

Fiber Optic Solutions for Hazardous Areas

Cinch fiber optic solutions are at the core in providing connectivity for a specially developed communication backbone for harsh environment applications in hazardous areas.

Surface equipment and systems used in potentially explosive environments must be designed and certified to avoid the formation of energy densities which may ignite gases and dust in the immediate surroundings.

Working closely with industry experts, Cinch designed the Geo-Beam™ connector system which met the stringent requirements for this environment when coupled with a certified Ex “op is” transceiver, such as that from Microsens.

“Wipe and Mate” Expanded Beam Fiber Optic Connectors

Close cooperation with industry experts made it possible for Cinch to create a multichannel hermaphroditic connector which combines unrivalled optical performance and reliability within a form factor unheard of in the oil field industry.

The design of the Geo-Beam™ offers a flat mating surface protected by a glass window covering the expanded beam lenses. This allows for easy cleaning of the connector without a need for any special cleaning aids. Corrosion resistance even under extreme marine conditions is ensured by using high quality stainless steel.

An exceedingly reliable connector design has been achieved by a unibody construction which allowed for an IP67 certification even while unmated. Low insertion loss even under dirty mating conditions was achieved by using expanded beam technology.

Conclusion

By advancing technology for this new fiber optic based surface system, Cinch is reinforcing its commitment to develop solutions to aid safety in the oil and gas industry.

The high speed data link coupled with reliable and easy to maintain connectivity, ensures higher productivity resulting in lower NPT. This is one more step for Cinch towards its commitment to offer best in class service to its customers.

