



36" Remote Tecno Plugs™ | MLNG-Dua, Bintulu, East Malaysia

The Petronas LNG Complex in Bintulu, Sarawak comprises three LNG plants owned and operated by Petronas' joint venture companies. This complex is one of the world's largest liquefied natural gas production facilities at a single location, with an annual production of 23 million tonnes.

As part of the Kumang Cluster onshore tie-in project, STATS were required to isolate 36'' Trunk Lines 3 and 4 while the lines remained at an operating pressure of 69 barg. The new pipelines to be tied-in will supply the onshore facility with gas from the Kanowit CPP located approximately 250km offshore Bintulu. Two STATS remotely operated 36'' Tecno PlugsTM were utilised, one in each trunk line, during the project to isolate the pipelines upstream of the tie-in locations.



STATS isolation technician Iain Reid, prepares 36" Remote Tecno Plug™ for deployment

STATS Remote Tecno PlugsTM were configured in a three module train, to allow the tools to negotiate multiple bends as they were pigged approximately 80 metres each to their set locations. The Remote Tecno PlugsTM were tracked and accurately positioned using through-wall communication. An extremely low frequency (ELF) radio control system sets and monitors the plugs throughout the isolation. The remote control system provides a high degree of flexibility and eliminates the need for tethers or specially modified pig-trap doors.

The Remote Tecno Plugs™ were constantly monitored and remained stable and in location for approximately seven days each while tie-in operations, which included close proximity hot work activities (welding), were completed. Finally the plugs were unset and reverse-pigged back to the receivers for demobilisation.

STATS Group managing director, Peter Duguid, said: "This project marks a significant milestone for STATS as these are the first Tecno Plug $^{\text{TM}}$ isolations carried out in Malaysia. There is great demand for STATS isolation technologies throughout South East Asia which we look to expand with future plans for a permanent base in region."

