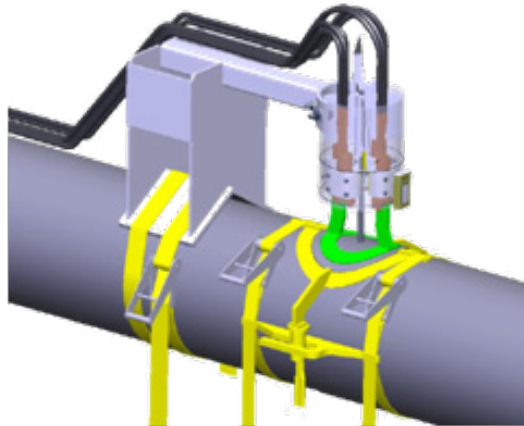


Tampen Link Pre-Heat System



DESCRIPTION

Forum supplied a system to control pre-heat coils during welding of a pipe stub onto the main gas pipeline between the UK and Norway (Tampen Link), all operations were carried out without shutting down production. Control of the sub-sea functions was provided by the lap-top running dedicated software. Control of the surface supplies and line insulation monitoring was provided by the PDP.

The system provides:

- Power for four generators (inverters), supplied by EFD, Norway
- Control of the generators
- Cooling of the generators
- Monitoring of the generators
- Cooling of inductive coils
- Cooling of OCM (output conditioning module) capacitors
- Monitoring of 16 type K thermocouples

Components supplied:

- Surface PDP (power distribution panel)
- Surface transformer
- Surface control lap-top PC
- Surface reeler and umbilical
- Sub-sea deployment skid

SUMMARY

- Sub sea Weld pre-heat control system.
- Used to hot tap into main gas pipeline from UK to Norway
- Forum System Part # A295-000-002