

# CASE STUDY

## MOVING YOUR WORLD



## Installation of hose protection for glass manufacturer

### Project Overview

A leading manufacturer of glass packaging required support to reduce the risk of fire outbreaks within their manufacturing plants. Where hoses become damaged, there is a high risk of atomised oil igniting due to the high temperature of the plant. FUCHS UK suggested Renosafe Hose Protect, a range of protective covers/sleeving and shrouds.

### The Customer

The customer is a global supplier of sustainable and infinitely recyclable glass packaging with 41 glass production facilities in total, four of which are in the UK.

### The Problem

The customer was having too many incidents involving fire outbreaks at multiple production facilities. The environment in a glass production facility is very hazardous, especially in the hot end of the facility where the glass is fed to the I.S machines through a furnace and reaches a temperature of around 1500 degrees Celsius. The next stage is where the glass reaches the forehearth and the temperature is still around 1200 degrees Celsius, with the surrounding equipment such as the feeder mechanism around the spout bowl area maintaining a constant temperature of over 600 degrees Celsius.

A recent stand-out incident was a machine oil fire due to a burst oil feed pipe. This oil feed is situated around the areas where a temperature of over 600 degrees Celsius is maintained which is too high for any machine oil on the market. The oil feed was leaking & atomised due to the feed pressure, it was then spraying onto the hot refractory equipment which soon set alight & spread rapidly due to the atomised spray fuelling the fire. Luckily, the quick actions of the machine operators contained the fire by activating the fire suppressant system. The customer therefore needed a solution to prevent a repeat incident.

## RENOSAFE HOSE PROTECT



A range of protective covers, sleeving and shrouds designed to cover any exposed oil feed piping and contain high-pressure bursts from spraying out into high-temperature areas where oil could ignite

FUCHS LUBRICANTS (UK) plc  
New Century Street, Hanley,  
Stoke on Trent, ST1 5HU  
Telephone: +44 (0)1782 203700  
E-Mail: [contact-uk@fuchs.com](mailto:contact-uk@fuchs.com)  
[www.fuchs.com/uk](http://www.fuchs.com/uk)

[/fuchslubricantsuk](https://www.facebook.com/fuchslubricantsuk) [@fuchslube\\_uk](https://twitter.com/fuchslube_uk) [/fuchs-lubricants-uk-plc](https://www.linkedin.com/company/fuchs-lubricants-uk-plc)



# CASE STUDY

## MOVING YOUR WORLD



### The Solution

FUCHS UK carried out a survey of the production facility to see how we could help the customer prevent similar incidents from occurring in the future. Colleagues from the FUCHS UK mining division suggested using Renosafe Hose Protect, a range of protective covers/sleeving & shrouds which cover any exposed oil feed piping and contain the high-pressure bursts from spraying out into dangerous areas where engineers and equipment are working. Renosafe Hose Protect is commonly used in a wide range of applications within the mining industry, such as covering high-pressure hydraulic feed pipes to a variety of machinery, due to the critical safety needs, especially in underground mines where any fire outbreaks are catastrophic.

The customer expressed great interest in this solution and agreed to pilot a trial project at the plant where the incident occurred.

The following suggestions were made:

- Hoses of the correct length/type should be fitted where possible and routed correctly to help prevent damage or wear
- All hoses where possible should be fitted with a cover to prevent oil from spraying onto a hot surface or atomising in the event of damage to the hose or a leak from a fitting
- Where it is not practicable to fit a cover, for example where steel pipes are used, then a shroud/cover could be used to deflect any leaking fluid away from an ignition source.
- For manifolds/control valves, a shroud with an access flap could be designed and fitted
- Due to the relatively low operating pressure and small diameter hoses, Renosafe Hose Protect Marine can be redesigned to a single rap cover and supplied in 5m lengths to be cut to size on-site
- Where multiple hoses are jointed together, a larger diameter cover can be used to surround them all
- For high-temperature applications, we can replicate the hose or manifold cover using an outer layer of Fire sleeve silicon-coated glass fibre

### Results & Conclusion

The customer was pleased with the outcome of the plant survey to introduce Renosafe Hose Protect. They have now ordered the relevant products to trial at one of their UK facilities. If they are happy with the product and trials, they will then look to install it on all machines at this facility for phase 1 of the project. Phase 2 will then be to implement the same improvements at the other three facilities in the UK before considering the other plants in Europe.



FUCHS LUBRICANTS (UK) plc  
New Century Street, Hanley,  
Stoke on Trent, ST1 5HU  
Telephone: +44 (0)1782 203700  
E-Mail: [contact-uk@fuchs.com](mailto:contact-uk@fuchs.com)  
[www.fuchs.com/uk](http://www.fuchs.com/uk)

[f /fuchslubricantsuk](https://www.facebook.com/fuchslubricantsuk) [@fuchslube\\_uk](https://www.instagram.com/fuchslube_uk) [in /fuchs-lubricants-uk-plc](https://www.linkedin.com/company/fuchs-lubricants-uk-plc)

