# International Standard 7786

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION•МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ•ORGANISATION INTERNATIONALE DE NORMALISATION

# Dental rotary instruments — Laboratory abrasive instruments

*Instruments rotatifs dentaires — Instruments abrasifs de laboratoire*

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**Descriptors :** dentistry, dental instruments, dental rotary-cutting instruments, abrasives, specifications, dimensions, dimensional tolerances.

Price based on 4 pages

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized 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.

International Standard ISO 7786 was developed by Technical Committee ISO/TC 106, *Dentistry*, and was circulated to the member bodies in July 1982.

It has been approved by the member bodies of the following countries :

| | | |
|---|---|---|
| Australia | France | Sweden |
| Belgium | Germany, F. R. | Switzerland |
| Canada | India | United Kingdom |
| China | New Zealand | USA |
| Czechoslovakia | Poland | USSR |
| Egypt, Arab Rep. of | Romania | |

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Japan
South Africa, Rep. of





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# Dental rotary instruments — Laboratory abrasive instruments



## 0 Introduction

This International Standard is one of a series of standards relating to dental rotary instruments.

The various dimensional and other requirements specified herein are those considered important to ensure the interchangeability of laboratory abrasive instruments.

Attention is drawn to ISO 6360 which specifies a 15 digit number for the identification of dental rotary instruments of all types.

## 1 Scope and field of application

This International Standard specifies the dimensional and other requirements for the five most commonly used grinding instruments used in the dental laboratory.

Other characteristics of dental abrasive instruments are not covered by this International Standard. These will be dealt with in a future International Standard.

## 2 References

ISO 1797, *Dental rotary instruments — Shanks.*[1)]

ISO 2157, *Dental rotary instruments — Nominal sizes and designation.*

ISO 2859, *Sampling procedures and tables for inspection by attributes.*

ISO 6360, *Dental rotary instruments — Number coding system.*

ISO 8325, *Dental rotary instruments — Test methods.*[2)]

## 3 Symbols

$d$ diameter of the working part, head diameter.

$l_1$ length of the working part, head length.

$l_2$ overall length.

## 4 Material

The shaft shall be made of steel or other suitable material. The selection of the type of steel and the treatment given to it shall be left to the discretion of the manufacturer. The working part shall be made of abrasive materials. The selection of the type, the bonding and the treatment of the abrasive material shall be left to the discretion of the manufacturer.

1) At present at the stage of draft. (Revision of ISO 1797-1976.)

2) At present at the stage of draft.

## 5 Dimensions

All dimensions are in millimetres.

The dimensions, determined as described in ISO 8325, shall be as specified in the tables and as shown in figures 1 to 5.

The shank shall be type 2 of ISO 1797.

### 5.1 Cylindrical

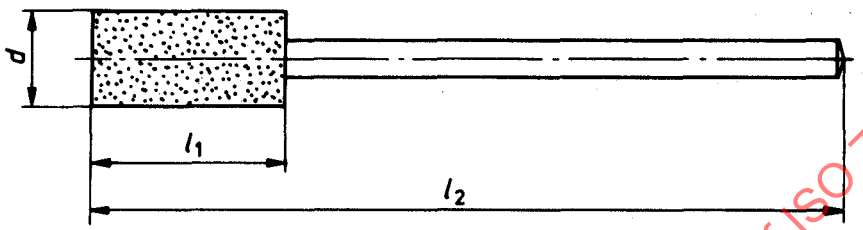


Figure 1

Table 1 — Dimensions

| Nominal size | $d$ $^{+0,5}_{0}$ | $l_1$ $^{+1}_{-0,5}$ | $l_2$ ± 3 |
|---|---|---|---|
| 050 | 5 | 12 | 48 |
| 065 | 6,5 | 13 | 50 |

### 5.2 Truncated conical

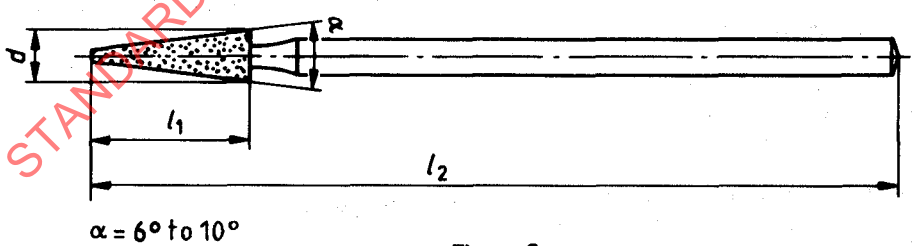


Figure 2

Table 2 — Dimensions

| Nominal size | $d$ $^{+0,5}_{0}$ | $l_1$ $^{+1}_{-0,5}$ | $l_2$ ± 3 |
|---|---|---|---|
| 030 | 3 | 7 | 46,5 |
| 035 | 3,5 | 10,5 | 53,5 |