



**WINIFRED CLEANROOM & ESD**

**PRODUCTS(HK) LTD**

CONTAMINATION FREE AIRFLOW VISUALISATION

IN CLEAN ROOMS ACCORDING TO ISO 14644-3

## BACKGROUND OF APPLICATION

CLEANROOMS ARE DYNAMIC SYSTEMS. PEOPLE AND GOODS ARE CONSTANTLY IN MOTION. INSTALLATIONS, PRODUCTION LINES AND MACHINES ARE PERIODICALLY ADJUSTED TO THE PRODUCTION OF DIFFERENT PRODUCTS. ACCORDING TO THE RELEVANT STANDARD ISO 14644-3 ANNEX B7 THE OPERATORS OF CLEANROOMS ARE OBLIGED TO GIVE PERIODICALLY EVIDENCE OF THE ACTUAL AIR FLOW SITUATION BY A STATE OF THE ART AIR FLOW MAPPER (CLEAN ROOM FOGGER).



## AFM FOG PISTOL

SISTEMA'S AFM FOG PISTOL DOES OFFER AN UNMATCHED LOW WEIGHT (974 G) AND COMPACT DESIGN (27,5 X 22,75 ) SUPPLYING AN UNSEEN MOBILITY AND FOG OUTPUT FOR AIR FLOW VISUALISATION AND TRACKING STUDIES IN CLEANROOMS ACCORDING TO ISO 14644-3 ANNEX B7.



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## FOG OUTPUT CHARACTERISTICS

PAPER WHITE FOG OUTPUT BASED ON HOT WIRE TECHNOLOGY

HIGH DENSITY & LONG STANDING

60 MINUTES OF AUTONOMY BASED ON BATTERY PACKAGE AND 60 ML TANK

NON-CONTAMINATING MEDIA (DI WATER WITH LOW PERCENTAGE OF GLYCOL)

VARIOUS ACCESSORIES AVAILABLE (RAKE, SMALL AREA CAP, MULTIPLE SINTER CANDLES)

## DESCRIPTION OF AFM FOG PISTOL

MINIATURIZED, LOW WEIGHT CLEAN ROOM FOG GENERATOR (CONDENSATION FOG GENERATOR)

CASING IN ALUMINUM ANODIZED SILVER/CYAN BLUE/BLACK

FOG TO CLOUD MODULATION 'ZERO MOMENTUM'

60 ML REFILLABLE TANK

CLEAN NON HARMING MEDIA, CAS CLEARED DI-WATER W/GLYCOL FLUID MIX

VARIOUS DEMOUNTABLE SINTER ELEMENTS PLUS 2-SECTION RAKE (FOG WAND)

RECHARGABLE BATTERY, 15V / 3200MAH, 48WH, CE CERTIFIED (RECHARGABLE IN 60 MIN)

BATTERY CHARGER 115V / 230V





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## WEIGHT, DIMENSIONS AND AUTONOMY

WEIGHT, EMPTY: 974 GRAMM

DIMENSIONS (L X H X W): 27,5 X 22,75 X 5,5 CM

MAX. CYCLE TIME: 60 MIN OF AUTONOMY (DEPENDING TO OPERATION MODE)

MEDIA CONSUMPTION PER MINUTE:  $\pm$  1 ML

## TYPICAL APPLICATIONS

AIR FLOW MAPPING & VISUALISATION OF AIR INFILTRATION INTO/OUT OF CLEANROOMS ACCORDING TO ISO 14644-3.

SMOKE TESTING OF BIOSAFETY CABINET ACCORDING TO EU 12469 & FUME HOODS ACCORDING TO ISO 14175-4

CONTAINMENT TRANSPORT STUDIES ON PROCESS TOOLS & OPTIMIZATION OF EQUIPMENT LOCATIONS

CLEANROOM LEAK TESTS (CLEANROOMS TO BE PUT UNDER 80-100 PA POSITIVE PRESSURE. THANKS TO THE FOG PISTOL DISPERSED DENSE, LONG STANDING FOG OF HIGH VOLUME

ALLOWING LEAK DETECTION STUDIES. THROUGH LEAKS AT WALLS, CEILING, WINDOWS, DOORS ESCAPING FOG POINTING AT SILICON IMPROPERLY APPLIED AND NOT PROVIDING SUFFICIENT TIGHTNESS.

DETECTION OF UNSUSPECTED PARTICULATE AND GASEOUS CONTAINMENT SOURCES

SUITABLE FOR RECOVERY TESTS

CLEAN ALTERNATIVE FOR TOXIC (SULPHUROUS ACID) GLASS TUBES BEING WIDESPREAD IN USE AT AIR FLOW STUDIES OR LEAK TESTS.

SUITABLE FOR SEGREGATION TESTS (MANDATORY IN UPCOMING PART 11 OF STRD.) ACC. TO WHICH FOG EITHER IS TO BE GENERATED

RIGHT OUTSIDE A LAMINAR AIRFLOW SYSTEM IN ORDER TO PROPERLY ASSESS THE QUALITY OF THE BARRIER EFFECT.

ENABLING SMOKE TESTS OF DIFFERENTIAL PRESSURE < 5 PA