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# Brown coals and lignites — Classification by types on the basis of total moisture content and tar yield

Charbons bruns et lignites — Classification en types, d'après la teneur en humidité totale et le rendement en goudron

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#### **FOREWORD**

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International Standard ISO 2950 was drawn up by Technical Committee ISO/TC 27, *Solid mineral fuels*, and circulated to the Member Bodies in November 1972.

It has been approved by the Member Bodies of the following countries:

Belgium Bulgaria Canada Iran Italy New Zealand Thailand Turkey U.S.A. U.S.S.R.

Yugoslavia

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France

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The Member Body of the following country expressed disapproval of the document on technical grounds :

Australia

# Brown coals and lignites — Classification by types on the basis of total moisture content and tar yield

#### 1 SCOPE AND FIELD OF APPLICATION

This International Standard establishes a classification of brown coals and lignites by types on the basis of total moisture content and tar yield.

Until reliable parameters for differentiation of brown and hard coals are worked out and confirmed, coals considered in each country as brown, on the basis of a number of other characteristics, should be classified as brown coals regardless of their calorific value, i.e. including the cases when the gross calorific value of the coal in equilibrium with air at 30 °C and 96 % relative humidity is more than 24 000 kJ/kg on the ash-free basis.

### 2 REFERENCES

ISO/R 647, **Determination of the yields** of tar, water, gas and coke residue by low temperature distillation of brown coal and lignite.

ISO/R 1015, Determination of moisture in brown coals and lignites by the direct volumetric method.

ISO/R 1171, Determination of ash of solid mineral fuels.

#### 3 PRINCIPLE

Brown coals are classified in this International Standard according to the following properties:

- a) total moisture content calculated on the ash-free basis:
- b) tar yield calculated on the dry, ash-free basis.

# 4 CLASSIFICATION INDICES

## 4. Division of brown coals into classes

The brown coals are first divided according to their total moisture content, calculated on the ash-free basis, into the classes shown in table 1.

TABLE 1 — Class numbers of brown coal types

Class number	Total moisture content of run-of-mine coals on the ash-free basis %
1	≤ 20
2	> 20 to 30
3	> 30 to 40
4	> 40 to 50
5	> 50 to 60
6	> 60 to 70

### 4.2 Division of brown coals into groups

The brown coals, divided into classes as described in 4.1, are then sub-divided according to their tar yield, calculated on the dry, ash-free basis, into the groups shown in table 2.

TABLE 2 — Group numbers of brown coal types

Group number	Tar yield on the dry, ash-free basis %
0	≤ 10
1	> 10 to 15
2	> 15 to 20
3	> 20 to 25
4	> 25