
International Standard



5414/1

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**Tool chucks (end mill holders) with clamp screws for
flatted parallel shank tools —
Part 1 : Dimensions of the driving system of tool shanks**

Mandrins porte-outils, à vis de blocage, pour outils à queue cylindrique à méplat — Partie 1 : Dimensions du système d'entraînement des queues d'outils

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Descriptors : tools, tool holders, chucks, dimensions.

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 5414/1 was prepared by Technical Committee ISO/TC 29, *Small tools*.

ISO 5414/1 was first published in 1982. This second edition cancels and replaces the first edition, of which the tolerance on l_2 has been revised.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Tool chucks (end mill holders) with clamp screws for flatted parallel shank tools — Part 1 : Dimensions of the driving system of tool shanks

1 Scope and field of application

This part of ISO 5414 lays down the dimensions of tool chucks (end mill holders) with clamp screws designed for driving of flatted parallel shanks and specifies the clamp screws used.

It also gives the maximum diameter of the chuck nose.

Two types of drive are defined :

- chucks with bores of $d_1 < 20$ mm are intended for driving parallel shank tools with a single flat, these tools being provided with either a single or a double cutting part;
- chucks with bores of $d_1 \geq 25$ mm are intended for driving parallel shank tools with a double flat, these tools being provided with a single cutting part only.

The connecting dimensions of the various types of chucks are dealt with in ISO 5414/2.

The flatted parallel shanks mounted into these chucks shall conform with ISO 3338/2.

2 References

ISO 3338/2, *Parallel shanks for milling cutters — Part 2 : Dimensional characteristics of flatted parallel shanks.*

ISO 5414/2, *Tool chucks (end mill holders) with clamp screws for flatted parallel shank tools — Part 2 : Connecting dimensions of chucks.*