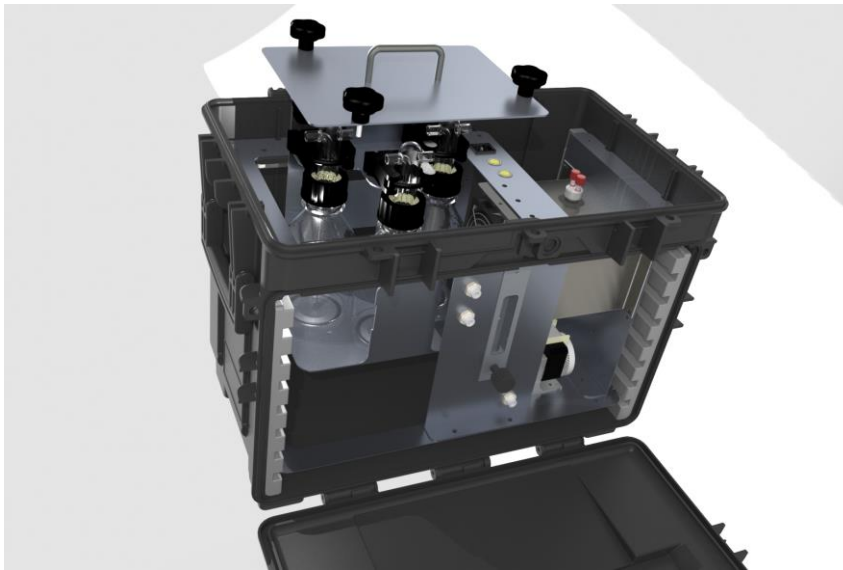


## PSS 100 STATION TRASPORTABLE SYNGAS SAMPLE PRE-TREATMENT



- ✓ Remove TAR , Dust & Water vapour
- ✓ Transportable with 3 refillable bubbler
- ✓ Inlet from process Hi-Temperature probe
- ✓ Peltier cooler with 1 heat exchanger
- ✓ Internal Sample pump
- ✓ Gas sample out dry @ 5 °C
- ✓ Max Flow sample out 300 NI/h
- ✓ Low cost of ownership
- ✓ Cooler maintenance free
- ✓ Universal uses in sampling gas

### DESCRIPTION

Regarding the presence of tars in biosyngas, it may be stated that “tars” are equivalent to a major economic penalty in biomass gasification. Tar aerosols and deposits lead to more frequent maintenance and repair of especially gas cleaning equipment and resultantly lower plant capacity factors.

This leads to a decrease of revenues or to higher investments, as some equipment will be installed in duplicate to overcome standstills.

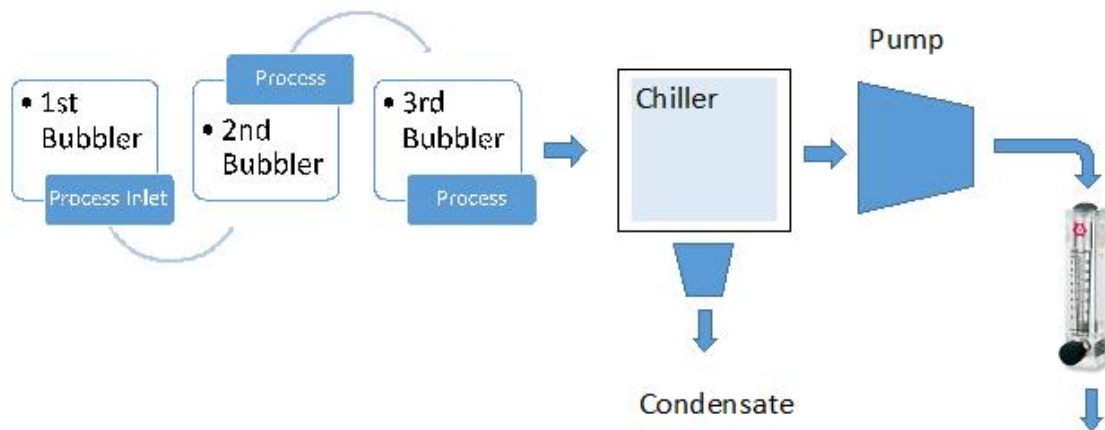
Furthermore, removal of tar components from the process wastewater requires considerable investments that can even be dramatic as some tar components show poisoning behaviour in biologic wastewater treatment systems.

In gas analysis it's mandatory to have a clean gas to feed the analyzer so the system flow firstly remove the majority of tar and dust through washing device , then by two degree precision filter, the gas chiller provide to remove the moisture and dust, as to obtain a kind of clean dry air. Finally, the sample gas through the protection filter goes into the analytical instruments .

## SYSTEM LAYOUT

The new ETG Portable syngas pre-treatment unit for dust/tar/moisture removal from the sample gas, with 3 refillable water scrubbers, 1 refillable charcoal filter, 1 fine filter with replaceable 0.3µm filter element for tar removal.

- heat exchanger made of PVDF, Semi-conductor (peltier-effect) cooled
- electronic controller, temperature setpoint at fact. +5° C
- built-in heat exchanger temperature display
- micro fine dust filter with fiberglass filter element, pore size 2u
- built-in peristaltic pump for continuous removal of condensate (front access to pump)
- diaphragm sample pump PVDF/FPM, flow rate < 2NI/min interlocked with over/under temperature alarm
- “Pump” and “Alarm” status display
- flowmeter with needle valve
- LED indicator lamp, blinking when system is ready for use Material in contact with sample: PVDF, FEP, FPM, SS316



## MAIN FEATURES

<b><i>Inlet process fitting</i></b>	Hoses 4/6 mm
<b><i>Outlet fitting dried gas sample</i></b>	Fast fitting hoses 4/6 mm
<b><i>Electrical supply</i></b>	220/240 VAC 50/60 Hz
<b><i>Nominal Capacity</i></b>	55 kj/h @ 5°C Dew Point
<b><i>Sample gas output Dew Point</i></b>	Adjustable 3-5-10-15°C
<b><i>Warm up</i></b>	10 minutes
<b><i>Power consumption</i></b>	100 VA
<b><i>Dimensions</i></b>	581 (L) x 381 (W) x 455 (D) mm
<b><i>Weight</i></b>	25 Kg

WEB SITE : [www.etgrisorse.com](http://www.etgrisorse.com) [www.biogasanalyzer.eu](http://www.biogasanalyzer.eu) [www.syngasanalyzer.eu](http://www.syngasanalyzer.eu) [www.analisi-biogas.com](http://www.analisi-biogas.com)

### ETG RISORSE E TECNOLOGIA

Via P. Carpignano 23 – 14026 Montiglio AT  
ITALY  
Tel. +39 0141 994905 / 994952 / 699114  
Fax +39 0141 994971

The Company reserves the right to change any product specifications without prior notification.