



Lubricants, industrial oils and related products (class L) — Recommendations for the choice of lubricants for machine tools

Lubrifiants, huiles industrielles et produits connexes (classe L) — Recommandations pour le choix des lubrifiants pour machines-outils

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- type 2, when the subject is still under technical development requiring wider exposure;
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ISO/TR 3498 was prepared by Technical Committee ISO/TC 28, *Petroleum products and lubricants*.

The reasons which led to the decision to publish this document in the form of a technical report type 2 are explained in the Introduction.

0 Introduction

Technical Report 3498 replaces ISO 3498-1979, which has become partly outdated. There was a strong feeling in ISO/TC 28 that the document is still temporarily usable in its revised form. As a compromise, it was decided that it should be published as a technical report type 2.

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1 Scope and field of application

This Technical Report has been prepared with the following intentions :

- to establish a rationalized range of lubricants consisting of products essential for machine tools lubrication. These categories are internationally available and it is among them that machine tool manufacturers should make recommendations; this rationalized range is printed in framed type in the table giving the recommendations for the choice of lubricants for machine tools (clause 4);
- to avoid unnecessary restriction on specifications or product descriptions that would inhibit future development.

This Technical Report is not intended to cover special requirements that should be individually addressed in conjunction with machine tool manufacturers.

This Technical Report completes the rationalized range as defined above with a series of categories of products necessary for some countries according to their needs, though they do not have a common interest for every member body. This series is printed in general type in the table in clause 4.

In the future, it is intended to progressively reduce this complementary series so as to eliminate it in time.

NOTE — Lubricants for machine tools must be compatible with the materials used for the machine tool parts, particularly seals, with which they will be in contact.

2 References

ISO 2137, *Petroleum products — Lubricating grease — Determination of cone penetration.*

ISO 3104, *Petroleum products — Transparent and opaque liquids — Determination of kinematic viscosity and calculation of dynamic viscosity.*

ISO 3448, *Industrial liquid lubricants — ISO viscosity classification.*

3 Explanation of symbols used

3.1 In the column headed "Category symbol ISO-L" in the table in clause 4, the various products are designated in an abbreviated form: the complete designation is as shown in the following examples: ISO-L-CKB 32, ISO-L-CKC 68, etc.

It is also permitted to designate a product in the form: L-CKB 32; L-CKC 68, etc.

3.2 In other respects, in the designation utilized:

the prefix letter L designates the class "lubricants, industrial oils and related products".

3.2.1 Case of oils

- a) the group of letters which follows the letter L, considered as a whole, forms a code;

NOTE — The first letter of this code identifies the family of the product considered but the second letter, when it exists, and any following letters, have no particular significance.

- b) the numerical group designation which appears after each code corresponds to the average kinematic viscosity of the lubricant measured in accordance with ISO 3104 at 40 °C and expressed in millimetres squared per second¹⁾ (see ISO 3448).

1) $1 \text{ mm}^2/\text{s} = 1 \text{ cSt}$