Real-time well surveillance data is critical to make decisions about optimizing production, reducing risks, and ultimately maximizing returns. But, historically obtaining that data has been a challenge, due to the complexity of running and connecting lines long distances down hole and because of long-term reliability concerns in extreme environments. Because of this, operators are often operating blindly in terms of what is going on down hole, especially in the pay zone.

Baker Hughes, a GE company (BHGE), developed the **SureCONNECT™** downhole intelligent wet-mate system to solve this ongoing issue. The system is modular, enabling connection and re-connection of the upper completion components to the lower completion with hydraulic, electric, and/or fiber-optic lines. Leveraging the SureCONNECT system, operators can achieve real-time, interventionless monitoring and control across the entire wellbore of multi-trip completions—enabling them to make data-driven decisions to optimize reservoir performance and proactively mitigate risks for the life of the well.

**Increased reliability**

The SureCONNECT system utilizes a downhole wet-mate connector that houses up to five channels, and comes together to connect the upper and lower completions. Each channel supports two hydraulic lines, one electric line, or one six-fiber line. Using this modular approach, operators can choose the lines they want to include without customizing and designing a new system, driving reliability and consistency.

The system’s carriers align the connectors through a specially designed orienting mechanism.

**Applications**
- Multi-trip completions
- Offshore, subsea, and other complex completion designs

**Benefits**
- Allows downhole connection of electric, hydraulic, and fiber-optic lines in multi-trip completions
- Enables fullbore well monitoring, control, and flow profiling
- Delivers increased reliability with modular line connections
- Optimizes field and reservoir performance with actionable data-driven insights
- Reduces workover times and operating risks

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guide, ensuring proper connection, even in challenging downhole environments. The SureCONNECT system is also compatible with other downhole technologies used to shut off zones and optimize production, creating standardization across intelligent completion designs.

Optimized performance
For the first time, operators can achieve fiber-optic, real-time distributed temperature sensing (DTS) and distributed acoustic sending (DAS) monitoring across the entire wellbore, for the life of the well. The information gathered is processed through a fiber-optic interrogation unit at surface and turned into actionable, data-driven solutions. This means completions can now be designed to respond to changing reservoir conditions, optimizing production by shutting gas and water-dominant zones through remotely actuated sliding sleeves. The data also provides a better understanding of the performance of natural fractures, complimenting existing conventional well surveillance data to drive better placement decisions in future field developments.

Reduced risks
By incorporating the SureCONNECT system as part of the completion string above the production packer, it is possible to perform upper completion workover operations without retrieving the lower completion, which contains the intelligent completion components. These workover jobs could include the change-out of production tubing, installation/retrieval of ESPs, or even the repair of a safety valve. Eliminating the need to remove an operational lower completion during these workover operations significantly decreases required rig time, HSE risks, and equipment costs.

Contact your local BHGE representative or visit BHGE.com/SureCONNECT to learn how the SureCONNECT system can help you achieve fullbore well monitoring and control for the life of your well.