

“THE FOAM EXPERTS”

When a potential or existing customer has a special or specific requirement from Fire Fighting Foam, they ask “The Foam Experts” for help.

The Aviation industry has its own specific requirements, not only with foam but with the equipment needed to successfully complete their task. The essence of an aviation fire fighter is speed, get to the incident fast, extinguish fast and secure the area fast. To achieve this they need rapid vehicles with copious supplies of water and foam and the equipment to put the water foam mix onto the fire. What that equates to is massive vehicles, with two engines, vast quantities of foam concentrate and water and massive foam making nozzles. The sum total of all this, is the vehicles are extremely heavy, yet they still have to travel, to essential areas of the airport, in less than two minutes. Inevitably this leads to very expensive, bespoke vehicles.

If an airport fire appliance could be constructed from a “standard” commercial chassis it would be considerably cheaper, much lighter and quicker, but it wouldn’t have the capacity to carry enough media to extinguish a fire. This was a dilemma that needed resolving and so the aviation regulators tasked the foam producing industry to design a foam concentrate that would extinguish faster, using smaller quantities, through lighter, non-aspirated nozzles and still secure the fire afterwards. Two levels of fire performance already existed within ICAO (International Civil Aviation Organisation) they were Level ‘A’ and Level ‘B’ so what was needed now was a better performing more efficient Level ‘C’.

Solberg Foams jumped at the opportunity to help and the Research and Development team quickly came up with a new foam concentrate, confident that it would do the trick.

The next stage was for the regulators to test all the new foam concentrates submitted, from the various foam producers and formal tests were completed at an independent fire test centre in France. The results, using an indoor test facility, highlighted that only one foam concentrate passed at the new, required, Level ‘C’ – Solberg Foams “The Foam Experts” had done it again, the only foam manufacturer to satisfy the needs of a special customer. But wait, this was just a small scale test, what would happen on a “real” fire? The only way to find out was to validate the test results, using a large scale fire at the biggest fire test facility that could be found. The largest surface area, test fires were located at the Tyndall Airport Base in Florida. Two pits with a surface area of 700 sqm each meant “real” tests could be done, so using a typical airport fire appliance, the new foam was put to the test. With an application rate of just 3.75 lpm/sqm, through non-aspirating water nozzles, a series of three fires were lit and extinguished and all the data collated. As expected, the full scale fires validated the figures gained from the smaller scale tests done in France. This truly was an exceptional foam.

If you have a special requirement or need, from a foam concentrate, contact “The Foam Experts” at Solberg Foams.