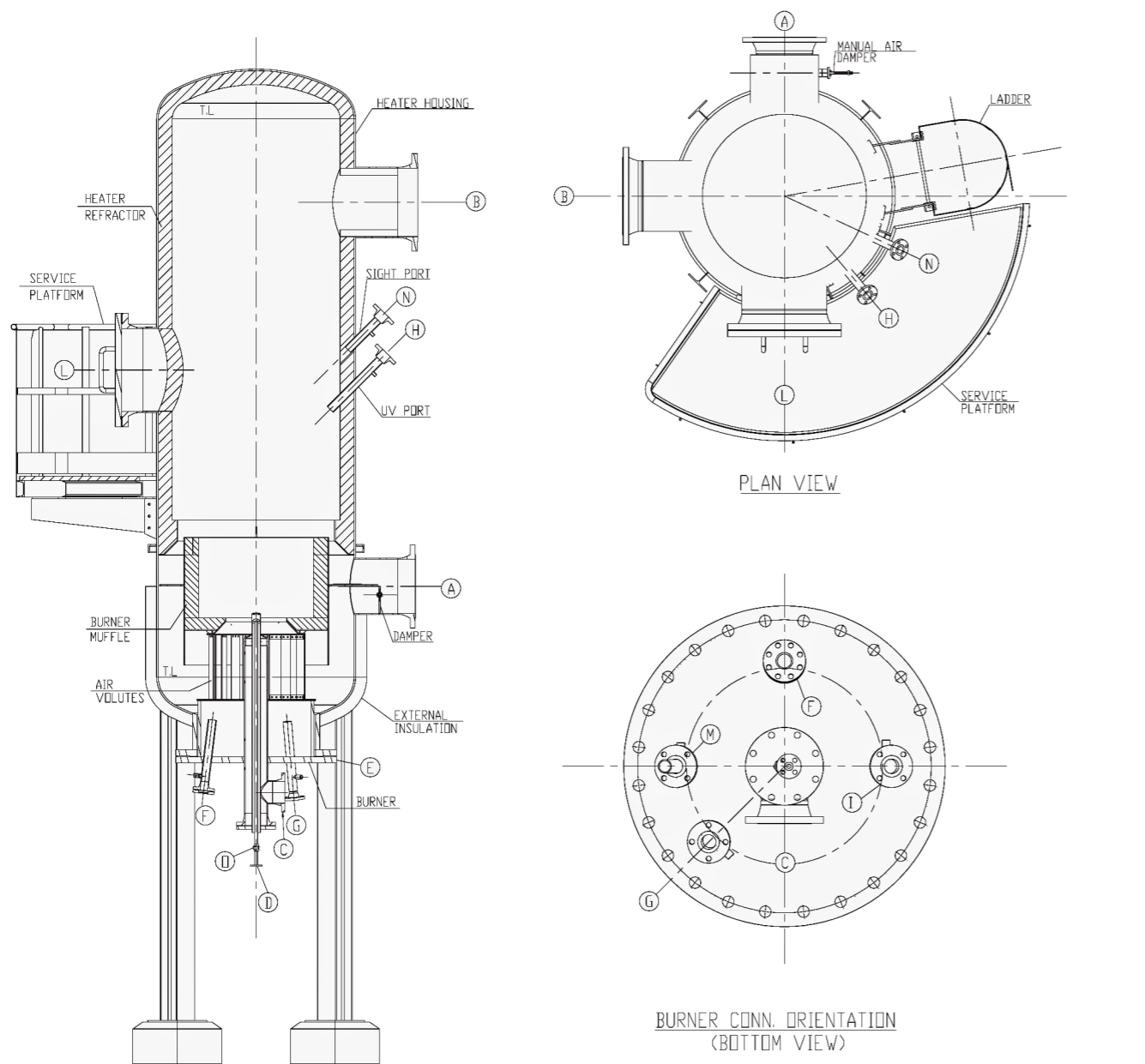
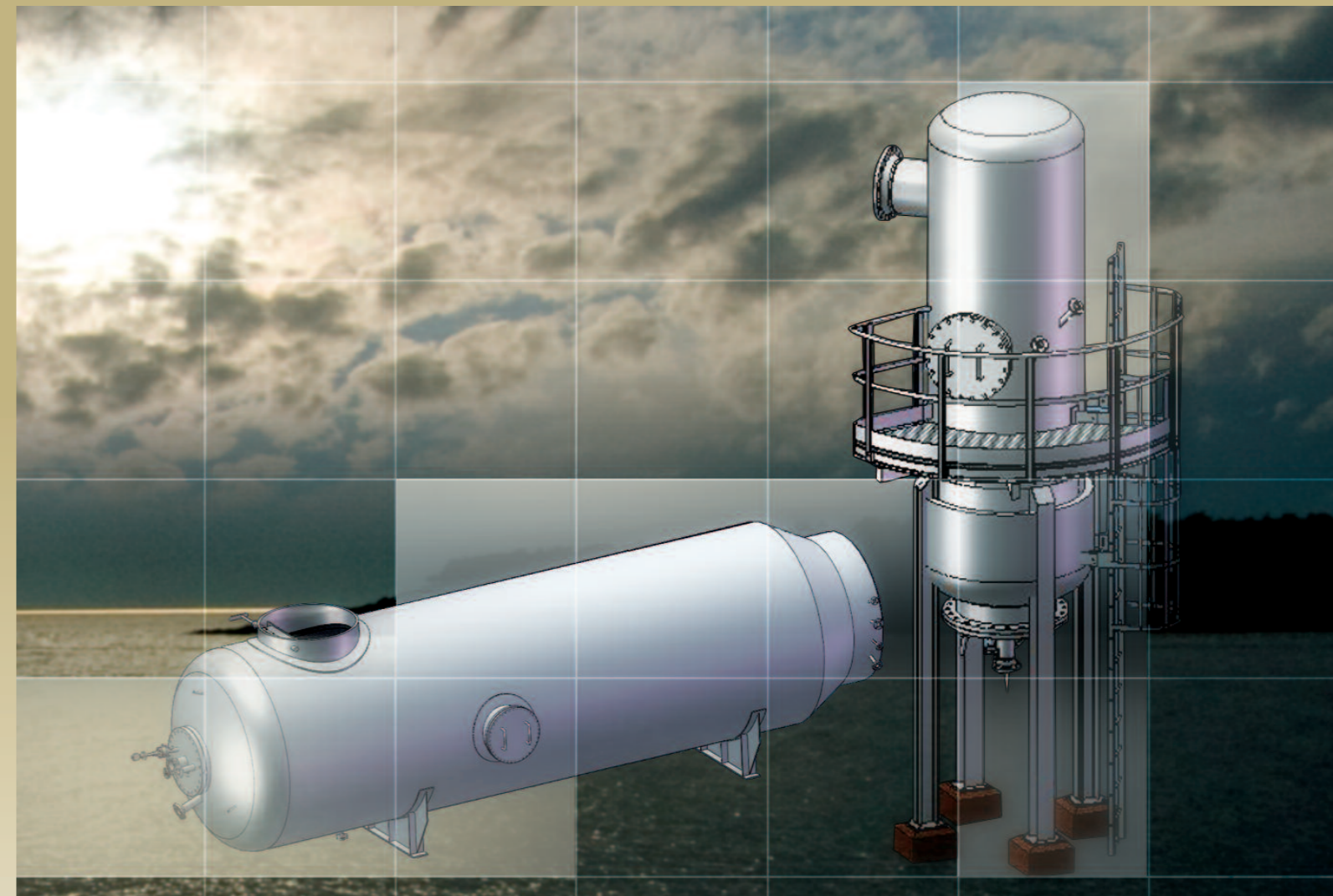


Fired heater general assembly with oil/gas combination burner



N	SIGHT PORT	WITH VALVE
M	PILOT CONNECTION	
L	MAN-HOLE (INSULATED)	WITH DAVIT
I	U.V. SCANNER	
H	U.V. SCANNER	
G	UV SCANNER	
F	SIGHT PORT	WITH VALVE
E	BURNER MOUNTING PLATE	
D	OIL INLET	
C	FUEL GAS INLET	
B	AIR OUTLET	
A	AIR INLET	
ITEM	SERVICE	NOTE

ITAS Direct Fired Heaters



ЕІРІВDFH01120



Direct fired heater

This heater is applicable for the direct heating of gaseous fluids, for example for air preheating at catalytic converters.

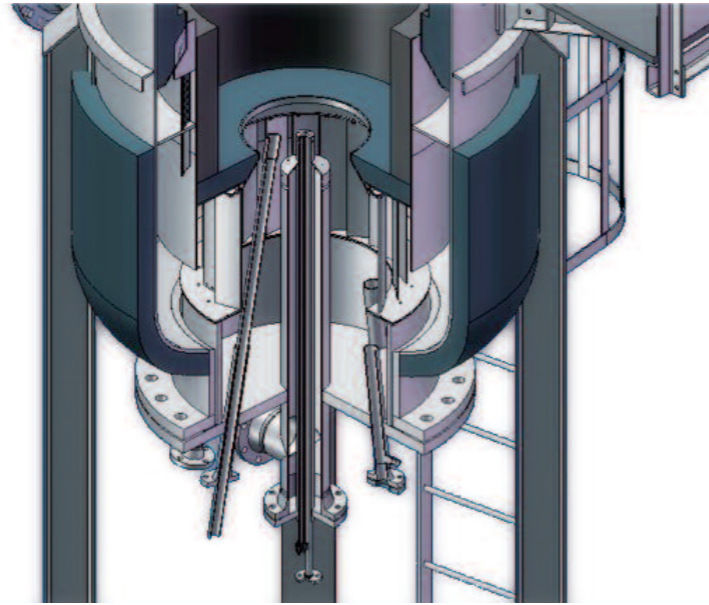
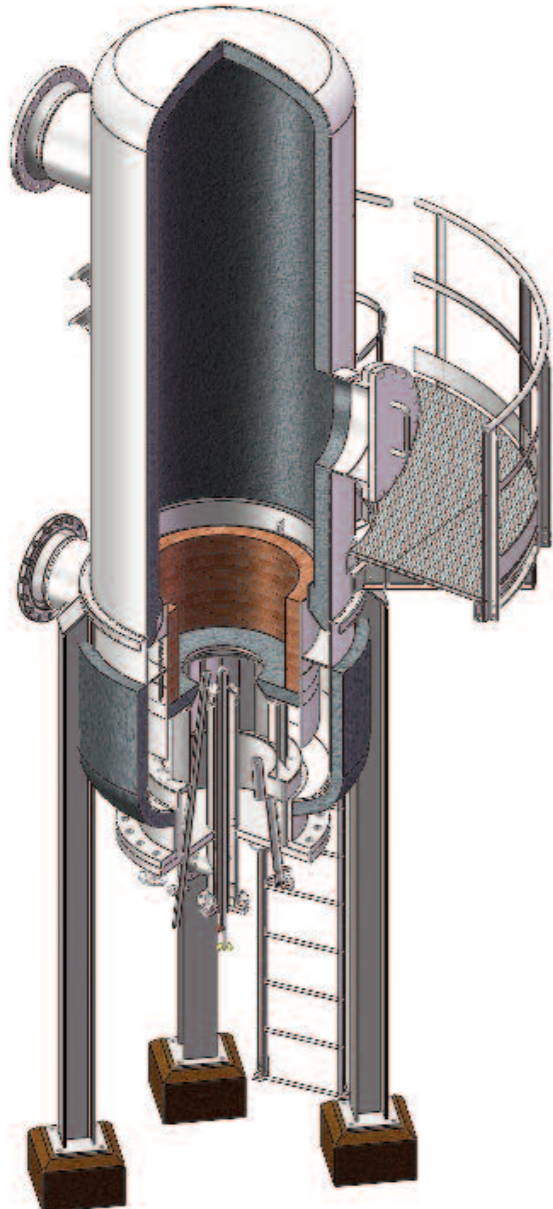
It distinguishes itself by its compact design and can be operated either atmospheric or also with overpressure.

Any mounting position is possible: by choice the ignition can be either by pilot burners or high energy ignition rods.

UV-Scanners are commonly used for monitoring.

The standardised heaters are supplied with an operative capacity between 1 and 60 MW.

Special constructions are also available: in the aside picture a fired heater multi-fuel burner detail is showed.



The air heater mainly consists of a combustion chamber internally refractory lined, made in carbon steel welded, vertical or horizontal shell position, supported by legs or saddles, suitable to be anchored to the foundations.

The combustion chamber assembly include as standard:

- Air inlet flanged or welded connection
- Air outlet welded connection
- Burner connection
- Manual air damper
- Blast air connections
- Multiple UV scanner connections
- Sight ports
- Lifting lugs

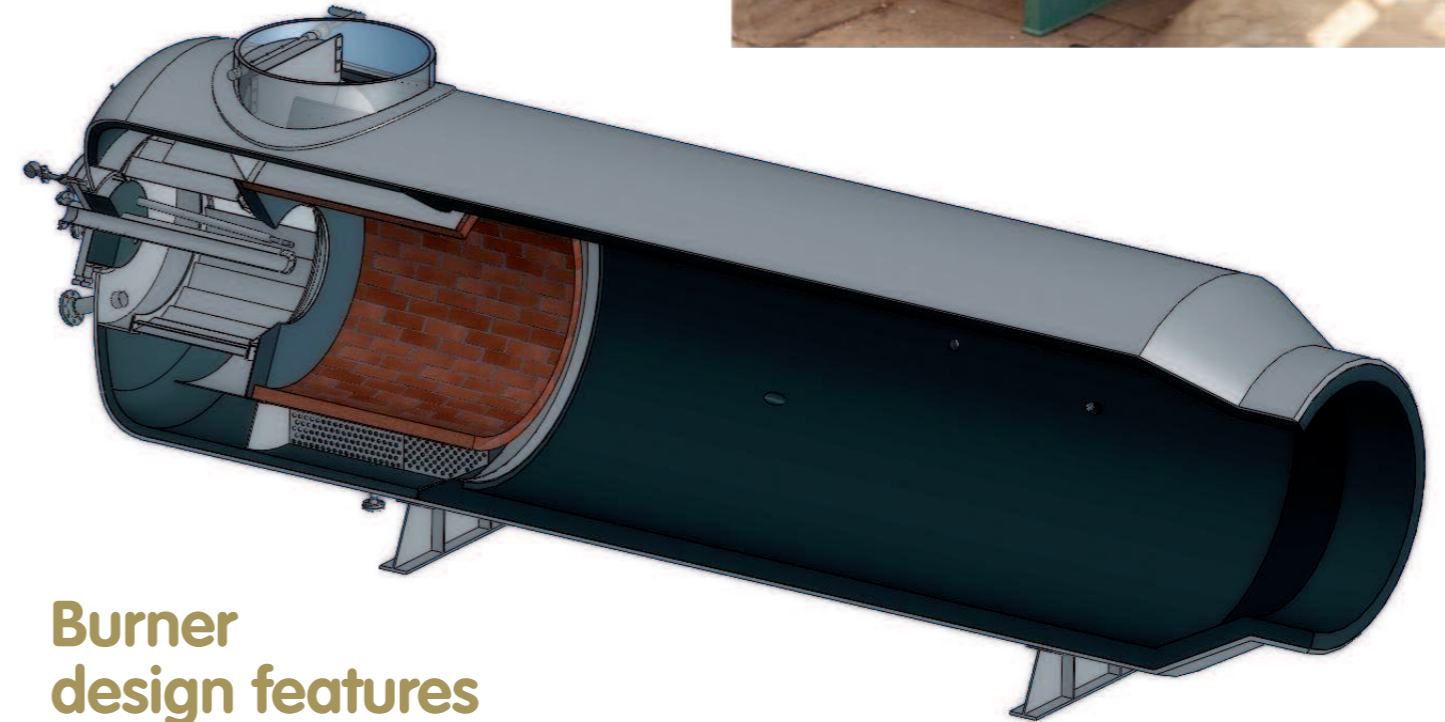


The burner

The burner installed on Air Preheater is a Forced Draft High Intensity model.

It mainly consists of:

- Burner Mounting plate
- Air Volutes
- Central gas gun c/w tip nozzle
- Forced Draft Pilot with ignition rod and Junction Box
- Sight Port and UV scanner connection



Burner design features

The four major parts of the burner are: mounting plate, air volutes, combustor and fuel gas gun system.

The burner is designed to fire almost any industrial gas – including natural gas, propane, butane, manufactured and mixed gases – to extremely high outputs.

The high combustion air swirl rate generated by the air volutes produces a stable flame with high turndown capabilities across a wide range of fuel options.

The intense and thorough mixing of swirled air and fuel also results in low NOx and CO emissions.

Combustion air is forced through the integral volute, which consists of a series of swirl vanes, to create a vortex and an air fuel mixture as close to stoichiometric as possible given the burner's operating parameters.

The burner can operate on high excess air for high volume process air heating. The combustor refractory can be installed on site.

