भारतीय मानक Indian Standard

IS 10068 (Part 1): 2018

दबा कर कार्य करने वाले डाई सेट (प्लेन टाइप)—विशिष्टि

भाग 1 सैंटर पोस्ट आयाताकार डाई सेट (पहला पुनरीक्षण)

Press Working Die Sets (Plain Type) — Specification

Part 1 Centre Post Rectangular Die Sets

(First Revision)

ICS 25.120.10

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भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS

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FOREWORD

This Indian Standard (Part 1) (First Revision) was adopted by the Bureau of Indian Standards after the draft finalized by the Metal Forming Machines Sectional Committee had been approved by the Production and General Engineering Division Council.

This standard was first published in 1982. The experience gained in implementation of this standard has necessitated this revision. This standard is issued in six parts. Other parts of this Indian Standard are:

- Part 2 Centre post square die sets
- Part 3 Centre post round die sets
- Part 4 Rear post rectangular die sets
- Part 5 Rear post square die sets
- Part 6 Rear post round die sets

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: 1960 'Rules for rounding off numerical values (*revised*)'.

Indian Standard

PRESS WORKING DIE SETS (PLAIN TYPE) — SPECIFICATION

PART 1 CENTRE POST RECTANGULAR DIE SETS

(First Revision)

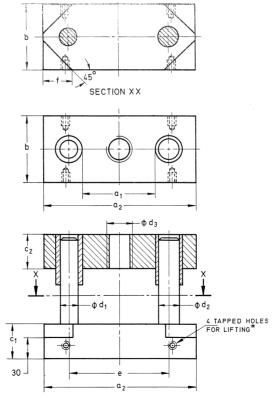
1 SCOPE	IS No.	Title		
This standard covers dimensions and other	210 : 2009	Grey iron castings — Specification (<i>fifth revision</i>)		
requirements for (plain type) rectangular die set with two guide posts in central axis.	1030 : 1998	Carbon steel castings for general engineering purposes — Specification		
2 REFERENCES		(fifth revision)		
The following standards contain provisions which, through reference in this text, constitute provisions of	2062 : 2011	Hot rolled medium and high tensile structural steel — Specification (seventh revision)		
this standard. At the time of publication, the editions indicated were valid. All standards are subject to	8127 : 2005	Guide bushes for press tool die sets — Specification (second revision)		
revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards	11742 : 1986	Test chart for die sets		

3 DIMENSIONS

The dimensions shall be as given in Table 1.

Table 1 Dimensions for Press Working Die Sets (Centre Post Rectangular Die Sets) (Clause 3)

indicated below.



All dimensions in millimetres.

IS 10068 (Part 1): 2018

Die Space	a_2	c_1	c_2	d_I	d_2	d_3	е	f
$a_1 \times b$								
80 × 63	197	40	30	19	20	M 20 × 1.5	127	30
100×63	217	45	30	19	20	$M 20 \times 1.5$	147	30
125×63	242	45	30	19	20	$M 20 \times 1.5$	172	30
160×63	288	50	32	24	25	$M 20 \times 1.5$	212	30
200×63	328	50	32	24	25	$M 20 \times 1.5$	252	30
100×80	228	50	32	24	25	$M 20 \times 1.5$	152	35
125×80	253	50	32	24	25	$M 20 \times 1.5$	177	35
160×80	288	50	32	24	25	$M 20 \times 1.5$	212	35
200×80	328	50	32	24	25	$M 20 \times 1.5$	252	35
250×80	378	50	32	24	25	$M 20 \times 1.5$	302	35
125×100	253	56	40	24	25	$M 24 \times 1.5$	177	40
160×100	288	56	40	24	25	$M 24 \times 1.5$	212	40
200×100	346	56	40	30	32	$M 24 \times 1.5$	260	40
250×100	396	56	40	30	32	$M 24 \times 1.5$	310	40
315×100	461	56	40	30	32	$M 24 \times 1.5$	375	40
160×125	306	56	40	30	32	$M 24 \times 1.5$	220	50
200×125	346	56	40	30	32	$M 24 \times 1.5$	260	50
250×125	396	56	40	30	32	$M 24 \times 1.5$	310	50
315×125	461	56	40	30	32	$M 24 \times 1.5$	375	50
200×160	346	63	50	30	32	$M30 \times 2$	260	40
250×160	396	63	50	30	32	$M30 \times 2$	310	50
315×160	485	63	50	38	40	$M30 \times 2$	385	50
400×160	570	63	50	38	40	$M30 \times 2$	470	50
250×200	420	63	50	38	40	$M30 \times 2$	320	50
315×200	485	63	50	38	40	$M30 \times 2$	385	50
400×200	570	63	50	38	40	$M30 \times 2$	470	50
500×200	670	63	50	38	40	$M30 \times 2$	570	50
315×230	485	63	50	38	40	$M30 \times 2$	385	50
400×250	570	63	50	38	40	$M30 \times 2$	470	50
500×250	670	63	50	38	40	$M30 \times 2$	570	50
400×315	594	75	63	48	50	$M42 \times 3$	480	50
500 × 315	694	75	63	48	50	$M42 \times 3$	580	50
500×400	694	75	63	48	50	$M42 \times 3$	580	50

^{*} Tapped Size —

4 DESIGNATION

4.1 A centre post rectangular die set of cast iron having a die space $a_1 \times b = 100 \text{ mm} \times 80 \text{ mm}$ with guide posts 'Type A' with round ends and having length = 200 mm, and with stepped solid (Type A) guide bushes of length 60 mm, shall be designated as:

> Die Set C — 100×80 IS 10068 (Part 1) alongwith guide posts AR — $24/25 \times 200$ IS 7664 and guide bushes A — $24/25 \times 60$ IS 8127

4.2 A centre post rectangular die set of mild steel having a die space $a_1 \times b = 100 \text{ mm} \times 80 \text{ mm}$ with guide posts 'Type B' with tapered ends and having length = 200mm, and with guide bushes 'Type B' of length 60 mm, shall be designated as:

> Die Set MS — 100 × 80 IS 10068 (Part 1) alongwith guide posts BT — $24/25 \times 200$ IS 7664 and guide bushes B — $24/25 \times 60$ IS 8127

4.3 A centre post rectangular die set of welded or cast steel having a die space $a_1 \times b = 100 \text{ mm} \times 80 \text{ mm}$, with guide posts 'Type B' with tapered ends and having length = 200 mm, and with guide bushes 'Type B' of length 60 mm, shall be designated as:

> Die Set S — 100 × 80 IS 10068 (Part 1) alongwith guide posts BT $-24/25 \times 200$ IS 7664 and guide bushes B — $24/25 \times 60$ IS 8127

4.4 A centre post rectangular die set of mild steel having a die space $a_1 \times b = 100 \text{ mm} \times 80 \text{ mm}$, with guide posts 'Type A' with round ends and having length = 200 mm, and with guide bushes 'Type C' shall be designated as:

> Die Set MS — 100×80 IS 10068 (Part 1) along with guide posts AR — $24/25 \times 100$ IS 7664 and guide bushes C — 24/25 IS 8127

5 MATERIAL

The top and bottom tool holders shall be made of hot rolled medium and high tensile structural steel of IS 2062 or of cast iron of grade FG 260 of IS 210 or cast steel of grade 230-450W of IS 1030.

6 GENERAL REQUIREMENTS

The top and bottom tool holders shall be free from cracks, burrs and pits and shall satisfy for accuracy when tested in accordance with IS 11742.

M 8×20 for die sets up to 125×80 die space, M 10×25 for die sets from 160×80 to 250×160 die space, and

M 12×35 for die sets of 315×160 die space and above.

7 MARKING

7.1 The designation and the manufacturer's identification or trademark shall appear at a prominent place on tool holders.

7.2 BIS Certification Marking

7.2.1 The press working die sets may also be marked with the Standard Mark.

7.2.2 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

Bureau of Indian Standards

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This Indian Standard has been developed from Doc No.: PGD 04 (1550).

Amendments Issued Since Publication

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Published by BIS, New Delhi