



الشركة الدولية لأنظمة الأمن والسلامة
Int. Security & Safety Systems Co.

AQUA FIRE PUMPS

CE mark



بكل فخر .. صنع في مصر

Introduction

- 1989** ISS has been serving industrial, commercial, government and oil & gas sites in the field of fire and security systems as specialized contractor and agent for many international firms.
- 2001** ISS opened its manufacturing facility, located in AL OBOUR city, provides blending foam concentrates, packaging of Egyptian civil defense and NRC approved fire pumps, CO2/Dry powder systems assembly and piping fabrication for firefighting systems.
- 2003** ISS under license from Chemguard-USA has been awarded the first UL approval in Egypt & Africa on blending AFFF - AR/AFFF - FP foam concentrates.
- 2006** ISS was certified by ISO 9001:2000.
- 2011** ISS has signed an OEM agreement with EPE (Ebara pump Europe) and PTEI (PT Ebara Indonesia) to assemble their quality pumps in Egypt and to submit for getting the UL/FM approval.
- 2012** ISS has been awarded the UL approval of its fire pump range.
ISS with the cooperation of EPE & PTEI has been approved to package UL/FM fire pumps in Egypt.
- 2014** ISS has been awarded UL approval of aboveground tank for flammable liquids.
- 2015** ISS expands its UL/FM pump range to 2800 and 3560 RPM for 60 HZ countries.
- 2016** ISS is awarded the ASME certificate – “U-stamp” as a first step to apply for UL on bladder tanks.
ISS is the first Egyptian factory to have LPCB approval on its HFC-227ea gas system.
ISS is the first Egyptian factory to have CE mark approval on its bladder tanks.
ISS is the first Egyptian factory to have CE mark approval on its CO2- gas system and dry powder.
ISS is the first Egyptian factory to have CE mark approval on its AQUA FirePumps (100-3000 GPM).

ISO Certificate



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Certificates

AQUA Fire Pumps range (100 - 3000) gpm

Declaration of Compliance

This Declaration of Compliance is hereby issued to the below named company.

**Applicable Directive(s): 2006/42/EC- Machinery Directive,
2006/95/EC- Low Voltage (LVD)**

In accordance with the following applicable standards:
EN 13478:2001+A1:2008, EN 1028-2:2002+A1:2008,
EN 1846-2:2009+A1:2013, EN 13241-1:2003+A1:2011
EN 14044:2014, EN 14466:2005+A1:2008, EN 14710-2:2005+A2:2008
EN 50267-2-3:1998, EN 60332-3-25:2009



Issued on 20th June 2016

General Information

- Applicant** — ISS CO SAE.
International Security & Safety Systems.
49-Abbass El Akaad Street Nasr City- Cairo-Egypt.
- Manufacturer** — Same as above
- Product Description** — AQUA range of FirePumps.
Locally assembled (HSC-ES-VT) Fire Pumps and
controllers for Electric driven and Diesel driven
pumps -ranges from (100-3000 gpm)
- Trade Mark** — AQUA FirePumps.
- Ranges** — 100-3000 GPM



Certificate number: 24656

This certificate is valid from 20-June-2016 until 20-June-2017.
Re-certification is due on 19-June-2017.
Certification expiry on 19-June-2017.

This Certificate is issued under following conditions:

The product is declared by the applicant as complying with the applicable directives. UR has performed a review of the technical information of the product. The applicant is required to inform UR of any changes to its product design and technical documentation. The CE mark may be used by the applicant, for this product, under the sole responsibility of the applicant.

David Wilmer
Certification Manager

UNIVERSAL REGISTRARS
www.universalregistrars.com

This certificate can be verified at the above URL.
The certificate remains the property of Universal Registrars, to whom it
must be returned on request. Lack of fulfillment of certification terms
and conditions at all times, may render this certificate invalid.



The product liability rests with the manufacturer in accordance with their committed specifications and contractual obligations, including applicable standards. The CE mark shown above is for reference only and does not indicate accreditation. Universal Registrars does not accept any liability arising out of this certificate.

CE Compliance

End Suction Pumps



1 BEARINGS

- Standard bearing vibration monitoring ports standard.
- Double row thrust bearing.
- Standard O-ring bearing Isolators.

2 POWER FRAME

The heavy-duty power frame of the CPP 21 incorporates an "integrated fine design."

3 LUBRICATION

Grease lubrication without adjustments or different parts.

4 SLEEVE

A robust 316SS sleeved shaft as standard for extended seal life.

5 CASING

The UL/FM Listed ANSI pumps will be supplied with FF. ANSI 150 # flange drilling. Is available based on material selection.

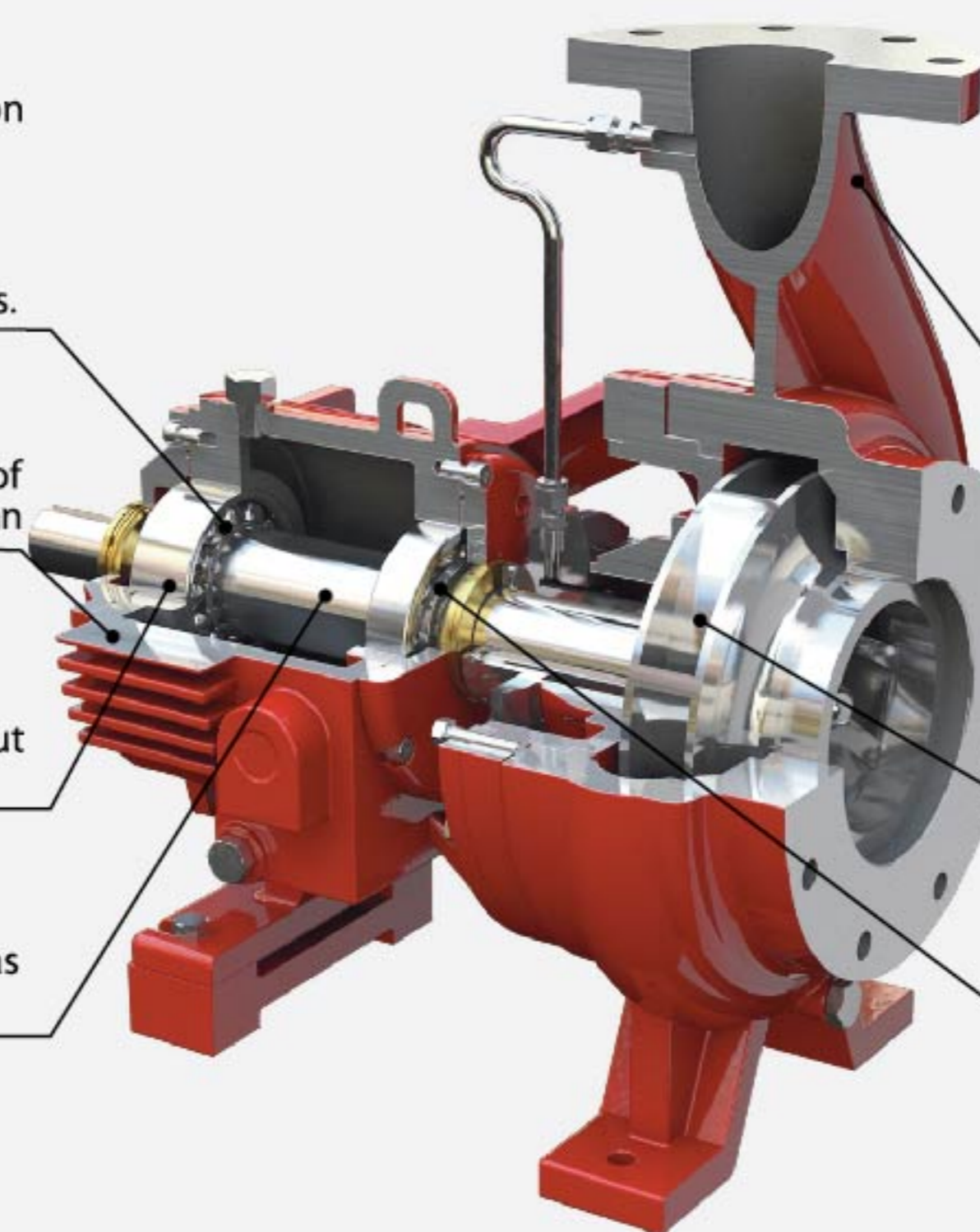
Casing wear ring is standard for the certified ANSI pumps.

6 IMPELLER

Enclosed impeller design ensures maximum efficiency. The impeller is threaded against rotation, is positively locked onto shaft and sealed with an O-ring.

7 STUFFING BOX.

Stuffing box cover for packing.



NOTES: - Two models are shown (4" x 3") and (5" x 4") and (6" x 4").
- Other models are available upon request.

Vertical In-line Pumps

Vertical-In Line Pumps are also available for Fire Fighting Applications.



* Packaged unit as per requirement.

Pumps Types

Horizontal Split Case Pumps



1 COMPACT DESIGN

Heavy shaft and short bearing span reduce shaft deflection to a minimum, providing longer packing and bearing life and lower maintenance costs, while requiring less floor space. Clockwise rotation standard; counter-clockwise rotation optional.

2 BEARINGS

Radial and Thrust Bearings with grease lubrication for maximum life at minimum maintenance cost.

3 CASING

Horizontally split, upper and lower half bolted and dowelled.

Flanged suction and discharge connections located in the lower-half casing, allowing inspection and maintenance without disturbing piping or drive alignment.

4 STUFFING BOX

Deep Stuffing boxes are designed to accept a minimum of five rings of packing with lantern ring. Internally drilled liquid passage in upper-half casing provides lubrication to the packing area.

5 CASING WEAR RING

Close running clearance minimizes pressure leakage between suction and discharge chambers of the casing, maximizes efficiency and are easily replaceable.

6 SHAFT

Larger-diameter, precision-machined, high strength steel shaft provides maximum strength with minimum shaft deflection, so ensuring maximum reliability.

7 IMPELLER

Enclosed, double-suction type. Cast in one-piece and balanced to minimize thrust and to ensure longer bearing life. Keyed to shaft and locked in position by threaded shaft sleeves.

8 SHAFT SLEEVE

Protects the shaft against corrosion and wear, extends through gland for maximum shaft protection. (Threaded against impeller hub to tighten with rotation, yet free for thermal expansion with temperature changes.)

- NOTES:** - Two models are shown (5" x 4") and (6" x 5").
- Other models are available upon request.

Vertical Turbine Pumps

1 DISCHARGE HEAD

Provides support for motor and entire pump and column assembly. Available in cast iron or fabricated steel.

2 COLUMN

Connections are flanged or threaded, and include replaceable bearing retainer.

3 COLUMN ASSEMBLY

Column assembly is manufactured in-plant to ensure accurate fit.

4 LINE SHAFT

In steel and threaded with coupling.

5 SUCTION BOWL

Provides a rigid support of the lower end of the pump shaft. Suction bell is available for special applications.

6 STRAINER

Prevents entry of foreign objects into pump suction. Designed in accordance with NFPA-20.

7 STUFFING BOX

Machined with bushing to guide shaft.

8 BEARINGS

Available in a variety of materials to meet pumping needs.

9 LINE SHAFT COUPLINGS

Are machined from solid steel stock.

10 SLEEVE BEARINGS

Operate in conjunction with pump shaft to provide long life and low friction.

11 ENCLOSED IMPELLERS

Enclosed impellers are designed for long life and high efficiency. Each is precision machined and balanced for vibration free operation; the vanes and guide passages are hand finished to improve the efficiency.

12 IMPELLERS

Standard tapered collets secure impeller to pump shaft. Keyed impellers available for some sizes.

Locally Assembled Fire Pumps Controllers

Our versatile range of FirePump controller are suitable for various types of operations on customers requirements, as per (NFPA20 - LPC -Etc.). These controllers are supplied with Nema2 enclosure, either wall mounted or free standing.

Electric Driven FirePump:

Starting methods include DOL (Direct On Line or across the line) starting or Star/Delta controllers.

Features:

- Cabinet lock.
- Mechanical emergency switch with latch (NFPA only).
- Auto-manual- off switch.
- System pressure switch.
- Minimum run timer.
- Ammeter.
- Manual start and stop push button.
- Status indicating lamps.
- Contact for remote indications.



Floor stand Fire Pumps controllers as per NFPA20.

Diesel FirePump Controllers

Features:

- Relay logic controller.
- System pressure switch.
- Manual start and stop push buttons.
- Auto-Manual- Off selections switch.
- Audible and visual alarms.
- Voltmeter and ammeter.
- Alarm reset push button.
- Contacts for remote indications.
- Two independent fully automatic constant voltage battery charger.



Wall-Mounted FirePumps Controllers As Per LPC.

Jockey Pumps



Most piping systems generally have a small amount of leakage causing drop in system pressure.

To prevent the fire pump from starting to maintain the system pressure for this non-fire related need, a small jockey pump is applied in the system.

The jockey pump controller is pressure activated and the pump sized to maintain the system pressure at the minimum allowable leakage rate. Any pump meeting these requirements is acceptable for use as a jockey pump.

All fire pump manufacturers supply non-approved jockey pumps since no listing is available.

ISS presents the new EBARA EVM vertical multistage centrifugal pumps manufactured in cast iron (EVMG),

Three Models are available:

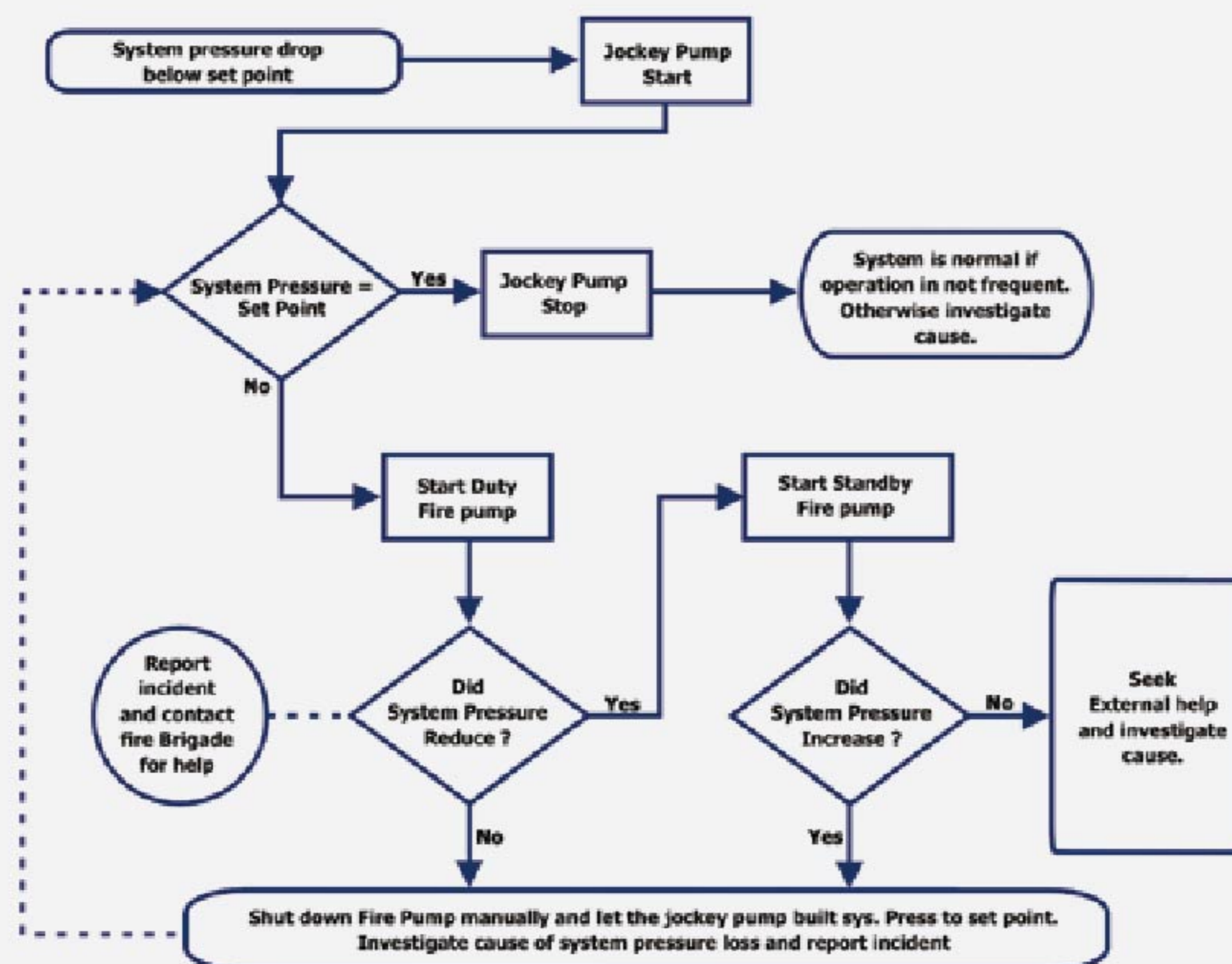
EVMG3 13N51.5/HP

EVMG5 12N52.2/HP

EVMG5 16N53.0/ HP.

GRUNDFOS, SALMSON and other vertical multistage pumps can be used as jockey pumps in the package.

Sequence of Fire Pumps Operations



Fire Fighting Packaged Units



CE - Fire Pumps Package
100 - 250 GPM - 7bar.



CE - Fire Pumps Package
500 gpm - 8bar.



- CE Packaged Fire Pump - exported to a project in AFRICA Fully Tested 750 gpm - 8bar
- CE Packages up to 3000 gpm.

UL / FM Fire Pump Skid as per NFPA 20



UL / FM - ISS - Fire Pump Skid as per NFPA 20 Consists of :

- 500 gpm-8 bars. UL/FM Electric driven fire pump.
- 500 gpm-8 bars. UL/FM diesel Driven fire pump.
- 25 gpm – 9 bars. Vertical turbine Jockey pump.
- UL/FM -star/delta electric fire pump controller.
- UL/FM diesel fire pump controller.
- UL – Jockey pump controller.
- UL- single diesel tank.
- FM- water flow meter.
- SS- sensing lines for 3-pumps.
- UL/FM – pressure relief valve.
- UL/FM – 6” O.S.&Y. gate valves.
- UL/FM – 6” non return valves.
- Suction and discharge manifolds.
- 250 gpm - 1250 gpm available. UL/FM.



CLARKE
Fire Protection Products, Inc.



The Better Alternative



Powering Business Worldwide



Electric & Diesel drivers

China Engines



HATZ Engines



China Motors



SIEMENS Motors



FFD Motors



ISS - Variable speed booster Pumps



EBARA Sump Pumps



Aqua Fire Pumps Project

TCI - SANMAR - PORTSAID



AGIBA SITES FIRE PUMPS



ZAMBIA - CE - PACKAGE



EL - SEWEDY ELECTRIC



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