

# STANDARD REQUIREMENTS

THE STANDARDS

## STANDARD SYSTEM

**FIXED FIREFIGHTING SYSTEM – GAS EXTINGUISHING SYSTEM  
EN 15004 (1-10)**

DESIGN QUANTITY  
BY VOLUME %

GAS HALOCARBON DESIGN QUANTITY %			
FUEL	HFC227EA	FE 25	HFC23
CLASS A	7,9	8,71	16,3
HIGER HAZARD CLASS A	8,5	10,74	16,3
CLASS B	9,0	11,31	16,4

## STANDARD COMPONENT

**CE MARKING OF COMPONENTS  
EN 12094 (1-16)**

## ITALIAN STANDARD MAINTENANCE

**UNI 11280**  
PRELIMINARY INSPEC-  
TION AND MAINTENANCE  
OF THE GASEOUS FIRE-  
EXTINGUISHING SYSTEM".  
(THIS STANDARD IS  
MORE STRINGENT COM-  
PARED TO THE UNI EN  
15004:2008-1 AND  
ISO 14520:2006:1)

HFC 125  
HFC 227EA  
HFC 23

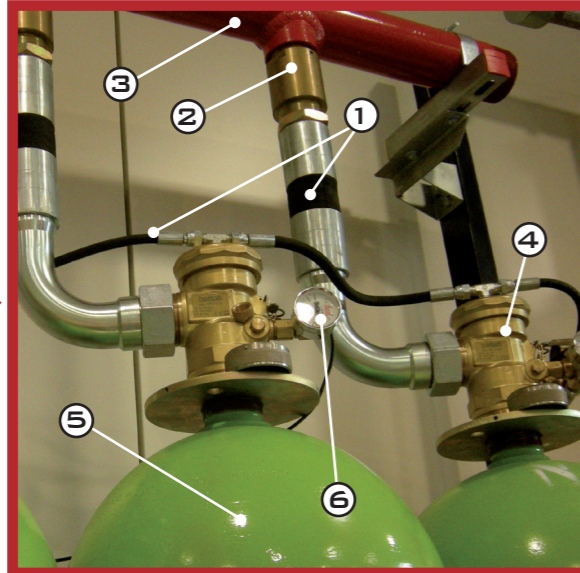
### ADVANTAGES

**THE MAXIMUM SPEED WITH  
MINIMUM SPACE REQUIREMENT.**

- FAST FIRE FIGHTING (10 SEC.)
- REQUIRES SMALL SPACE FOR CYLINDERS STORAGE
- NO RESIDUAL UPON DISCHARGE
- BETTATI'S CERTIFIED COMPONENTS EN 12094. COMPLIANCE CE 0068
- NEW 200 LITER WELDED-CYLINDER (WORKING PRESSURE 42 BAR)



EN 12094-1  
CONTROL PANEL



- ① - EN 12094-8 CONNECTORS (DISCHARGE AND PNEUMATIC HOSE)
- ② - EN 12094-13 CHECK VALVES AND NON-RETURN VALVES
- ③ - PED 97/23/CE MANIFOLD DISCHARGE
- ④ - EN 12094-4 CONTAINER VALVE AND ACTUATOR

- ⑤ - T-PED 99/36/CE CYLINDER
- ⑥ - EN 12094-10 PRESSURE GAUGES AND PRESSURE SWITCHES

EVERY 12 MONTHS CARRY OUT A CHECK OF ENCLOSURE INTEGRITY USING THE MACHINE DOOR FAN INTEGRITY TEST



**bettati**  
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fire protection technology

# OUR HISTORY

THE EVOLUTION OF HALOCARBON SYSTEM BETTATI

1996



ITALIAN LAW D.M. 26.3.96- HALON GASES PHASED OUT BECOMES CHARTER MEMBER OF THE "CONSORZIO AMBIENTE E SICUREZZA" (ENVIRONMENT AND SECURITY AUTHORITY) FOR THE REPLACEMENT OF HALON SYSTEMS.

2004



PARTICIPATES AT "SICURTECH" TRADE FAIR AND PRESENTS BETTATI'S VALVES AND COMPONENTS FOR HFC227EA, HFC125, HFC23.

2006



ITALIAN LAW D.M. 20.12.05 - HCFC FIRE FIGHTING SYSTEM WITHDRAWAL. UNDERSIGNS A PROGRAMMED AGREEMENT WITH ITALIAN MINISTRIES MATT AND MAP - N° 2566/RAS.

2008



GAINS THE CE CERTIFICATION FOR INERT AND HALOCARBON COMPONENTS ACCORDING TO DIRECTIVE 89/106/CE AND EN12094. COMPLIANCE CERTIFICATE CE0068 - 047/2008.

2010



SINCE 1997 HAS SOLD MORE THAN 300 METRIC TON OF HFC WHICH CORRESPONDS TO ABOUT 1.600 SYSTEMS AND HAS REDUCED PRODUCT DEFECTS FROM 2% TO 0,5%.

HFC (227EA, 125, 23) HYDROFLUOROCARBONS ARE COMPRESSED AND LIQUEFIED GASES. HFC SYSTEMS ARE NEEDED FOR FIRE PROTECTION IN A NUMBER OF CASES WHERE SPEED, SPACE AND SAFETY ARE CRITICAL.

# HALOCARBON GAS SYSTEMS

BETTATI ANTINCENDIO

## HFC227EA



### FEATURES:

HFC 227ea can be used in all major classes of fire; it is safe, clean and electrical non-conductive. It is particularly suited for telecommunications facilities, computer rooms and process control centres. Due to its low toxicity level, HFC 227ea is suitable for protecting areas that are normally occupied by people and it is environmentally friendly with ODP=0.

## HFC125 - (FE25™)



### FEATURES:

Due to its low boiling point (-48.3°C), HFC125 is the most indicated halocarbon extinguisher for the Halon 1301 replacement. It can be stored in the same kind of containers and covers a variety of end uses. The new PBP Model demonstrates that it can also be used for areas occupied by people if the exposure time is suitably reduced.

## HFC23



### FEATURES:

HFC23 extinguishes fires without contaminating sensitive computer components, medical equipment and electronic devices. It is also an effective alternative because of its far lower toxicity and extinguishing concentration. It is chemically and biological un-reactive and produces no serious consequences to persons, therefore it is particularly applicable where high extinguishing concentrations are needed in order to improve margins of safety or where temperatures are equal to or less than 0° C.

### THE EUROPEAN REGULATION CE 842/2006

- DOES NOT IMPOSE A TEMPORAL LIMITATION TO THE USE OF HFCs IN FIRE PROTECTION SYSTEMS.
- DEFINES PROCEDURES WHICH SEEK TO CONTAIN, PREVENT AND THEREBY REDUCE ANY HFC EMISSIONS INTO THE ATMOSPHERE.