

manufactured by

M & J ENGINEERING

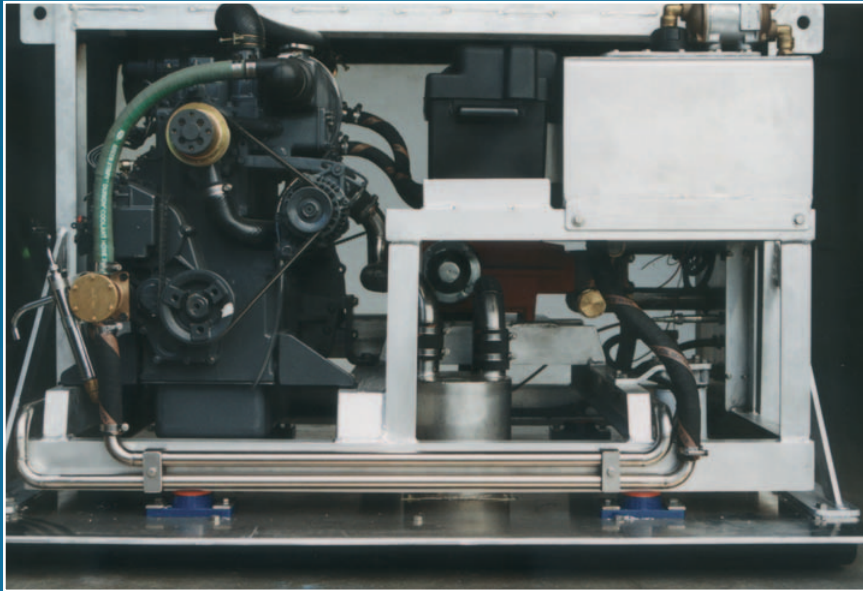
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Shell Cleaning Equipment

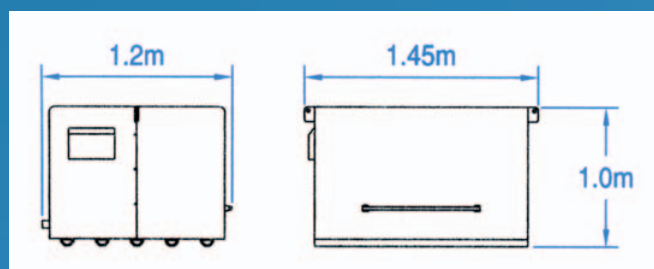


SHELL CLEANING MADE EASY

The shell cleaning machine derives its power from an auxiliary power pack, consisting of a hydraulic pump, high pressure water pump & a hydraulic reservoir with an oil cooler. The main power source can be a small diesel engine or an electric motor. This power pack can be utilised on vessels up to 12m with a hydraulically driven inching winch & long line retriever for sea based operations. With a weather proof cover and superior quality pumps, the power pack and auxiliary equipment will minimise downtime and increase efficiency.

Features include:

- Optional electric or diesel power source
- Universal hydraulic pump for use in almost any application
- High pressure water pump
- Full aluminium weather proof cover
- Stainless steel muffler & exhaust system for diesel engines
- Engine oil pressure & water temperature safety switches
- Diesel engine fitted with sump pump
- Primary & secondary fuel filters
- Durable & lightweight aluminium frame with rubber mounting to minimise vibration
- Hydraulic oil cooler



Specifications:

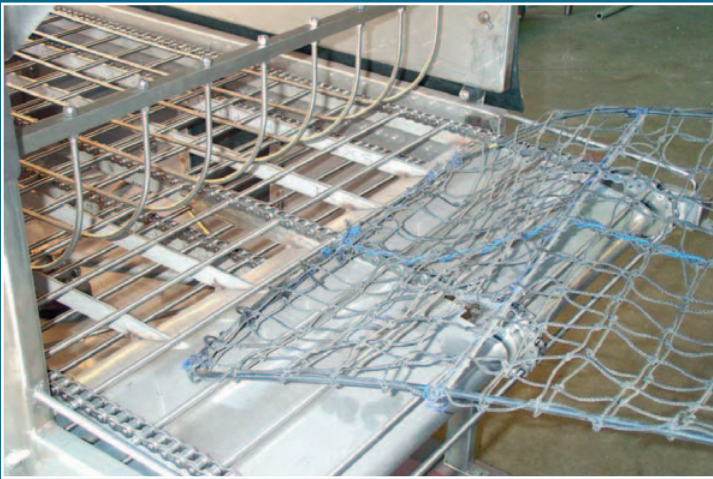
Overall Weight: 650kg

Max. Engine HP: 50hp @ 2800rpm

Power Required: 25hp @ 2000rpm

Recommended Water Pump:

Triplex P51-135-80 (capacity 135L per min producing 600psi @ 800rpm Max.)



Features include:

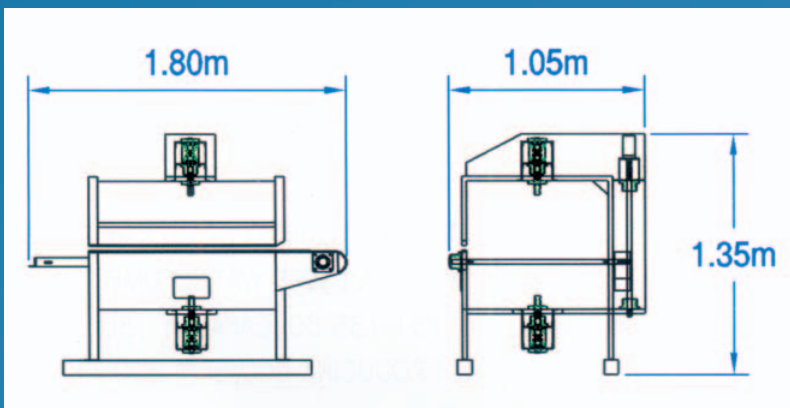
- Optional 2 or 3 chain conveyor system
- Nozzle water pressure guage
- Variable conveyor & jet rotor speeds
- Full rubber splash covers
- Catchment tray
- Remote mounted grease manifold for simple lubrication
- Anti-jump rack
- Full 316 stainless steel frame
- Hydraulic safety valves to prevent damage to shell or injury to operator

Options available:

- Instructional video
- Stainless steel hydraulic hose fittings
- Detailed parts catalogue (available soon on CD-ROM)

EFFICIENT TROUBLE FREE CLEANING

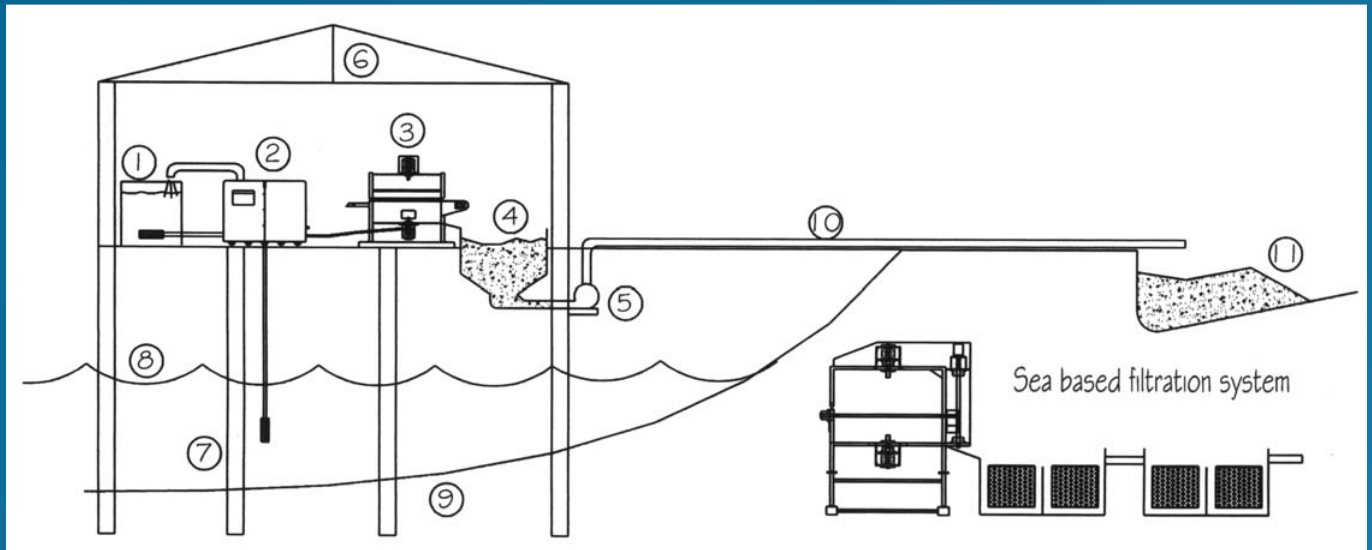
Available with a conventional 2 chain, or the more robust, 3 chain conveyor, these shell cleaning machines are capable of cleaning over 12,000 shells per day. Hydraulically driven and constructed from heavy duty 316 stainless steel, the cleaning machines will provide efficient trouble free cleaning. All machines are fitted with hydraulic safety valves to protect the shell & operator.



Specifications:

Overall weight:	250kg
Conveyor Length:	1.65m
Conveyor Width:	0.8m
Conveyor to Jet Distance:	0.3m
Conveyor Speed:	0-10m per min
Jet Rotor Speed:	0-200rpm
Jet Pressure:	0-600psi

As part of M & J Engineering's policy to protect the environment, we are constantly thinking of waste water management techniques to protect the aquaculture, without disrupting the efficient cleaning process.



LAND & SEA BASED OPERATIONS

- | | |
|---------------------------------------|--|
| 1. 1800L (minimum water tank) | 7. Jetty Piles |
| 2. Power Pack | 8. Sea Water level (minimum) |
| 3. Shell Cleaning Machine | 9. Sea bed |
| 4. Waste Tank | 10. Waste delivery pipe |
| 5. Sludge Pump | 11. Waste pit, wedge shaped (1m deep x 4m wide x 10m long) |
| 6. Jetty & SHed (8m long x 4.5m wide) | |

Due to some farms working in small lagoons unsuitable for sea based operations, pictured above is a simple land based operation with an easy to manage filtration system to prevent spawning of growth on the oyster shell.



There is no limit to your pearling needs from M & J Engineering is your first choice when it comes to pearl farming equipment.

MANUFACTURED FROM HEAVY DUTY MARINE GRADE MATERIALS

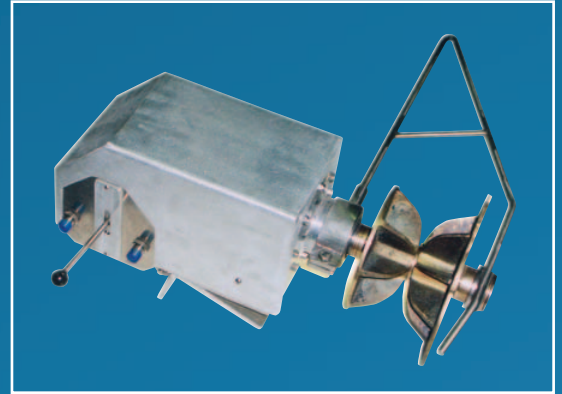
Inching Winch & Lazy Roller

Specifications:

Length: 0.5m
Width: 0.24m
Height: 0.24m
Speed: variable 0-35rpm
Direction: Forward & reverse
Line pull: 1000kg

Features:

- Stainless steel guide bars
- Variable direction & speeds
- Stainless steel lazy roller construction
- Bronze inching heads available in various sizes



Designed for sea based operations, the capstan & inching winch retrieval system is designed to keep oyster in the water longer as well as increasing the efficiency of the cleaning process. Manufactured from heavy duty marine grade stainless steel and aluminium, this line retrieval & inching winch system can be fitted to any type of vessel. Hydraulically driven, this equipment is powered by a power pack and is designed to work simultaneously with the cleaning machine. The simplicity involved in operation is one of the main design features considered in design and construction of all this equipment.

Retrieving Capstan Winch & Sheave Block

Specifications:

Weight: 28kg
Speed: variable 0-65rpm
Capstan Diameter: 175mm
Line Pull: 800kg

Features:

- Marine grade aluminium construction
- Rotating sharpening stone
- Variable speeds
- Heavy duty snatch block for line retrieval



Established in 1968, M & J Engineering has a very proud history of dedicated & quality workmanship towards the marine & fishing industries.

Since 1980, M & J have been providing an extensive service for the pearling industry, manufacturing specialised equipment specifically for the process of pearl farming. Now into it's second generation, M & J Engineering will continue to supply & service your needs.

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