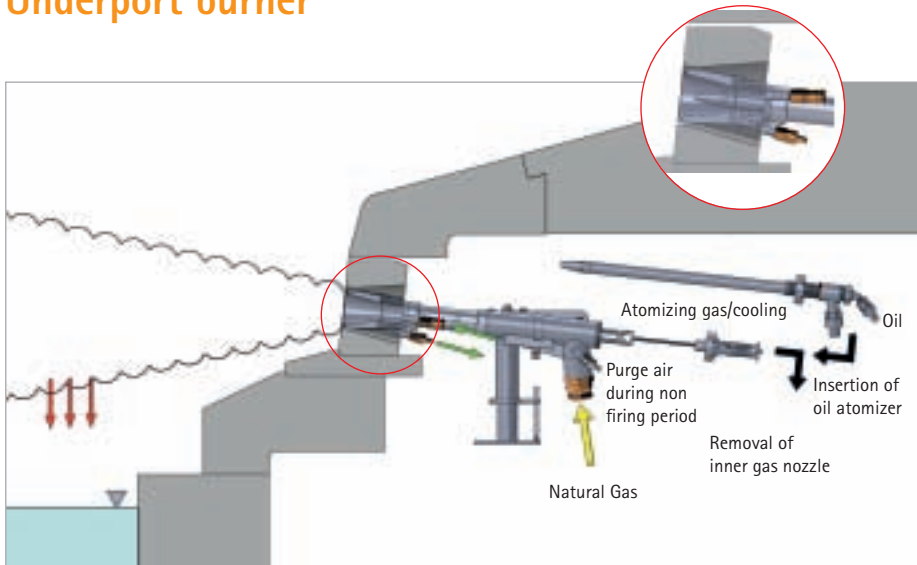


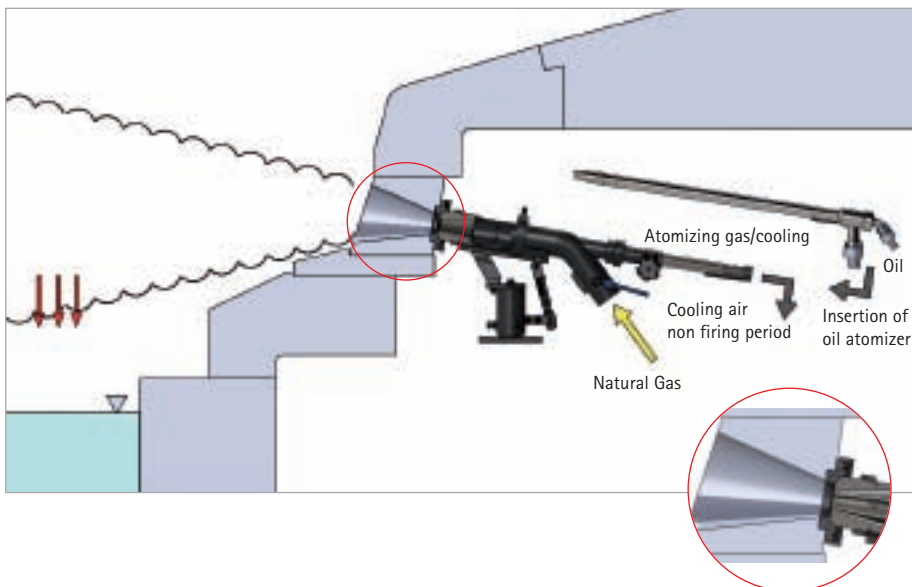
FT FREEJET AND FT FLEX GAS/OIL DUAL INJECTOR

Underport burner



Technical Data

- Fuel: Natural Gas, LPG, LNG, Propane Heavy Oil, Diesel
- Energy output: 0,2 ... 8,5 MW (3 sizes)
- Atomizing: Natural Gas, LPG, LNG, Propane
- Purge air: $\geq 0,1$ bar (non-firing period)
- Water cooling: 10 ... 20 l/min (continuous)



Technical Data

- Fuel: Natural Gas, LPG, LNG, Propane Heavy Oil
- Energy output: S (0,3 – 1,5 MW)
M (1,1 – 4,4 MW)
L (3,6 – 8,0 MW)
- Atomizing: Natural Gas, LPG, LNG, Propane
- Cooling air: $\geq 0,4$ bar (non-firing period)
- Socket plate cooling air: ≥ 2 Pa , 300 Nm³/h (continuous)

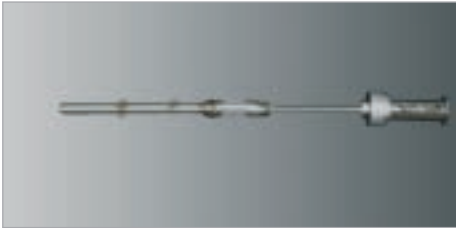
Technical Concept

- Firing of Diesel or Heavy Oil with Natural Gas combines the advantages of high luminosity of oil flames with the economic benefits of the Natural Gas
- Depending on available media and control system following scenarios are possible:
 - Oil burner with up to 40% Gas as atomization
 - Pure dual firing with an oil atomizer as an inlet inside a FT Free Jet or FT Flex Gas injector
 - Pure Oil or pure Gas firing possible
- Pure Dual firing provides the widest range of application flexibility from 0 to 100% - this results in the best available technological and economic effects



Advantages and benefits

- Adding oil improves radiation characteristics of gas flame
- Atomizing gas instead of atomizing air avoids cold primary air
- High oil/gas ratio operation (0 ... 100%)
- Quick change over from gas to dual fuel or pure oil backup configuration possible
- Fuel cost flexibility



Scope of supply

- FT FreeJet / FT Flex Gas Injectors operated $\pm 30\%$ of nominal capacity
- Oil inlets with the required capacity
- Fully adjustable burner bracket
- Socket plates (only Flex)
- Stainless steel flexible hoses
- Gas spool enabling full control of flame shape and length (only Flex)
- Tailor made check valves (only Flex)



Options

- Optimization of melting process, using CFD simulation
- Renting and maintenance contract
- Port design optimization
- Regular service during and after warranty period
- Control panels & safety trains delivery

