Sprinkler Fire Pump - Online Course 2021

This course is split into three modules which are spread out at one module per month over the period of three month period of April to June 2021

We firmly believe that the learning experience should be enjoyable. The courses are formulated around actual experience and they have an extensive visual impact. It is important to us that the delegate leaves each class with a thorough understanding and full working ability.

Fire pump sizing and the basic understanding of pumping principles is little understood within the industry.

- The sprinkler installers know how to calculate a fixed fire protection requirement but not how to order a pump, and
- The pump suppliers know how to size a pump but not calculate a sprinkler systems requirement.

This leaves a huge rift between the correct calculation of a sprinkler system and the resultant pump and water supply requirements. The object of this course is to bridge this chasm and to create a Certificate issued by the ASIB that is meaningful within the industry in respect of competency in this field. In this respect we intend to hold an examination which will enable the ASIB to determine the level of understanding the individual has within the pumping field specifically.

The material covered has many practical exercises built into them from both an individual and networking point of view. It is through these that invaluable experience is gained. Delegates are kept to manageable limits, which enables personal attention to be given as required. Networking consists of small groups who will collectively solve the problem given by sharing knowledge gained either in the course or within their working environment.

The course is limited to potable water as the fluid medium and excludes any fluid with a greater density or kinematic viscosity.

Lectures move through the phases that have been experienced by South Africa and the broader global sprinkler industry for the past two-hundred-years or more. They include past rules and their application through to the very latest.

- **The modules run concurrently whereby it is not possible to miss modules or to select individual modules unless the level of understanding of the individual is regarded as competent.**
- **The cost of the course includes all learning materials such as Rule Books and stationery.**

The following pages detail each module's content, its duration as well as the expected outcome.

MODULE 1	
TOPIC COVERED	**OUTCOME**
Ninth Edition Systems	*Provides an understanding of how to interpret the requirement for the sizing of pumps in accordance with this set of Rules*
Pipe size tables	*Provides an understanding of how to interpret the pipe size table and the sizing of pumps in accordance with these*
Basic estimation of a sprinkler systems flow and pressure requirement	*Creates a basic understanding of how the calculation of a sprinkler system is carried out and useful estimation tricks and tips*
Water supply curves	*Provides the candidate the ability to empirically calculate an water supply or pump curve or extrapolate a curve*
Resistance or system curves	*Gives the candidate the ability to calculate and understand what a resistance curve is in relation to a sprinkler system*
Duration	Three days
Daily Starting Time	08:30 - 09:00
Daily Finish	16:00 - 16:30
Dates	Tuesday, Wednesday and Thursday 20, 21 and 22 April 2021
Cost	R 7,950.00 Excluding VAT

MODULE 2	
TOPIC COVERED	**OUTCOME**
Overview of pumps	*Provides an introduction into pumps and enables the candidate to calculate pumps running in parallel and in series and the effect this has on sprinkler systems* *Provides useful definitions of common terms* *Provides the ability to determine the differences between types of pumps and creates an understanding of how to read a composite characteristic pump curve*
Gravity and velocity	*Creates an awareness of gravity and the effect this has on velocity in relation to a water supplies and sprinkler systems*
Centrifugal fire pumps	*Provides an understanding of a pump impeller and how to calculate peripheral velocities* *Provides an understanding and application of the pump affinity laws* *Provides an understanding of a pumps power requirements*
Calculation of junction points	*Enables the candidate to quickly calculate a reasonably accurate intercept point of a water supply against a system demand point*
Duration	Three days
Daily Starting Time	08:30 - 09:00
Daily Finish	16:00 - 16:30
Dates	Tuesday, Wednesday and Thursday 18, 19 and 20 May 2021
Cost	R 7,950.00 Excluding VAT

MODULE 3	
TOPIC COVERED	**OUTCOME**
Orifice plate calculation	*Provides the candidate with the ability to calculate and size an orifice plate within a sprinkler system or proving test pipe and where to apply them*
Pump suction tanks	*Creates an awareness of the requirements for a suction tank feeding a sprinkler system*
Calculation of effective suction tank capacity	*Provides a candidate with the ability to calculate freeboard, dead water and the limitations associated with these*
Suction line and NPSH	*Provides an understanding of the requirements for a pump suction line and NPSH requirements Creates an awareness of cavitation*
General	*Provides the required knowledge in respect of the general requirements relating to a pumped water supply feeding a sprinkler system*
Duration	Three days
Daily Starting Time	08:30 - 09:00
Daily Finish	16:00 - 16:30
Dates	Tuesday, Wednesday and Thursday 22, 23 and 24 June 2021
Cost	R 7,950.00 Excluding VAT

The online course will be hosted on the Zoom platform and will require:

- A Laptop / Computer
- Webcam
- Microphone
- Internet Connection

All learning material and stationary for the course will be shipped to the registered candidate.