अतिरिक्त लंबाई के समानांतर शैंक ट्विस्ट ड्रिल

(तीसरा पुनरीक्षण)

## Extra-Long Parallel Shank Twist Drills

(Third Revision)

ICS 25.100.30

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November 2024

**Price Group 4** 

Cutting Tools Sectional Committee, PGD 32

#### NATIONAL FOREWORD

This Indian Standard (Third Revision) which is identical to ISO 3292 : 2016 'Extra-long parallel shank twist drills' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on recommendation of the Cutting Tools Sectional Committee and approval of the Production and General Engineering Division Council.

This standard was originally published in 1975 based on ISO 3292 : 1975 and subsequently revised in 1983 and 2005. This third revision has been brought out to align it with latest version of ISO 3292. In this revision, the relationship between symbols used in this standard and symbols according to ISO 13399 series on 'Cutting tool data representation and exchange' has been added as Annex A.

The text of ISO standard has been approved as suitable for publication as an Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'.;
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

The Committee has reviewed the provisions of the following International Standard referred in this adopted standard and has decided that it is acceptable for use in conjunction with this standard:

#### International Standard

Title

ISO 10899 High-speed steel two-flute twist drills — Technical specifications

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

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### Indian Standard

## EXTRA-LONG PARALLEL SHANK TWIST DRILLS

(Third Revision)

## 1 Scope

This International Standard specifies the dimensions of extra-long parallel shank twist drills in the range of 2 mm to 14 mm diameter with an overall length range of 125 mm to 400 mm.

#### 2 Normative references

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

ISO 10899, High-speed steel two-flute twist drills — Technical specifications

### **3** Dimensions

See <u>Figure 1</u> and <u>Table 1</u>.

### 4 Technical specifications

Unless otherwise specified, technical requirements shall comply with ISO 10899.

## **5** Designation

Extra-long parallel shank twist drills in accordance with this International Standard shall be designated by the following:

- a) "twist drill";
- b) a reference to this International Standard, i.e. ISO 3292;
- c) drill diameter, *d*, in millimetres;
- d) overall length, *l*, in millimetres.

EXAMPLE An extra-long parallel shank twist drill of diameter d = 10 mm and overall length l = 250 mm is designated as follows:

#### Twist drill ISO 3292 - 10 - 250

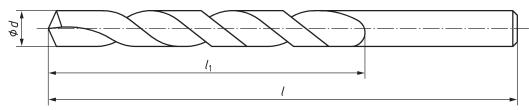


Figure 1 — Extra-long parallel shank twist drills

Preferred	Overall length					
diameters d				1		
h8	125	160	200	250	315	400
110	Flute length					
		$l_1$				
	80	100	150	200	250	300
2	Х	Х				
2,5	Х	Х				
3		Х	Х			
3,5		Х	Х	Х		
4		Х	Х	Х	Х	
4,5		Х	Х	Х	Х	
5			Х	Х	Х	Х
5,5			Х	Х	Х	Х
6			X	X	X	Х
6,5			X	X	Х	Х
7			X	Х	Х	Х
7,5			X	X	Х	Х
8				Х	Х	Х
8,5				X	Х	Х
9				X	Х	Х
9,5				X	Х	Х
10				Х	Х	Х
10,5				Х	Х	Х
11				Х	Х	Х
11,5				Х	Х	Х
12				Х	Х	Х
12,5				Х	Х	Х
13				Х	Х	Х
13,5				Х	Х	Х
14				Х	Х	Х
Range of diameters	2 ≤ <i>d</i> ≤ 2,5	$2 \le d \le 4,75$	$2,65 < d \le 7,5$	$3,35 < d \le 14$	$3,75 < d \le 14$	$4,75 < d \le 14$

## Table 1 — Extra-long parallel shank twist drills — Preferred sizes

Dimensions in millimetres

## Annex A (informative)

## Relationship between designations in this International Standard and ISO 13399 (all parts)

For relationship between designations in this International Standard and preferred symbols according to ISO 13399 (all parts), see <u>Table A.1</u>.

# Table A.1 — Relationship between designations in this International Standardand ISO 13399 (all parts)

Symbol in ISO 3292	Reference in ISO 3292	Property name in ISO 13399 (all parts)	Symbol in ISO 13399 (all parts)	Reference in ISO 13399 (all parts)
d	<u>Figure 1</u> <u>Table 1</u>	cutting diameter	DC	71D084653E57F
<i>l</i> <sub>1</sub>	<u>Figure 1</u> <u>Table 1</u>	length chip flute	LCF	71DCCC27DEF53
1	<u>Figure 1</u> <u>Table 1</u>	overall length	OAL	71D078EB7C086

## Bibliography

- [1] ISO 235, Parallel shank jobber and stub series drills and Morse taper shank drills
- [2] ISO 494, Cylindrical shank twist drills Long series
- [3] ISO 13399 (all parts), *Cutting tool data representation and exchange*

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This Indian Standard has been developed from Doc No.: PGD 32 (23680).

#### **Amendments Issued Since Publication**

Amend No.	Date of Issue	Text Affected

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