



ZERO-COMPROMISE FIRE PROTECTION WITH ZERO-COMPROMISE PUMPS

FOR WHERE IT REALLY MATTERS

spp
PUMPS



**ALWA FOR TRADING
AGENCIES LTD**



**HUMAN LIFE IS PRICELESS.
ENSURE APPROVED FIRE
PROTECTION THAT'S PRECISION
ENGINEERED.**

Fire is one of the greatest dangers we face. It will take human life in moments. It will devour critical infrastructure in minutes. Developing, designing and manufacturing fire safety pump sets, drivers and controls for nearly half of its 130-year history, SPP Pumps Ltd ensures approved fire protection that's precision engineered.

British design, coupled with superior quality manufacturing in the UK and USA, has made SPP Pumps one of the most widely specified global fire pump suppliers. Over 25,000 installed products protect sites across more than 100 countries.

As the first company to achieve fire pump approval and listing by the internationally recognised Loss Prevention Certification Board (LPCB), SPP Pumps has more approved and fire-pump-listed equipment than any other manufacturer, now including FM approved Multi-Stage Multi-Outlet (MSMO) pumps.

ABOUT SPP PUMPS

SPP Pumps has led the design and manufacture of centrifugal pumps and engineered pumping solutions for over 130 years. Serving challenging industry applications across oil and gas, water, power generation, construction, mining and fire protection, the brand is synonymous with pump performance, quality and reliability.

Many of the world's most iconic building structures and civil engineering projects depend on SPP's fire pump technology and expertise. From the tallest skyscrapers to the longest tunnels, over 500 staff, including 50 specialist engineers, ensure round-the-clock advice and support for critical pumping operations.

FIRE SECTOR APPLICATIONS

- Sprinkler systems
- Hydrant systems
- Deluge systems
- Monitor systems
- Water curtains
- Remote monitoring

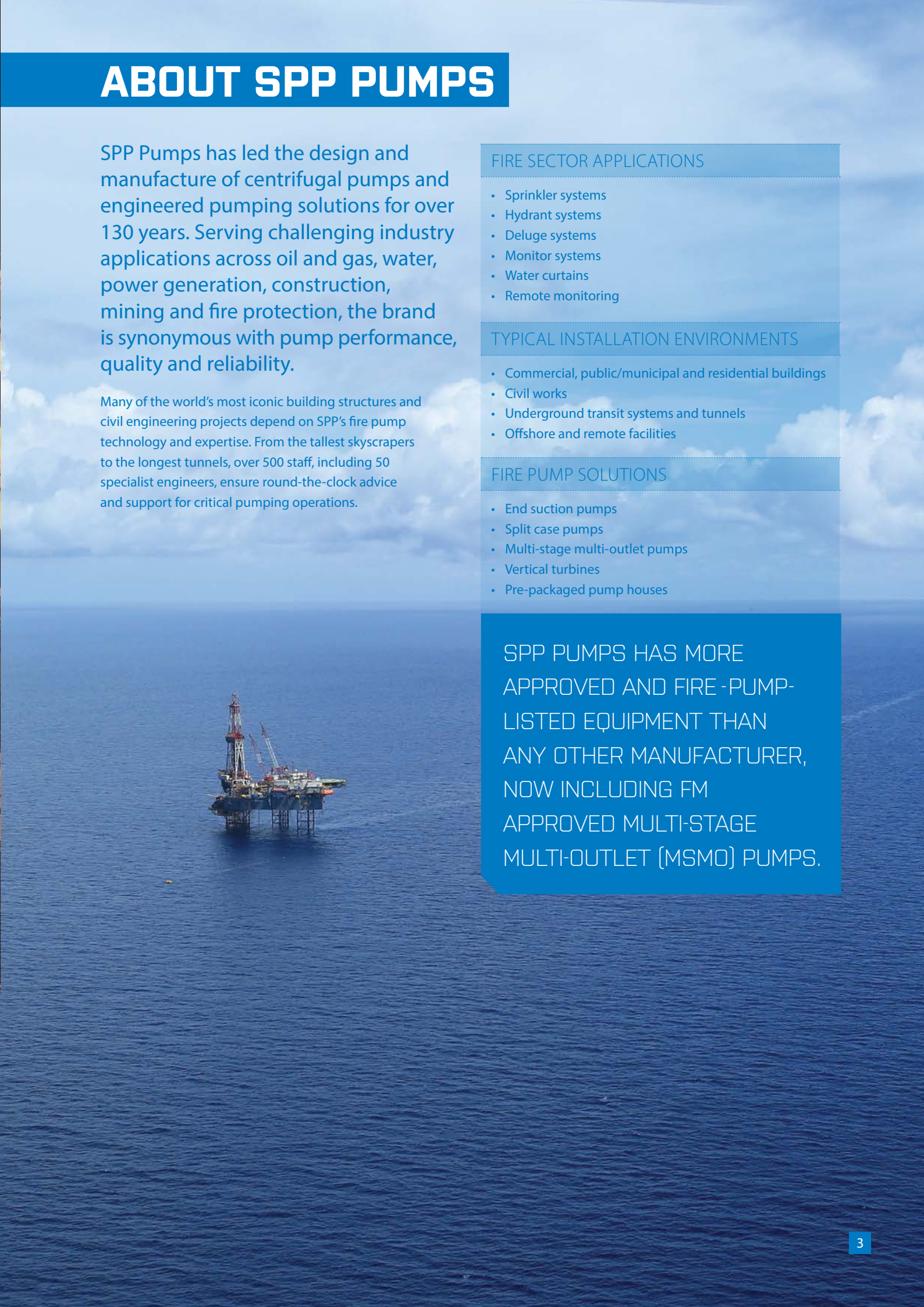
TYPICAL INSTALLATION ENVIRONMENTS

- Commercial, public/municipal and residential buildings
- Civil works
- Underground transit systems and tunnels
- Offshore and remote facilities

FIRE PUMP SOLUTIONS

- End suction pumps
- Split case pumps
- Multi-stage multi-outlet pumps
- Vertical turbines
- Pre-packaged pump houses

SPP PUMPS HAS MORE APPROVED AND FIRE -PUMP- LISTED EQUIPMENT THAN ANY OTHER MANUFACTURER, NOW INCLUDING FM APPROVED MULTI-STAGE MULTI-OUTLET (MSMO) PUMPS.



SPP FIRE PUMPS EXPERIENCE SETS THE STANDARD WORLDWIDE

UNRIVALLED GLOBAL FIRE APPROVALS

Approved fire protection equipment must satisfy stringent operational testing to meet exacting safety standards.

SPP fire pump products comply with the demanding requirements of the LPCB, FM and UL approval standards. Products also meet all the requirements of NFPA 20, as required in North America and adopted in many other parts of the world.

VALUE-ADDED ENGINEERING

SPP Pumps leads the fire protection market with innovative value-added engineering. For instance, SPP manufactures fire pump packages featuring a box section baseplate. Simply bolting directly to the concrete pump plinth, the design solution removes the need for grouting in. Without compromising structural integrity, the extra rigid design is approved by authorities having jurisdiction (AHJ), simplifying and accelerating installation whilst reducing costs.

INNOVATIVE INTEGRATED DESIGN

SPP Pumps was the first fire pump manufacturer to introduce a plug-and-play/all on one baseplate fire pump set. The baseplate cassette includes the controller and fuel tank - elements that had previously been the responsibility of different contractors on site. By simplifying the package, SPP Pumps has revolutionised the fire pump market. The concept now extends to single and multiple fire pump sets - available on one fully packaged skid, or within fully pre-packaged pump house enclosures.



SPP FIRE PUMPS: FIRE CODE COMPLIANCES

- UL (Underwriters Laboratories)
- FM (Factory Mutual) Global
- LPCB (Loss Prevention Certification Board)
- NFPA 20 (National Fire Protection Association)
- CNPP (APSAD) Le centre national de prévention et de protection
- CNBOP (Centrum Naukowo-Badawcze Ochrony Przeciwpożarowej)
- ZUS (Technický A Zkušební Ústav Stavební Praha)
- TÜV (Technischer Überwachungsverein) SÜD PSB
- PSB (Singapore Productivity and Standards Board)



THE SHARD, LONDON

Towering 309.6m, London's iconic Shard is the tallest building in Western Europe. 11 hectares (27 acres) of diverse floor space includes 72 habitable floors, 306 flights of stairs and 44 elevators. A public plaza, retail space, restaurants, hotel and spa, private residences and observation galleries are just some of the areas requiring fire protection. SPP pumps feed a specialist sprinkler system ensuring zoned protection for all floors, also eliminating the need for pressure reducing valves in line with EU regulations.





TOTAL CAPABILITY. FROM FACTORY PROTOTYPE TO FULLY TESTED PUMP

FAST, IN-HOUSE MANUFACTURE

In addition to an extensive pump portfolio spanning common fire pump applications, SPP Pumps routinely designs and manufactures bespoke, fully integrated packaged pump solutions. Matched to a customer's unique application and operating environment, close consultation scopes complex needs, whilst custom design solutions (including 3D printing of moulds) means that every sub-assembly can be configured precisely - maximising reliability and performance over the full system lifecycle.

MARMARAY TUNNEL, ISTANBUL, TURKEY

The £3.4bn Marmaray project, linking the European and Asian sides of Istanbul with a railway, is the world's deepest immersed tube tunnel. Crossing the Bosphorus Strait, the tunnel runs for 13.6-kilometres (8.5 miles), of which 0.8 miles (1.4 km) is an underwater section. It is estimated by 2015 the tunnel will see 1.5 million trips per day, rising to 1.7 million by 2025. SPP Pumps fire protection in the tunnel includes 6 sets of pumps for 6 stations - Kazlıçeşme, Yedikule, Yenikapı, Sirkeci, Uskudar and Ayılıkçeşme. Each set includes an electric, diesel and jockey pump all approved to UL and FM standards. The pumps are supplying the tunnel standpipe system, pre-action sprinkler system in the stations and foam systems in drain sumps.

RIGOROUS PREQUALIFICATION AND TESTING

Operating to the highest quality standards, all fire pumps and fire pump sets are built and packaged in SPP Pumps' own ISO 9001:2008 approved manufacturing facility. But that's just the start. Using advanced in-house computerised test facilities, every unit's performance is also fully checked and certified ready for real-world duty prior to leaving the factory. Customers know any SPP Pumps product will operate as specified from the moment it arrives on-site.

A GLOBAL SUPPORT NETWORK

Customers enjoy access to lifetime global support for all fire pumps and equipment through SPP Pumps Engineering Services. Resources include spares supply, emergency repairs, planned contractual maintenance, product training and technical performance analysis.

Every year, SPP Pumps Field service engineers travel more than 600,000 miles, providing on-site rapid response 24/7/365.

SPP Pumps also operates FireEye, a remote monitoring system for fixed fire protection equipment. Delivering web dashboard reporting with text and email alerts, FireEye provides ultimate peace-of-mind.

FIVE SERVICE CENTRES
ACROSS THE UK, OFFICES IN
FRANCE, THE NETHERLANDS,
ITALY AND THE CZECH
REPUBLIC PLUS APPROVED
OVERSEAS MANUFACTURING
FACILITIES GUARANTEE
MAXIMUM UPTIME.



TOTAL PROTECTION FOR ANY FIRE PUMP PROJECT

TYPICAL PUMPING SOLUTIONS FOR FIRE

1 High Rise (Office/Residential/Mixed Use)

- The Shard, London, UK
- Sky Tower, Poland
- Petronas Towers, Malaysia
- Burj Al Arab, Dubai
- Motokov Building, Prague
- Leadenhall Building, London, UK
- Keppel Reflections, Singapore

2 HOTELS

- Marina Bay Sands, Singapore
- Flame Towers (Four Seasons), Baku, Azerbaijan

3 AIRPORTS

- London Heathrow, London, UK
- Ruzyně now-Václav Havel Airport, Prague, Czech Republic
- Kuala Lumpur International Airport (KLIA), Malaysia
- New Doha International Airport, Qatar

4 POWER STATIONS

- Az Zour North (IWPP), Kuwait
- ABA Power Plant, Nigeria
- Drax Power Station, North Yorkshire, UK
- Al Hamra Power Station, Ras Al Kaimah, UAE
- Samra (CCGT) Power Plant, Jordan

5 PRODUCTION & STORAGE

- Neste Oil, Rotterdam, The Netherlands
- Oiltanking, Malta

6 TUNNELS

- The Channel Tunnel, between UK and France
- Marmaray Tunnel, Turkey

WHATEVER
THE PROCESS,
WE HAVE THE
PUMPING
SOLUTION

END SUCTION PUMPS

Using a horizontal shaft with an overhung impeller and bearing arrangement, the space-saving end suction configuration has become the most common centrifugal pump arrangement.

Motor slide rails and back pull out design allow ready access and ease of maintenance. Suitable for electric or diesel drives, end suction pump duties range from 760 litres/min to 5,700 litres/min.

TYPICAL INSTALLATIONS:

- Supermarkets
- Hospitals
- Schools and Colleges
- Hotels
- Office Buildings

TYPICAL APPLICATIONS:

- Sprinkler systems
- Hydrant systems
- Monitor systems
- Water curtains



SPLIT CASE PUMPS

Split case centrifugal pumps feature a single double suction or two single suction impellers supported between bearings. The casing is split axially, with opposing suction and discharge flanges, greatly simplifying maintenance.

With balanced bearings and a robust overall design it's not uncommon to find SPP horizontal split case pumps still in use after 70 years of service.

Suitable for electric or diesel drives, split case pump duties range from around 760 litres/min to 19,000 litres/min.

SPP Pumps also boasts the largest UL Listed horizontal fire pump to date - with a capacity of 8,000 USgpm.

TYPICAL INSTALLATIONS:

- Airports
- Manufacturing Facilities
- Warehouses
- Power Stations & Refineries
- Data Centres
- Fuel Storage Depots

TYPICAL APPLICATIONS:

- Sprinkler systems
- Hydrant systems
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- Water curtains

MULTI-STAGE MULTI-OUTLET PUMPS

SPP Pumps is the first company to offer FM Approved multi-stage multi-outlet (MSMO) pumps. Using multiple impellers to generate more head than a single impeller, MSMO pumps are used in fire protection systems in most tall buildings including offices, hospitals and hotels.

MSMO pumps offer many benefits: buildings need fewer pumps; pipework and valves are reduced; the need for water storage tanks on intermediate floors is eliminated; and the loading on the building is reduced. The cost and space saving implications are significant: power requirements are lower, pump rooms can be smaller and, in line with new EU legislation, there is no need to use pressure reducing valves to prevent over-pressurisation of sprinkler heads.

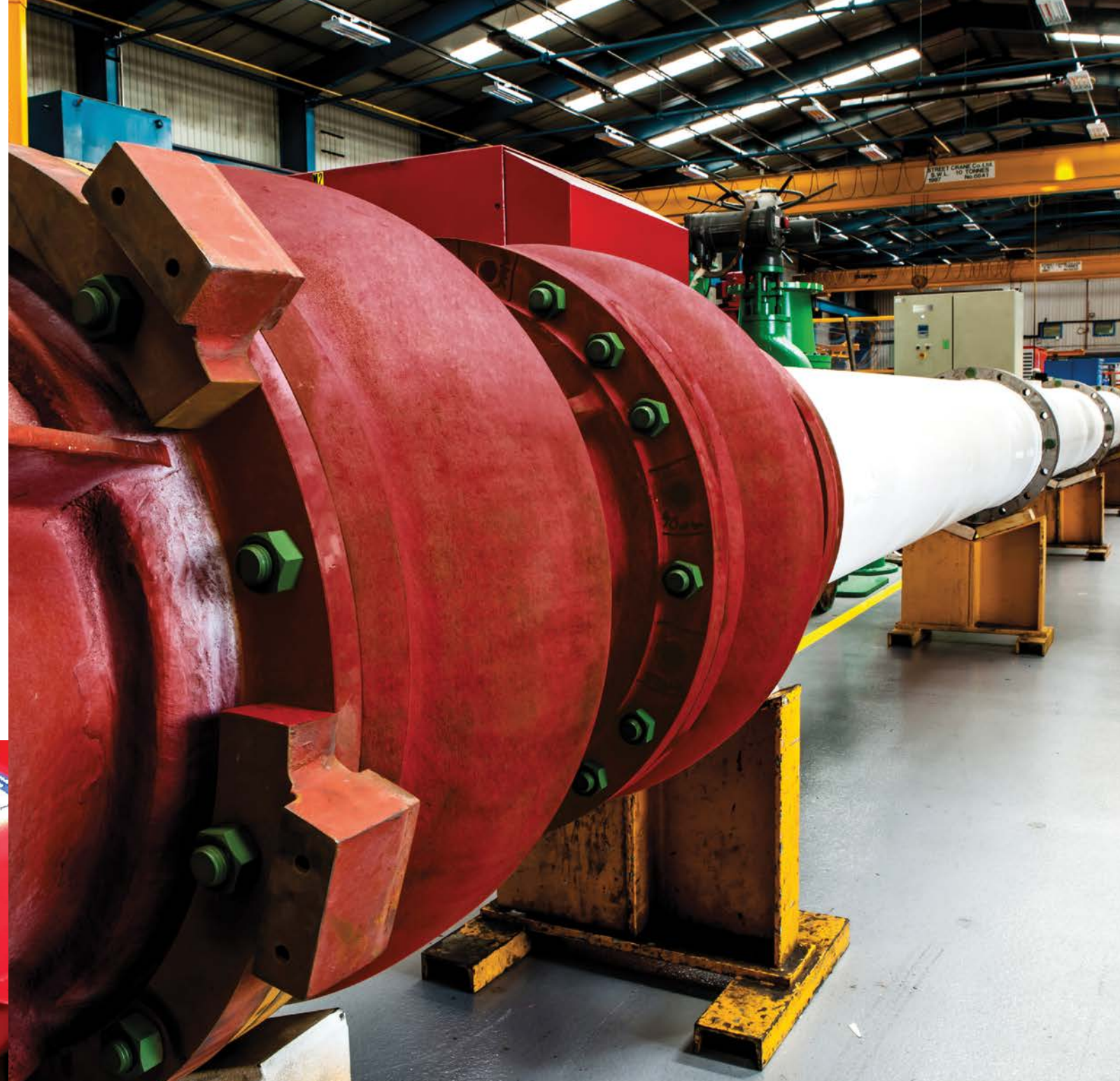
Driven by electric motors or diesel engines, SPP MSMO pumps are available to satisfy any LPCB specification for automatic sprinkler protection in high rise and multiple storey buildings.

TYPICAL INSTALLATIONS:

- Offices
- Hotels
- Residential Buildings
- Tunnels
- Mixed Use Buildings

TYPICAL APPLICATIONS:

- Sprinkler systems
- Hydrant systems
- Deluge systems
- Monitor systems
- Water curtains



VERTICAL TURBINES

Where the fire protection water source is located below ground or deck level, a multi-stage vertical suspended water pump is the best solution.

In this type of pump the impellers are fully immersed in water, maintaining priming at all times. The pumps are driven by vertical electric motors or by diesel engines through a right-angle gearbox.

TYPICAL INSTALLATIONS:

- Manufacturing Facilities
- Warehouses
- Power Stations & Refineries
- Fuel Storage Depots

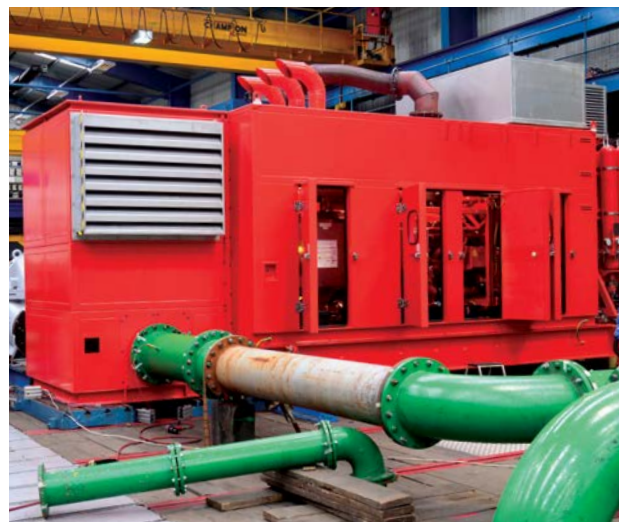
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PRE-PACKAGED PUMP HOUSES

Delivered complete ready for installation, pre-packaged pump house enclosures incorporate pumps, drivers, control systems and pipework in a single container.

Simply requiring fast, easy connection to water and power once sited, they significantly reduce time and labour costs, becoming operational almost immediately. Insulated enclosures minimise operating noise levels, whilst pre-assembly and testing in the factory eliminates potential coordination problems later on site. Each complete pump house can be engineered and tailored to meet the required specifications.



MARINA BAY SANDS, SINGAPORE

Transforming Singapore's Marina Bay waterfront, the Marina Bay Sands resort features three 55-storey cascading hotel towers, a shopping mall, celebrity restaurants, theatres, MICE convention facilities, and Singapore's first casino.

SPP fire safety pump sets are already part of the fire protection system for the casino. The latest twin tower addition, Asia Square, will see a further 16 SPP pump-sets installed.



DELIVERING PERFORMANCE ACROSS THE WORLD

The Shard, London



South China Sea



Petronas Towers, Malaysia



Zubair Oil Field Development, Iraq



FOR HELP WITH YOUR
NEXT FIRE PUMP
APPLICATION, TALK
TO THE EXPERTS.

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ALWA FOR TRADING
AGENCIES LTD



Assessed to OH5AS 18001: 2007
LPCB reg no. 111



Assessed to ISO 9001:2000
Certificate No. 111



Certificate number: EMS111
Issue 1



NFPA



UL LISTED



FM APPROVED



bsi



Approval No. 111b



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* Applies to: Coleford Manufacturing Site, Northern Service Centre and Wales & West Service Centre.
SPP Pumps are proud to be working towards achieving this accreditation at all sites.