# **KLAW - SAFE PRODUCT TRANSFER SOLUTIONS**

### The advantages of KLAW marine transfer safety systems

The complete solution to media transfer in the marine environment

KLAW designs and manufactures a range of systems designed to improve safety and efficiency during the transfer of media in the marine environment.

These systems enable you to minimise risk to assets, personnel, the environment and reputation.

They also protect against downtime and clean-up costs, litigation, injury, increased insurance and investment costs caused by higher risk.

The KLAW range:

Marine Breakaway Couplings
Industrial Breakaway Couplings
Quick Connect Disconnect Couplings
Full Bore Marine Breakaway Couplings
Emergency Release Systems
Cryogenic Emergency Release Systems
Camlocks
Swivel Joints
Minimising risk of spills

KLAW offers experience and a track-record for innovation and reliable solutions.



## **QS Marine quick connect and disconnect coupling**

Connects and disconnects hose lines with no spillage

The QS is designed for demanding operating conditions and the rigours of the marine environment.

- Completely interchangeable with other manufacturers.
- The QS features a single action operation with an orbital handle for easy grip and turn, which improves safety and time efficiency.
- Valves open and close automatically on connection and disconnection.
   This reduces the possibility of human error in transfer operations and reduces spillages to virtually zero.
- The selectivity system prevents cross contamination.
- Locking pin as standard, providing additional safety.

#### Typical applications

- Ship-to-Ship transfer
- Ship-to-Shore transfer
- Ship-to-Rig transfer
- Marine refuelling

#### Materials

Aluminium, stainless steel. Other materials available on request.



## **Marine Breakaway Coupling**

Designed to fit hose strings to ensure operations keep working

The KLAW BAC provides an identified and safe parting point within the hose transfer system. Where tensile forces exceed pre-determined tolerances, the BAC activates.

The KLAW BAC is designed specifically to be installed within a hose string and resists both bending movements and torsional forces in order to prevent premature activation of the unit. These features specifically protect the breakstuds from fatigue and provide for a reliable product in the tough marine environment.







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## **Full Bore Marine Breakaway Coupling**

#### No line restriction means faster flow and reduced transfer time

The KLAW Full Bore BAC is specially designed for the demands of the marine environment, providing an identified and safe parting point within the transfer system.

- The KLAW Full Bore BAC is the most efficient breakaway coupling of its type in the industry.
- The unit has a full unrestricted bore and all working mechanisms are completely isolated and protected from media until activation.
- Activation is not affected by clogging or abrasion from media.
- Instantaneous 100% double shut-off when a predetermined tensile load is applied.
- Excellent for handling abrasive or viscous media such as waste products.

#### Typical applications

- Ship-to-Ship transfer
- Ship-to-Shore transfer
- Ship-to-Rig transfer
- Marine refuellingCutting fluid operations
- Flowback operations

The only coupling of its kind with Full Bore and 100% shut-off.



#### **Swivel Joints**

#### Reduces stress and fatigue on hose systems

The KLAW range of Swivel Joints is designed to reduce wear and tear on hoses and equipment within the rigours of offshore applications.

- Extends the life of the hose.
- Aids hose handling.
- Reduces maintenance costs and downtime.
- Available sizes 1" to 24".

A range of options to suit your specific application.

- Pressure
- Materials
- Temperatures
- End connections
- Top side or subsea



## **Flange Camlocks**

### The fast, reliable & safe way of making and breaking hose connections

The flanges are automatically positioned within the cam blocks and locked together.

The cam is then turned by hand using a locking bar.

- Permanently positioned seal increases efficiency and safety.
- Cams cannot be loosened when line is pressurised.
- Extensive range of options and finishes.

Takes approximately 5 seconds to fit each cam.

