



ENGINEERING
EXCELLENCE



Pipeline Systems





BTC Lot C, near Ceyhan, Turkey

Pipeline Systems



Arctic conditions



Pump station building



Land fall, Turkmenistan

Fields of Expertise

- Pipelines in challenging terrain and environment, onshore and offshore
- System design and hydraulic modelling of complex pipeline systems
- All kind of pipeline stations and facilities (pump/compressor stations, metering stations, pressure reduction stations, pigging stations, line valve stations, terminals and tank farms)
- ILF ranked #12 in the category „Pipelines“ (Source: ENR 2014 - Top International Design Firms)”, worldwide

Highlights

- Extreme terrain in mountains
- Winter construction conditions, arctic design, permafrost
- Routing through rainforest and swamp
- Design for offshore pipelines up to 200 m water depth, offshore routing up to 800 m water depth
- Oil and gas pipelines up to 56" in length, high pressure pipelines up to 80" for fresh water and water supply for oil fields
- Rehabilitation programmes

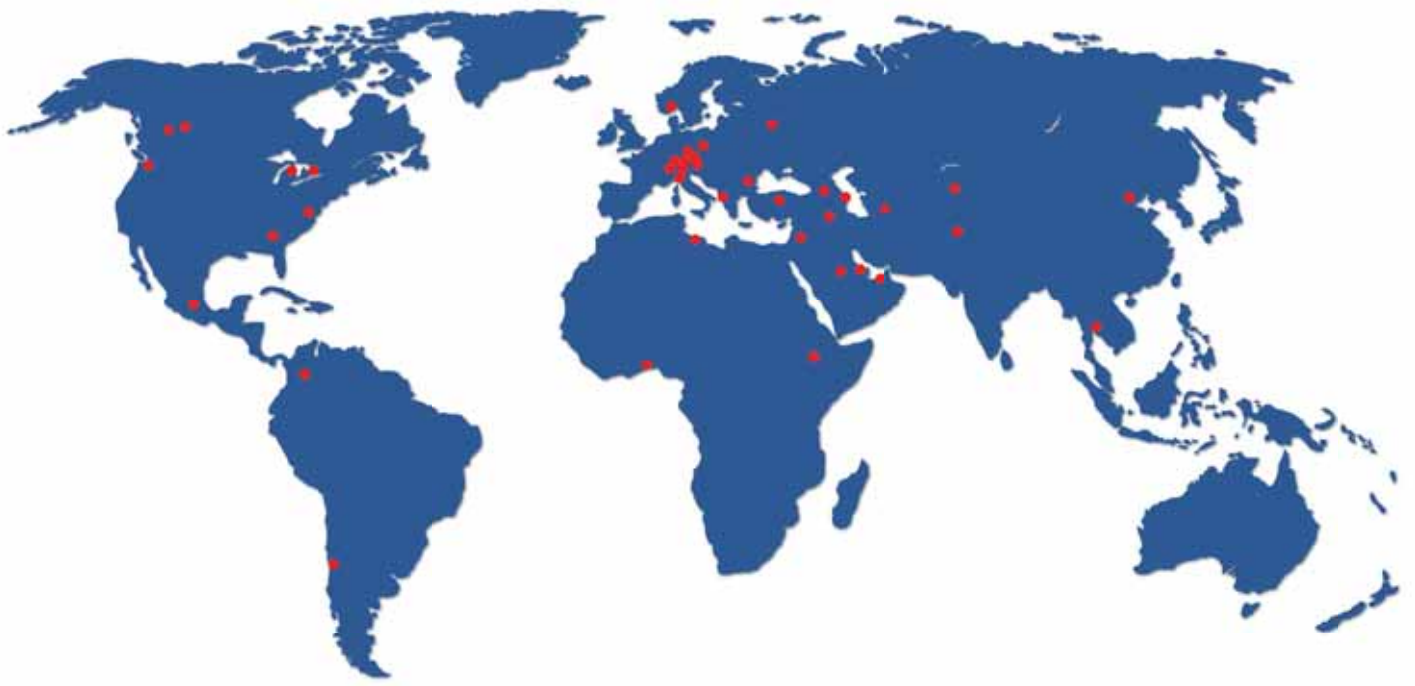
Selected References

- Baku-Tbilisi-Ceyhan (BTC) Crude Oil Pipeline, > 1,000 km oil pipeline, 46", 42", 34", 4 pumping stations, Turkish section
- Trans Anatolian Gas Pipeline, > 2,000 km gas pipeline, 56" - among the largest pipelines in terms of both diameter and CAPEX, Turkey
- Trans Asia Gas Pipeline, 1,825 km gas pipeline, 98 bar, 8 compressor stations, Uzbek-Kazakh section
- Trans Adriatic Pipeline - FEED, offshore 130 km, 36" and onshore 290 km, 48", Italy/Albania/Greece
- Abu Dhabi Crude Oil Pipeline Project (ADCOP), 403 km oil pipeline in extremely mountainous terrain, 48", 90 bar, United Arab Emirates
- Common Seawater Supply Project (CSSP), > 390 km multiple pipelines, 64", 12.5 MMBWPD, South Iraq

ILF Services

ILF provides all services required for the successful implementation of pipeline system projects. These services include:

- Overall transportation modelling, pipeline system optimization
- Corridor selection, centerline definition and Right of Way acquisition
- Environmental and Social Impact Assessment
- Conceptual design, Basic engineering/ FEED, detailed engineering, studies, technical due diligence
- EPCM incl. procurement, construction and commissioning management services
- PMC incl. procurement, construction and commissioning management services
- Technical safety and loss prevention: HAZID/HAZOP, SIL/LOPA, QRA studies, escape, evacuation and rescue assessment, fire and explosion safety studies, emergency and oil spill response plans
- Project risk assessment



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