

**Questionnaire**

In order to determine the best suitable system for your engine to be converted for Dual Fuel operation, please answer, if possible all the questions below:

Company: \_\_\_\_\_

Responsible Person: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_ E-Mail: \_\_\_\_\_

1. **Application:** Genset \_\_\_\_\_ Other \_\_\_\_\_

2. **Engine Data:** Make \_\_\_\_\_ No. Cyl. \_\_\_\_\_ Model \_\_\_\_\_ Year \_\_\_\_\_

2.1 Displacement: \_\_\_\_\_ cm<sup>3</sup> Turbo charged: Yes  No

2.2 Max. Power: \_\_\_\_\_ KW Max. Speed: \_\_\_\_\_ RPM

2.3 System Voltage 12V  24 V

3. **Fuel injection system:** Please specify which system is presently fitted on engine, as per variations below:

3.1 Inline block pump  Make \_\_\_\_\_ Part Nr. \_\_\_\_\_

3.2 Rotary pump  Make \_\_\_\_\_ Part Nr. \_\_\_\_\_

3.3 Cummins PT

3.4 Individual pumps per cylinder  Make \_\_\_\_\_ Part Nr. \_\_\_\_\_

3.5 Existing speed governor: Mechanical  Type \_\_\_\_\_

Electronic  Type \_\_\_\_\_

4. **Types of gas used:** NG  CNG  LPG  Biogas  Coke gas

5. Please advise percentage of individual gas components (If available).

(Ethane, Methane, Propane, Butane etc.)

\_\_\_\_\_

6. **Available gas supply pressure before gas train:** \_\_\_\_\_

7. Is the gas filtered? \_\_\_\_\_

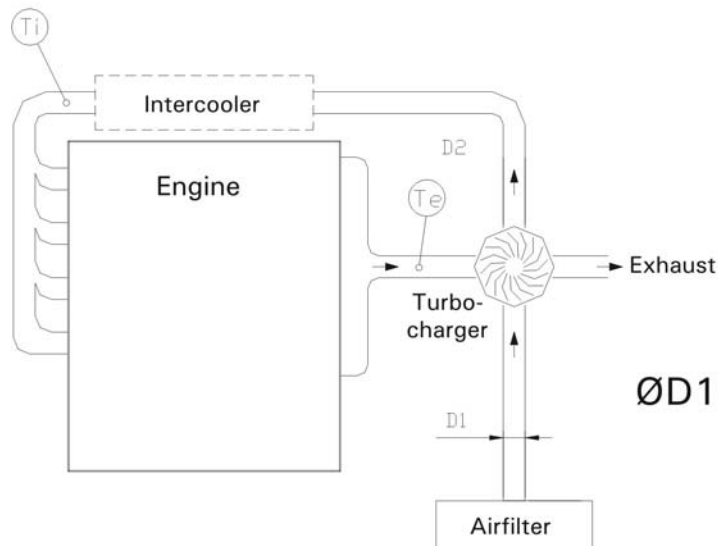
8. Ambient temperature: Min. \_\_\_\_\_ °C, Max. \_\_\_\_\_ °C

9. Ambient humidity: Min. \_\_\_\_\_ °C, Max. \_\_\_\_\_ °C

**Please specify question 6 in mbar or bar, before Gas Train**



10. Existing pipe dimensions and temperatures:  
**Turbo charged**



ØD1 = \_\_\_\_\_

**!Also see page 3!**

10.1 Ti (Intake manifold temp. in diesel mode) at 100% load \_\_\_\_\_ °C

10.2 Te (Exhaust temperature in Diesel mode) at 100% load \_\_\_\_\_ °C

**Photo of existing installation required from all angles!**

**Surveillance and Protection issues**

11. Is an engine (Generator) monitoring / protection control system already existing?

Make \_\_\_\_\_

12. In case of a generator, is Power Management, ev. PC communication requested?

\_\_\_\_\_

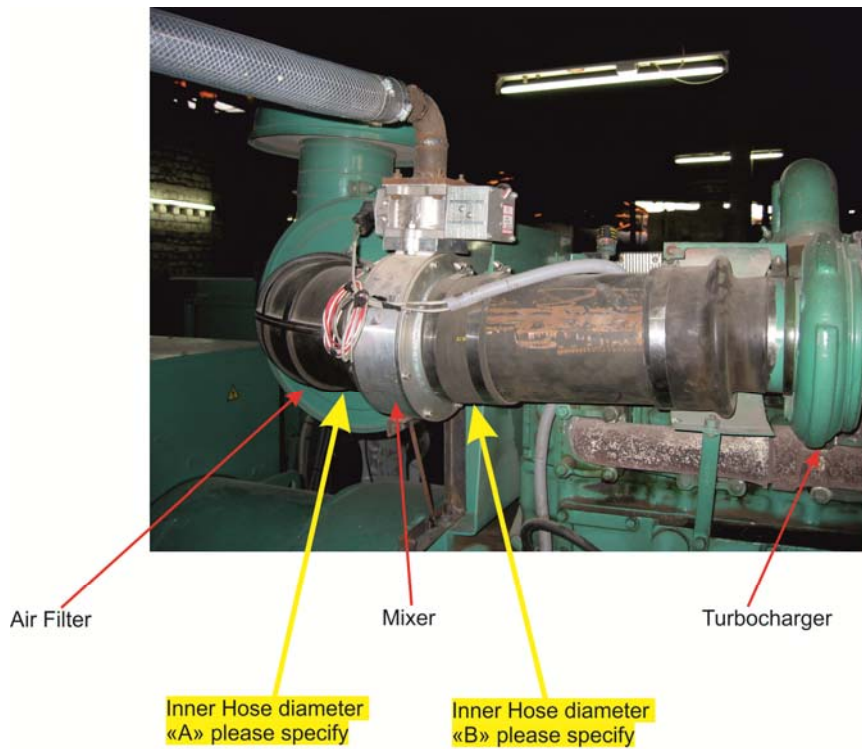
13. Potential: Are more than one conversion intended? \_\_\_\_\_

14. Remarks: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Detail explanation point 10



2.16) Hose adaptor to suit all X-Series intake valve		
		Outside Ø
HAX-301	3" Bore Valves-Single hose adaptor	51 mm
HAX-302	3" Bore Valves-Single hose adaptor	54 mm
HAX-303	3" Bore Valves-Single hose adaptor	57 mm
HAX-304	3" Bore Valves-Single hose adaptor	60 mm
HAX-305	3" Bore Valves-Single hose adaptor	63.5 mm
HAX-306	3" Bore Valves-Single hose adaptor	67 mm
HAX-307	3" Bore Valves-Single hose adaptor	70 mm
HAX-308	3" Bore Valves-Single hose adaptor	73 mm
HAX-309	3" Bore Valves-Single hose adaptor	76 mm
HAX-314	3" Bore Valves-Single hose adaptor	89 mm
HAX-319	3" Bore Valves-Single hose adaptor	102 mm
HAX-501	5" Bore Valves-Single hose adaptor	89 mm
HAX-502	5" Bore Valves-Single hose adaptor	92 mm
HAX-503	5" Bore Valves-Single hose adaptor	95 mm
HAX-504	5" Bore Valves-Single hose adaptor	98 mm
HAX-505	5" Bore Valves-Single hose adaptor	102 mm
HAX-506	5" Bore Valves-Single hose adaptor	105 mm
HAX-507	5" Bore Valves-Single hose adaptor	108 mm
HAX-508	5" Bore Valves-Single hose adaptor	111 mm
HAX-509	5" Bore Valves-Single hose adaptor	114 mm
HAX-510	5" Bore Valves-Single hose adaptor	117.5 mm
HAX-511	5" Bore Valves-Single hose adaptor	121 mm
HAX-512	5" Bore Valves-Single hose adaptor	124 mm
HAX-513	5" Bore Valves-Single hose adaptor	127 mm
HAX-518	5" Bore Valves-Single hose adaptor	140 mm
HAX-523	5" Bore Valves-Single hose adaptor	152 mm
HAX-807	8" Bore Valves-Single hose adaptor	178 mm
HAX-808	8" Bore Valves-Single hose adaptor	203 mm

