





## AGNI CONTROLS CHENNAI



#### **MANUFACTURER & TURNKEY SOLUTION**

**PROVIDER** 

IN

FIRE PROTECTION





#### **ABOUT OURSELVES**

**AGNI CONTROLS CHENNAI** located at Chennai, Southern Part of India, one of the Metropolitan Cities.

Initial business during the 1985 involved in manufacturing Fire Alarm Control Panels & allied products.

As part of business expansion, **Agni Controls** specialized in Fire Protection Systems such as Gas Based Fire Extinguishing Systems, Fire Alarm Systems and water spray and Mist system.

Agni Controls has many reputed customers in India, Europe and Asia Pacific Region.

#### BALAWA AGNI CONTROLS PVT LTD,

Formed to expand business scope by gradually transferring technology, manufacturing and installation facilities of proprietorship company of Agni Controls.





#### **ABOUT OURSELVES - KEY PERSONS**



D. BALACHANDRAN Proprietor & CEO



ARUNKUMAR BALACHANDRAN, DIRECTOR



- ✓ Mechanical Graduate Engineer
- √ 30 years experience in Fire Protection System.
- ✓ Founder president of FSAI (Fire & Safety Association of India)
- ✓ Representing as manufacturer in BIS CED 22 Fire Fighting Section committee.
- ✓ Key Responsibility -
  - ✓ Administration, R&D & QC
- ✓ Instrumentation Graduate Engineer
- √ 15 years' experience in Specialised Fire protection system
- ✓ Member in NFPA (National Fire Protection & Association), FSAI (Fire & Security Association of India) and FPAI (Fire Protection Association of India), CII Panel member for MSME Panel.
- ✓ Key Responsibility
  - ✓ Preliminary & Detailed Engineering, Tendering, Pricing & Commercial Terms
  - ✓ Instrumentation Graduate Engineer
  - ✓ MIFireE(UK) Graduate member in IFE-UK (Institution of Fire Engineers)
  - √ 9 years experience in specialised Fire protection system
  - ✓ Member in NFPA (National Fire Protection & Association)
  - ✓ Key Responsibility -
  - ✓ Detailed Engineering, Production, Installation, Testing, Commissioning & After Sales Support









#### **MESSAGE**

WITH OVER 35 YEARS OF EXPERIENCE, WE CAN PROUDLY SAY THAT,

"WE ARE SOLUTION PROVIDER AND OEM SUPPLIER IN FIRE PROTECTION FIELD, WITH THE QUALITY, INNOVATION & SERVICE TO THE CUSTOMERS".

OUR MAJOR STRENGTHS ARE R&D AND NON-COMPROMISING QUALITY STANDARDS.

WE DESIGN, MANUFACTURER, TEST, ERECT & COMMISSION SYSTEM & PRODUCTS
TO MEET OUR CUSTOMER SPECIFIC NEEDS IN FIRE DETECTION AND EXTINGUISHING FIELD.

- D. BALACHANDRAN









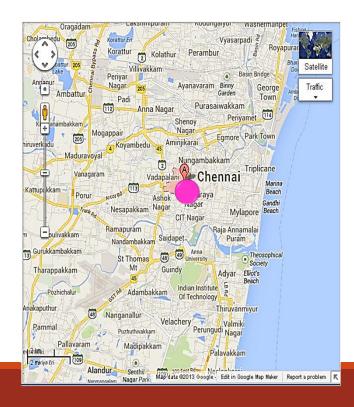








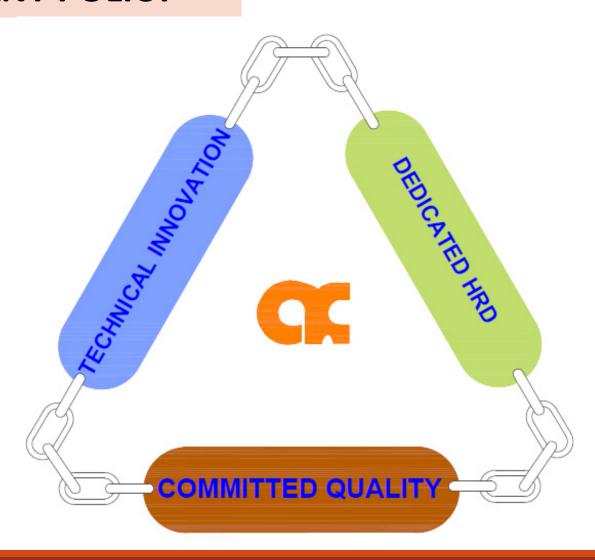
# HEAD OFFICE @ Chennai and Production Unit @ Near Porur







#### **COMPANY POLICY**

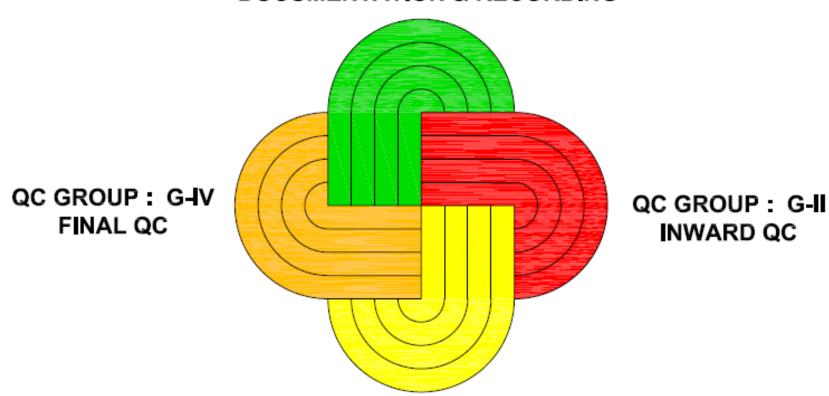






## UNCOMPROMISED QUALITY PROCEDURES IS ENSURED IN ALL STAGES

QC GROUP: G-I DOCUMENTATION & RECORDING



QC GROUP: G-III
IN-PROCESS QC





#### AN ISO 9001:2015 CERTIFIED MANUFACTURING COMPANY

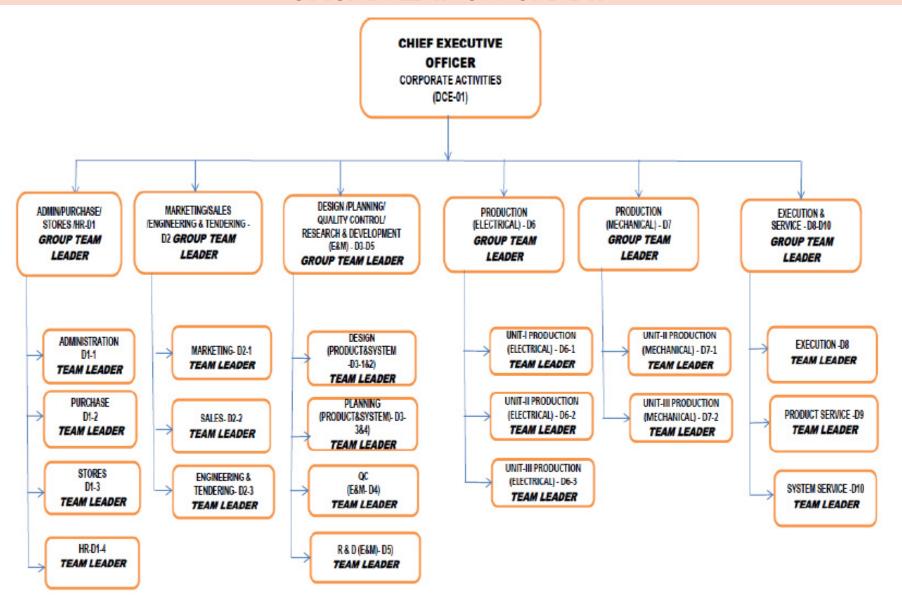








#### ORGANIZATION CHART







#### OVERVIEW ON M/S AGNI CONTROLS



Organization is supported with Dedicated R&D division, Discharge test facility, Batch-wise Production areas, In-house special design capabilities, advanced testing equipment, Stringent Quality Control Division.





#### **BRANDS**

FULLY INTEGRATED & TESTED CO2 GAS
EXTINGUISHING BANK ASSEMBLY

FULLY INTEGRATED & TESTED FK-5-1-12
EXTINGUISHING BANK ASSEMBLY

SPECIAL APPLICATION SPARK/HEAT/ FLAME DETECTORS

DETECT EXTINGUISH FIRE AT ORIGIN SYSTEMS

FULLY INTEGRATED & TESTED INERT GAS
EXTINGUISHING BANK ASSEMBLY

ENGINEERED HIGH / LOW PRESSURE WATER MIST FIRE SUPPRESSION SYSTEM











bala-wa-mist





## bala-wa-5112°

## FK-5-1-12 GAS FIRE SUPPRESSION SYSTEM







#### INTRODUCTION

- FK 5-1-12 is a fluro ketone chemical used to extinguish most type of fires, including flammable liquid hazards and electrical equipment fires.
- FK 5-1-12 extinguishes fire by chemically reacting with the fire
- It is stored as a liquid and is pressurized with N2 for discharging purpose.
- FK 5-1-12 is a colorless, odorless and electrically non-conducting chemical.





## INTRODUCTION (Cont)

- FK-5-1-12 system require less number of cylinder & hardwares for protecting risk area when compared with CO2 & Inert.
- Cylinder storage pressure for FK-5-1-12 is 25 bar or 42 bar.





#### **STANDARDS**

➤ NFPA - 2001 : 2018

**Standard on Clean Agent Fire Extinguishing Systems** 





#### **APPLICATIONS**

#### FK5112 AGENT IS RECOMMENDED TO USE IN THE FOLLOWING AREAS,

**UPS Rooms** 

**Control Rooms** 

**Communication centers** 

**Data centers & Computers** 

**Electrical Cabinets** 

**Electrical Switchgear** 

**Electronic Data Processing centres** 

- Machinery Protection
- Flammable Liquid Stores
- Transformer and Switch rooms
- Storage Rooms
- Telecommunication Equipment
- Subfloors & other concealed spaces
- Libraries





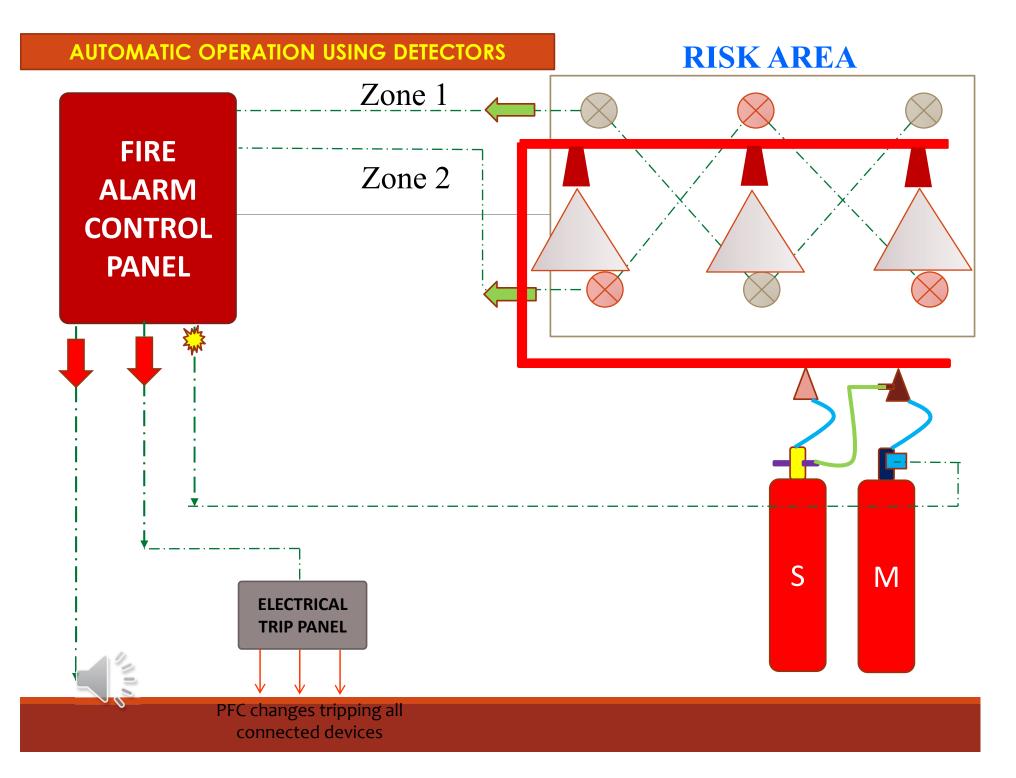
# FIXED INSTALLATION FK 5-1-12 FIRE SUPPRESSION SYSTEMS





## CLEAN AGENT FOR SUPPRESSION SYSTEMS AT DIFFERENT PRESSURES,

- 1. 600 PSI (42 BAR)
- 2. 360 PSI (25 BAR)
- 3. 200 PSI (15 BAR)







#### IH901Series...

### bala wa-FK-5-1-12 Gas Fire Suppression Cylinder Bank Assembly Using Master and Slave Cylinders





**IH920-CT** 

#### FK-5-1-12 Cylinder Bank Cabinet Type Enclosure







BIH912-MV-5112 Valve with Solenoid & Manual Actuator

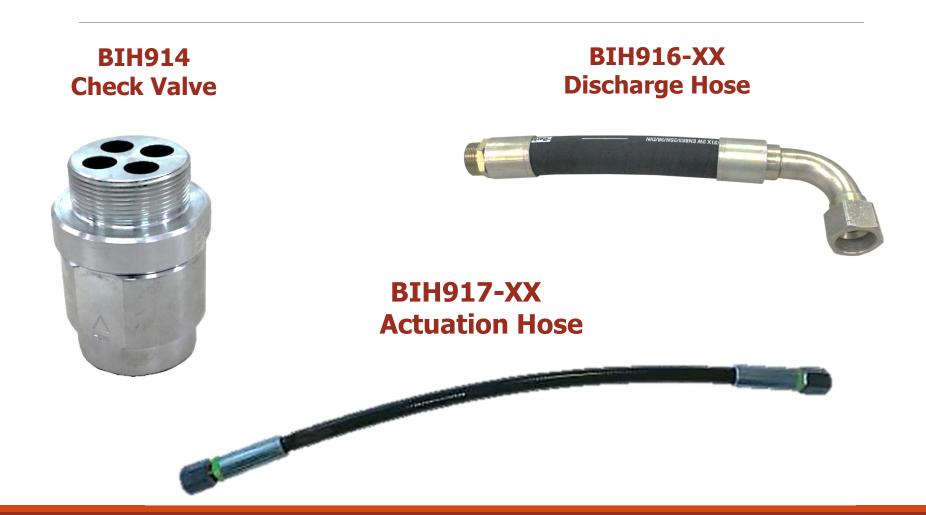
















## IH918 FK-5-1-12 Discharge Nozzle







#### IH029/1 Manual Gas Discharge Station Gas Inhibit Switch

## IH028/1







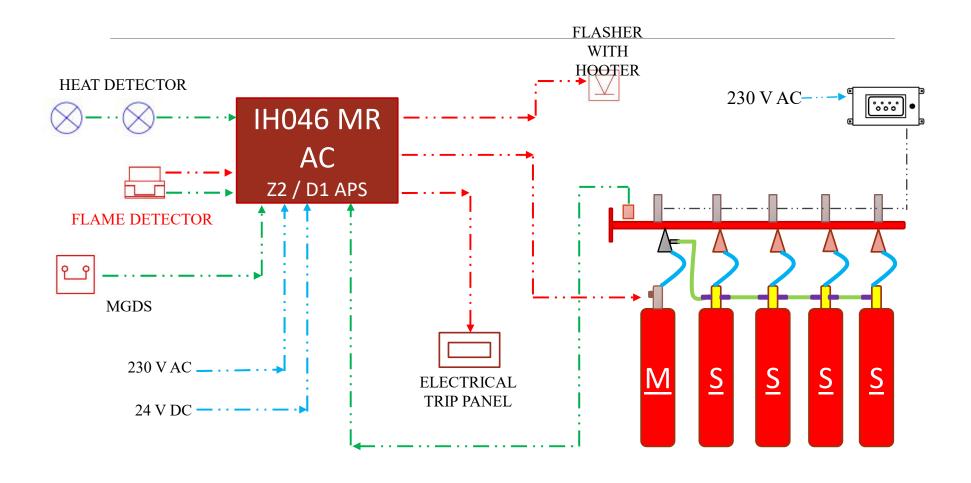






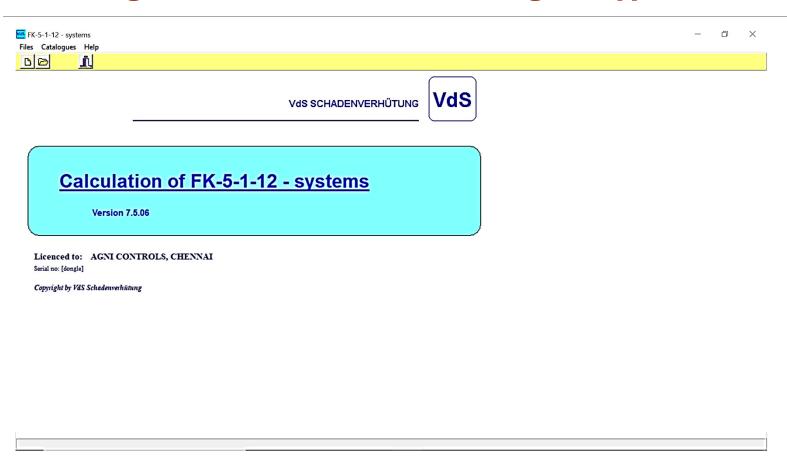


#### FIRE SUPPRESSION SYSTEM - SCHEME



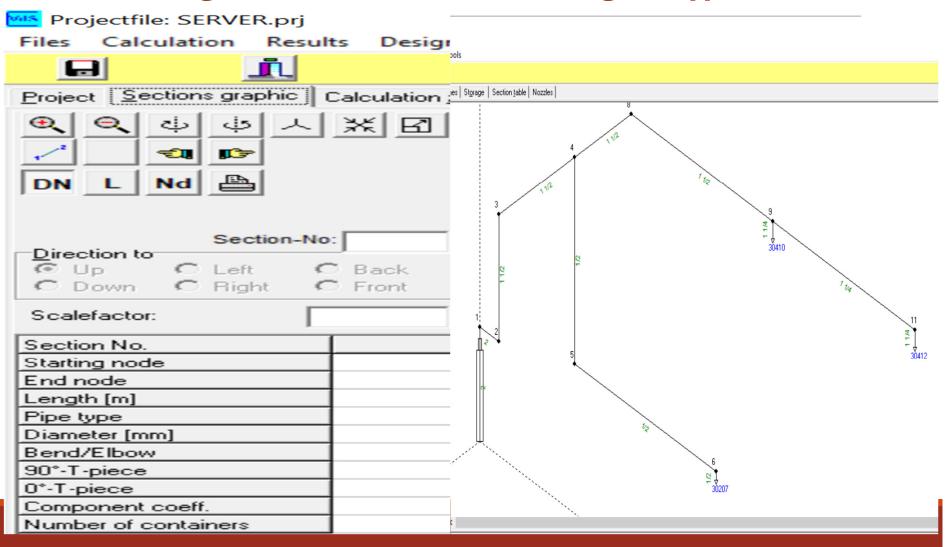






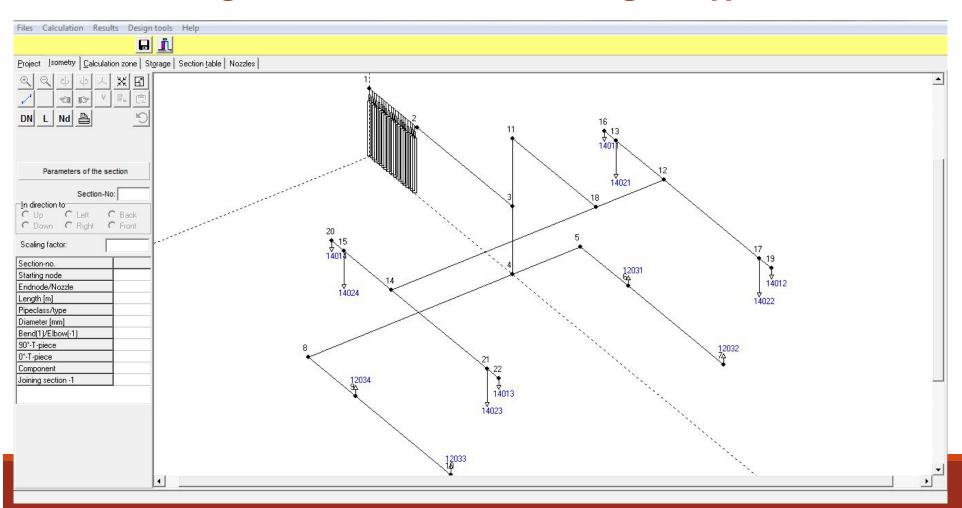






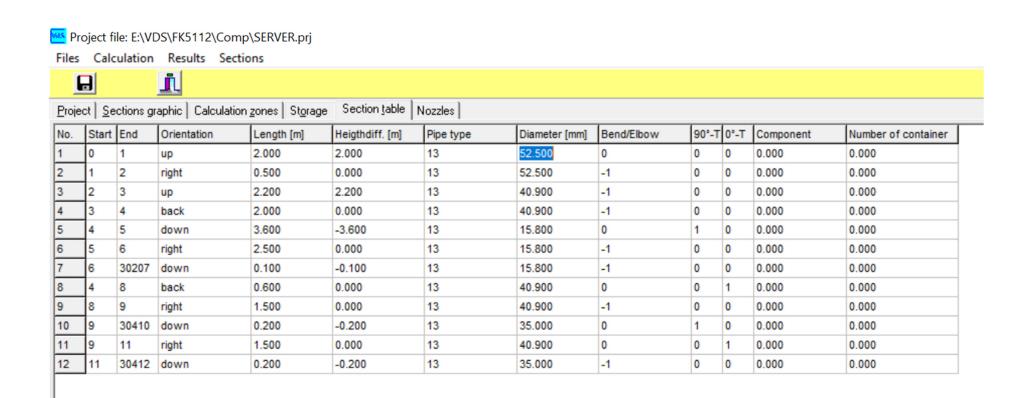
















#### **INSTALLATION PHOTOS**







#### OTHER RANGE OF FIRE SUPPRESSION SYSTEMS

FULLY INTEGRATED & TESTED CO2 GAS EXTINGUISHING BANK ASSEMBLY

bala-wa

FULLY INTEGRATED & TESTED INERT GAS EXTINGUISHING BANK ASSEMBLY

**bele** - We - 100 / 541

ENGINEERED HIGH / LOW PRESSURE WATER MIST FIRE SUPPRESSION SYSTEM

bala-wa-mist®

DETECT EXTINGUISH FIRE AT ORIGIN SYSTEMS

Defao SERIES...





## bala-wa series... CO2 GAS FIRE SUPPRESSION SYSTEM BANK

CABINET ENCLOSURE ASSEMBLY TYPE









#### CO2 GAS FIRE SUPPRESSION SYSTEM BANK





## FIXED INSTALLATION HIGH PRESSURE CO2 SYSTEM FULLY ASSEMBLED INTEGRATED & TESTED CYLINDER BANK IN AIR CONDITIONED CONTAINER





<u>MANUFACTURER</u>: M/S. AGNI CONTROLS, CHENNAI

**CUSTOMER**: M/S. BHEL, HYDERABAD - INDIA.

END USER: M/S. BPCL, COCHIN - INDIA.

**PROJECT**: GAS TURBINE PROTECTION - CO2 FIRE EXTINGUISHING SYSTEM

**DETAILS:** 

1. CONTAINER - Size 6.0 X 1.4 X 2.8 Mtr

Installed 24 X 45 Kgs CO, GAS CYLINDER

QTY - 3 NOS.

2. CONTAINER - Size 4.0 X 1.4 X 2.8 Mtr

Installed 18 X 45 Kgs CO, GAS CYLINDER

QTY - 3 NOS.

SPECIAL REMARKS: FULLY INTEGRATED, WIRED, INSULATED, AIR CONDITIONED

CONTAINER SUITABLE FOR SEMI OUTDOOR AND HIGH

AMBIENT TEMPERATURE PLACES.

TRADE NAME: bala-wa®







## **INERT GAS FIRE SUPPRESSION SYSTEM BANK**

CABINET ENCLOSURE ASSEMBLY TYPE







## **bala-wa-100 / 541 / 55** SERIES...

## INERT GAS FIRE SUPPRESSION SYSTEM BANK









## **bala-wa-100 / 541 / 55** SERIES...

## **INERT GAS FIRE SUPPRESSION SYSTEM BANK**



FRAME ASSEMBLY IG541 INERT CYLINDER BANK







## **INERT GAS FIRE SUPPRESSION SYSTEM BANK**

## TUBULAR FRAME ASSEMBLY TYPE







#### **LOCALISE THE FIRE**



## Defao<sup>®</sup> SERIES... AUTOMATIC DETECTION & EXTINGUISH SYSTEM





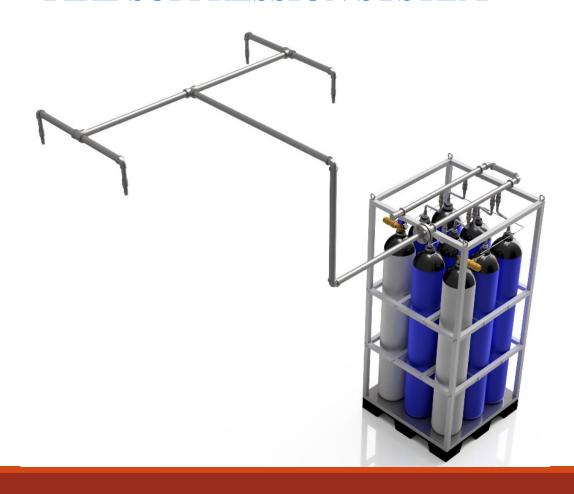
IN **DIRECT SYSTEM** 





## IH950 bala-wa-mist series...

# ENGINEERED HIGH/LOW PRESSURE WATER MIST FIRE SUPPRESSION SYSTEM







# IH950 bala-wa-mist series...

# ENGINEERED HIGH / LOW PRESSURE WATER MIST FIRE SUPPRESSION SYSTEM











**HAZIRA** 

## Overview on M/s Agni Controls **SOME IMPORTANT CLIENTS**

























## Overview on M/s Agni Controls

#### **SOME IMPORTANT CLIENTS**



DULAIJAN















MANALI











# Overview on M/s Agni Controls SOME IMPORTANT CLIENTS

## ROYAL ENFIELD

**CHENNAI** 





#### **AUTOMOBILE SECTOR**









HOSUR





BANGALORE







# Overview on M/s Agni Controls

#### **SOME IMPORTANT CLIENTS**



Sterlite

























# Overview on M/s Agni Controls SOME IMPORTANT CLIENTS













**B K BIRLA GROUP OF COMPANIES** 









# **b** l - W - 5112 Overview on M/s Agni Controls



#### **SOME IMPORTANT CLIENTS**





**SORIYA** 



Turkey



USA





**ITALY** 





**UK & CYPRUS** 





UAE



**SINGAPORE** 





**ITALY** 











## **HOW DOES AGNI CONTROLS DIFFER**

FROM OTHER SUPPLIERS OF

FIRE EXTINGUISHING SYSTEM?





## **AGNI CONTROLS** core strength is the

strong technical knowledge in both mechanical & advanced electronics.

# Supported with dedicated R&D divisions

Which helps continuously updating our products to the current trend.

Most of the Contractors do not have manufacturing capability nor supported with R&D.





Ref., No. EKC/T/1172/08-09

Date: March 28, 2009

#### CERTIFICATE FOR GRIT BLASTING

REFERENCE: OUR INVOICE NO. 01172 DT. 28.03.2009

It is hereby confirmed that the outer surface of the cylinders duly grit blasted to SA 21/2 cylinders supplied to M/s. Agni Controls, No.1, 6th Street, Dr. Subbarayan Nagar, Kodambakkam Chennai 600 024 against their Invoice No. 01172 dated 28.03.2009, P.O. No. AC/9.3.1/402/08-09 dated 21.03.2009 for 68.0 ltrs. water capacity - 100 Nos. Carbon-Di-Oxide Gas Cylinders.

SA -21/2

Grit used for blasting

Cylinder Serial Nos.:

BAINEESH GENERAL MANAGER

268671- 2255, 2256, 2259-2261, 2266, 2279, 2287, 2293, 2296, 2299, 2304 2308, 2311,2317,2321,2322,2345, 2350,2356, 2357, 2359, 2399,2412,2421, 2425,2432, 2442, 2452, 2453, 2457, 2474, 2479, 2480, 2482, 2484, 2485, 2490, 2492, 2498, 2499, 2501, 2414-2516, 2519, 2525, 2526, 2527, 2567-2569, 2576, 2580, 2585, 2599, 2600, 2601, 2611, 2620-2622, 2633, 2638, 2643, 2653, 2656, 2658, 2659, 2665, 2666, 2870, 2871, 2877, 2880, 2882, 2890, 2916, 2931, 2939, 2941, & 2952 2957

Quantity 100 Nos.

**AGNI CONTROLS directly** 

procures cylinder from the

manufacturer with all test

certificates & CCEO

approvals.

There are occasion, reconditioned cylinders are offered for new system

#### EVEREST KANTO CYLINDER LIMITED

Manufacturers of high pressure Seamless Gas Cylinders

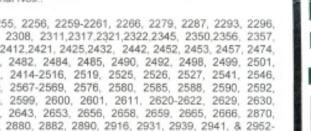
Registered Office 204. Raheia Centre. Free Press Journal Marg. 214, Nariman Point, Mumbai 400 (021)

Tel.: 0091-22-3026 8300 / 01

Fag: 022-2287 0718 / 20

Website: www.everestkanto.com

brian : eleggystil.com



FOR EVEREST KANTO CYLINDER LTD.





**AGNI CONTROLS directly** procures cylinder from the manufacturer with all test certificates & CCEO approvals.

There are occasion, reconditioned cylinders are offered for new system



#### RAMA CYLINDERS PRIVATE LIMITED.

Survey No. 334-P2 & 335, Vill : Bhimasar, Tal : Anjar, Dist : Kutch, State : Gujarat, India

#### ACCEPTANCE CERTIFICATE

Certificate No. : AEG / 014/13

Acceptance certificate for seamless steel cylinders Batch No. 014 (Dia 267.x 6.3mm x 68.0 Ltr. W.C.).

A consignment of 202 cylinders consisting of One test batch has been inspected and tested according to IS 7285 (Part 2):2004.

Γ	Designation or type of gas	Sr.No.of Cylinders	Qty.
1	CARBON DIOXIDE (CO2)	AEG 1927 to AEG 2128	200
		(Ex.Sr.No. AEG 2013 & AEG 2079)	1000

Manufacturer's No.: AEG 1927 to AEG 2128 (Inclusive)

Quantity Passed: 200 Nos.

(Excluding Sr No. : AEG 2013 & AEG 2079)

#### TECHNICAL DATA

Water capacity, V: Minimum 68.0 litre

Neckring: Fitted

Test pressure, Ph : 334 Bar

Working pressure at 15° C, Pw: 200 Bar

Outside diameter, Do: 267.0 mm Minimum wall thickness, a: 6.3 mm Neck Thread (Spec.): Type 4, Size 2

(without cap and without valve)

Nominal length: 1510 mm (Approx)

(as per IS 3224)

Maximum filling charge : 45.36 kg

Drawing No.: R-SC-IND-267-200-6.3/H Approved vide CCOE's letter No.: G.3(42)515/V dated: 24.09.2008

Colour of Body: Black with Aluminium Band

Material: M/s. Tianjin Pipe Corporation Ltd., China/ JIS-G-3429 / 34CrMo4

Suppliers Certificate No.: 11062213 Date 30.06.2011

0.32 0.10 0.40

Percent, Min:

Ouenched & Tempered

Heat treatment: Stamp markings:

RAMA CO2 34 Cr-MO4 Re 735 03/13 Q & T TW....KG AEG.....IS:7285-2 TP 334 FR 0.667 WC 68.0 LTR GW CM/L-7617783



Page 1 of 2





# **AGNI CONTROLS**, as a manufacturer, all the parts of the system are identified by

**PART Numbers & CODE Numbers** 

Which helps in Quality Assurance, Spares Supply & Maintenance Support.

Most of the Contractors do not have concept of Part & Code Numbers





India, providing branded FK-5112 system as a single product i.e., Totally assembled, Integrated, Tested & Site Fabricated cylinder bank assembly, which can be readily installed.





Other suppliers execute the FK-5-1-12 System as site-fabricated product.

They supply the cylinder, hoses, pressure switches, etc. separately,

They fabricate the frame, fabricate the header, fabricate the other required parts at the site, mostly by using locally available technical team.





### **AGNI CONTROLS** technical Man-Power strength

**Graduates Engineers** - 16

Diploma Engineers - 28

(As on April 2019)

42 Graduate and Diploma Engineers are exclusively dedicated to GAS SUPPRESSION SYSTEM & PRODUCTS





AGNI CONTROLS is the only company Which provides display of complete scheme, elaborately explaining the entire

Fire Suppression system operation.



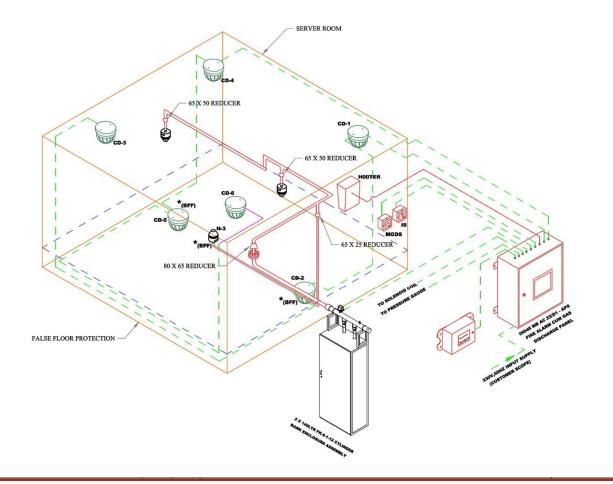
## **b@l@-W@**-5112 **AGNI CONTROLS VS OTHERS**



### AGNI CONTROLS is the only company Which provides display of complete

scheme, elaborately explaining the entire FK-5-1-12 system operation.

#### TYPICAL ISOMETRIC SCHEMATIC DRAWING OF FK-5-1-12 GAS FIRE SUPPRESSION SYSTEM ALONG WITH FIRE DETECTION & ALARM SYSTEM FOR SERVER ROOM



SI. NO.	SYMBOL	PART NO.	DESCRIPTION
01.		BIH920-CT -140-2S	bdd-wd-5112 EXTINGUISHING CYLINDER BANK CABINET TYPE ENCLOSURE
02.	N=1 TO N=3	IH918	FK-5-1-12 DISCHARGE NOZZLE
03.		BIH217-65/25 -CS	65 NB/25 NB C.S SEAMLESS Sch.40 PIPE
04.	CO-1 TO CO-6	BIH156	CONVENTIONAL COMBINED PHOTO-ELECTRIC & FIXED TEMPERATURE DETECTOR
05.	MGDS	IH029/1	MANUAL GAS DISCHARGE STATION
06.	(F)	IH147	ELECTRONIC DUAL TONE HOOTER WITH FLASHING LAMP
07.	is (ii)	IH028/1	INHIBIT SWITCH
08.	1	IH140-ETP	ELECTRICAL TRIP PANEL
09.		ES04 049	2C X 1.5 SQ.MM ARMOURED FRLS CABLE





AGNI CONTROLS is ISO Certified
Company for manufacturing gas
suppression system, and our QAP
(Quality Assurance Plan) ensure
proper quality of the system in all
the stages.

Many Contractors do not have ISO certification for manufacturing & installing gas suppression system.

QAP concept is not existing with many of the contractors.







As a customer, you need not accept / permit to execute the FK-5-1-12 system as site fabricated, because:

When execution depends on local skill, it is very difficult to ensure proper integration of the system.

There are many critical instruments like solenoid connection, pneumatic actuators to ensure the proper function of the entire FK-5-1-12 system.





belle-we series.. High pressure fixed installation FK-5-1-12 cylinder banks are fully pre-assembled integrated and tested for its proper operation at the factory itself.

Presently, Many Customers and consultants are strongly recommending to use factory preassembled and tested FK-5-1-12 cylinder bank assembly





### **CONCLUSION:**

WE DIFFER FROM OTHERS, BECAUSE WE SUPPLY FK-5-1-12 SYSTEM AS A PRODUCT, NOT AS A SITE FABRICATION & SITE PROJECT.

THAT IS WHY, WE ARE OEM SUPPLIER FOR MANY REPUTED COMPANIES.





SL.NO	PART NO.	DESCRIPTION
01	IH901 AA-BB-CC-DD- EE	balawa-FK-5-1-12 Gas Fire Suppression Cylinder Bank Assembly using Master and Slave Cylinders principle
		MODEL SELECTION:  AA - Water Capacity of Cylinder ( 80 / 140 ltrs ) BB - Number of Cylinder ( 1,2 , 3 ,XX ) CC - SR for Single row and DR for Dual row DD - Frame Type (FR) / Cabinet Type (CT) EE - Quantity of FK-5-1-12 in Kgs  EXAMPLE: FRAME TYPE
1.1	IH901 80 / 04 / SR / FR / 60	balawa-FK-5-1-12 Gas Fire Suppression Cylinder Bank Assembly using Master and Slave Cylinders principle  a. 1 No. 80 litres water capacity Cylinder filled with 60kgs of FK-5-1-12 with Solenoid valve with Pressure Gauge and switch.  b. 3 Nos. 80 litres water capacity Cylinder filled with 60kgs of FK-5-1-12 with Slave Valve with pneumatic actuator with pressure guage.  c. 1 Set. Tubular Frame Assembly with powder coating finishing to support 4 nos.of Cylinders with manifold (header) matching flange, safety valve, non return valve, discharge hose, actuation hose, terminal boxes, non ferrous fasteners and other required accessories.





		EXAMPLE: CABINET TYPE
	IH901 80 / 04 / SR / CT / 60	balawa-FK-5-1-12 Gas Fire Suppression Cylinder Bank Assembly using Master and Slave Cylinders principle
		a. 1 No. 80 litres water capacity Cylinder filled with 60kgs of FK-5-1-12 with Solenoid valve with Pressure Gauge and switch.
1.2		b. 3 Nos. 80 litres water capacity Cylinder filled with 60kgs of FK-5-1-12 with Slave Valve with pneumatic actuator with pressure guage.
		c. 1 Set. Cabinet type enclosure Assembly with powder coating finishing to support 4 nos.of Cylinders with manifold (header) matching flange, safety valve, non return valve, discharge hose, actuation hose, terminal boxes, non ferrous fastners and other required accessories.





MODULAR TYPE SINGLE CYLINDER KIT ASSEMBLY		
		bala-wa-FK-5112 Detection & Control Extinguishing Cylinder Assembly
		a. 1 set of bala-wa-5112 34 Itrs Cylinder with Valve filled with XX kgs of FK-5-1-12, Solenoid Actuator, Discharge Hose, Check Valve and other related accessories.
02	IH910-34-XX -46/Z2/D1-AC	b. 2 nos of Discharge Nozzle
		c. 1 set of Cabinet type Enclosure Assembly to fix 34ltrs cylinder integrated with pressure switch
		d. Conventional Microproccessor Based 2 Zone Fire Alarm Panel with Single gas discharge module with inbuilt charger and with battery





MODULAR TYPE SINGLE CYLINDER KIT ASSEMBLY		
03	IH911 -34-XX-CT	bala-wa-FK-5112 Modular type Extinguishing Cylinder kit Assembly
		a. 1 set of bala-wa-5112 34 ltrs Cylinder with Valve filled with XX kgs of FK-5-1-12, Solenoid Actuator, Discharge Hose, Check Valve and other related accessories.
		b. 2 nos of Discharge Nozzle
		C . 1 set of Cabinet type Enclosure Assembly to fix 34ltrs cylinder integrated with pressure switch



Please contact our Marketing Division at

Phone: +91-044-24812420

**Email**: marketing@agnicontrols.com/engineering@agnicontrols.com

Visit us at : www.balafire.com