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Interested committees:

Title: BS ISO 4106 Draft Motorcycles. Engine test code. Net power.

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/DIS 4106

Motorcycles — Engine test code — Net power

Motorcycles — Code d'essai des moteurs — Puissance nette

ICS: 43.140

ISO/TC 22/SC 38

Secretariat: **UNI**

Voting begins on:
2025-04-14

Voting terminates on:
2025-07-07

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 4106 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 22, *Motorcycles*.

This fifth edition cancels and replaces the fourth edition (ISO 4106:2012), which has been technically revised.

Introduction

The fourth edition of ISO4106 (ISO 4106:2012) has some minor differences compared to the other measurement methods, making it unreasonable for those who need to use both. This fifth edition harmonizes these differences as much as possible. Additionally, some editorial modifications have also been made for refinement.

ISO4106 has become a more reasonable International Standard for engine net power measurement of motorcycles while ensuring technical correctness.

Motorcycles — Engine test code — Net power

1 Scope

This International Standard specifies methods for evaluating the performance of engines designed for motorcycles as defined in ISO 3833, in particular with a view to the presentation of power curves and specific fuel consumption at full load as a function of engine speed, for net power assessment. It is applicable to reciprocating internal combustion engines (spark-ignition or compression-ignition) — excluding free-piston engines — and rotary piston engines, either naturally aspirated or pressure-charged and equipped with either mechanical pressure-charger or turbocharger. Particular specifications for the test of compression-ignition engines are specified in [Annex A](#).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2710-1, *Reciprocating internal combustion engines — Vocabulary — Part 1: Terms for engine design and operation*

ISO 3833, *Road vehicles — Types — Terms and definitions*

ISO 15550, *Internal combustion engines — Determination and method for the measurement of engine power — General requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 2710-1, ISO 15550 and the following apply.

3.1

net power

power obtained on a test bed at the end of the crankshaft or its equivalent at the corresponding engine speed with the equipment and auxiliaries listed in [6.3.1](#)

3.2

corrected net power

net power corrected under the standard reference conditions

3.3

net torque

torque transmitted on a test bed at the end of the crankshaft or its equivalent at the corresponding engine speed with the equipment and auxiliaries listed in [6.3.1](#)

3.4

corrected net torque

net torque corrected under the standard reference conditions

3.5

specific fuel consumption

amount of fuel consumed by an engine per unit of power and time

Note 1 to entry: The amount of the lubricants for two-stroke cycle engines is excluded.