

Components and systems of reciprocating internal combustion engines —

Part 2: Glossary of terms for main running gear

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Vocabulary of components and systems — Part 2: Main running
gear]

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- Ministry of Defence
- Society of Motor Manufacturers and Traders Ltd.

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- Association of British Generating Set Manufacturers
- BEAMA Ltd.
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Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
0 Introduction	1
1 Scope and field of application	2
2 References	2
3 Arrangement of terms and definitions	2
4 Piston group	3
5 Connecting rod mechanism	12
6 Crankshaft	16
7 Other running gear	18
Indexes	
English	20
French	21
Russian	22

National foreword

This Part of BS 7016 has been prepared under the direction of the Machinery and Components Standards Committee and is identical with ISO 7967-2:1987 *“Reciprocating internal combustion engines — Vocabulary of components and systems — Part 2: Main running gear”* published by the International Organization for Standardization (ISO).

ISO 7967 consists of nine Parts which are listed in clause 0.

Parts 1 to 9 of ISO 7967 will be implemented as Parts 1 to 9 of BS 7016.

Where the words “part of ISO 7967” appear, referring to this standard, they should be read as “Part of BS 7016”.

Cross-references

The British Standards which implement these international or European publications may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 23 and a back cover.

Sidelining in this document indicates the recent changes by amendment.

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0 Introduction

ISO 7967 establishes a vocabulary, in English, French and Russian, for components and systems of reciprocating internal combustion engines. It consists of the following parts:

- Part 1: Structure and external covers.
- Part 2: Main running gear.
- Part 3: Valves, camshaft drive and actuating mechanisms.
- Part 4: Pressure charging and air/exhaust gas ducting systems.
- Part 5: Cooling systems.¹⁾
- Part 6: Lubricating systems.¹⁾
- Part 7: Governing systems.¹⁾
- Part 8: Starting systems.¹⁾
- Part 9: Control and monitoring systems.¹⁾

¹⁾ In preparation.

Introduction

L'ISO 7967 établit un vocabulaire, en anglais, français et russe, des termes relatifs aux composants et aux systèmes des moteurs alternatifs à combustion interne. Elle comprend les parties suivantes:

- Partie 1: Structure du moteur et de ses capotages.
- Partie 2: Mécanismes principaux.
- Partie 3: Soupapes, arbre à cames et mécanismes de commande.
- Partie 4: Compresseur et circuits d'admission et d'échappement.
- Partie 5: Systèmes de refroidissement.¹⁾
- Partie 6: Systèmes de lubrification.¹⁾
- Partie 7: Systèmes de régulation.¹⁾
- Partie 8: Systèmes de démarrage.¹⁾
- Partie 9: Systèmes de contrôle et de surveillance.¹⁾

¹⁾ En préparation.

Введение

ИСО 7967 устанавливает словарь терминов на английском, французском и русском языках, относящихся к компонентам и системам поршневых двигателей внутреннего сгорания. Он состоит из следующих частей:

- Часть 1: Детали остова.
- Часть 2: Основные детали движения.
- Часть 3: Клапаны, привод кулачкового вала и клапанный механизм.
- Часть 4: Системы наддува и газообмена.
- Часть 5: Системы охлаждения.¹⁾
- Часть 6: Системы смазки.¹⁾
- Часть 7: Системы регулирования.¹⁾
- Часть 8: Системы пуска.¹⁾
- Часть 9: Системы контроля и наблюдения.¹⁾

¹⁾ В стадии разработки.

1 Scope and field of application

This part of ISO 7967 defines terms relating to the main running gear of reciprocating internal combustion engines.

ISO 2710 gives a classification of reciprocating internal combustion engines and defines basic terms of such engines, their working and characteristics.

2 References

ISO 2710, *Reciprocating internal combustion engines — Vocabulary*.

ISO 6621-1, *Internal combustion engines — Piston rings — Part 1: Vocabulary*.

3 Arrangement of terms and definitions

The terms and definitions are listed in the table under clauses 4 to 7.

In many instances, an illustration is given which shows a typical shape of the component. In some illustrations, the component is highlighted to aid identification.

Objet et domaine d'application

La présente partie de l'ISO 7967 définit les termes relatifs aux mécanismes principaux des moteurs alternatifs à combustion interne.

L'ISO 2710 donne une classification des moteurs alternatifs à combustion interne et les définitions des termes de base relatifs à ces moteurs et à leur fonctionnement et leurs caractéristiques.

Références

ISO 2710, *Moteurs alternatifs à combustion interne — Vocabulaire*.

ISO 6621-1, *Moteurs à combustion interne — Segments de piston — Partie 1: Vocabulaire*.

Présentation des termes et définitions

Les termes et définitions sont présentés sous forme de tableau dans les chapitres 4 à 7.

Dans de nombreux cas, une illustration est ajoutée pour montrer une forme typique du composant défini. Dans certaines illustrations, la partie représentant le composant est tramée pour mettre le composant en relief et faciliter son identification.

Назначение и область применения

Настоящая часть ИСО 7967 определяет термины, относящиеся к основным деталям движения поршневых двигателей внутреннего сгорания.

ИСО 2710 дает классификацию поршневых двигателей внутреннего сгорания и определяет основные термины, относящиеся к этим двигателям, а также к их работе и их характеристикам.

Ссылки

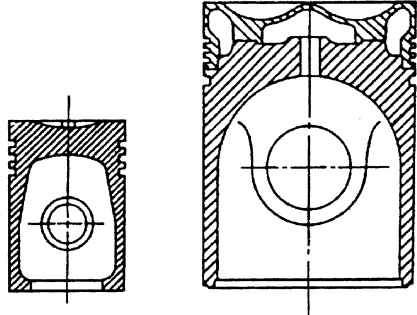
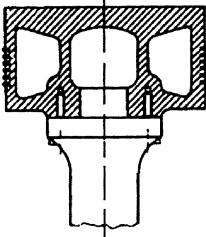
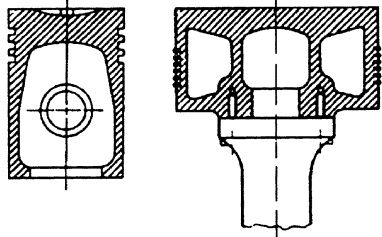
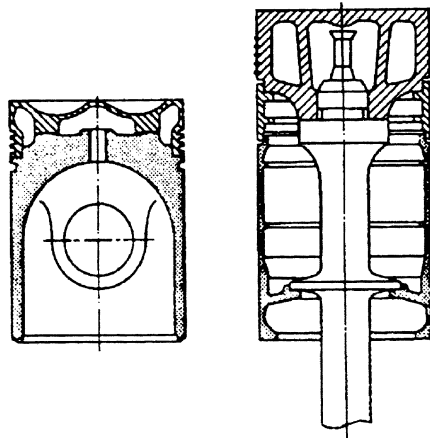
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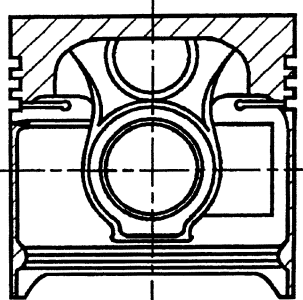
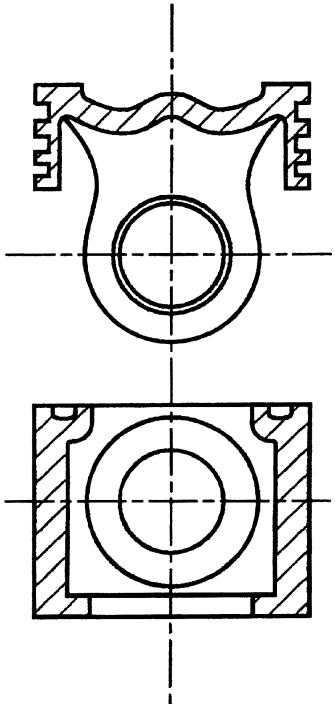
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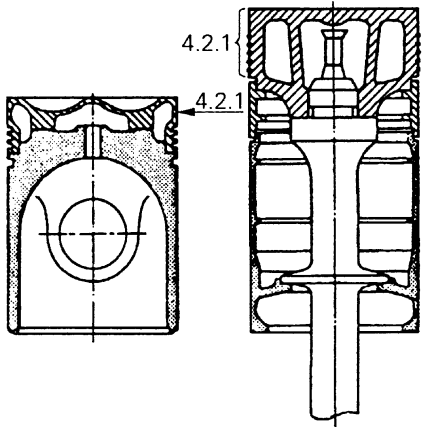
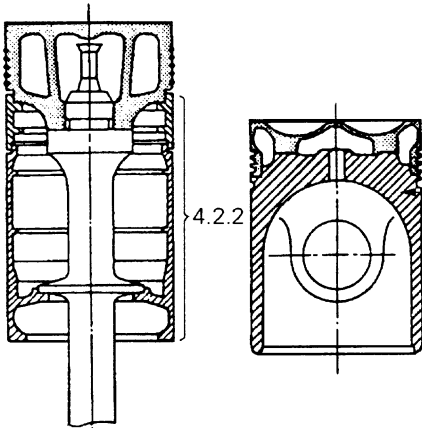
Расположение терминов и определений

Перечень терминов и определений дан в форме таблицы в главах 4-7.

В большинстве случаев даны также иллюстрации, показывающие типовую форму данного компонента. На некоторых иллюстрациях часть, изображающая компонент, обозначена жирной линией для наглядности.

No. N°	Term Terme	Definition Définition	Illustration Illustration
4 Piston group			
4 Ensemble du piston			
4.1	Piston Piston	Component reciprocating in the engine cylinder upon which the gas pressure acts. It is normally articulated to the connecting rod. Pièce animée d'un mouvement alternatif dans le cylindre moteur et sur laquelle agit la pression du fluide de travail.	
4.1.1 Special types of piston			
4.1.1 Types particuliers de pistons			
4.1.1.1	Crosshead piston Piston à crosse	Piston to which the piston rod is rigidly attached Piston auquel une tige de piston est attachée de façon rigide.	
4.1.1.2	One-piece piston Piston monobloc	Piston consisting of one part or several parts which are permanently connected. Piston constitué d'une seule pièce ou de plusieurs pièces non démontables.	
4.1.1.3	Multi-piece piston Piston multi-pièces	Piston consisting of several parts, some of which can be dismantled. Piston constitué de plusieurs parties, dont certaines peuvent être démontées.	

No. N°	Term Terme	Definition Définition	Illustration Illustration
4.1.1.4	Piston with controlled thermal expansion Piston à dilatation thermique contrôlée	Piston with cast-in elements to control the thermal expansion of the piston skirt. Piston dans lequel des éléments permettant de contrôler la dilatation thermique de la jupe de piston ont été incorporés à la coulée.	
4.1.1.5	Articulated piston Piston articulé	Piston consisting of at least two parts; piston skirt (piston lower part) and piston crown (piston upper part) connected by the piston pin. Piston constitué d'au moins deux parties, la jupe de piston (partie inférieure du piston) et la tête de piston (partie supérieure du piston) reliées par l'axe de piston.	

No. N°	Term Terme	Definition Définition	Illustration Illustration
4.2 Piston components			
4.2 Composants du piston			
4.2.1	Piston crown (piston upper part) Tête de piston (partie supérieure du piston)	That part of a piston upon which the gas pressure in the cylinder acts, and where all or some of the piston rings are located, consisting of the piston top and piston ring belt. Partie du piston composée du fond du piston, sur lequel agit la pression du fluide de travail, et de la couronne porte-segments, qui porte tous les segments ou quelques-uns d'entre eux.	
4.2.2	Piston skirt (piston bottom part) Jupe de piston (partie inférieure du piston)	Lower part of a piston which ensures piston guidance. It may or may not have piston ring grooves. In the case of two-stroke engines the skirt covers the ports during a part of the stroke. Partie inférieure du piston qui assure son guidage. Elle peut ou non comporter des gorges de segments de piston. Dans le cas des moteurs à deux temps, la jupe de piston peut recouvrir les orifices de transfert du fluide de travail pendant une partie de la course.	
4.2.3	Piston guide ring Anneau de guidage de piston	That part of crosshead piston positioned between piston crown and piston skirt, which ensures guidance of a crosshead piston. Partie d'un piston à crosse, entre la tête et la jupe de piston, qui assure le guidage du piston à crosse.	