

British Standard

Classification of petroleum fuels

Part 2. Gas turbine fuels for industrial and marine applications

[ISO title: Petroleum products — Fuels (class F) — Classification — Part 2 : Categories of gas turbine fuels for industrial and marine applications]

Classification des combustibles pétroliers

Partie 2. Combustibles pour turbines à gaz en service dans l'industrie et la marine

Klassifikation von Kraftstoffen

Teil 2. Gasturbinenkraftstoffe für die Anwendung in Industrie und Schifffahrt

National foreword

This Part of BS 6843 has been prepared under the direction of the Petroleum Standards Committee. It is identical with ISO 8216/2-1986 'Petroleum products — Fuels (class F) — Classification — Part 2 : Categories of gas turbine fuels for industrial and marine applications', published by the International Organization for Standardization (ISO). ISO 8216/2 was prepared as a result of discussion in subcommittee 4, Classifications and specifications, of Technical Committee 28, Petroleum products and lubricants, in which the UK participated.

A general classification of petroleum products (ISO 8681) prepared in ISO/TC 28 has allocated class F to petroleum fuels. ISO 8216 is being issued in several Parts covering the classification of different types of fuel. The following other Parts of BS 6843 have been published to implement the corresponding Parts of ISO 8216.

Part 0. General classification

Part 1. Marine fuels

Part 3. Liquefied petroleum gases

Terminology and conventions. The text of the international standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

Wherever the words 'part of ISO 8216' appear, referring to this standard, they should be read as 'Part of BS 6843'.

Cross-references

International standard	Corresponding British Standard
ISO 8216/0	BS 6843 Classification of petroleum fuels Part 0 : 1988 General classification (Identical)

It is intended that ISO 8217, referred to in the bibliography for information only, will be implemented as a British Standard as a revision of BS MA 100.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

1 Scope and field of application

This part of ISO 8216 establishes the detailed classification of gas turbine fuels for industrial and marine applications, but excluding aircraft fuels. It should be read in conjunction with ISO 8216/0.

The fuels in this classification are for use in industrial gas turbines and gas turbines derived from aviation turbines that are used in static and marine applications. The classification includes only fuels that are liquid under atmospheric pressure and at their normal storage temperatures. Petroleum fuels, being the result of the processing of crude oils of diverse origin, cannot be chemically defined, but may be categorized generally within the scope of this part of ISO 8216.

2 Reference

ISO 8216/0, *Petroleum products — Fuels (class F) — Classification — Part 0: General*.

3 Explanation of symbols

3.1 The detailed classification of gas turbine fuels into categories of products has been established for static and marine applications from two of the families of products (D and R) defined in the general classification (D for distillate fuels or mainly distillate and R for residual fuels).

3.2 According to ISO 8216/0, the products are designated by a symbol consisting of a group of letters, which together constitute a code.

This code consists of

- the initials ISO;
- the letter F (for the class fuels);
- the category of fuel, consisting of 3 letters, the first letter of this category always being the family letter (D for distillate, R for residual fuel). In this case, the second letter (S or M) indicates the field of application, S for static, M for marine, and the third letter T designates the final application, gas turbines;
- numbers, which complete the designation of the code (0, 1, 2, 3, 4). They are for further classification on the basis

of the properties with the corresponding remarks, and have no numerical significance in terms of definitions of product properties.

3.3 In this classification system, products are designated in a uniform manner. A product may be designated in the complete form, for example ISO-F-DMT 2, or in the abbreviated form, for example F-DMT 2.

4 Detailed classification of gas turbine fuels

Family: subdivision in relation to the type of fuel	Designation symbol ISO-F		Remarks
	Category: subdivision according to applications	Distin- guishing number	
Distillate fuel	DST	0	A low flash point petroleum distillate, naphta type
	DST DMT ¹⁾	1 1	A medium flash point petroleum distillate, jet fuel (kerosine) type
	DST DMT ¹⁾	2 2	A petroleum distillate, gas-oil type
	DST DMT	3 3	Low-ash petroleum distillate
Residual fuel-oil	RST RMT	3 3	Low-ash petroleum residual fuel which may contain heavy components from petroleum processing
	RST RMT	4 4	Petroleum residual fuel containing heavy components from petroleum processing

1) With reference to classes DMT 1 and DMT 2, attention is drawn to the limits for minimum flash point in the 1981 Amendment to the International Convention for the Safety of Life at Sea 1974¹⁾.

Bibliography

[1] ISO 8217, *Petroleum products — Fuels (class F) — Marine fuels — Specifications*.