



BECAUSE SAFETY CANNOT
BE COMPROMISED

SyncroFlo, Inc. INTRO

Represented by
our group company Kirloskar Brothers (Thailand) Limited
for the Asia market.

Get Started



History

Founded in 1962, SyncroFlo pioneered pre-assembled pumping systems. Today, our installed system base includes some of the largest pumping systems ever built and has systems in 27 different countries.

SyncroFlo was the first company to prepackage pumping systems for domestic water (plumbing) use. SyncroFlo started by making plumbing boosters, then municipal was added. In the late 1980's, we started building packages for HVAC, fire protection, and turf irrigation, and grew into the company that the industry knows us as today.



FIRST COMPANY TO PREPACKAGE PUMPING SYSTEMS



OUR BRANDS AND JOINT VENTURES



Enriching Lives

Brand Origin
- India
Manufacturing
- India
Assembly/Packaging
- Thailand
- Europe
Standards
- ISO/ ANSI/ DIN
- FM/ UL
- N Stamp
Main Products
- End Suction
- Split Case
- Multistage
- Vertical Turbine
- CVP



Brand Origin
- United Kingdom
Manufacturing
- India
- UK
- USA
Assembly/Packaging
- Thailand
- ME
Standards
- FM/ UL/ LPC/ NFPA20
Main Products
- End Suction
- Split Case
- Multistage
- Vertical Turbine



Brand Origin
- USA
Manufacturing
- USA
Assembly/Packaging
- Thailand
Standards
- FM/ UL/ NFPA20
Main Products
- End Suction
- Split Case
- Multistage
- Vertical Turbine
- Booster Pumps



Brand Origin
- Netherlands
Manufacturing
- Netherlands
Assembly/Packaging
- Thailand
Standards
- API
Main Products
- OH2
- OH5
- VS4
- VS5
- CVP
- Engineered Specialized Solutions



Brand Origin
- Ebara Japan
(joint venture with Kirloskar)
Manufacturing
- India
Assembly/Packaging
- Thailand
Standards
- API
Main Products
- OH
- VS
- BB
- Steam turbines
- Hydraulic Power Recovery Turbine



Brand Origin
- Netherlands
Manufacturing
- Netherlands
Application
- Thailand
Standards
- ASTM
- ISO 92144
Main Products
- Air Cooled HX protection
- Water Cooled HX protection
- Casing & Cabinet Coating
- Refurbishment & Rejuvenation
- Efficiency improve coating

KIRLOSKAR BROTHERS (THAILAND) LIMITED



Kirloskar Brothers (Thailand) Limited (KBTL) is the assembly plant for the East Asia region based in Amata Chonburi for Kirloskar, SPP, Rodelta, Syncroflo and KEPL.

Our Head office :

50 Sukhumvit 21 Road (Asoke), GMM Grammy Place Office Building, 18 FL., Unit 1805, Khlongtoey-nua, Wattana, Bangkok 10110 Thailand.

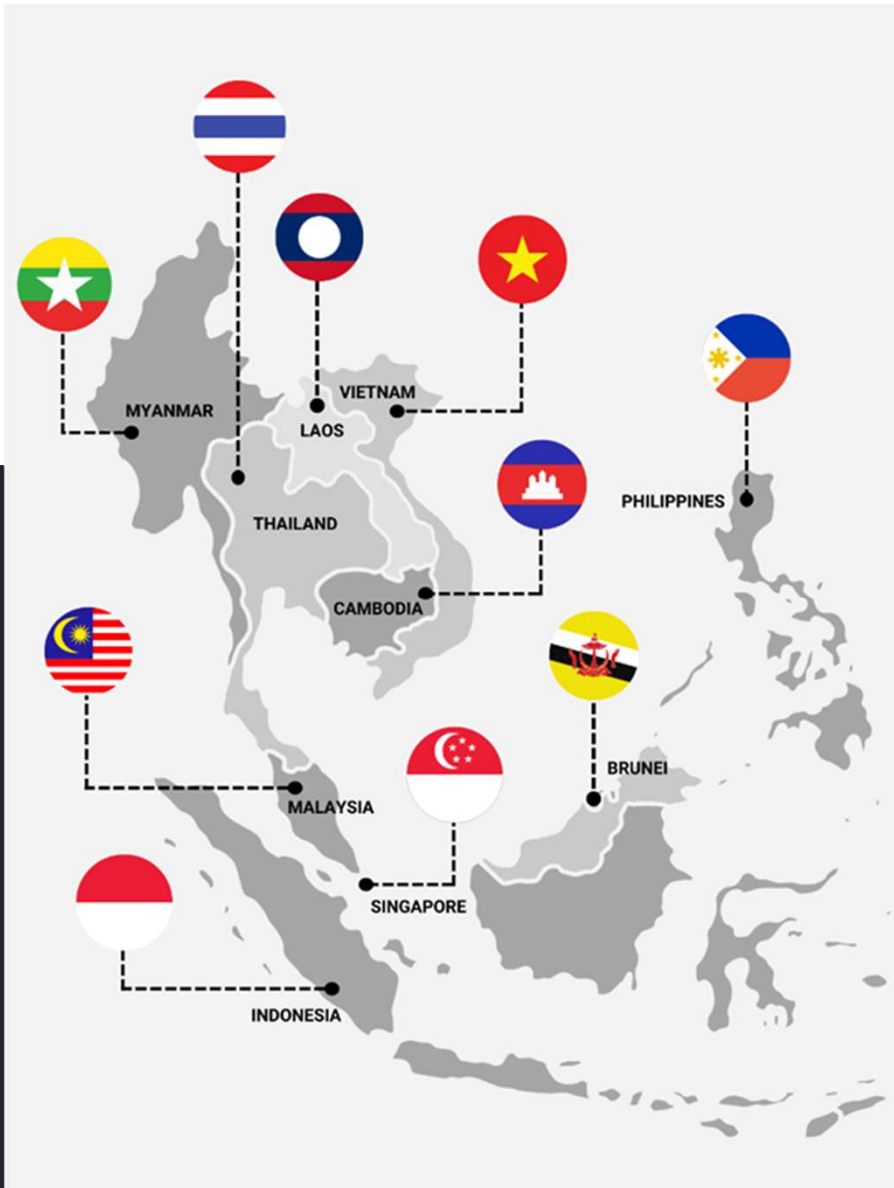
Our Factory :

Amata Nakorn Industrial Estate (Phase 8), 700/711 Moo 1, Phan Thong, Phan Thong, Chonburi 20160 Thailand.

REGIONAL SETUP



- BOI Promoted facility
- Total floor area : 9,600 m²
- Assembly shop with crane capacity up to 15.000 kg
- Hydrostatic testing up to 120 bar
- Repair and Service Area
- Meeting and Training rooms
- Pump sets and UL / NFPA 20 Fire Pump Systems
- Spare part warehouse / on-stock pump program
- Certified welding, fabrication, machining
- Paint Booth and coatings (including Blygold product)
- Engineering & Design
- Testing pump sets in our test lab up to 500 m³/h – 250 kW



REGIONAL SETUP



Thailand

- Kirloskar Brothers Thailand – Bangkok HQ for the ASEAN region for Kirloskar and SPP
- SPP Pumps Asia – Bangkok
- Kirloskar Brothers Thailand – Manufacturing Amata Chonburi common factory for all group brands:
 - Kirloskar
 - SPP Pumps
 - Rodelta
 - SyncroFlo
 - Blygold Thailand

Malaysia

- SPP Pumps Asia – Representative Office Malaysia KL

Singapore

- SPP Pumps Singapore

Indonesia

- SPP Pumps Asia - Representative Office Indonesia Jakarta
- Further we have an extensive dealer network throughout the Asian Region

OUR KEY



Oil & Gas



Marine &
Defence



Power



Building &
Construction



Industrial



Irrigation &
Agriculture



Water Resource
Management



Services

PETENCE SECTORS

Large & Medium Flow
pumping solutions
for complex fluid management
system

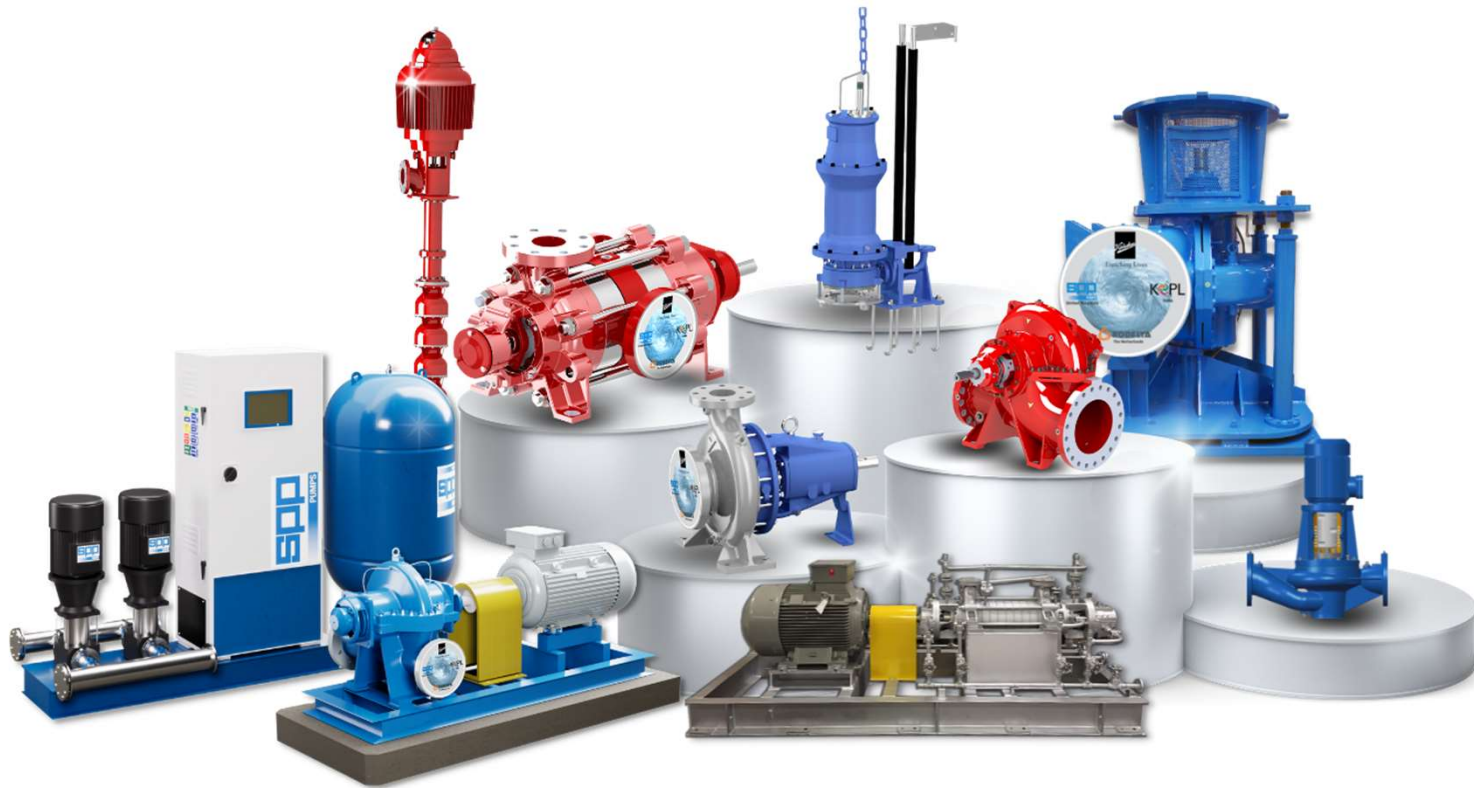
Small pumps
for day-to-day use at
households and farms

Valves
for industrial and large-
scale applications

Hydel /PAT/PICO
turbines



Complete Range Pumps



THRUSTREAM

SPLIT CASE PUMPS

Technical Data

Model Name: SyncroFlo Thrustream

Delivery size: 5 in. to 14 in.

Head: Up to 865 ft. (375 psi)

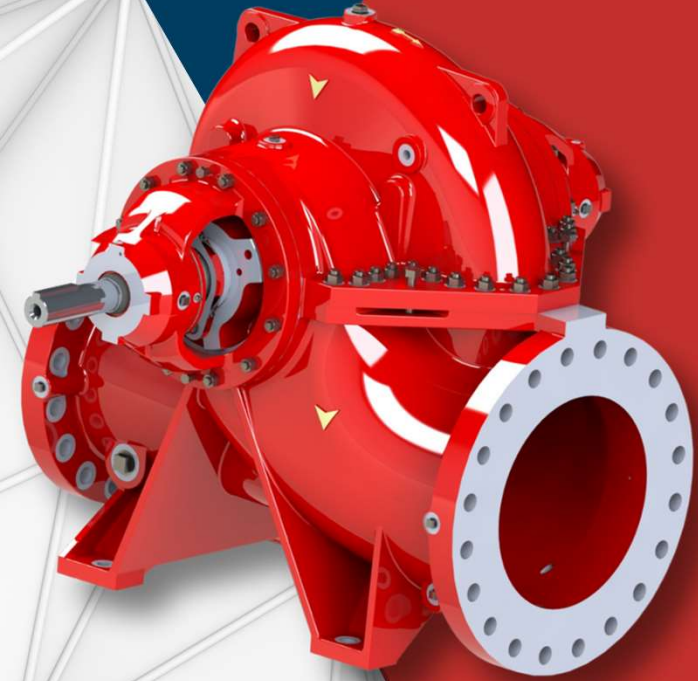
Flow: 200-5000 gpm

Features

- Axially split casing – rotating element can be removed without disturbing pipework
- Exceptional hydraulic efficiencies
- Double and single entry back to back impellers reduce end thrust, increase efficiency and bearing life
- Modular design for maximum interchangeability (multiple impeller selections)
- Stainless steel impellers and shaft as standard
- Double row thrust bearing
- Wide operating range and extended bearing life
- Reduced efficiency degradation
- Approved to FM and/or UL standards
- In compliance with NFPA 20
- Used in pump as turbine applications
- Internal high efficiency coating as standard
- Cartridge mechanical seals as standard
- Gland packing for fire pump

Applications

- Sprinkler systems
- Hydrant systems
- Deluge systems
- Monitor systems
- Water curtain



TURBOSTREAM

VERTICAL TURBINE PUMPS

Technical Data

Model Name: Vertical Turbine Pumps

Delivery size: 4 in. to 10 in.

Heads: Up to 565 ft. (245 psi)

Flow: 200-2500 gpm

Features

- Priming problems eliminated since pump ends are submerged in liquid
- 60 models, with bowls, heads and columns optimized for performance and cost
- Approved to FM and UL standards, all of which are compliant to NFPA 20
- Space saving
- Low maintenance cost
- High hydraulic efficiency
- Wide choice of materials
- Nuclear certification
- Dry and wet well installations
- API construction
- Diffuser bowls ensure balanced axial loading
- Soft packing or mechanical seals

Applications

- Sprinkler systems
- Hydrant systems
- Deluge systems
- Monitor systems
- Water curtain



FIRE PROTECTION

VERTICAL IN-LINE PUMPS

Technical Data

Model Name: Vertical IN-Line Pumps

Delivery size: 2 in to 8 in.

Head: Up to 336.8 ft. (146 psi)

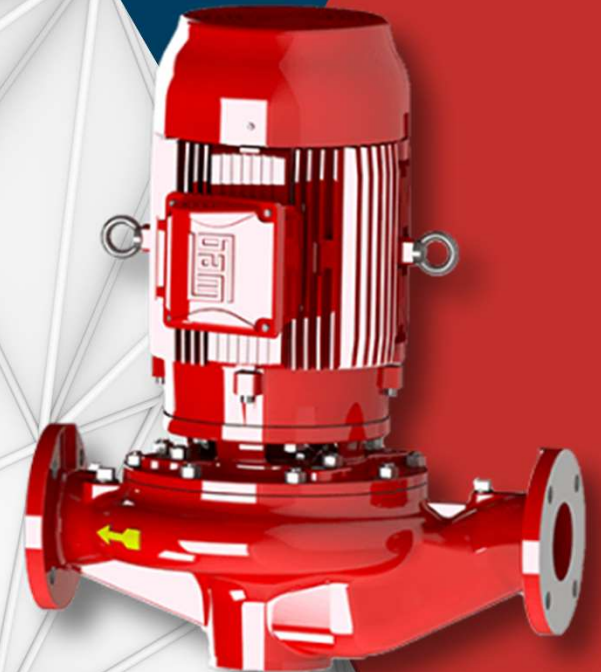
Flow: 150-1500 gpm

Features

- Priming problems eliminated. Pump end submerged in liquid
- 60 models, with bowls, heads and columns optimized for performance and cost
- Diffuser bowls ensure balanced axial loading
- Approved to FM and UL standards, all of which are compliant to NFPA 20
- Space saving
- Low maintenance costs
- High hydraulic efficiency
- Wide choice of materials
- Nuclear certification
- Dry and wet well installations

Applications

- Sprinkler systems
- Hydrant systems
- Deluge systems
- Monitor systems
- Water curtain



VERTICAL MULTI STAGE

SYVS / SYVR

Technical Data

Model Name: SYV

Head Range: Up to 323 metres

Discharge Range: Up to 110 m³/hr

Power Ratings: 0.37 to 45 Kw (0.5 to 60 HP)

Voltage Range: 370 to 440 volts (three phase)

Protection: IP 55 Insulation: F class

PH Range: 4 to 10

Altitude: Up to 1000 metres

Liquid Temperature Range: -20° C to 120°C

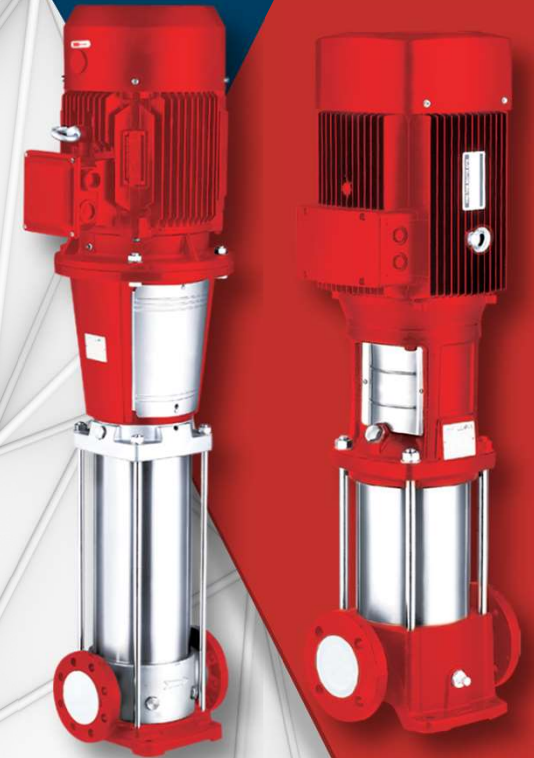
Motors: All motors are designed under IE2 specification.

Features

- Superior Pump Hydraulics
- Cartridge Type Mechanical Seal
- Splined Shaft
- Replaceable Wearing Parts
- Dynamically Balanced Rotating Parts
- Easy Maintainable Design
- Suitable for Horizontal Applications
- High Head Applications

Applications

- Fire-fighting system
- Food & beverage industry
- Agricultural irrigation
- Ultra-filtration systems
- Water supply & drainage for high-rise buildings
- Water treatment systems
- Boiler feeding
- Distillation systems



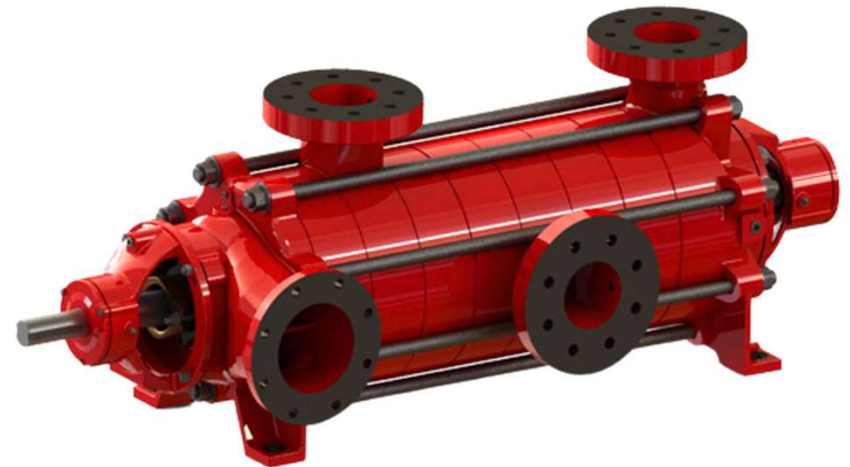
MULTI STAGE
MULTI PORT



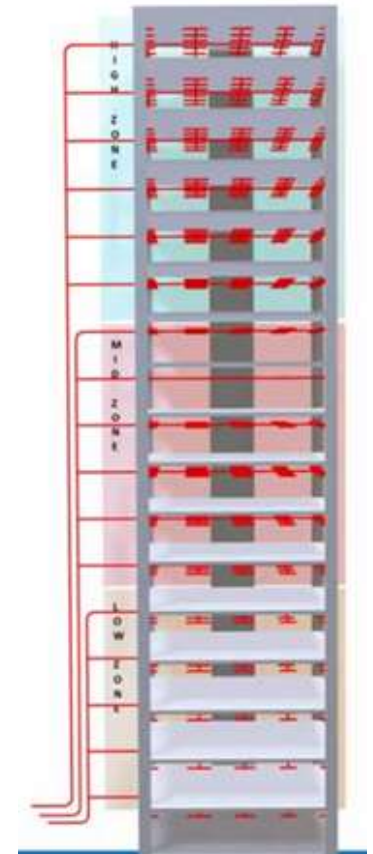
MSMO

Delivery size : 5" to 6"
Capacity : 750, 1000, 1250 USGPM
Head : up to 723 psi
Speed : 1480 / 1760 rpm
Outlets : 3 per pump maximum
Individual outlets can be rated to different rated flows

- ✓ Space Saving as eliminates multiple sets
- ✓ Immediate Response
- ✓ Reduced use of PRV's



FM Approved (SK15DC-Multi Stage Multi Outlet)



MSMO – SK15DC Pump with Two Intermediate and One Delivery Outlet

Approved Materials:

Casings: Ductile Cast iron (SG Iron), Ni Al Bronze, CF8M, CA6NM, CF3M, Duplex SS, Super Duplex SS

Impeller: Bronze, CF8M, CA6NM, CF3M, Ni Al Bronze, Duplex St. Steel, Super Duplex St. Steel

Shaft: SS-431, Monel, Duplex St. Steel, Super Duplex St. Steel

FM Approved (SK15DC-Multi Stage Multi Outlet)



SK15DC
NEW MULTI-STAGE MULTI-PORT FM+ APPROVED FIRE PUMP

Rated Flow – 750, 1000, 1250 USgpm.
Rated speeds – 1480 and 1760 rpm.
Rated pressure – up to 510 psi.

Cost Savings
First outlet available below 175 psi discharge pressure.

Reliable
Failsafe design, pump can handle backpressure in case of check valve failure.

Higher MTBF
Shaft and sleeves are made with tough and corrosion resistant martensitic stainless steel.

Fewer drips
Stuffing box is optimized to lower stuffing box pressure, reducing drippage.

Robust
Can handle city supply pressures up to 150 psi. Suction nozzle can be oriented left or right.

Compact
One pump serves up to three zones, savings in prime real estate space.

Materials
Casing – Ductile Iron
Impeller – Bronze
Shaft – Stainless Steel
Sleeves – Stainless Steel

Versatile
Suitable for mixed occupancy high rise buildings.

Easy to maintain
Ring section diffuser design allows for fewer parts and ease in replacements.

Immediate response
Unlike in series pumping there is no delay in service higher zones.

More choices
Also available as single outlet high pressure pump.

Bearings
Longer bearing life as radial thrust is theoretically zero due to diffuser design.

Outlet options
Available in multiple combinations to address different system designs.

Efficient
Pressure is split across multiple stages allowing pump to be more efficient and typically requires smaller driver.

FM Approved (SK15DC-Multi Stage Multi Outlet)



SK15DC 8 stage Multi-Stage Multi Outlet pump is FM Approved for various intermediate outlets 2nd, 3rd, 4th, 5th, 6th, 7th, and 8th as final delivery outlet. Green group below in the table is the intermediate delivery pressure rating and yellow group is the final delivery outlet pressure.

CD15K - Pressure Rating									
CD15K - 750 USgpm									
Outlet Position Stages	Final (Standard) Delivery Outlet				Outlet Position Stage/Outlet	Intermediate Outlet			
	1480 RPM		1760 RPM			1480 RPM		1760 RPM	
	344+344 (Max Imp Dia)	276+276 (Min Imp Dia)	344+344 (Max Imp Dia)	276+276 (Min Imp Dia)		344+344 (Max Imp Dia)	276+276 (Min Imp Dia)	344+344 (Max Imp Dia)	276+276 (Min Imp Dia)
2	121	63	181	96	2/1	116	54	174	88
3	181	94	271	144	3/2	177	88	255	135
4	242	126	362	192	4/3	233	120	345	184
5	302	157	452	240	5/4	297	148	437	238
6	362	188	542	288	6/5	365	185	530	285
7	423	220	633	336	7/6	419	212	625	333
8	483	251	723	384					

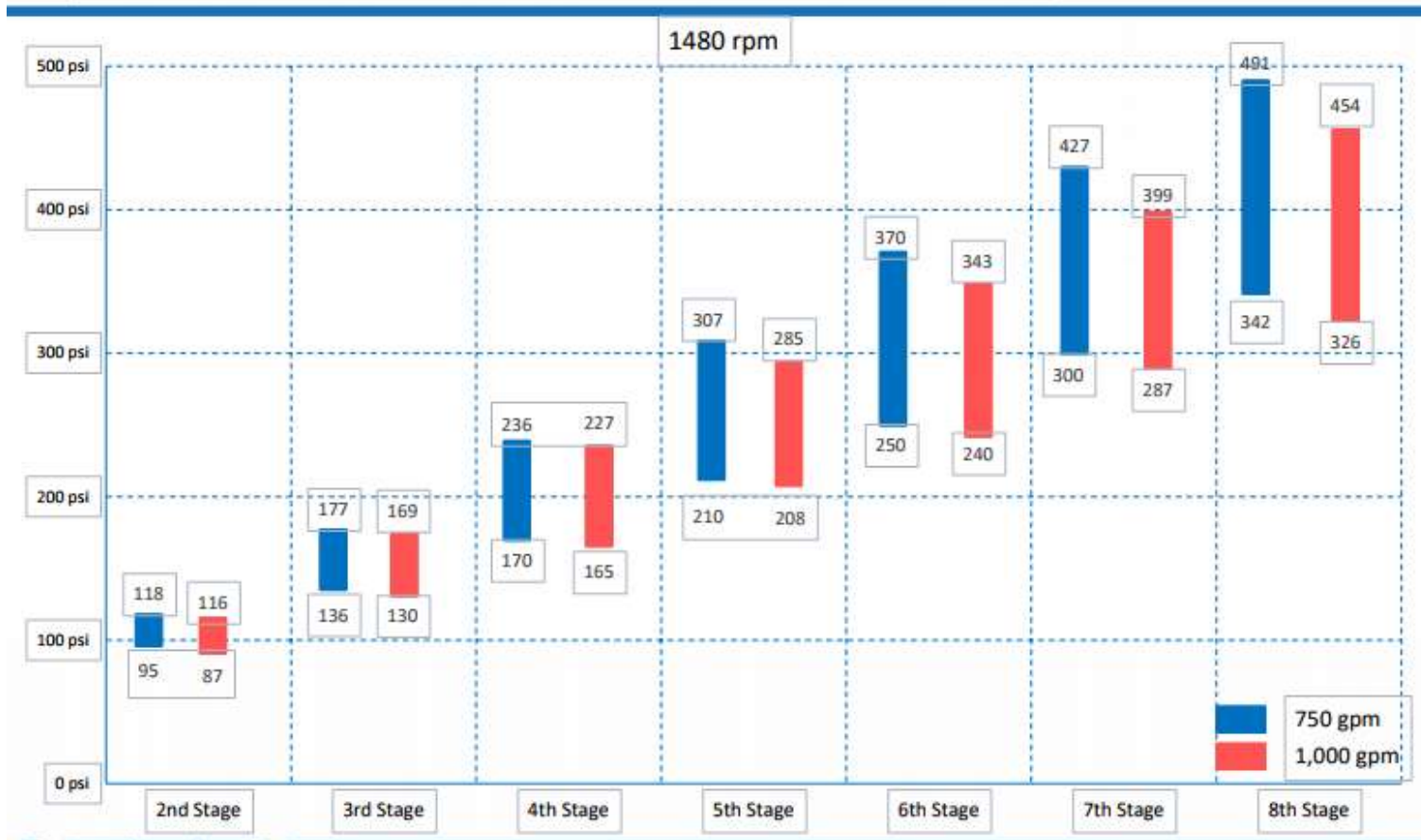
CD15K - 1000 USgpm									
Outlet Position	Final (Standard) Delivery Outlet				Outlet Position Stage/Outlet	Intermediate Outlet			
	1480 RPM		1760 RPM			1480 RPM		1760 RPM	
	344+344 (Max Imp Dia)	344+320 (Min Imp Dia)	344+344 (Max Imp Dia)	344+285 (Min Imp Dia)		344+344 (Max Imp Dia)	344+320 (Min Imp Dia)	344+344 (Max Imp Dia)	344+285 (Min Imp Dia)
2	113	88	171	105	2/1	102	77	160	111
3	170	131	257	157	3/2	160	120	237	162
4	227	175	343	210	4/3	209	167	325	210
5	283	219	428	262	5/4	266	211	409	260
6	340	263	514	314	6/5	336	263	495	310
7	396	306	599	367	7/6	387	302	590	355
8	453	350	685	419					

CD15K - 1250 USgpm									
Outlet Position	Final (Standard) Delivery Outlet				Outlet Position Stage/Outlet	Intermediate Outlet			
	1480 RPM		1760 RPM			1480 RPM		1760 RPM	
	NA	NA	344+344 (Max Imp Dia)	344+330 (Min Imp Dia)		NA	NA	344+344 (Max Imp Dia)	344+330 (Min Imp Dia)
2	NA	NA	161	134	2/1	NA	NA	144	118
3	NA	NA	241	201	3/2	NA	NA	215	183
4	NA	NA	322	269	4/3	NA	NA	298	252
5	NA	NA	402	336	5/4	NA	NA	373	313
6	NA	NA	482	403	6/5	NA	NA	464	377
7	NA	NA	563	470	7/6	NA	NA	548	457
8	NA	NA	643	537					

FM Approved (SK15DC-Multi Stage Multi Outlet)



Flow and Pressure coverage – 50 Hz Market

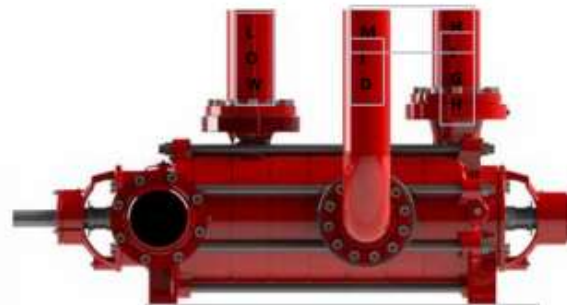


FM Approved (SK15DC-Multi Stage Multi Outlet)

Space Saving



Pumps arranged in series



Multi-Stage Multi outlet

FM Approved (SK15DC-Multi Stage Multi Outlet)

Immediate Response

Pumps arranged in series needs timed acceleration delays to ensure earlier pump is brought up to rated speed before next pump can be turned on. At times this can add up to 30 seconds of delay for high zone pump.



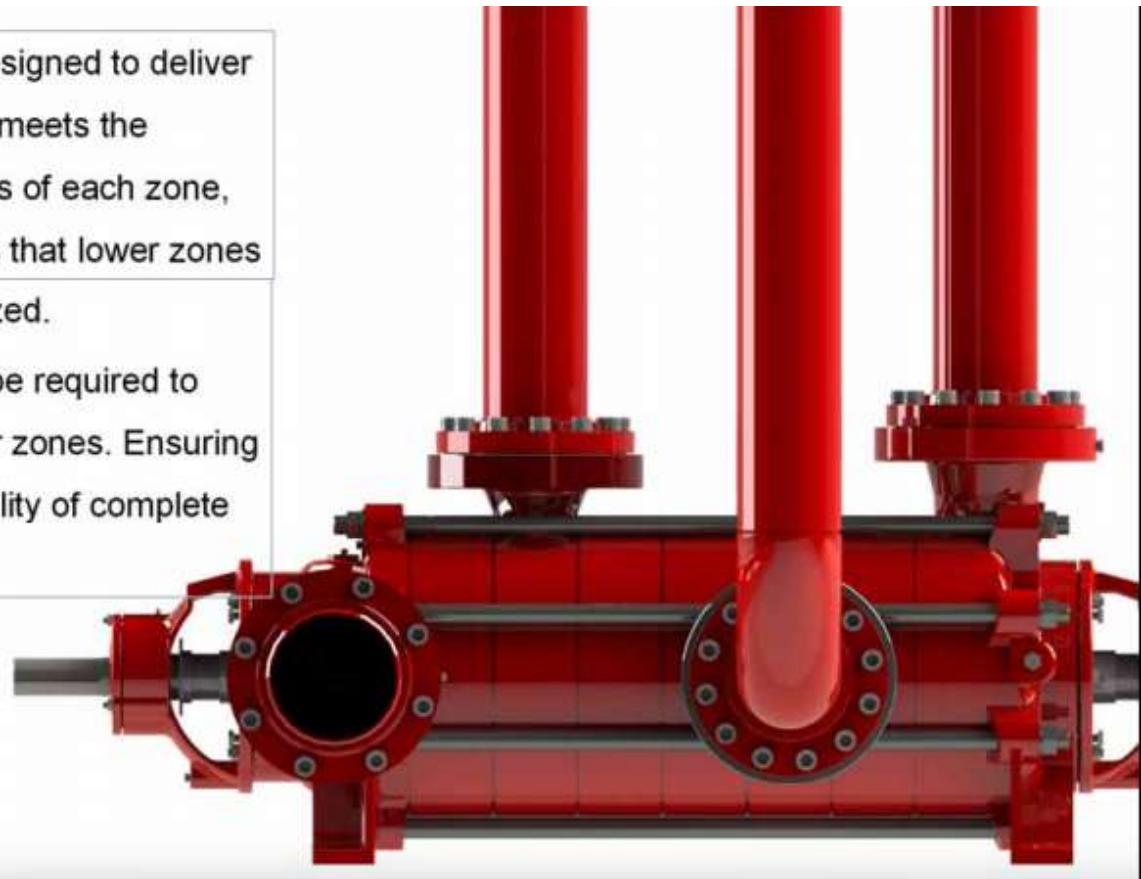
Multi-stage multi outlet pumps offers immediate response upon sprinkler activation as there is only one pump to be brought up to its rated speed.

FM Approved (SK15DC-Multi Stage Multi Outlet)

Reduced use of PRV's

As MSMO pumps are designed to deliver pressures that precisely meets the individual pressure needs of each zone, MSMO certainly ensures that lower zones will not be over-pressurized.

Meaning, PRVs will not be required to reduce pressure at lower zones. Ensuring higher operational reliability of complete fire protection system.



Why us?



Facility
Integration, Testing & Site Simulation facility

Wide service network
with Integration & Automation expertise

Variety of Efficient Pumps
End Suction, Split Case Horizontal & Vertical

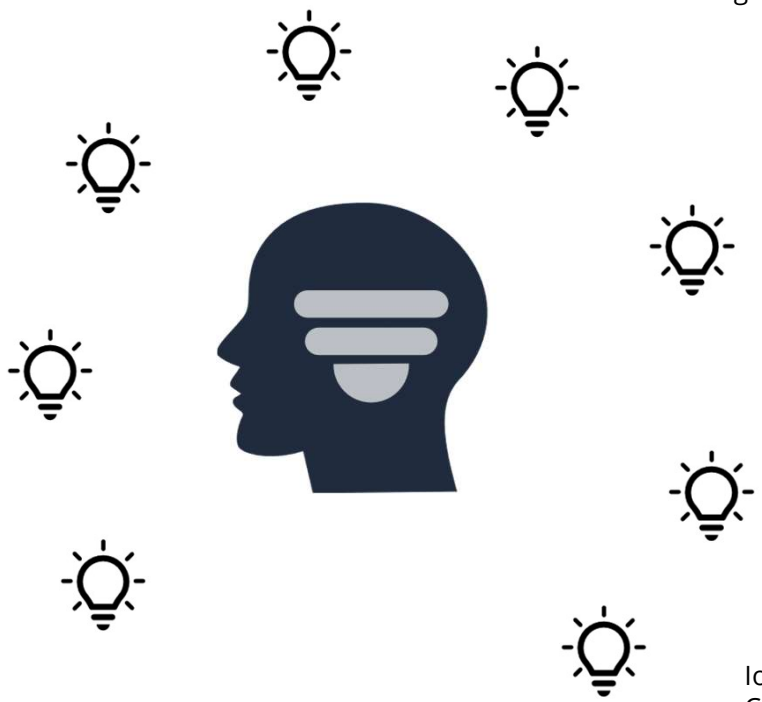
Approvals
from Major consultants

Energy Efficient & Energy Sustainable
solution
LLC Pumps

Customers
Worldwide references

offerings
Own controllers, customized programming
as per application needs.

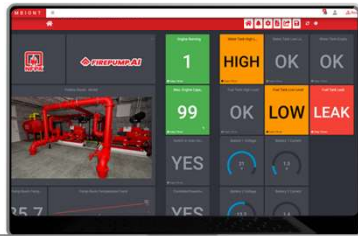
IoT
Cost effective Remote Monitoring solution



IoT Solutions

Any time, Any where with Monitoring System

FIREPUMP.AI



Fire Pump Monitoring System

Connected to onsite controllers via a secure gateway, you will be able to keep an eye on everything you need, 24/7. With Firepump.AI you will know exactly when any anomalies, before they become critical and proactive. Monitor crucial data including water supply, fuel supply for diesel engine drives, battery voltage for diesel engine, pump room altitude and temperature according FM 1330.

WATERPUMP.AI



Water Pump Monitoring System

Help you to ensure reliability through real-time monitoring, predictive maintenance. It enhances cost savings via energy efficiency, reduced operational cost. Operational optimization enables efficient water distribution with data-driven insights. Remote accessibility allows timely issue responses anywhere. This system's environmental impact curbs energy consumption, promotes water efficiency, aiding sustainability.



ADVANTAGES

- 24/7 MONITORING -
- REMOTE ACCESS ANYWHERE -
- SECURE DATA STORAGE -
- INSTANT ALERTS -
- INSPECTION REPORTS IN THE CLOUD -
- REDUCE HUMAN ERROR -
- NO LOST DATA & RECORDS -
- NEVER DISCONNECTED -

Our references



Data Centres
E-Shelter, Germany
Evoswitch, Netherlands
Google, California



Transport & Construction
Royal Dutch Airlines
KTX, Korea
Volvo Heavy Equipment



Airports
London Heathrow
Shanghai Airport
Schiphol Amsterdam



Museums
Louvre, Paris
Rijksmuseum, NL
Queensland Museum



Hotels
Grand Lucayan Bahamas
Diplomats Resort Florida
Mariott Hotels



Transportation
BTS Sky Train Yellow & Pink Line



Construction
Hong Kong Macao Bridge



Airports
Heathrow Airport UK Terminal 5



Construction
Channel Tunnel France to UK



Offshore
Texaco Captain Production Platform

Our references



Powerplants
Cairo, Egypt
Guam, Micronesia
Berlin, Germany



Sport Facilities
Sun Life Stadium, Miami
Old Trafford, Manchester
Stamford Bridge, London



Offshore & Marine
Queen Mary II
Palm Island Dubai
Pearl Harbour, Hawaii



Hospitals
VUmc, Amsterdam
UMC, Utrecht
Antonius, Nieuwegein



Office Buildings
EU Parliament, Brussels
Burj Kalifa, Dubai
Heineken, Netherlands



Buildings
Marina Bay Sands
Singapore



Buildings
Opera House Sydney Australia



Buildings
Swiss Re



Shopping mall
Siam Paragon



Shopping mall
Icon Siam

Thank You

FOR ALL YOUR ATTENTION

SyncroFlo, Inc. is represented
by our Group company Kirloskar Brothers
(Thailand) Limited for the Asia market.

End Slide

