Fire Security is a Norwegian company specializing in repair, protecting and extending the life of electrical cables. We are offering our systems with specially trained personnel for applications worldwide.

For more information visit our website: www.fire-security.com
mail: headquarter@fire-security.com
Our coating has been tested in a hydrocarbon fire for 60 minutes.

Since Fire Security started in 1986 we have gained more than 25 years of experience in working with electrical cables. Over the years we experienced that cables coated with FS 5 or FS 1 came out looking far better than uncoated cables in the same environment.

In the mid-1990s we did our first lifetime extension projects. Mobil/ExxonMobil had experienced outer sheath cracking on their asset in the North Sea, Lancelot, Guinave and Excalibur. Fire Security successfully completed a lifetime extension campaign of these cables in 1996. When Perenco in year 2010 invited us to visit these platforms that were now a part of their asset portfolio we were delighted to see how well the lifetime extension program had worked. The cables that were experiencing cracking in 1996 and was treated by Fire Security with FS 5 then, was still today in excellent condition.

Further, over the years Fire Security has performed many lifetime extension projects and all of them with results that exceeds ours and the clients expectations, please refer to reference letters from satisfied clients.

We remain always available for consultations with our expertise if your company has assets that may cultivate the cables normal lifetime or if for some reason the cables are aging prematurely.

Best regards,

Hj. Håvard Tvedten
President
Fire Security
Life Time Extension of cables consists of the following:

- Bring back, upgrade fire protection
- Upgrade cables smoke class
- Short circuit delay in a fire situation

- Ozone Protection
- Increase the dielectric strength
- UV protection

- Mud protection
- Oil protection
- Chemical protection

- Bring back, upgrade insulation properties
- Repair cables where the outer sheath is damaged
FS GIVES YOUR CABLES NEW LIFE

The graph indicates FS cable coatings three main benefits:

1. Taking care of the cables ability to function

   We have to ascertain that the cables conductivity is in working condition before any further work is done.
   FS coatings have a very high insulation value and dielectric strength.
   This ensures that the electric safety is upgraded, improved and that the cables working capacities are maintained.

2. Upgrading the cables to meet today’s standards

   Standards are a lot more stringent than 15-30 years ago.
   FS coated cables are upgraded to meet today’s most stringent standards with regards to toxicity, smoke, emission, smoke toxicity, flame spread and fire resistance.

3. Minimizing detrimental effects

   Our working crew is normally from 2 men or more depending on the time schedule and bed space availability.
   The application of the FS coating is done while the cables are in operation.
   This again ensures a smooth normal operation for the installation.
This repair can be done under normal operation and no shutdown is required.

1. The damaged outer sheath of the cable is removed.

2. A metal shielding tape is used to effectively rebuild the cross sectional area of the damaged shield.

3. FS5 coating is applied by brush.

4. A fibre mesh is used to rebuild the insulation cross sectional area and to gain mechanical strength.

5. The area and insulation value is effectively rebuilt.

6. FS5 coating is applied to smooth finish the repair.

7. The affected cable is tied in place and sprayed with FS5 together with the rest of the cables on the cable tray.
FS5 is an ablative coating system, which in addition to be fire resistant is weather resistant, resistant to UV, ozone, oil, mud and chemicals. This system is water based, non toxic, highly elastic and has excellent adhesion.

To whom it may concern,

Total Exploration & Production, a branch of TOTAL Group, has used since 1998 Fire Security expertise in cable protection and repair on various sites ranging from the North Sea through Middle East to Indonesia.

Fire Security has been involved in several projects where cables already damaged by UV, oil and chemicals, early ageing, have been repaired and upgraded in technically.

It has effectively extended the lifetime of the cables and contributed to significant cost savings.

It is our experience that the cables repaired and protected 6 and 8 years ago are still in good working condition, cables in some cases were 25 years old at the time they were repaired.

Among all the projects Fire Security has performed for us, there has never been any accident or loss time incident, nor has any shutdown of production required as a result of their work.

We are pleased to give Fire Security and their coating systems our best recommendation.

Best Regards,

Patrick LEROUX
Total Exploration & Production
Head of Electrical Department

Tel : patrick.leroux@total.com
FS5 is an ablative coating system, which in addition to being fire-resistant is weather-resistant, resistant to UV, ozone, oil, mud, and chemicals. This system is water-based, non-toxic, highly elastic and has excellent adhesion.

Fire Security is a company specializing in the repair and protection of electrical cables, offering our systems with specially trained personnel for worldwide application. We do on-site survey & inspection, followed by a written report, and an offer.
Our products have been tested and approved by the world's leading international classification societies and authorities.

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