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EXPERTISE + INTEGRITY = RELIABILITY

CHIEF EXECUTIVE OFFICER
YVONNE GILCHRIST-MASON OBE

MARINE DIRECTOR
CAPT. BOB GILCHRIST
– MNI FIMarEST

WHO WE ARE

Since our formation in 2010 our main objective has been to provide high quality ship-to-ship (STS) transfer services that are consistently safe and reliable.

Our world class team is highly trained and supported by our passion for the industry. We encourage them at all times to put health, safety and the environment at the forefront of everything they do.

Our staff numbers have grown significantly and they have amassed many years of hands-on experience. Our POACs are recognised as being leaders in their fields and have unmatched records of safety across many thousands of STS operations.

WHAT WE DO

We work for and alongside industry leaders as well as governments to conduct STS transfers of oil, gas and other essential cargoes and to improve standards and procedures, particularly in emergency situations.

We commit to doing the job to the very highest standard every time. Successfully audited by leading oil majors and trading houses, we have a well-deserved reputation for integrity, reliability and expertise.

OUR MISSION

We are committed to consistently delivering an industry-leading, safe service with absolute transparency in everything we do.

Through that commitment, innovation and investment in our people and equipment, we strive to raise the standards and safety of ship-to-ship transfers across the globe. Our highly trained and passionate team prioritises health, safety and the environment as part of our ethical standards.

OUR VISION

We want to continue delivering expertise, integrity and reliability in all aspects of our business and to stand out as the best contractual partner in the industry.

From an STS perspective, we want to support and be part of an industry that shares our exemplary safety record and ensures no spills in its operations.

Our job is to manage and minimise our clients' risk, every step of the way.

SINCE
MAY 2010
SAFESTS HAS TRANSFERRED OVER
775 MILLION
BARRELS WITH
ZERO SPILLS

THINKING GLOBALLY, DELIVERING LOCALLY

OUR PROMISE

Safety is our mantra and what we have been proud to deliver from day one. When offering our services we do it in the best and safest possible way.

In every single task we undertake, from STS transfers through to personnel training, we ensure what we do meet the highest levels of market requirements and expectations.

We promise to use only the highest quality equipment and a global pool of highly experienced Marpol-compliant Mooring Masters.

OUR PHILOSOPHY

We aim to work harmoniously alongside our host country, respecting its needs and contributing to its economy, safety and security of energy supply.

We firmly believe in thinking globally, but delivering locally. Our expertise helps raise the standards of STS operations consistently across the world.

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Our extensive knowledge and skill-sets combine in the following services, through which we aim to deliver a positive impact in the marine industry:

- Ship-to-ship Transfer of all Hydrocarbons
- Training (POACs)
- Asset Management
- Project Management
- Marine Consultancy
- Ship-to-ship Transfer Equipment

Although our key sector service is ship-to-ship transfer of oil and gas, we have influenced and contributed to the long-term improvement of standards and legislation that positively affect many other marine sectors.

SHIP-TO-SHIP TRANSFER (STS)

We conduct STS transfers of oil, gas and in some cases, dry cargo, around the globe 24 hours a day 365 days a year. Being fully Marpol compliant, we ensure that all of our operations happen safely and efficiently.

We have considerable experience and expertise in emergency contingency STS and have been instrumental in the mitigation and prevention of oil spills globally.

Our continual investment in technology has led to significant advances in safety throughout the entire STS process.

STS EMERGENCY

Extreme weather events, vessel casualty - there are so many scenarios that require fast, safe, efficient removal of cargo.

Our team is quick to respond and, with safety at the core of everything we do, you can be sure that everyone involved has the expertise to facilitate rapid response STS in accordance with your needs and without further incident.

STS CONTINGENCY

If a vessel cannot continue her voyage for any reason, we can orchestrate contingency lightering to safely and efficiently remove the cargo.

Our marine team work alongside the shore-based management team, offshore personnel and vessels to manage the process in accordance with national and international regulations.

STS DIVERSIFICATION – LNG & FUTURE FUELS

As the size of the world's LNG fleet rapidly increases, so does the demand for ship-to-ship transfers and bunkering.

Working with new cargoes demands knowledge and expertise relating to STS transfer equipment used, the skills employed and the collaboration with high-level engineering expertise.

Our development of new transfer technologies and products have been globally recognised and has led to commendations by leading Industry publications.

All operations are carried out in strict accordance with OCIMF/ICS and SIGTTO guidelines and comply fully with Marpol Chapter 8 requirements.

TRAINING (POACS)

Many years experience of operations both underway and at anchor leave us well placed to deliver training in both the classroom and the field.

Our bespoke competence programme for Mooring Masters/Person in Overall Advisory Control (POAC), covers oil, gas and dry cargo STS and training is delivered to our own team and to third parties providing continuous improvement within the industry.

ASSET MANAGEMENT

If you have purchased your own fenders, hoses and specialist equipment to meet your trading needs, but would like to realise an income from those assets when they are not being used, we can help.

We audit and maintain your equipment, hire it out to third parties and provide you with a revenue. We manage everything, including the commercial processes and the risk.

MARINE CONSULTATION

Our in-house marine experts have a wide-ranging skills base, so whether your project is an FPSO, (side by side or tandem moor), an FSU or the mooring systems design for an FLNG, we have people who can support you with years of real, practical experience and a full understanding of your needs from project feasibility to operability.

QHSE MANAGEMENT

We develop, implement and manage QHSE systems for third parties, using our in-house expertise and bespoke system *SafeOps* to encourage consistent standards within the industry.

Working in accordance with IMO, OCIMF/ICS, ISGOTT, ISO & ISM standards we are proud to have developed an industry leading system.

EXPERT WITNESS

Our highly experienced Mooring Masters and marine consultants are qualified to offer expert witness testimony and advice in various maritime disciplines such as LNG transfers, salvage and emergency operations and offshore projects.

WITH SAFESTS YOU'RE ALWAYS IN SAFE HANDS

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SAFESTS IN JAPAN – A CASE STUDY

Our goal has always been to build a trusting and open relationship with our clients across the world. We think globally but we deliver locally and work alongside our host country, respecting its needs and contributing to its safety, security and economy of supply.

When our first conversation with Japanese businesses began in 2012, we set out with clear aims:

- to protect Japan when natural or maritime disasters occur
- to provide cost-effective and safe alternatives to infrastructure repair and replacement needs
- to enable diversification, flexibility and security of oil supply
- to facilitate growth in regional trading opportunities

After many cups of tea we reached consensus and with support from one of our key Japanese clients we were proud to deliver our first STS transfer safely and successfully in November 2013

Since then, we have safely completed over 220 STS operations in Japan, transferring 103,901,662 barrels with zero spills and no LTIs.

We have developed a Japanese supply chain, which involves training local personnel in the best international operating standards.

Our ongoing work has enabled Japanese shipyards to build and deliver STS support craft, some of the finest available in the world. We work closely with the Maritime Disaster Prevention Center, holding term contracts which include full training for our teams on the ground.

Our STS locations at Nagasaki and Tsushima have been chosen with due respect to Japanese aquaculture and the local stakeholders.

WE CONTRIBUTE SIGNIFICANTLY TO THE LOCAL ECONOMY

GOING FORWARD

Japan is well placed to develop its own ship-to-ship transfer hub as a means of supplying neighbouring countries and could capture business from existing and mature transshipment hubs across Asia.

SafeSTS has developed medium and long term plans to include training Japanese national mariners to Marpol Chapter 8 compliant POAC status. As a nation Japan would benefit significantly from having an in-country skill set to this level.

STS services provide opportunities for Japanese refiners, traders and utilities to optimise transport costs and take advantage of competitive prices in the hydrocarbon purchasing and trading market. The service provides protection from sudden supply shortages which can arise from natural disasters or geopolitical situations.

Ongoing STS transfers can demonstrate long term economic benefits as well as a reduction of the dependence on oil storage in Korea and Singapore which brings security and diversification of energy supply.

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LNG OPERATIONS

At SafeSTS we are continually growing our business to include new spheres of operation. One area in particular that has seen significant growth is the STS transfer of LNG.

The ship-to-ship transfer of LNG has been identified as strategically important to our client base, to future energy security and also to the reduction of carbon emissions. SafeSTS are looking to create working partnerships with businesses that wish to harness this growth but need the guarantee of a safe and secure STS service provider.

Our excellent reputation within the STS sector, as a team of drivers and innovators, has led to us advising governments and international bodies on STS transfer. We have developed a loyal global client base working as a contractor, an alliance partner or a partner.

FROM PROJECT CONCEPT THROUGH TO CARGO DELIVERY OUR LNG SERVICES INCLUDE:

- **Cryogenic cargo consultancy** *(ammonia, hydrogen etc)*
- **Cargo and STS compatibility**
- **LNG STS cargo procedures**
- **LNG STS superintendents** *(engineering)*
- **LNG ERS mobilisation operation**
- **LNG transfer equipment readiness and maintenance**
- **LNG system training**

LNG EXPERIENCE

Our Mooring Masters are extremely professional operators with vast experience in the marine and offshore worlds and in various roles in business development, including specialising in FPSO and FLNG activities.

Combining both technical and commercial knowledge, they have offered guidance to support the development of floating liquefaction solutions, initiated FLNG strategies and provided advice to companies for the development of in-house LNG management systems.

Our Mooring Masters and POACs have managed large teams and have been responsible for the safe day-to-day management of large fleets that include VLGCs, GTTs and Moss LNG vessels.

Our staff have engaged in updating LPG guidelines for OCIMF/SIGTTO/ICS and developing operating philosophies for LNG FPSOs and FSRUs.

Our Masters have been involved variously in the technical advancement of LNG FPSOs and FSRUs and also in the development of SYMO (soft yoke mooring and offloading) terminals, SQMs (soft quay mooring terminals) and floating LNG hose.

LNG PROJECTS TO DATE

LIVORNO OLT
- Consultancy pre start-up
- Incident investigation
- Expansion of services consultancy

FSRU (TERMINAL) INDONESIA
- Terminal start-up and POAC Training

TURKEY FSRU (TERMINAL)
- POAC for client

MALTA FSRU (TERMINAL)
- POAC for client / start-up and initial operations
- Incident investigation root cause analysis

ROTTERDAM LNG BUNKERING
- POAC for initial operations
- Ongoing fender equipment advice

MIDDLE EAST / FAR EAST
(4 separate projects)
- LNG Project development
- Permitting

SENEGAL LNG FSRU / POWER BARGE
- Consultancy

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TRANSFER TECHNOLOGY LTD

EQUIPMENT

We are not just experts in the execution of STS, we pride ourselves in the fact that we have over 30 years experience in the selection and certification of equipment, alongside maintaining key alliances with high-end brand manufacturers to ensure guaranteed quality and a reliable supply chain, resulting in some of the best performing equipment available in the market.

Therefore, we are well placed to manage your procurement needs. Alternatively, if you don't wish to commit to a purchase, we can source and arrange the rental of suitable apparatus.

Working with world renowned manufacturers and ensuring that we have a full understanding of your equipment needs you can be sure that what we provide will always be high quality, fit for purpose, and cost effective.

PNEUMATIC FENDERS

Pneumatic fenders are integral to all STS operations and are ideal for permanent or semi-permanent port operations.

SafeSTS are authorised distributors for Trelleborg fenders which are ISO17357-1:2014 compliant and meet PIANC 2002 guidelines.

With the development of ship technology, fenders have evolved to suit newer vessel types such as ULCCs, LNG carriers, bulk carriers, FSOs and FPSOs. As a result, a wide range of pneumatic fenders from the large 6.0 x 11.5 m down to the 0.3 x 0.5 m baby fenders are available.

HOSES

Hoses used during STS transfers are a crucial link between the vessels.

We remain dedicated to working with manufacturers that have the technology which deliver optimum service-life and high operational performance even in the most demanding of transfer conditions, whatever the cargo.

DECK HARDWARE, ROPES AND CHAINS

Alongside fenders and hoses, SafeSTS can also specify and provide all ancillary equipment required for STS operations, including a brand-new mooring fuse concept.

This state-of-the-art development operates by ensuring that potential over-tension is identified and managed before it causes damage, without compromising the integrity of the ship mooring system.

SAFETY ENHANCEMENT EQUIPMENT

Strategic expansion plans have taken us into the development of safety enhancement products relative to our sector; including:

- Mooring system overload protection including snapback protection
- Co-development of PTX (Protected Transfer System) – flip-flap type valve.

INNOVATION IN STS OPERATIONS WITH TRANSFER VIA BUOY

The Transfer via Buoy Terminal (TVB) has been created to bring the terminal closer to the producers, with a simple, safe, scalable and carbon saving logistic strategy solution.

TVB is designed to allow export tankers to load at a standard single SPM type terminal and for the DP tankers to discharge in DP mode whilst station keeping at a predetermined distance from the export tanker (approximately 150 m).

The TVB Terminal can be sited close to the production fields which gives exceptional operational availability. With a capacity of 20 operations per month, VLCC tankers will only require mooring once to the TVB and can be loaded by two or more consecutive DP shuttle tankers with various size cargo volumes.

The DP shuttles, operating in DP mode, will be able to connect and start discharge 24/7, minimising delays and the overall time required for loading.

TVB BENEFITS (Independent study by Crondall)

BRAZIL EXAMPLE STUDY ON TVB EMISSIONS v STS AND PORT EMISSIONS

TVB offloading results in the lowest emissions, driven by the shortest shuttle tanker transit distance and time, showing the benefit of locating the TVB buoy close to the field. Over a full operating year, the estimated greenhouse gas emissions savings of TVB offloading for the examples in the scenarios considered are:

- **16,000 CO_2 e te/year compared to STS**
- **32,000 CO_2 e te/year compared to port offloading**

Industry research is being carried out on reduction of CO_2 emissions from support craft and potential, for identifying additional emissions reduction going forward, is expected.

- It is noted that both Acu port (in port STS) and offshore STS have lower availability and higher cost that TVB. These scenarios will also incur additional emissions.

For full analysis refer; Crondall Energy TVB Offloading Emissions Study GHG 2023

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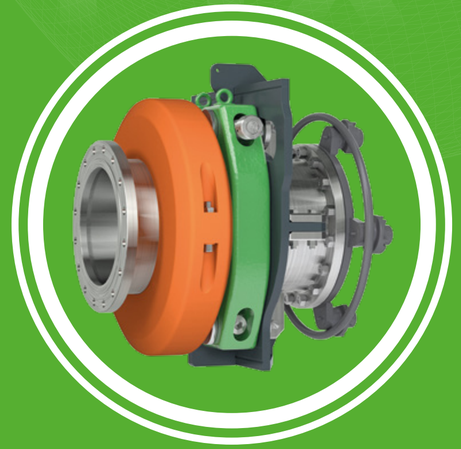
PTX



Through design and technical ingenuity we engineer out the risk of spillage

Ship-to-ship transfers of crude, clean and dirty oil products have been taking place for over 50 years, with over 11,500 transfers taking place annually from around 250 lightering locations in 85 countries around the world.

Be they offshore (34%) or in port (66%), the risks associated with transfer operations are well known and recognised across the lightering sector, but climate change and global warming are now creating new risk factors, including higher sea states, stronger winds and more frequent extreme weather events.

As a result, a new world is emerging for STS, where marine expertise, advanced engineering, technology and systems and processes are needed to reduce risk and enhance human and environmental safety to avoid unexpected mooring breakouts; widely recognised as the biggest risk during offshore STS operations.

INTRODUCING PTX (PROTECTED TRANSFER SYSTEM)

PTX has been developed by SafeSTS working closely with Gall Thomson, the industry-leading experts in Flip-Flap System Technology

Utilising the fundamentals of the existing technology, which was designed for low viscosity products such as kerosene and LPG, we have developed a Marine Breakaway Coupling that incorporates the flip-flap technology to provide safe, rapid, on-demand release in the marine hose transfer system for higher viscosity products such as crude oil.

Because of the way that it seamlessly goes about its business after installation, PTX reduces risk to almost zero, preventing offshore spills, damage to capital equipment and disastrous knock-on effects for wildlife and the marine environment.

BENEFITS

SAFETY

- Instantaneous closing and disconnection, saving significant time in an emergency.
- Activated from a safe distance using dedicated Reflex HPU.
- Delivers remote or local on-deck release.
- Removes the potential for hoses parting and damage to the manifolds in a breakaway scenario.
- Safe operation in accordance with HAZID assessment.
- Reduces the risk to crew in a rapid or emergency manifold disconnection.

OPERATIONAL / EASE OF FITTING

- The PTX Release is simply fitted between the hose and vessel manifold with no requirement for ship integration.
- Minimal downtime following activation with resetting of the unit in the bespoke resetting skid taking about 10 minutes.
- Improved control of emergency management and procedures.
- Can accommodate high flow rates during transfer.
- Optional over a wide range of cargo viscosity and temperature.

COMPACT

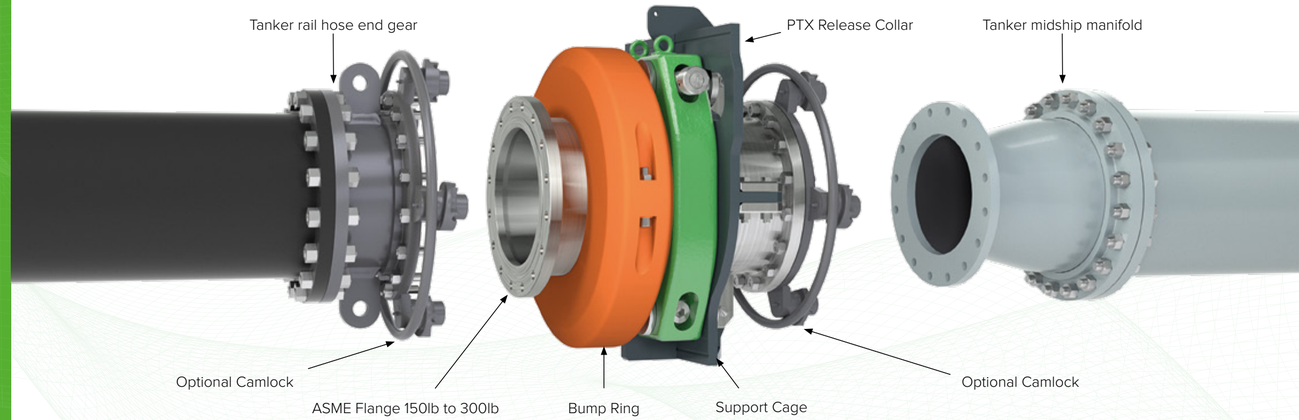
- The advantageous Flip-Flap design provides a compact unit.
- The HPU is integrated into the transport and reset skid, enabling one single lift, minimising on-deck footprint.

ENVIRONMENT

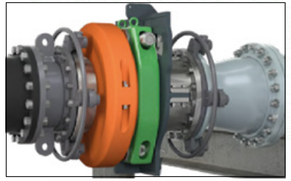
- Preventing rupturing of hoses and pollution from open hoses.
- Minimise the risk of spills: The Flip-Flap valve provides 100% leak-tight shut-off following closure.
- The PTX release is located directly over vessel's manifold drip tray.

QUICK TO CONNECT AND DISCONNECT

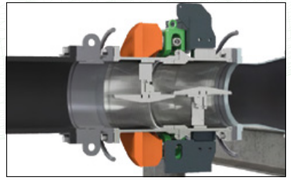
PTX allows for quick and simple integration with the existing system.



OPERATIONAL

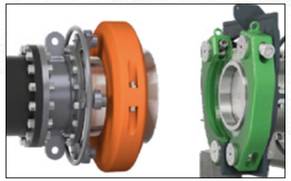


1/ The PTX Release Coupling is quickly secured with Ratchet Camlock couplings. The portable HPU is then connected to the PTX Release Collar.

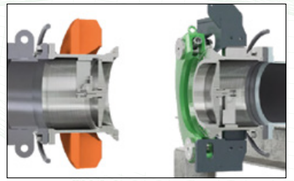


2/ Flip-Flap valve discs are locked open and positioned in line with the flow – offering minimum headloss.

ACTIVATED



3/ The HPU signals to the PTX Release Collar and the coupling parts. The energy of the bias springs flip the discs through a controlled arc.



4/ The activated discs are seated and sealed – providing 100% leak-free shut-off.

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GLOBAL PRESENCE

Our scope of operations has grown across the globe. Since our formation in 2010 we have been entrusted to transfer more than 775,000,000 barrels from the Caribbean to SE Asia.

We continue to add new STS bases and expand the areas in which we undertake STS operations.

With emerging countries looking to expand manufacturing operations and grow their economies, oil will remain a vital ingredient for many decades to come. It is, therefore, important for ethical STS operators to continue to lead the way in ensuring a reduction of carbon footprints and transitioning energy supplies.

QHSE STANDARDS

ISO 14001:2015
ISO 45001:2018
ISO 9001:2015

We will continue to think globally, but deliver locally

CORPORATE AND SOCIAL RESPONSIBILITY

Ship-to-ship transfer requires a complex and unique set of skills. Our industry isn't widely known which is why we've chosen to invest in and support initiatives that raise awareness. We are proud of what we do and of the industry in which we operate and believe that greater understanding will help improve standards and attract more people to work within the marine industry.

TheMasonTrust

Inspiring confidence, supporting ambition

Established in 2008 by Yvonne Gilchrist-Mason OBE, **The Mason Trust** is a charity dedicated to raising the aspirations of young people. Working closely with local and national governments, it helps develop future generations of workforce by forging closer links between education and the industry. It also provides essential support to young people in the form of grants, made to individuals or to organisations working with young people. The charity focuses its support on the young people of Norfolk and Suffolk, UK where Yvonne grew up (and still lives) and where our head office is based. Over **20,000** young people have been inspired and supported to date.

icanbea...

The **"I Can Be A..."** interactive social media platform helps students and young people keep abreast of the growth sectors in the region in order to develop their future careers. We are extremely pleased to lend our support and encouragement to the project. Over **250,000** students use the system which is supported by regional and national governments, Department for Work & Pensions, Local Enterprise Partnership and emerging supply chains for regional infrastructure and economic development growth.

utcn
University Technical College Norfolk

Established in 2014, **University Technical College Norfolk** provides a unique educational experience for 14-19 year-olds through its focus on advanced manufacturing and energy skills. It is designed to give students the engineering and energy skills and qualifications that employers need.

The curriculum is delivered though technical challenges which have been designed in conjunction with employers. These provide contextualised learning opportunities which show the students the relevance of the subjects they are studying. Working closely this way we ensure 100% destinations for all our students. Yvonne Gilchrist-Mason OBE is one of the project founders and in 2017, became the Chair of the Industry Liaison Group.

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