ROBOT - rigid multi-lances

- *Length . . . . . 908 cm*
- *Width . . . . . 92 cm*
- *Cabin hut height . . . . . 183 cm*
- *Column height (at working condition) . . . . . 270 cm*
- *Weight . . . . . 2,000 kg*
- *Number of nozzles 3*
- *Water pressure up to . . . . . 1,000 bar*
- *Jet lance horizontal travel . . . . . 900 cm*
- *Jet lance vertical travel . . . . . 185 cm*

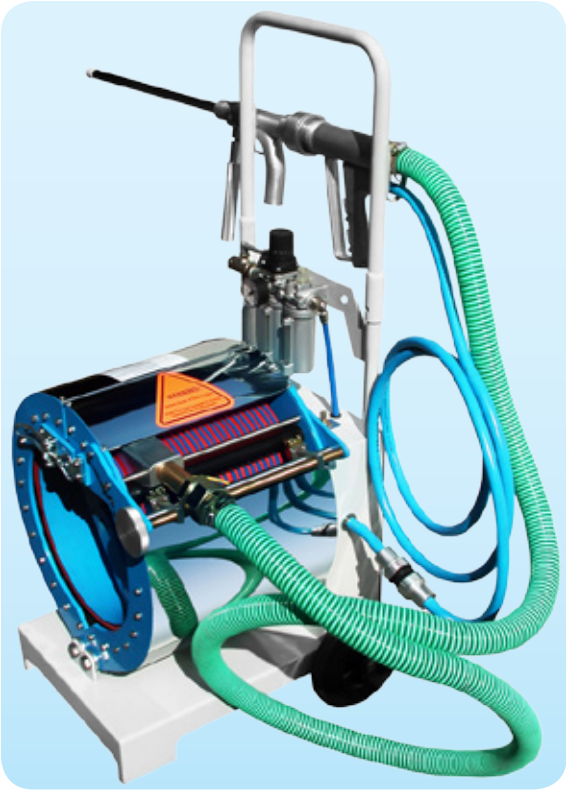


FREELANCE TUBE CLEANER - flexi hose

Freelance offers fast, efficient, safe and pollution-free tube cleaning at rates exceeding 200 tubes per hour. Low cost and minimal set-up time make flex lancing a preferred method of tube cleaning. Now, the unique Freelance offers mechanized flex lancing and new levels of efficiency.

- *1,000 bar (14,500 psi) and 2,500 bar (36,250 psi)*
- *Single & Twin Lance options.*
- *Light-weight portable design.*
- *Lance control system cleans at high pressure during retraction.*
- *Adjustable lance extension allows 'end-to-end' tube cleaning to take place.*
- *Controlled extension of the lance ensures a consistent level of cleanliness.*
- *Can be positioned and set up by a single operator in minutes.*
- *Fully contained, compact, environmentally friendly, self-cleaning lance system.*
- *Effluent controlled to collection point. No particle infringement to operator.*

Freelance



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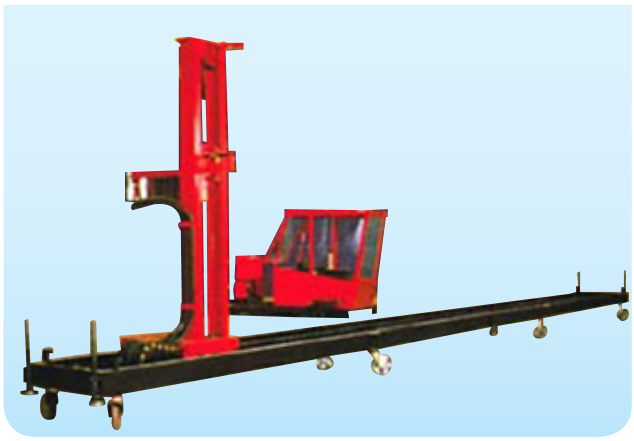
EXTERNAL CLEANING



EXTERNAL BUNDLE CLEANING ROBOT

- *Length . . . . . 106 cm*
- *Width . . . . . 250 cm*
- *height . . . . . 270 cm*
- *Weight . . . . . 3,000 cm*
- *Lance working stroke . . . . . 930 cm*
- *Cross travel . . . . . 155 cm*
- *Up stroke . . . . . 188 cm*
- *Number of lances . . . . . up to 5*
- *Lance diameter . . . . . 10/12 mm*
- *Lance speed . . . . . 1/1.5 m/sec*
- *Force of thrust . . . . . 1,000 Kg*
- *Water pressure up to . . . . . 1,000 bar*
- *¾" double chain slide*
- *High/low speed lance*
- *High pressure hose reel/drum & HP swivel*
- *Hydraulic remote control*
- *Hatz hydraulic power unit*
- *Operator control cabin*

SSC20 SHELL-SIDE CLEANER

The Calder SSC20 enables semi-automatic high pressure water jetting of awkward-to-reach areas via a robotic, hydraulic arm.

SSC20 can be retro-fitted to a suitable vehicle (Bobcat, Caterpillar, Kubota etc.) and the cleaning head can be removed to allow the vehicle to return to normal duties. The water jet and cleaning nozzles are operated from within the cab and the robotic or hydraulic arm takes the strain allowing the operator to work efficiently and safely away from the hazard of the high pressure jet.

Typical Specifications

- *Cab mounted water pressure ON/OFF control valve – dump type pneumatically actuated.*
- *On board air compressor to allow pressure control valve to be pneumatically actuated.*
- *5-jet spray bar rated at up to 20,000 psi working pressure.*
- *Rotary joint mounted on spray bar to enable HP hoses to be manipulated safely without twisting.*
- *40,000 psi spray bar and connection kit optionally available.*

SSC20

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High Pressure Water Jet Machines

The following machines can all be used to provide the high pressure water for our internal and external bundle cleaning equipment. Additionally, these machines can be used with hand-held lances, and a range of surface and floor-cleaning equipment.

Containerised – electric and diesel units can be mounted in industrial or offshore certified containers.

Skid-mounted - lightweight, versatile, electric or diesel options. Suitable for permanent site location.

Skid-mounted diesel unit - rugged design with trailer-mounted option.

Crash Frame - offers protection during transportation, whilst giving easy access for maintenance. Suitable for onshore or offshore applications.

Road going single axle trailer-mounted MultiJet series with noise-reducing hood. Up to 70 kW power.

Road going trailer-mounted MultiJet series with noise-reducing hood. Over 120 kW power.

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For many years Calder has supplied industrial high pressure waterjet equipment to companies around the world including:

- Alcoa
- British Sugar
- Buchen
- CEDA
- DBI Cape Industrial
- Dialog
- ESSO
- Fantec
- Gulf Consolidated Contractors
- Hammelmann Australia
- Kabbini
- KOC
- Ma'aden Aluminium
- Magnox
- Occidental of Qatar
- Olayan Descon
- Ozest
- Petrotech Services
- Plant Tech Arabia
- Polytech
- Redland Industrial Services
- Saudi TKT
- Seyana
- Sureclean
- Tamimi
- TCC Saudi
- Total
- Veolia

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ISO 9001 ISO 14001 OHSAS 18001 Registered
UKAS MANAGEMENT SYSTEMS 015
WJTA WaterJet Technology Association
WJA
Achilles JQS empowered by Achilles Qualified
FPAL empowered by Achilles Registered
bsi.

Calder Ltd reserve the right to alter specifications and data to incorporate improvements in design.