

www.wepune.co.in

CRITICAL EQUIPMENT FIRE SUPPRESSION SYSTEMS

CNC AND EDM MACHINE

"A fire outbreak can catch you offquard when least expected. Your CNC and EDM machines are highly vulnerable to a fire outbreak."

CAUSES OF FIRE

- Presence of Neat cutting oil with flash point as low as 130°C
- Presence of Oil fumes within the grinding envelope is more hazardous than the oil itself
- Tool crash, grinding sparks or extremely hot flying metal chips could ignite in the above scenario





CAUSING

- Business downtime
 Infrastructure loss
- Production loss
- Loss of human life
- Revenue loss

IF, A FIRE IGNITES, THEN:

- Dense black smoke makes firefighting a challenge
- Presence of neat cutting oil for grinding becomes fuel for fire
- Fire, if not, caught early and knocked down at this moment, can turn into an inferno in no time

WEFIRE™ Solution

- A linear pneumatic WEFIRE™ Heat Detection Tube is routed near the fire hazard which senses the heat of the fire in its incipient stage
- This immediately activates clean agent gas discharge through discharge nozzles, suppressing the fire at its source
- The gas is non-conducting, non-toxic and leaves no residue (CNC); hence does not contaminate the oil, neither does it spoil expensive electronics

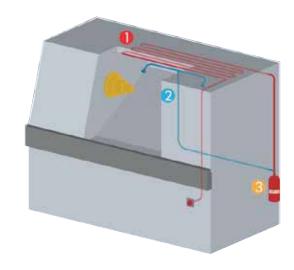
WORKING PRINCIPLE CNC - WEFIRE™ NOZZLE DISCHARGE SYSTEM

WEFIRE™ Heat Detection Tube is routed inside, on the ceiling and walls of the CNC, very close to the grinding or machining operation. Strategically placed nozzles connected to the cylinder via a piping network, above the grinding ensures prompt fire knockdown.

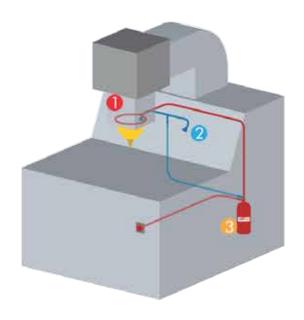
WEFIRE™ recommends the use of following clean agent extinguishing gas for CNC's

- 3M's Novec 1230/FK-5-1-1-2 based extinguishing agent
- FM200/HFC

Optionally, the WEFIRE™ system can also be connected to a Manual Actuator.



CNC MACHINE



EDM MACHINE

WORKING PRINCIPLE ON EDM - WEFIRE™ NOZZLE DISCHARGE SYSTEM

WEFIRE™ Heat Detection Tube is routed at the base of the ram, just above the typical source of fire in an EDM. This tube is connected with the Nozzle Discharge System cylinder containing the extinguishing gas. Nozzles for gas discharge are installed either on the sides of the ram or at the far ends of the oil tank.

WEFIRE™ recommends the use of Bioversal® QF-R Foam as the extinguishing agent which suppresses fire on the principle of

- Cooling cools environment around fire
- Chemical reaction breaking chemical chain of the fire
- Smothering encapsulates fuel, thus creating a blanket
- Starving cutting off oxygen

Bioversal QF-R further also traps combustible gas compounds that are released by the burning fuel, preventing further explosions and enhancing visibility and safety during the fire.

Optionally, the WEFIRE™ system can also be connected to a Manual Actuator.

ADVANTAGES





Quick detection







- No clean up in the equipment required post gas discharge
- Turnaround time to re-instate the system is a few hours so minimal damage and downtime
- Virtually ZERO maintenance
- Can be integrated with the BMS, Fire alarm system, SCADA

ABOUT US



WEFIRE™, a brand owned by Warrier Electronics® has an experience of installing several hundreds of WEFIRE™ critical component fire suppression systems across India and parts of Malaysia.

Established in the year 2010 in Pune (India), a period when startups were looked at ambiguously, Warrier Electronics® did not just survive, but thrived and achieved various growth milestones from being a sub-dealer to a dealer to a manufacturer within a decade; and has become the default choice of various OEM's for WEFIRE™ critical component fire suppression systems, serving across India.

At the heart of the company, lies its core values viz Excellence, Innovation, Integrity and Respect. These values not only translate into a niche & a reliable end product but also in the way its team reciprocates to client needs at every step. A company is only as good as its people & product and its product reflects the quality, intelligence and excellence of its people!

www.wepune.co.in





WARRIER ELECTRONICS
"Sticker House"
180/1, Ravet, Ganesh Nagar,
MIDC Road, Dehuroad,
Pune-412101.

- **/** +91 8806 44 99 00
- (a) info@wepune.co.in
- www.wepune.co.in

Authorized partner:

WE COMMUNICATE WHAT WE CAN ACHIEVE & WE ACHIEVE WHAT WE COMMIT