

TRANSFORMER

SUPPRESSION SYSTEM

THE I-CAT LOCALISED SUPPRESSION SYSTEM – DESIGNED TO SUPPRESS TRANSFORMERS AND ASSOCIATED INFRASTRUCTURE FIRES

THE SYSTEM USES WATER MIST WITH A FOAM ADDITIVE

I-CAT systems incorporate **AQUA COLLISION®** technology to create a fine atomised mist, charged with kinetic energy to penetrate the heat radiation caused by fire, it leads to gradual cooling without causing thermal shock to the equipment. A foam additive, **CLEAVOS AFFF® / FFF®** is added to the system to prevent any Hydrocarbon fires (Class B fire) from spreading in the event of main and conservator tank failure.

I-CAT's Localised Suppression Systems incorporate nozzles that were tested in accordance with UL711 guidelines. The systems are proven safe against conductivity on electrical apparatus and can be used on electrical equipment up to 100 kV.



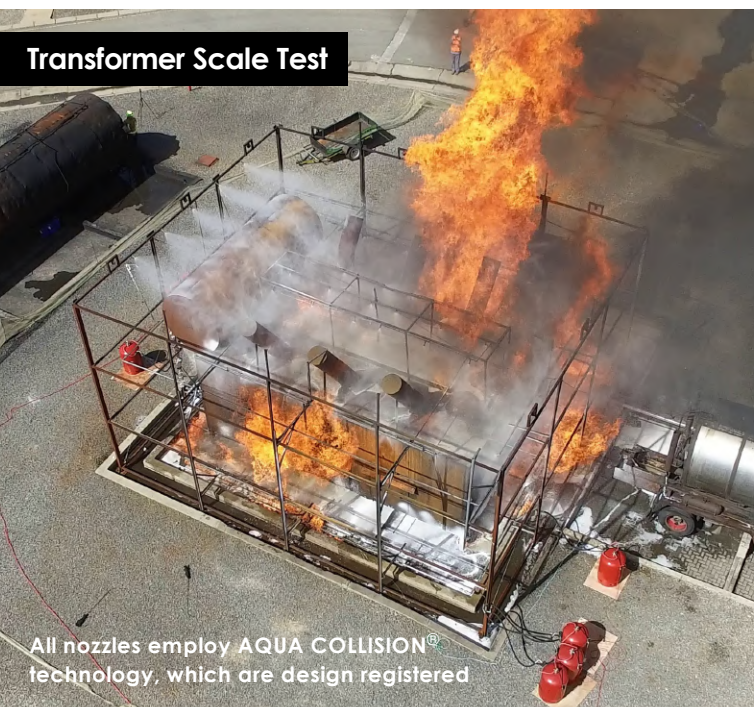
SYSTEM OBJECTIVES

- ❖ Effective fire detection and suppression.
- ❖ Reducing downtime and cleanup after discharge with non-invasive suppression agents.
- ❖ Considers the environment.
- ❖ Easy installation and operation.
- ❖ Cost effective maintenance.

SYSTEM PROPERTIES

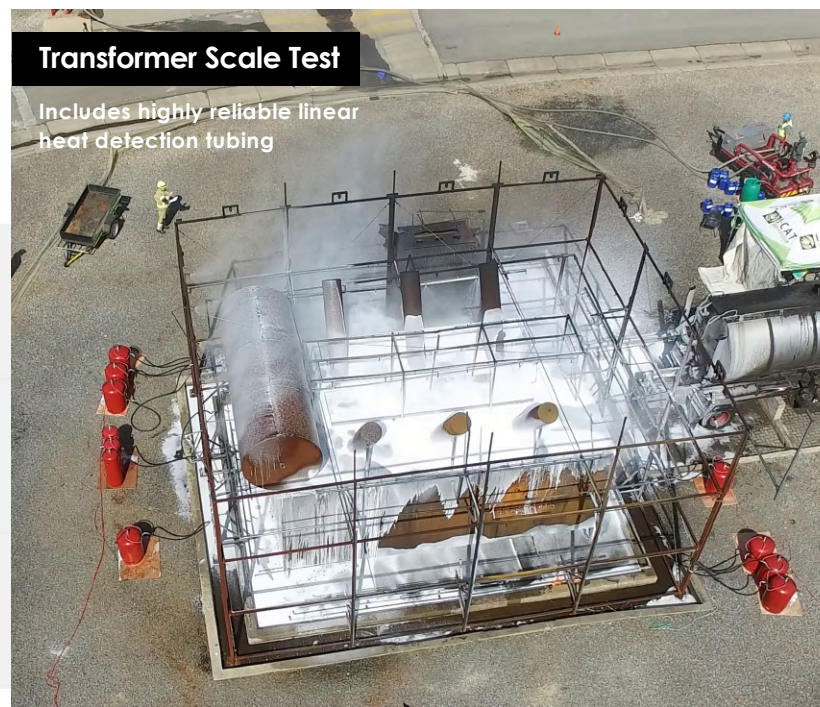
- ❖ The system is available as:
 - ❖ Automatic and manual activation and suppression.
- ❖ Operating temperatures -40°C to 60°C.
- ❖ Seamless integration with third party detection and fire alarm systems.
- ❖ Designed in accordance with NFPA 750 guidelines.

Transformer Scale Test



All nozzles employ AQUA COLLISION[®] technology, which are design registered

Transformer Scale Test



Includes highly reliable linear heat detection tubing

Water mist as a suppression agent is effective in displacing oxygen through its rapid expansion by combating the radiated heat from a fire, forming an inert environment. Through its gradual cooling properties, it controls the risk of re-ignition and the spread of a potentially devastating fire. The water mist prevents thermal shock and poses no threat to hot surface equipment that may crack or damage through rapid cooling. The systems have a Class A, B and C classification. The system has been tested on scale fires according to NFPA 750: Standard on Water Mist Fire Protection Systems.

USE AND BENEFITS

The transformer LSS is designed to improve and save on maintenance costs. Once a system has been activated, it will require a foaming agent and water refill, detection tubing repair and system pressurisation with nitrogen or air. All systems can be reinstated on site and be placed back into service within minutes.