100% Survivability Rate in More Than 4,000 Intellitite Downhole Dual-Seal Dry-Mate Connectors Since 2004

Connectors ensure integrity of WellWatcher monitoring system permanent downhole electrical gauges for the life of the well.

**Background**

When Schlumberger introduced permanent downhole gauges in 1972, the gauges often did not last the life of the well. The most common reason for failure was a loss of electrical integrity, often a factor of the gauge connector’s seal.

In 2001, Schlumberger launched a development program to eliminate these failures. Research focused on the seals, antivibration and antishock devices, and cable connections. In 2004, the results of the development program were released in the form of the Intellitite* downhole dual-seal dry-mate connector.

Since that time, all premium WellWatcher* permanent monitoring systems have been supplied with Intellitite connectors.

**Technologies**

- Intellitite downhole dual-seal dry-mate connector
- WellWatcher permanent monitoring systems

The Intellitite connector has the highest reliability rating in the industry.

- Sealing is redundant or fully welded (connector is welded to cable).
- Cable anchoring device provides high resistance to axial loads.
- Antivibration and antishock design prevents backing off downhole.
- Mechanical collets ensure robust cable engagement.
- Standardized installation toolkit ensures consistent, correct makeup.
- Microleak detection system uses digital pressure test technology and software with predetermined leak acceptance rates to ensure accuracy and minimize errors.

Since 2004, Schlumberger has run more than 4,000 Intellitite connectors. No failures have occurred.