

MAX FIRE EVAC SYSTEM

Who Are Checkmate?

Checkmate Lifting & Safety Ltd are a privately owned SME, triple Queens Award winners and a world leader in the development, design and manufacture of innovative height safety equipment and solutions. Our own in-house training division H.A.R.T, is also able to provide an extensive array of height safety courses including RUK and GWO approved. Facilities include a 22m tower, 35m of confined space tunnels and mobile rigs to deliver both working at height, rescue, and confined space training.

With over thirty years experience in the manufacture of textile lifting slings and lashings our lifting division has vastly experienced and dedicated personnel able to tailor products and equipment precisely to our customers' needs.

The Problem

Turbine fires are the second most common cause of turbine incident and current rescue equipment is not rated for use in fires or for rapid descents.

Two personnel trapped on top of a burning nacelle in Holland.

Tragically neither survived. One jumped to his death whilst the other burnt to death on the turbine.

These gentlemen were aged just 19 and 21.



The Brief

Checkmate were commissioned by Vattenfall to design and develop a new system to provide rapid evacuation out of turbines in the event of a fire. Vattenfall remained involved throughout the process, and brought invaluable industry and application knowledge to the development of the solution.

In this instance the turbine manufacturer MVOW had raised questions regarding the implementation of any new systems and how they would interface with various turbine types, specifically the ones on Thanet and Kentish Flats wind farms.

The Solution

The Max Fire Evac. The only system which substantially increases survival rates in the event of a fire in the nacelle. With D2 Technology from UK based company International Safety Components, Checkmate have developed a 'system' with reduced escape times and increased resistance to heat by utilising TEIJINs Technora Aramid Fibre Ropes, which have a thermal range of up to 500°C.

The MAX Fire Evac is by no means a substitute for improved fire safety and reduced fire risk, however as a last resort when you need resilience, dependability and performance it is the most viable option in the market place to date.

Checkmate, in partnership with ISC and TEIJIN, has developed an industry leading descender which has set new standards for the Wind Industry. After extensive trials at our dedicated testing and training facility in Kent, the Max Fire Evac is ready to emerge across the European marketplace as the industry standard - a standard that can save lives in the future.

The Max Fire Evac features:

- Cam feed for fast bail-out
- Technora rope - heat resistant up to 500°C
- Compact and lightweight step-in harness
- Up to 120m working length

Core Values and Leadership

Our core values can be broken down into six key areas:

Safety

From the ground up, Checkmate is built around a "SAFE" ethos; from conception of design, our business and culture, and ultimate user safety.

Innovation

Our values are simple: NEVER DUPLICATE - INNOVATE. Ask the right questions; think outside the box; never believe a solution can't be found and never stop learning.

Capabilities

Our capabilities result from a powerful combination of technical knowledge, attitude, experience and determination. Ranging from design, testing, manufacturing, installation, training and consultation.

Service

Providing excellent service to our customers is the driving force behind what we do at Checkmate. We supply technically innovative, cost effective products derived from knowledge and experience.

Customers

Our growth and continued development has only been made possible by the outstanding commitment and loyalty of our customers. This co-operation has led to many long term partnerships being developed both in the UK and around the world.

Quality

In addition to ISO 9001:2008, we have our own in house test facilities which are used extensively in product and materials development. These include an 85T tensile test bed, 9m 50kN dynamic drop tower, abrasion, salt spray and climatic chamber -40°C to +150°C with up to 95% humidity.

Sharing and Communication

By working closely with the turbine manufacturers and users, together with industry colleagues and partners, a solution was found and this is now being promoted to the market through website, video, literature, exhibitions, customer visits and training.

Follow links to video, and more information on our website.

<https://vimeo.com/118024688>

<http://www.checkmateuk.com/height-safety/products/descent-and-rescue/max-fire-evac/>

