SECTION GA

FUEL OIL SPECIFICATION

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Fuel oil should be a wholly hydrocarbon oil derived from petroleum, with which small quantities of additives may be incorporated for the improvement of ignition or other characteristics and should conform to British Standard Specification 2869 : 1988.

The fuel is to Class A1 or A2 of B.S. Specification 2869 : 1988.

Whichever class of fuel is selected, it is most important that the appropriate grade of approved lubricating oil is used (Refer to appendix 'A').

BS : 1988 REQUIREMENTS FOR ENGINE FUELS

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| --- | --- | --- |
| Property | Class A1 | Class A2 |
| Viscosity, Kinematic at 40°C,cSt\*  Min. | 1.5 | 1.5 |
| Max. | 5.0 | 5.5 |
| Cetane number, min. | 50 | 45 |
| Carbon residue, Ramsbottom on 10% residue, %(m/m),max. | 0.20 | 0.20 |
| Distillation, recovery at 350°C, % (V/V), min. | 85 | 85 |
| Flash point, closed, Pensky-Martens, °C min. | 56.°C | 56.°C |
| Water content, % (V/V), max. | 0.05 | 0.05 |
| Sediment, % (m/m), max. | 0.01 | 0.01 |
| Ash, % (m/m), max. | 0.01 | 0.01 |
| Sulphur content, % (m/m), max. | 0.30 § | 0.50 § |
| Copper corrosion test, max. | 1 | 1 |
| Cold filter plugging point °C,max.  Summer (March/Sept, inclusive). | -4 | -4 |
| Winter (October/February inclusive). | -15 | -12 |

\* cSt = ImmVs.

§ This limit is set in accordance with the legislative requirements for gas oil of the 'Council Directive (75/716/EEC of the European Economic Community) on the approximation of the laws of Member States relating to the sulphur content of certain liquid fuels' as embodied in Statutory Instrument 1976 No. 1988 Public Health - The Motor Fuel (Sulphur Content of Gas Oil) Regulations 1976 and Statutory Instrument 1976 No. 1989

Public Health - The Oil Fuel (Sulphur Content of Gas Oil) Regulation 1976 in countries where this legislation does not apply it is permissible to run Paxman engines on fuels with up to 1.0% sulphur.

ENGINE FUELS

1. The two classes of fuel specified in the table are marketed specifically as oil-engine fuels. Class A1 is of higher quality and is intended primarily as an automotive diesel fuel, whilst class A2 is intended as a general purpose diesel fuel. Classes A1 and A2 are distillate grades and are so specified as to prevent the inclusion of residuum.
2. The specifications for classes A1 and A2 include limits for cold filter plugging point chosen to cover seasonal requirements in the United Kingdom.
3. Ignition quality is specified in terms of cetane number but the calculated cetane index is referred to as an alternative for routine purposes with fuels not containing ignition improver additives.

NOTE If local supply problems dictate that fuels which fall fall outside the above specification are to be considered for use with Paxman Diesel Engines, then our Service Department should be consulted first.