



DELIVERING TOTAL ENGINEERING



OFFSHORE REFUELLING SYSTEMS



COMPANY INFORMATION	5
CERTIFICATION	7
TANKS	9
PUMPS	11
DISPENSER	13
OTHER EQUIPMENT	15
TRANT DIVISIONS & SECTORS	17
CLIENT LIST	19

CONTENTS



P. Trant Ltd.

1951 Bedford K



Centres ■ Control

YVL 682

Trant Engineering Ltd is a UK based Engineering, Procurement and Construction (EPC) Company capable of providing a diverse range of clients with a single source solution to their specific requirements. Established in 1958, Trant has a long history of engineering excellence, delivering high quality multi-disciplined services across the UK and Internationally. Our integrated management systems registered to BSI standards ensures consistently good performance, leading to repeat business within our prime sectors of Oil & Gas, Process & Water, Defence, Energy and Nuclear.

We operate on many framework and term maintenance contracts as well as delivery of capital projects for many of our clients such as ExxonMobil, Valero, Shell UK, Perenco and BP. We transfer good practices and learning between all sectors to ensure that our project teams can provide the best route for enhancing efficiency, maximising opportunities and delivering value.

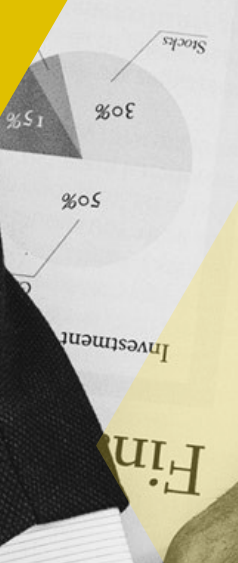
Drawing on the experience and knowledge of over 1,000 employees and professional engineering staff we can offer our clients a range of engineering, procurement, manufacturing and commissioning services. Our in-house design teams produce civil, mechanical, electrical, process and instrumentation designs utilising the latest design & modelling software.



INFO



Current financial s
Putting your strategy into action
set. At the same time, it will also sh
through networking, advertising etc.
maximize sales. The right timing that fits your



Trading Graph

on to focus resources on the greatest opportunities to increase sales and strategy's goal is to increase sales and achieve the advantage over other

Inform It is a process to achieve the company's in competitions.

100%

90%

80%

70%

60%

50%

40%

30%

20%

10%

It includes short term and long term activities of marketing that has to do with the analysis of a company's situation and contribute to its objectives. The objectives will be based on how you gain sales by acquiring and keeping customers. A marketing strategy helps convey effective messages with the right twist of marketing approaches that will maximize your income and marketing activities.

45,556 12,357 20,775 24,766 45,556

534 3,541 354 1,876

764 133 190

346 134

599 47,756

Issue 764
Monday, Jun 14, 2016
#Citydailynews

y of the n Union

Are you innovative or are you the experienced type? or do you offer a high-cost, high-quality product, or low-cost, high-value products? It's impossible to be both. You should consider on thinking what your customers need you to be. Your logo is the main foundation of your brand. All the promotional materials should be connected with your logo to communicate with your brand. Having a good brand strategy allows you to gain a large advantage in your market competitors. Your brand tells your customers what they can have or expect from the products and services you offer. The branding strategy as it have should be consistent as it leads to a strong brand equity. The branding strategy you have should be consistent a : more on p.5:1

Company Accreditations:

The implementation of Trant's Integrated Management Systems for Health & Safety, Quality and the Environment is recognised by the 'British Standards Institution' for which the Company holds registrations to BS EN ISO 9001, BS EN ISO 14001 and BS EN 45001.

Being BSI 9001 accredited, all our work is controlled and monitored using a 'Development and Quality Plan' as part of a robust Quality Management System ensuring a full audit trail for any solution provided with BSI 9001 at its foundation.

System Compliance:

Trant's refuelling systems are manufactured to the highest international standards. Designed around compliance to the Civil Aviation Authority's publication, "CAP 437: Standards for offshore helicopter landing areas", Trant's systems can also be detailed and manufactured to exact client specifications.

Certified by 3rd party maritime classification societies such as ABS, Bureau Veritas and Lloyd Register, gives our clients the confidence that all systems are audited and monitored in depth throughout all stages of design, procurement, manufacturing and Commissioning.



CERTIFICATION



Transportable Tanks:

Our tanks designed and manufactured to ASME VIII Div. 1 PED 97/23/EC Pressure Vessel Standards and fitted into a portable frame approved to DNV 2.7-1/EN 12079 for Offshore Containers. These purpose built TOTE Tanks are designed around the compliance to CAP437. Available in a range of different capacities with the most common size being 2,900L. Orientation is compliant to the customers specification available in vertical or horizontal designs.

Static Tanks:

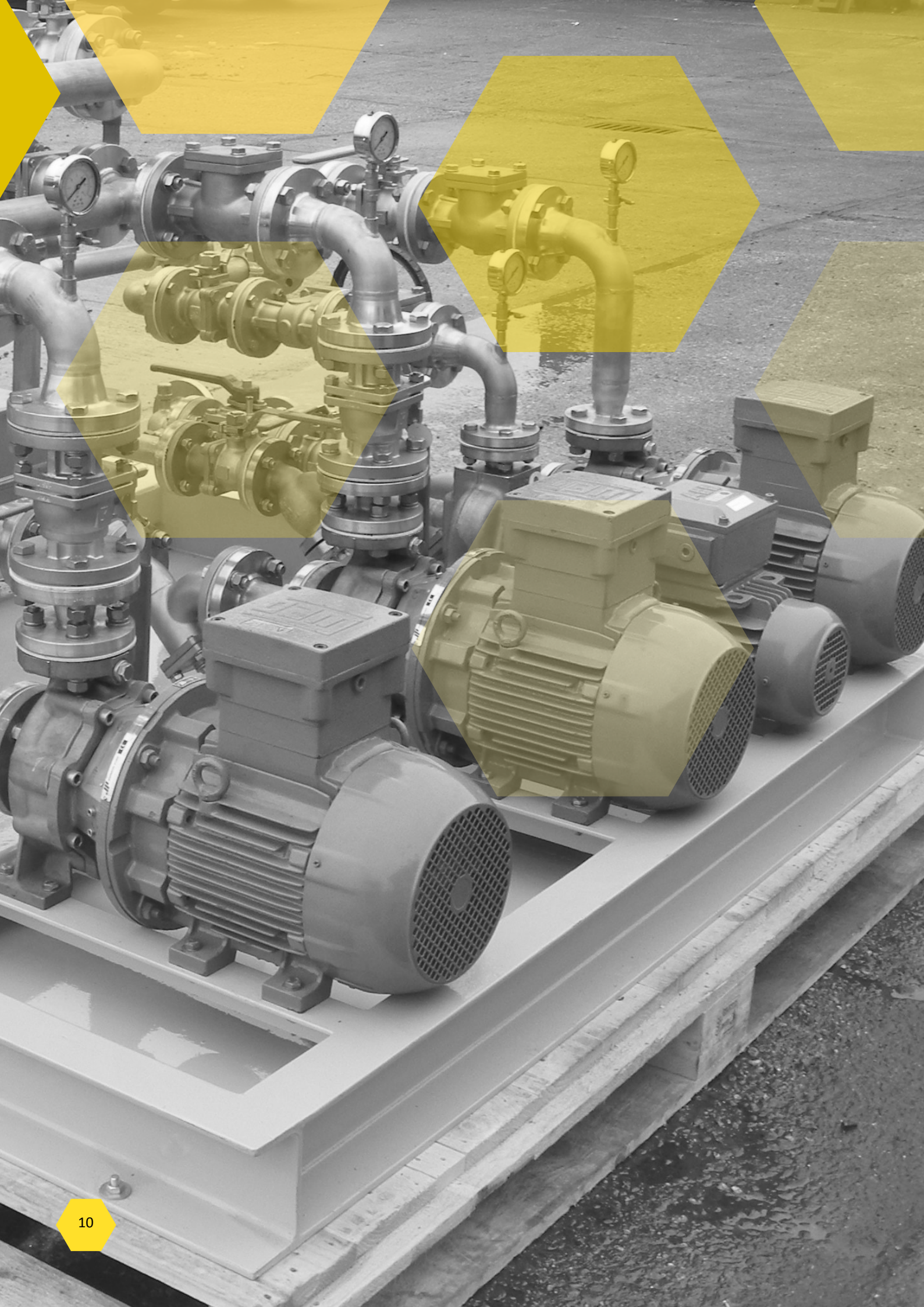
Designed and Manufactured to ASME VIII Div. 1 PED 97/23/EC Pressure Vessel Standards and EN 13445. Cylindrical design, horizontal orientation with compliance to CAP437. All static tanks are fitted with a floating suction arm, bottom outlet, a low point drain/sump point and remote operated safety valves.

All Tanks:

All tanks can be fabricated from Stainless Steel or Mild Steel. Mild Steel tanks are coated internally with a fuel resistant epoxy lining and externally resistant to the project specific conditions. As a minimum all tanks will be manufactured with a manhole cover, inspection hatch, level measuring device and Sufficient venting.



TANKS



Standard Pumps Design:

Wherever practical the system will be designed with a duty/standby pump configuration. The pumps are designed to deliver 225lpm and the pressure is calculated to achieve 2-3 Bar at the delivery nozzle.

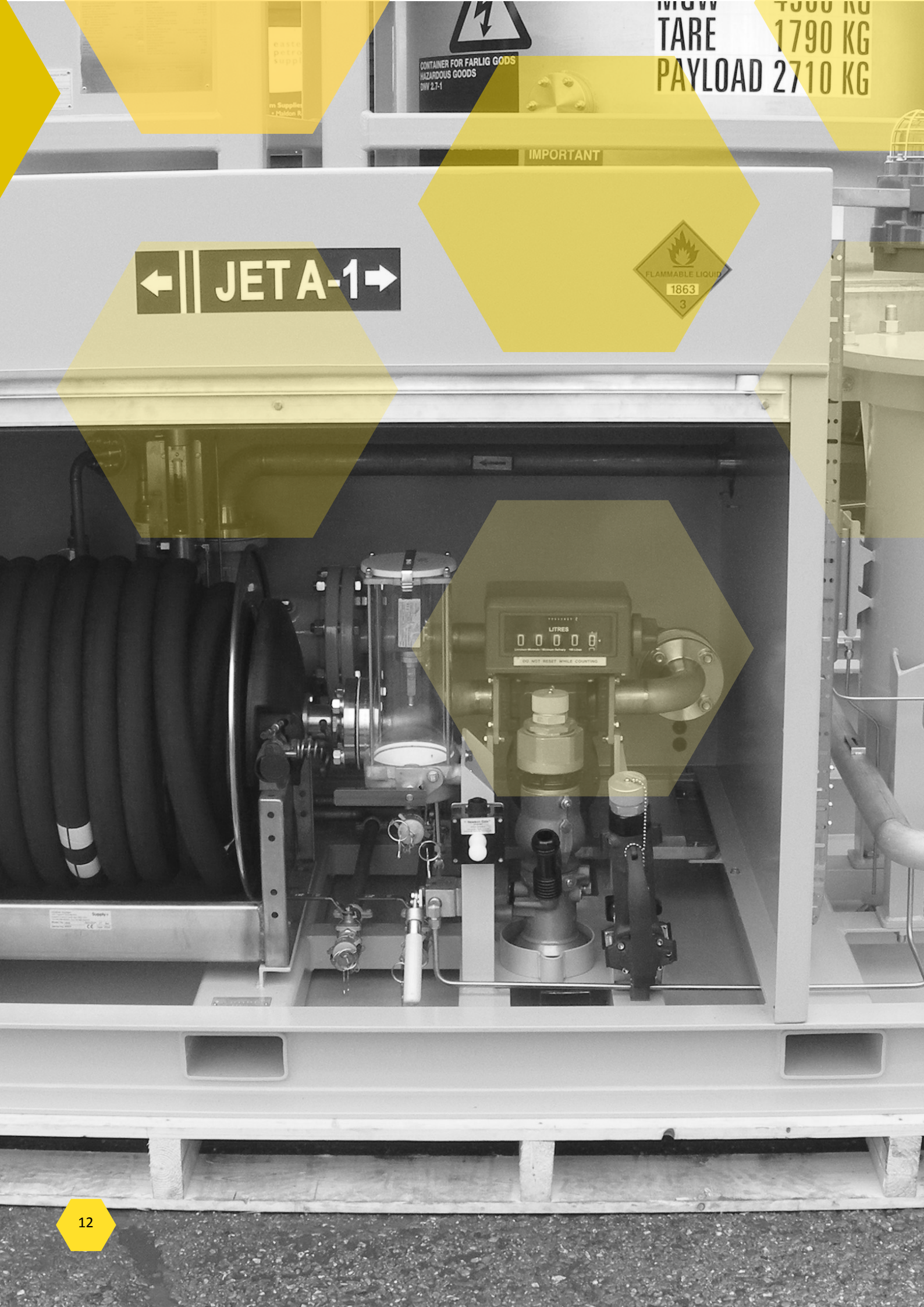
The pumps can be powered Electronically, Hydraulically or Pneumatically, dependant on what is available and can be either centrifugal or positive displacement type pumps. A Strainer will be fitted upstream of the pump in order to protect it from any contaminants.

The pumps have a control panel and isolators fitted locally with a remote start/stop control system closer to the point of refuelling, to comply with the regulations of CAP437. An earth proving unit is fitted to prevent the pumps from running if there is no earth connection, as well as a pump running beacon (fitted near to the helideck visible at the point of refuelling.)

Hand Pumps cannot be used for refuelling.



PUMPS



← JET A-1 →

IMPORTANT



TARE 1790 KG
PAYLOAD 2710 KG

CONTAINER FOR FARLIG GOODS
HAZARDOUS GOODS
DIV 2.1-1

LITRES
0000

DO NOT RESET WHILE COUNTING

Filter Vessels:

Designed and manufactured to ASME VIII Div. 1 and EI 1596. the design of the system can either feature a two vessel design (filter water separator & filter monitor) or a single vessel design (single three stage filter vessel). Each vessel will be fitted with an automatic air eliminator, a pressure relief valve and a differential pressure gauge as a minimum. Filter Water Separator shall comply to EI 1581, Filter Monitor shall comply to EI 1583 with the Combined Three Stage Vessel - complying to both EI 1581 & EI 1583.

Flow Meter:

A positive displacement flow meter manufactured for specific use with aviation fuel with a high accuracy level. The flow meter will be fitted with a strainer air eliminator upstream of the measuring device and shall be located before the filter monitor vessel (or three stage filtration vessel.)

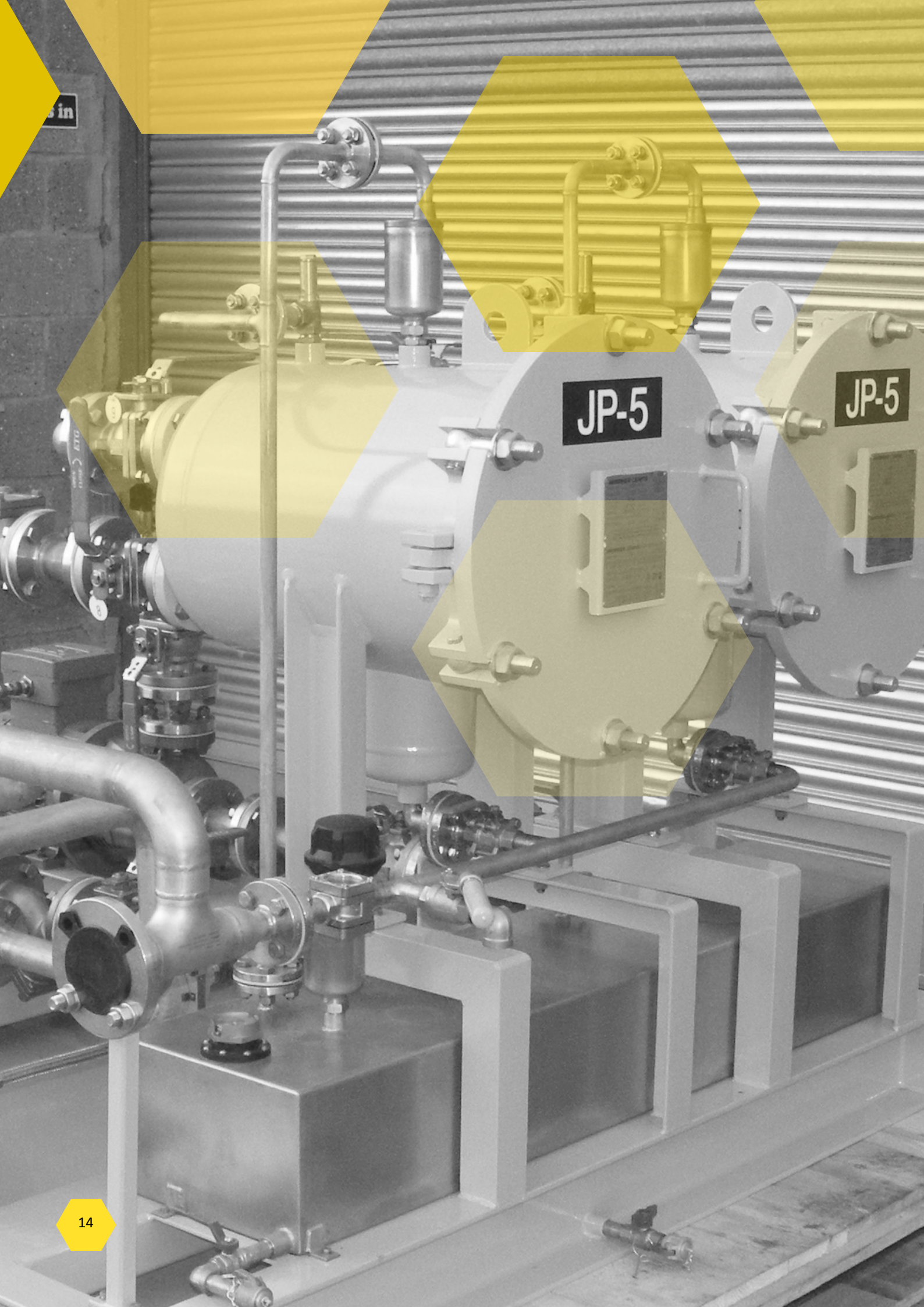
Hose & Nozzles

The fuel delivery hose shall be an approved ISO 1825 type hose, normally 1.5" bore to suit the refuelling nozzle. Two types of nozzles are approved for refuelling aircrafts, a gravity nozzle and a pressure refuelling nozzle.

Sampling

A final closed circuit sampling device is fitted as far upstream as possible.

DISPENSER



JP-5

JP-5

Spare Parts:

We offer as standard a 2 year spares package for each of the major components, recommended by the manufacturer. Spare parts include (but are not limited to) the following: filter elements, gaskets, flow meter spares, nozzle spares and testing equipment.

Civil and Military Application:

Unless requested otherwise our systems are designed for use with refuelling Jet A-1 aviation fuel into civil aviation aircrafts, however should you have a requirement for other fuel applications such as military grade JP-8, JP-5 or Civil Grade Avgas we are able to adapt our systems to suit.

Services:

With our trained in-house engineers we offer a range of services for our offshore systems, providing before and after sales worldwide. Our services include Technical Advice, Commissioning, Training, Maintenance, Spare Parts, Retrofits plus more. These services are available for any CAP 437 compliant system ensuring that our client's helicopter refuelling systems are always safe and operational.

**OTHER**



RUSHINGTON
HOUSE
ESTABLISHED 1898



Fuel Transfer System (FTS)

The containerised Fuelling System is designed for remote and temporary fuel installations to serve multiple functions; it receives fuel from a tanker and/or vessel, it can transfer fuel between storage tanks and serve to refuel vehicles (via a separate dispensing unit).

Fuel Storage and Refuelling System (FSRS)

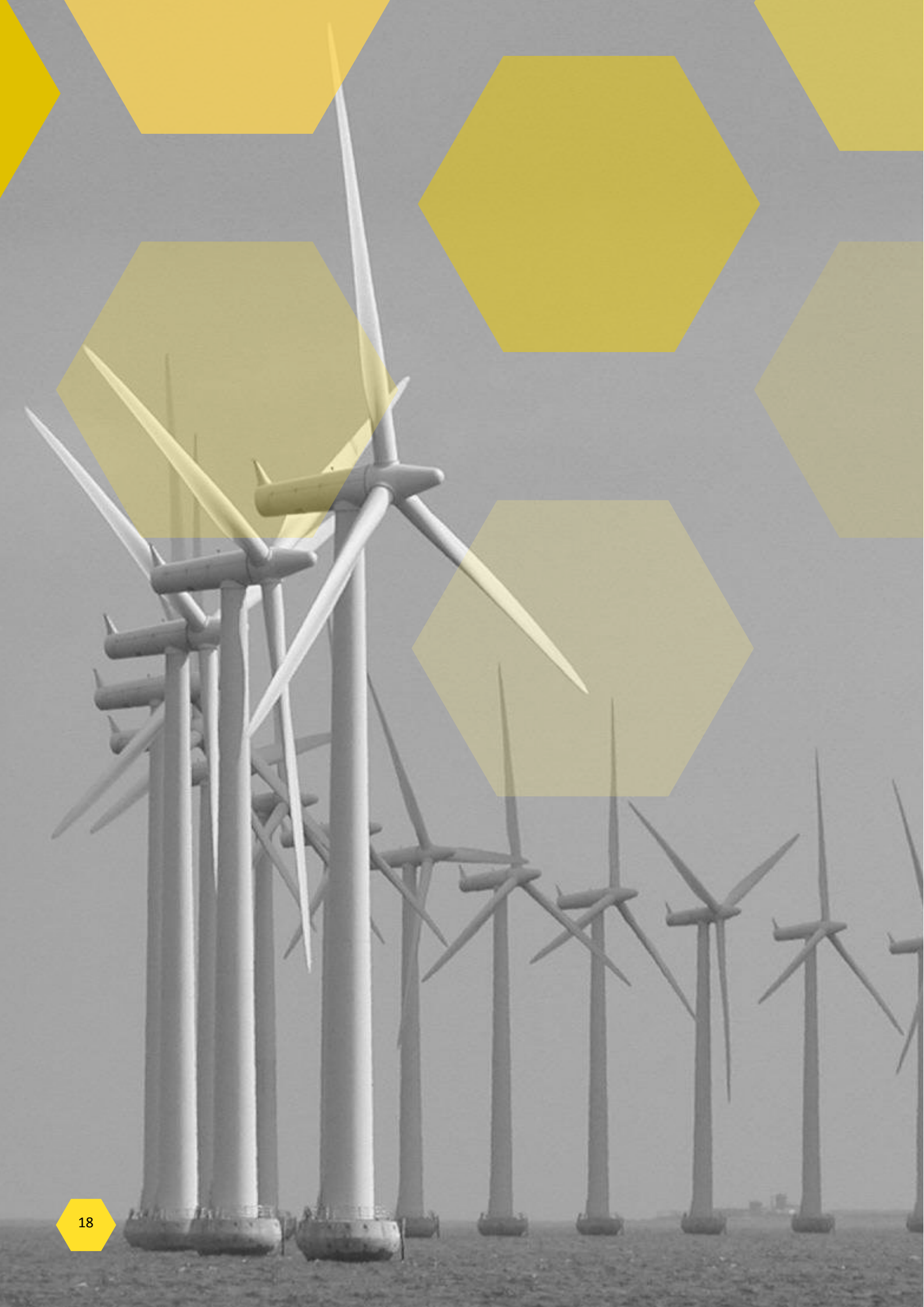
The Containerised Fuel Storage & Refuelling System is designed for remote and temporary fuel installations, its unique design is to serve multiple functions; It can be used for fuel storage, refuelling any vehicle and loading or unloading tankers/vessels.



Mobile Master Meters

The Master Meter assembly consists of a standard positive displacement meter, mounted on to a supporting frame, with a calibrated temperature gauge and pressure gauge. Combined with a flow control valve to restrict any excess flow and a ball valve. Fitted on to either a hand trolley, highway trailer or skid frame.

**OTHER FUEL
PRODUCTS**





SIEMENS

قطر للبترول
Qatar Petroleum



SAMSUNG

SAMSUNG HEAVY INDUSTRIES



TOTAL



P E R E N C O



ExxonMobil



CLIENTS



About Trant Engineering

Our mission is to be the first choice Engineering Procurement and Construction Company for our clients in the UK and overseas.

Our clients can benefit from an extensive range of in-house services including process, MEICA and civil design, Offsite Manufacture & Assembly, Instrumentation Control & Automation products and Commissioning services. This internal capability allows us offer innovation and efficiency to the whole life cycle of EPC projects across all our sectors.

Our fully Integrated Management Procedures with dedicated gateways and managerial swim lanes ensures the technical and commercial health of our projects. These robust procedures give us the ability to deliver complex work programmes in the most challenging and regulated work environments.

Clients can be assured of our commitment to complete their project to high specification, with zero incidents and minimal impact on their operations and neighbouring environment.

Services



Innovation Design & Solutions



Automation Control & Technology



Offsite Manufacture & Assembly

Sectors



Process & Water



Energy



Oil & Gas



International

Contact

Ross Edmonds
Technical Sales



ross.edmonds@trant.co.uk
+44 (0) 23 806 65544

Locations

Southampton – Rushington
+44 (0)23 8066 5544

Manchester – Altrincham
+44 (0)161 244 8899

Pembrokeshire – Pembroke Docks
+44 (0)1646 641148

Channel Islands – Guernsey
+44 (0)1481 230471

South Atlantic – Falkland Island
+00 500 53260

Trant Engineering Ltd.

Rushington House
Rushington
Southampton
United Kingdom
SO40 9LT

+44 (0) 2380 665544
enquiries@trant.co.uk
www.trant.co.uk

