PENTOL

# Fuel Oil Treatment – Questionnaire

Company _____

Contact Person _____

Address _____

Telephone _____

Telefax _____

Email _____

Type of Industry _____

Please fill in this questionnaire for each boiler or furnace.

If there are more identical boilers or furnaces, please show on boiler manufacturer line the number of boilers with the same characteristics.

## GENERAL INFORMATION

Boiler Manufacturer _____

Boiler No. _____

Operating hours per year _____

Max. Steam Production (t/h) _____

Average Steam Production (t/h) _____

Minimum Operational Load (t/h) _____

Steam Pressure (MPa) _____

Boiler (or Furnace) burning ☐ Fuel Oil ☐ Gas and Oil ☐ Coal and Oil

Spray Water to control SH-RH temperatures ☐ yes ☐ no

Banks arrangement of SH-RH section ☐ vertical ☐ horizontal

Spray water maximum flow (t/h) SH _____ RH _____

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## AIR-HEATER

| | | |
|---|---|---|
| Air-heater type | ☐ Rotary | ☐ Static |
| If static, flue gas is | ☐ inside tubes | ☐ outside tubes |

## EXCESS AIR

| | max load | min load |
|---|---|---|
| Excess air before air-heater (% $O_2$) | _____ | _____ |
| Excess air after air-heater (% $O_2$) | _____ | _____ |

## TEMPERATURES

| | max load | min load |
|---|---|---|
| Exit gas temperature @ air-heater outlet (°C) | _____ | _____ |
| Air temperature @ air-heater inlet (°C) | _____ | _____ |

## PROBLEM REPORT

| | | |
|---|---|---|
| Hard deposits in SH-RH sections | ☐ yes | ☐ no |
| Corrosion in SH-RH sections | ☐ yes | ☐ no |
| Plugging in SH-RH sections | ☐ yes | ☐ no |
| Plugging in the economiser | ☐ yes | ☐ no |
| Corrosion in the economiser | ☐ yes | ☐ no |
| Plugging in air-heater | ☐ yes | ☐ no |
| Corrosion in air-heater | ☐ yes | ☐ no |
| Standby corrosions | ☐ yes | ☐ no |
| High dust load at stack | ☐ yes | ☐ no |
| Acid smut formation | ☐ yes | ☐ no |

Frequency of air heater washing _____

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## FUEL OIL

| | max load | min load |
|---|---|---|
| Fuel oil consumption (t/h) | _____ | _____ |

Fuel oil characteristics

| | | |
|---|---|---|
| Nitrogen | _____ | % N |
| Sodium | _____ | ppm Na |
| Vanadium | _____ | ppm V |
| Nickel | _____ | ppm Ni |
| Sulphur | _____ | % S |
| Asphaltenes | _____ | % |
| Conradson | _____ | % |
| Ash | _____ | % |

| Atomisation | Oil pressure | Steam/Air pressure |
|---|---|---|
| ☐ by steam | _____ | _____ |
| ☐ by air | _____ | _____ |
| ☐ mechanical | _____ | |

In case of continuous recirculation of fuel oil after the regulating valve, the return goes to:

- ☐ Suction side of booster pumps
- ☐ Day tank
- ☐ Main storage tank

| Storage | Volume ($m^3$) | temperature (°C) |
|---|---|---|
| Day tank | _____ | _____ |
| Main storage | _____ | _____ |

Cost of fuel oil _____

Atomising steam consumption (per ton of fuel) _____

Soot blowing steam consumption (average/day) _____

# Fuel Oil Treatment – Questionnaire

## PRIVACY STATEMENT

Pentol will always protect the personal information that you share with us. Pentol stores information internally in a controlled, secure environment. Your personal information will not be given to any 3rd party. The only purpose of this questionnaire is to enable your Pentol contact to offer optimal solutions for your application.

## SUBMIT INFORMATION

Please print this form and fax it to our agent or to


Pentol GmbH
Degussaweg 1
D-79639 Grenzach-Wyhlen
Germany

Tel. +49.7624.300 0
Fax. +49.7624.300 190

fot@pentol.com


## THANK YOU

Thank you for taking the time to fill in this form. We will contact you as soon as your information is processed.

Date: _____ Signature: _____