**BUREAU OF INDIAN STANDARDS**

 **AGENDA**

|  |  |  |  |
| --- | --- | --- | --- |
|  MEETING | DATE | TIME | VENUE |
| 17thMeeting ofMetal Forming Machines Sectional Committee, PGD 04 | **09 May 2024,****Thursday** | **12 00 h** |  **Hybrid Mode** **(BIS Hyderabad Branch office,Telangana)****(Virtual + Physical)** |

|  |  |
| --- | --- |
| **Meeting link:** | https://bismanak.webex.com/bismanak/j.php?MTID=m5e1c2ea9c1285e5637c403799987161b |
| **Meeting number:** | 2515 238 9095 |
| **Password:** | PGD04 (74304 from video systems) |
| **Host key:** | 462628 |
| **Meeting Time** | 12:00 PM |

**Chairperson**: Mr. Naresh Gurudasani, General Technical Manager, HMT Machine Tools Limited, Bengaluru

**Member Secretary:** Mr. Vimal Kumar, Scientist-B (PGD), BIS, New Delhi

Item 0 GENERAL

**0.1 Welcome by the Head (PGD)/Member Secretary**

**0.2 Opening Remarks by the Chairman**

**Item 1 CONFIRMATION OF MINUTES OF LAST MEETING**

The minutes of the 15th meeting of Metal Forming Machines Sectional Committee PGD 04 were circulated to the members by email on 24 Feb 2024. No comments have been received.

The Committee may please formally confirm the minutes.

**Item 2 COMPOSITION OF THE SECTIONAL COMMITTEE**

The present composition of the Metal Forming Machines Sectional CommitteePGD 04 is given in **Annex A** (Pages 12-14).

The Committee may please note and review

**Item 3 PROGRAMME OF WORK**

**3.1** The present programme of work of Metal Forming Machines Sectional Committee PGD 04 is given in **Annex B** (Pages 16-25).

The Committee may please note.

**3.2 New Work Item Proposal** — For proposing a new subject for National Standardization please use the standard formulation module. Online submission can be done through this link: [Submit New Proposals (bis.gov.in)](https://www.services.bis.gov.in:8071/php/BIS_2.0/bisconnect/master-proposals)

# Item 4 REVIEW OF PROGRESS OF ONGOING WORK ITEMS

# Duplication of Indian Standards

The Committee had constituted the panel PGD 04/P4 **‘Die Sets’** to review the Indian Standards in the table which is given below. The panel examine the duplication of subjects of the adopted standards with the corresponding indigenous standards. The meeting of panel is yet to be convened.

|  |  |  |
| --- | --- | --- |
| **Subject** | **Indigenous Standards** | **Adopted Standards** |
| Die Sets |  **IS 9266 (Part 1-4)** Press Working Die Sets Boss Type – Specification**IS 10068 (Part 1-6)** Specification for Press Working Die Sets Plain Type | IS 16795: 2018 Tools for Pressing— Die Sets |
| GuideBushes | **IS 8127: 2005** Guide Bushes for Press Tool Die Sets Specification (Second Revision) | IS 15448 (Part 1-11) Tools forPressing - Guide Bushes |
| Guide Pillar | **IS 7664: 2005** Guide pillar for press tool die sets: (Second Revision) | IS 15424 (Part 1-5) Tools for Pressing - Guide Pillars |

 **Item 4.2 Review of Standards on Punches**

The Committee had constituted the panel PGD 04/P3 ‘Tools for Pressing — Punches’ to review the standards on punches as given below and assess whether all the sizes being used in the Indian industry is covered in these standards.

|  |  |  |  |
| --- | --- | --- | --- |
| **S No.** | **IS No.** | **Title** | **Current Status** |
|  | **IS 4296 (Part1): 2016/ISO 6752: 2008** | Tools for pressing: Part 1 round punches with 60 degrees conical head and straight shank (Second Revision) | Input is awaited  |
|  | **IS 4296 (Part2): 2024** | Tools for Pressing — Punches Part 2 Punches with Cylindrical Head and Straight or Reduced Shank | **Ready to published**  |
|  | **IS 4296 (Part 3): 2015/ISO 9181: 2007** | Tools for pressing: Part 3 round punches with 60-degree conical head and reduced shank (Second Revision) | Input is awaited |

**Item 4.3 Review of Indian Standards**

As per the Rules of the BIS Act, the Indian Standard has completed five years since the last publications/reaffirmations to be reviewed by the concerned Sectional Committee based on the latest technology/industrial trend world over as well as their application to the Indian industries’ list of Indian Standards to be reviewed is given below. The Committee may please review and decide on their reaffirmation, revision or withdrawal.

|  |  |  |
| --- | --- | --- |
| **S No.** |  **IS No. and Title** | **Due Date for Re- affirmation** |
|  | **IS 11443 (Part 2) : 2003 Reviewed In : 2019** Tools for pressing and moulding - Machined plates: Part 2 machined plates for moulds (First Revision) | March, 2024 |
|  | **IS 14497 : 1997 Reviewed In : 2019**  Capacity rating and dimensions for trimming presses | March, 2024 |
|  | **IS 14877 (Part 2) : 2002 Reviewed In : 2019** Hydraulic presses - Straight sided column/C - Frame type: Part 2 test chart for technical (Performance) evaluation of presses and press brakes | March, 2024 |
|  | **IS 15318 : 2003 Reviewed In : 2019**  Open front mechanical power presses - Vocabulary | March, 2024 |
|  | **IS 15448 (Part 4) : 2018 ISO 9448-4:1991**Tools for pressing - Guide bushes: Part 4 form C, gliding bushes, headed, type 1 (First Revision) | July, 2023 |
|  | **IS 4918 : 1981 Reviewed In : 2019** Specification for hard metal (Carbide) wire, bar and tube drawing dies (First Revision ] | March, 2024 |
|  | **IS 7469 : 1974 Reviewed In : 2019** Recommendation on preferred capacities for mechanical and hydraulic presses | March, 2024 |
|  | **IS 8064 : 2002 Reviewed In : 2019**  Method of designation of mechanical and hydraulic presses (Second Revision) | March, 2024 |
|  | **IS 8711 : 2002 Reviewed In : 2019** Gap frame open front mechanical presses - Capacity ratings and dimensions (First Revision) | March, 2024 |
|  | **IS 9888 : 1981 Reviewed In : 2019** Dimensions for sintered pellets of hard metal (Carbide) for wire, bar and tube drawing dies | March, 2024 |
|  | **IS 10068 (Part 1) : 2018** Press Working Die Sets (Plain Type) â€” Specification Part 1 Centre Post Rectangular Die Sets ( First Revision ) | July, 2023 |
|  | **IS 9266 (Part 2) : 2019** Press working die sets (Boss Type) - Specification: Part 2 centre post square die sets (First Revision) | March, 2024 |
|  | **IS 9266 (Part 3) : 2019** Press working die sets (Boss Type) - Specification: Part 3 centre post round die sets (First Revision) | March, 2024 |
|  | **IS 16800 (Part 2) : 2018 ISO 9183-2:2008** Tools for pressing - Wear plates for press dies: Part 2 type B | September, 2023 |
|  | **IS 16794 (Part 3) : 2019** Tools for pressing Punch holder shanks Part 3 Type D | March, 2024 |

**4.4 Review/Revision of Pre-2000 Standards**

As decided by the Director General, BIS, all standards published before 2000 are to be reviewed on a first-priority basis. Under this criterion the standards due for review are given below**-**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **IS No.** | **Title** | **Current Status** |
|  | [**IS 4918: 1981**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/11640) | Specification for hard metal (Carbide) wire, bar and tube drawing dies (First Revision) | Input is awaited. |
|  | [**IS 10644: 1983**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/1496) | Recommendation on preferred shut heights for mechanical presses |
|  | [**IS 10650: 1983**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/1503) | Specification for pressure pins |
|  | [**IS 11344: 1985**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/2431) | Dimension- Sions for sintered carbide pellets used in heading dies |
|  | [**IS 11684: 1986**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/2831) | Test chart for spinning and planishing lathes |
|  | [**IS 11742: 1986**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/2900) | Test chart for die sets |
|  | [**IS 2515: 1978**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/9022) | Test chart for guillotine shears (First Revision) |
|  | [**IS 6652 (Part 1): 1986**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/13518) | Glossary of terms relating to metal forming machines and tools part 1 Metal forming tools (First Revision) |
|  | [**IS 6652 (Part 2): 1986**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/13519) | Glossary of terms relating to metal forming machines and tools: Part 2 metal forming machines relating to sheet metal (First Revision) |
|  | [**IS 6652 (Part 3): 1986**](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails_mnd/13520) | Glossary of terms relating to metal for - Ming machines and tools: Part 3 Metal forming technology and operations relating to sheet metal ( first revision ) |

**Item 5 INTERNATIONAL ACTIVITIES**

**5.1** BIS, as a founder member ofInternational Organization for Standardization (ISO), actively participate in standardization activities at international level including participation in its policy making bodies like Development Committee (DEVCO), Committee on Conformation Assessment (CASCO) and Committee on Consumer Policy (COPALCO). India (BIS) is the member of various ISO Technical Committee engaged in development of Standards. When we vote in the ISO committee where India is ‘P’ member, the vote is taken into account and also the comments are tabled. Since technical discussions regarding finalization of International Standards mainly take place in these committees mainly through voting; therefore, it is desirable that India should actively comment on the documents circulated by the sub-committees as well. It is proposed to constitute a fresh panel of experts to comment on ISO documents as and when received. The member secretary will forward all the ISO voting documents to these members and after getting their views, a consolidated decision will be taken and vote will be sent on behalf of India.

The Committee may please note.

**5.2** The membership status of India (BIS) on the ISO Technical Committees (ISO/ TC) and sub-Committees (SC) related to Hand Tools Sectional Committee, PGD 4 is as given below:

|  |  |  |
| --- | --- | --- |
| **Technical/Sub Committee** | **Title** | **Membership Status** |
| TC 29/SC 8 |  Tools for pressing and molding | “Observer” Member |
| TC 39 | Machine Tools | “Participating”Member |

For participating (P) member, it is obligatory on our part to vote on all the documents received from ISO. The comments from the members are compiled and sent to the Chairman for approval for voting. All the members and the Chairman are requested to take prompt action on the circulated documents for voting as voting is time bound.

**Effective participation in ISO activities is crucial for our nation as we have a significant stake in international trade and ISO standards. Therefore, it is essential that the committee participates effectively and thoroughly examines ISO ballots with respect to their relevance. If the ballot is relevant to us, the committee should nominate experts to represent our nation in ISO meetings. This will help to ensure that our national interests are well-represented and safeguarded in the international arena.**

The Committee may please note.

**5.3** Different working groups of ISO TC 29/ SC 8

|  |  |  |
| --- | --- | --- |
| **Technical/Sub Committee** | **Title** |  **Expert Nomination** |
| TC 29/SC 8 |  Tools for pressing and molding |  None |

The Committee may please discuss for further action.

**5.4 List of Standards published by ISO/TC 29/SC 8** (Tools for pressing and molding)

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO** | **ISO Standards** | **Title** | **Current Status** |
| **1.** | ISO 6751:2011 | Tools for moulding — Ejector pins with cylindrical head | These standards have already been adopted as Indian Standards |
| **2.** | ISO 6752:2008 | Tools for pressing — Round punches with 60 degrees conical head and straight shank |
| **3.** | ISO 6753-1:2005 | Tools for pressing and moulding — Machined plates — Part 1: Machined plates for press tools |
| **4.** | [ISO 6753-2:1998](https://www.iso.org/standard/20382.html?browse=tc) | Tools for pressing and moulding — Machined plates — Part 2: Machined plates for moulds |
| **5.** | ISO 8017:2007 | Tools for moulding — Guide pillars, straight and shouldered, and locating guide pillars, shouldered |
| **6.** | ISO 8018:2007 | Tools for moulding — Guide bushes, headed, and locating guide bushes, headed |
| **7.** | ISO 8020:2002 | Tools for pressing — Punches with cylindrical head and straight or reduced shank |
| **8.** | ISO 8404:2021 | Tools for moulding — Angle pins |
| **9.** | ISO 8405:2023 | Tools for moulding — Ejector sleeves with cylindrical head — Basic series for general purposes |
| **10.** | ISO 8406:2008 | Tools for moulding — Mould bases — Round locating elements and spacers |
| **11.** | ISO 8693:2011 | Tools for moulding — Flat ejector pins |
| **12.** | ISO 8694:2011 | Tools for moulding — Shouldered ejector pins |
| **13.** | ISO 8695:2010 | Tools for pressing — Punches — Nomenclature and terminology |
| **14.** | ISO 8977:2003 | Tools for pressing — Matrixes |
| **15.** | ISO 9181:2007 | Tools for pressing — Round punches with 60 degrees conical head and reduced shank |
| **16.** | ISO 9182-1:2023 | Tools for pressing — Guide pillars — Part 1: Types |
| **17.** | ISO 9182-2:2023 | Tools for pressing — Guide pillars — Part 2: Type A, straight pillars |
| **18.** | ISO 9182-3:2023 | Tools for pressing — Guide pillars — Part 3: Type B, end-locking pillars |
| **19.** | ISO 9182-4:2023 | Tools for pressing — Guide pillars — Part 4: Type C, pillars with taper lead and bush |
| **20.** | ISO 9182-5:2023 | Tools for pressing — Guide pillars — Part 5: Type D, end-locking pillars with flange |
| **21.** | ISO 9183-1:2008 | Tools for pressing — Wear plates for press dies — Part 1: Type A |
| **22.** | ISO 9183-2:2011 | Tools for pressing — Wear plates for press dies — Part 2: Type B |
| **23.** | ISO 9448-1:2013 | Tools for pressing — Guide bushes — Part 1: Forms |
| **24.** | ISO 9448-2:2013 | Tools for pressing — Guide bushes — Part 2: Form A, gliding bushes, plain, type 1 |
| **25.** | ISO 9448-3:2013 | Tools for pressing — Guide bushes — Part 3: Form B, ball cage bushes, plain, type 1 |
| **26.** | ISO 9448-4:2013 | Tools for pressing — Guide bushes — Part 4: Form C, gliding bushes, headed, type 1 |
| **27.** | ISO 9448-5:2013 | Tools for pressing — Guide bushes — Part 5: Form D, ball cage bushes, headed, type 1 |
| **28.** | ISO 9448-6:2013 | Tools for pressing — Guide bushes — Part 6: Form E, gliding bushes, flanged, type 1 |
| **29.** | ISO 9448-7:2013 | Tools for pressing — Guide bushes — Part 7: Form F, ball cage bushes, flanged, type 1 |
| **30.** | ISO 9448-8:2013 | Tools for pressing — Guide bushes — Part 8: Form G, gliding bushes, stepped, type 1 |
| **31.** | ISO 9448-9:2013 | Tools for pressing — Guide bushes — Part 9: Form B, ball cage bushes, plain, type 2 |
| **32.** | ISO 9448-10:2013 | Tools for pressing — Guide bushes — Part 10: Form E, gliding bushes, flanged, type 2 |
| **33.** | ISO 9448-11:2013 | Tools for pressing — Guide bushes — Part 11: Form F, ball cage bushes, flanged, type 2 |
| **34.** | ISO 9449:2007 | Tools for moulding — Centring sleeves |
| **35.** | ISO 10069-1:2008 | Tools for pressing — Elastomer pressure springs — Part 1: General specification | **Not Adopted** |
| **36.** | ISO 10069-2:2008 | Tools for pressing — Elastomer pressure springs — Part 2: Specification of accessories |
| **37.** | ISO 10071-1:2008 | Tools for pressing — Ball-lock punches — Part 1: Ball-lock punches for light duty |
| **35.** | ISO 10071-2:2005 | Tools for pressing — Ball-lock punches — Part 2: Ball-lock punches for heavy duty |
| **39.** | ISO 10072:2004 | Tools for moulding — Sprue bushes — Dimensions | These standards have already been adopted as Indian Standards |
| **40.** | ISO 10073:2008 | Tools for moulding — Support pillars |
| **41.** | ISO 10242-1:2011 | Tools for pressing — Punch holder shanks — Part 1: Type A |
| **42.** | ISO 10242-2:2008 | Tools for pressing — Punch holder shanks — Part 2: Type C |
| **43.** | ISO 10242-3:2008 | Tools for pressing — Punch holder shanks — Part 3: Type D |
| **44.** | ISO 10243:2019 | Tools for pressing — Compression springs with rectangular section — Housing dimensions and colour coding |
| **45.** | ISO 10907-1:2008 | Tools for moulding — Locating rings — Part 1: Locating rings for mounting without thermal insulating sheets in small or medium moulds (types A and B) |
| **46.** | ISO 10907-2:2007 | Tools for moulding — Locating rings — Part 2: Locating rings for mounting with thermal insulating sheets in small or medium moulds (types C and D) |
| **47.** | ISO 11415:1997 | Tools for pressing — Die sets |
| **48.** | ISO 11900-1:2007 | Tools for pressing — Ball-lock punch retainers — Part 1: Types A and B, rectangular and square for light duty |
| **49.** | ISO 11900-2:2008 | Tools for pressing — Ball-lock punch retainers — Part 2: Types C and D, reduced for light duty |
| **50.** | ISO 11900-3:2004 | Tools for pressing — Ball-lock punch retainers — Part 3: Type E, reduced for heavy duty |
| **51.** | ISO 11901-1:2003 | Tools for pressing — Gas springs — Part 1: General specifications |
| **52.** | ISO 11901-2:2018 | Tools for pressing — Gas springs — Part 2: Specification of accessories |
| **53.** | ISO 11901-3:2021 | Tools for pressing — Gas springs — Part 3: Gas spring with increased spring force and compact built height |
| **54.** | ISO 11901-4:2021 | Tools for pressing — Gas springs — Part 4: Gas springs with increased spring force and same built height |
| **55.** | ISO 11901-5:2021 | Tools for pressing — Gas springs — Part 5: Safety instructions for gas springs | **Not Adopted** |
| **56.** | ISO 11903:2008 | Tools for pressing — Guide pillar mountings | It has been already adopted as an Indian Standard.  |
| **57.** | ISO 12165:2019 | Tools for moulding — Components of compression and injection moulds and diecasting dies — List of equivalent terms and symbols | These standards have already been adopted as Indian Standards |
| **58.** | ISO 15600:2000 | Tools for moulding — Thermal insulating sheets for injection moulds |
| **59.** | ISO 16366:2008 | Tools for pressing — L-shaped guides |
| **60.** | ISO 16367:2008 | Tools for pressing — Guide plates — U- and V-blocks |
| **61.** | ISO 16915:2003 | Tools for moulding — Sprue pullers |
| **62.** | ISO 16916:2016 | Tools for moulding — Tool specification sheet for injection moulds |
| **63.** | ISO 18084:2011 | Press tools for tablets — Punches and dies |
| **64.** | ISO 20928:2018 | Tools for pressing — Spring plungers with helicoidal compression steel spring or gas spring | **Not Adopted**  |
| **65.** | ISO 20929:2018 | Tools for pressing — Heel guidings in large stamping and forming dies |
| **66.** | ISO 21223:2019 | Tools for pressing — Vocabulary |
| **67.** | ISO 23480:2013 | Tools for pressing — Sliding plates |
| **68.** | ISO 23481:2021 | Tools for pressing — Cam driver plates | It has already been adopted as an Indian standard |
| **69.** | ISO 24233:2008 | Tools for moulding — Tool specification sheet for diecasting dies |
| **70.** | ISO 28238:2010 | Compression and injection moulds — Components for gating systems |

**Item 6 BIS COMMITTEES OF THE YEAR AWARDS**

To recognize the significant contribution and outstanding performance of a BIS Sectional Committee or Subcommittee in the development of Indian Standards these awards have been started. Any Sectional Committee or Sub-Committee of BIS would be eligible for the award. The award shall be given to one of the Sectional Committees or Subcommittees under each Divisional Councils on an annual basis. Nomination for the award can be submitted by any Sectional committee/Sub-Committee (by the Chairperson or a Member). Nominations should be submitted to the Member Secretary of the

The selection shall be based on the following criteria.

* The size and portfolio of the committee’s work, including of any work plan
* Management of current work program with priority setting, development of need-based standards having high degree of relevance, ensuring timelines of standard development
* Timely review & up-dating of standards
* Number of standards published
* Good meeting dynamics with - timely meetings, ensuring adequate agenda items and good level of participation of members.
* Good coordination & communication internally with reporting by a subordinate committee.
* Promotional activities of committee work through workshops, conferences, seminars and trainings
* Contributions to international standards activities
* Specific achievements that are outstanding in nature including any committee-level innovations.

The award shall comprise of a plaque and a certificate which shall be presented on the occasion of World Standards Day celebration each year to be received by the Committee Chairperson/Convener or a member or it’s Member Secretary.

The Committee may please note.

**Item 7 LETTER OF APPRECIATION TO COMMITTEE MEMBERS**

Objective: To recognize significant contribution of members of technical committees in developing standard(s) that can be considered to be a major development in the subject area and in national/international standardization.

Any individual can be nominated in his/her capacity as a member of a Committee/Subcommittee/panel including their Chairperson/Convener. Candidates may be nominated by fellow members, by the Chairperson/Convener or Member Secretary of the relevant technical committee in the prescribed form.

The person nominating shall consider those individuals who have made significant contribution in an important recent standardization project. The following aspects shall be considered while recommending for letter of appreciation:

a) Leadership in initiating a project.

b) Technical inputs provided on standard(s) developed including during preparation of the draft standard.

c) Draft document(s) developed (new Indian Standards/revision of existing Indian Standards).

d) Technical comments/inputs provided on ISO/IEC documents/deliverables or major contributions made in developing International Standards.

e) Exceptional contributions in leading standardization projects at national/international level.

f) Initiatives taken/contributions in standards promotion work through workshops, conferences, seminars and trainings.

The Committee may please note.

**Item 8 NATIONAL AND INTERNATIONAL LEVEL EVENTS TO BE PARTICIPATED IN**

BIS has envisaged participation in events organized at national and international levels as these events showcase the latest trends in the field of standardization and technological advancements? Considering the importance of these events committee may please suggest such events where participation of BIS can the benefit development of national standards. The following programs for participation are related to PGD 04.

Committee members may please suggest other important events that may benefit this committee.

**Item 9 SCIENTIFIC JOURNALS AND PERIODICALS TO BE SUBSCRIBED**

BIS has taken a new initiative to subscribe to scientific journals and periodicals relevant to committee work. It is also envisaged that relevant articles from these journals and periodicals are shared with members of the sectional committee

Committee members may please suggest other important journals and magazines that may benefit this committee.

**Item no 10 IMPLEMENTATION OF THE PROCESS REFORMS AIMED AT STRENGTHENING OF THE STANDARDISATION ECOSYSTEM**

* 1. **Declaration by the Member of the Technical Committee**

As per the instructions received from BIS Management, each of the Sectional Committee members are required to submit signed declaration. Members are requested to kindly submit the declaration at the earliest.

*The Committee may kindly NOTE.*

* 1. **Efficiency of Technical Committees**

The efficiency of Technical Committees (TCs) is being evaluated on quarterly basis. It can be also assessed on BIS portal. The efficiency of the TC is being evaluated on following parameters:

1. Meeting Attendance
2. Published Standard Timeframe
3. % of Reviews Completed
4. Inactive Member Removed
5. Comments on P-draft

Members of the Technical Committees are requested to kindly attend the TC meetings on a regular basis, give comments on P-Drafts and participate effectively during different activities of standardization.

*The Committee may kindly NOTE.*

* 1. **Research as an Integral Part of the Standard Formulation**

As a matter of policy, no new standard should be formulated or existing standard reviewed without an ARP or R&D project, unless the Sectional Committee (SC) takes a conscious call, to be recorded in the minutes of the SC meeting, that the data and information available is sufficient and does not warrant any further research.

As per guidelines for R& D projects approved by the Executive Committee of BIS, R & D projects (with financial involvement up to Rs. 10 Lakh only) can be awarded to the members of SC, WP, Working Groups and faculty or research scholars of the academic institutions having entered into MoU with BIS inviting proposals from them.

*The Committee may kindly NOTE.*

* 1. **Onboarding of New Members**

It is mandatory for newly boarded members to attend training programme organized at NITS. It will be helpful for members to be fully conversant with vision, scope, challenges, long, medium term and short-term goals, norms and procedures, of the Sectional Committee**.**

*The Committee may kindly NOTE.*

**Item no 11 INFORMATION ON FREE AVAILABILITY OF INDIGENO US STANDARDS BY BIS**

Bureau of Indian Standards, the National Standards Body of India has published more than 20500 Indian Standards which are available for sale. They are available on the e-sales portal https://standardsbis.bsbedge.com. The Indigenous Indian Standards (not adopted) are available for download free of cost on this website. International Standards adopted by BIS continue to be chargeable.

*The Committee may NOTE.*

**Item no 12 NATIONAL INSTITUTE FOR TRAINING IN STANDARDISATION**

National Institute of Training for Standardization (NITS) has been set up by BIS with world class facilities to impart training on various aspects leading to standardization, quality and other management systems, consumer protection, public service delivery, etc. The training calendar for the current year is available on BIS web site <http://www.bis.gov.in>. The trainings are imparted both through physical as well as virtual mode. The organizations desirous to depute their personnel for training may kindly go through the appropriate programme and get them registered to undergo training.

*The Committee may NOTE.*

**Item 13 DATE AND PLACE OF NEXT MEETING**

Committee may please discuss and decide the date and place of next meeting.

**Item 14. ANY OTHER BUSINESS**

The Committee may please discuss and decide on holding upcoming seminars on Indian Standards on the Safety of Machine Press.

**ANNEX A**

*(Item 2)*

**Composition of Metal Forming Machine Sectional Committee PGD 04**

|  |  |  |  |
| --- | --- | --- | --- |
| ***S. No.*** | ***Organization Represented******/ Nominating Authority*** | ***Principal/Alternate*** | ***Attendance******in the last 3 meetings*** |
| **1.** | HMT Machine Tools Limited, Bengaluru | Shri Naresh Gurudasani**Chairman** | 3/3 |
| **2.** | Autocomp Corporation Panse Private Limited, Rudrapur | Shri S.H. Razode | 3/3 |
| Shri Jaidev Prakash |
| **3.** | Bharat Dynamics Limited,Hyderabad | Shri Karnatham Babu | 0/3 |
| Shri Appa Rao S |
| **4.** | Bharat Heavy Electricals Limited, Bhopal | Shri Deepak Makhija | 1/3 |
| **5.** | Central Institute of Plastics Engineering & Technology,Chennai | Shri Lalit Guglani | 0/3 |
| Shri Avneet Kumar Joshi |
| **6.** | Central Institute of ToolDesign, Hyderabad | Shri J. Bramheswaraiah | 2/3 |
| Shri V. Ragurami Reddy |
| **7.** | Directorate General FactoryAdvice Service and Labour Institutes, Mumbai | Shri Upendra Singh | 3/3 |
| Shri Amit Gola |
| **8.** | Engineering Staff College of India, Hyderabad | Dr. D.N. Reddy | 0/3 |
| Shri D. Seshadri |
| **9.** | ITI Limited, Bangalore | Shri Swamidas V. | 0/3 |
| Shri Ram Gopal MA |
| **10.** | ISGEC Heavy EngineeringLimited, Noida | Shri Suman | 2/3 |
| **11.** | Mahindra CIE AutomotiveLimited, Uttarakhand | Shri Subodh Tripathi | 0/2 |
| Shri Pradeep Sharma |
| **12.** | Maruti Suzuki India Limited,Gurgaon | Shri Deepak Aggarwal | 1/3 |
| Shri Sandeep Gupta |
| **13.** | National Safety Council, Mumbai | Shri A. V. Hotkar | 2/3 |
| Shri Swapnil U. Pupulwad |
| **14.** | Rites Limited, Gurgaon | Shri Rajeev Kumar Ahuja | 2/3 |
| Ms. Jyoti Agarwal |
| **15.** | Safe in India Foundation,Gurgaon | Shri Sandeep Sachdeva | 2/3 |
| Ms. Chitra Khanna |
| **16.** | Tata Motors Limited, Pune | Shri H.J. Anawkar | 3/3 |
| Shri Sanjeev Krishna |
| **17.** | Wheels India Limited,Chennai | Shri S. Mathiyalagan | 0/3 |
| Shri S. Prakash |
| **18.** | In personal capacity | Shri Mukesh Sinha | 3/3 |
| **19.** | DatumTools Private Limited, Faridabad | Mr. Nikunj Mangla | 3/3 |
| **20.** | Misumi India Private Limited, Gurugram | Mr. Liju PS | 3/3 |

**PGD 04/P1 ‘Pressing Machines — Noise Emission — Requirement and Test Method’**

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| --- | --- | --- |
| *S.N.* | *Organization* | *Representative* |
| 1 | HMT Machines Tools Limited, Bengaluru | Mr. Naresh Gurudasani |
| 2 | In personal capacity, Gurugram | Mr. Mukesh Sinha |
| 3 | ISGEC Heavy Engineering Limited, Noida | Mr. D.K. Awasthi |
| 4 | Maruti Suzuki India Limited, Gurugram | Mr. Deepak Aggarwal |
| 5 | Wheels India Limited, Chennai | Mr. S. Mathiyalagan |

**PGD 04/P2 ‘Safety of Metal Forming Machines’**

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| *S.N.* | *Organization* | *Representative* |
| 1 | Safe in India Foundation, Gurugram **(Convener)** | Ms. Chitra Khanna |
| 2 | Directorate General Factory Advice Service and Labour Institutes, Mumbai | Mr. Upendra Singh |
| Mr. Amit Gola |
| 3 | Central Institute of Plastics Engineering &Technology, Chennai | Dr. Lalit Guglani |
| 4 | Central Institute of Tool Design, Hyderabad | Mr. J Bramheswaraiah |
| 5 | HMT Machine Tools Limited, Bengaluru | Mr. Naresh Gurudasani |
| 6 | In personal capacity, Gurugram | Mr. Mukesh Sinha |
| 7 | Maruti Suzuki India Limited, Gurugram | Mr. Deepak Aggarwal |
| 8 | National Safety Council, Mumbai | Mr. AV Hotkar |
| Mr. Swapnil Pupulwad |

**PGD 04/P3 ‘Tools for Pressing — Punches’**

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| *S.N.* | *Organization* | *Representative* |
| 1 | HMT Machines Tools Limited, Bengaluru**(Convener)** | Mr. Naresh Gurudasani |
| 2 | In personal capacity, Gurugram | Mr. Mukesh Sinha |
| 3 | Misumi India Private Limited, Gurugram | Mr. Liju PS |
| 4 | Maruti Suzuki India Limited, Gurugram | Mr. Deepak Aggarwal |
| 5 | Tata Motors Limited, Pune | Mr. H. J. Anawkar |
| Mr. Sanjeev Krishna |
|  |  |  |

 **PGD 04/P4 ‘Die Sets’**

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| **S.N.** | **Organization** | **Representative** |
|  | Nagata India Private Limited, Gurugram (Convener) | Nomination awaited  |
|  | Central Institute of Tool Design, Hyderabad  | Mr. J. Bramheswaraiah  |
|  | DatumTools Private Limited, Faridabad | Mr. Nikunj Mangla |
|  | Mahindra and Mahindra Limited, Mumbai | Nomination awaited |
|  | Maruti Suzuki India Limited, Gurugram | Mr. Deepak Aggarwal |
|  | Misumi India Private Limited, Gurugram | Mr. Liju PS |

# ANNEX B

*(Item 3)*

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| **PGD 04: Metal Forming Machines** |
| **1**. **Scope** : Standardization in the field of various technical aspects of metal forming machines both by hot and cold processes and their machines (Presses, press brakes, shears, shear blades, moulds including plastic injection moulds, forging machines, nibs and dies for wire and tube drawing operations, aluminium diecasting dies, and their related tooling). |
| Liaison: ISO/TC 29/SC 8 (O): Tools for pressing and moulding ISO/TC 39 (P): Machine toolsStandard Published |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl No.** | **IS No.** | **Title** | **Base Standard** | **Status of Base****Standard** |
| **1** | **IS 2515: 1978** | Test chart for Guillotine Shears (First Revision) | - | - |
| **2** |  **IS 4296 (Part 1):****2016****ISO 6752: 2008** | Tools for Pressing: Part 1 Round Punches with 60 Degrees Conical Head and Straight Shank (SecondRevision) | ISO adoption | No change |
| **3** |  **IS 4296 (Part 2):****2015****ISO 8020: 2002** | Tools for Pressing: Part 2 Punches with Cylindrical Head and Straight or Reduced Shank (FirstRevision) | ISO adoption | No change |
| **4** |  **IS 4296 (Part 3):****2015****ISO 9181: 2007** | Tools for Pressing: Part 3 Round Punches with 60 Degree Conical Head andReduced Shank (Second Revision) | ISO adoption | No change |
| **5** |  **IS 4592: 2002****ISO 6899: 1984** | Acceptance Conditions of Open Front Mechanical Power Presses – Testing ofAccuracy (First Revision) | ISO adoption | No change |
| **6** | **IS 4593: 1968** | Test Chart for Straight- Sided Presses | - | - |
| **7** |  **IS 4918: 1981** | Specification for Hard Metal (Carbide) Wire Bar and Tube Drawing Dies – (FirstRevision) | ISO 1684 :1975 | Amd. Issued in 1982 |
| **8** |  **IS 6652 (Part 1):****1986** | Glossary of Terms Relating to Metal Forming Machines and Tools: Part 1 Metal Forming Tools (First Revision) | - | - |
| **9** |  **IS 6652 (Part 2):****1986** | Glossary of Terms Relating to Metal Forming Machines and Tools: Part 2 Metal Forming Machines Relating to Sheet Metal (FirstRevision) | - | - |
| **10** |  **IS 6652 (Part 3):****1986** | Glossary of Terms Relatingto Metal Forming Machines and Tools: Part 3 Metal Forming Technology andOperations Relating to Sheet Metal (First Revision) | - | - |
| **11** |  **IS 7468: 1974** | Recommendation on Preferred Strokes for Mechanical and Hydraulic Presses | - | - |
| **12** |  **IS 7469: 1974** | Recommendation on Preferred Capacities for Mechanical and Hydraulic Presses | - | - |
| **13** |  **IS 7664: 2005** | Guide Pillar for Press Tool Die Sets – Specification (Second Revision) | - | - |
| **14** |  **IS 7706: 1975** | Specification for Bolster Plates for Gap Frame Presses without Die Cushion | - | - |
| **15** |  **IS 7707: 1975** | Specification for Bolster Plates for Gap FramePresses with Die Cushion | - | - |
| **16** |  **IS 8064: 2002** | Method of Designation ofMechanical and Hydraulic Presses (Second Revision) | - | - |
| **17** |  **IS 8127: 2005** | Guide Bushes for Press Tool Die Sets – Specification (Second Revision) | - | - |
| **18** |  **IS 8711: 2002** | Gap Frame Open Front Mechanical Presses –Capacity Ratings and Dimensions (First Revision) | ISO6898:1984 | No change |
| **19** |  **IS 9266 (Part 1):****2017** | Press Working Die Sets (Boss Type)– Specification: Part 1 Centre Post Rectangular Die Sets (First Revision) | - | - |
| **20** |  **IS 9266 (Part 2):****2019** | Press Working Die Sets(Boss Type)– Specification: Part 2 Centre Post Square Die Sets (FirstRevision) | - | - |
| **21** |  **IS 9266 (Part 3):****1979** | Specification for Press Working Die Sets (Boss Type): Part 3 Centre Post Round Die Sets | - | - |
| **22** |  **IS 9266 (Part 4):****1990** | Press Working Die Sets (Boss Type)– Specification: Part 4 Centre Post Reverse Rectangular Die Sets | - | - |
| **23** |  **IS 9888: 1981** | Dimensions for Sintered Pellets of Hard Metal (Carbide) for Wire Bar and Tube Drawing Dies | ISO 2804:1973 | Revised in 1996 |
| **24** |  **IS 10068 (Part 1): 2018** | Press Working Die Sets(Plain Type) – Specification: Part 1 Centre Post Rectangular Die Sets(First Revision) | - | - |
| **25** |  **IS 10068 (Part 2): 2018** | Press Working Die Sets (Plain Type) – Specification: Part 2 Centre Post Square Die Sets (First Revision) | - | - |
| **26** |  **IS 10068 (Part 3): 2019** | Press Working Die Sets (Plain Type)– Specification: Part 3 Centre Post Round Die Sets | - | - |
| **27** |  **IS 10068 (Part 4): 1997** | Press Working Die Sets Plain Type: Part 4 Rear Post Rectangular Die Sets – Specification | - | - |
| **28** |  **IS 10068 (Part 5): 1996** | Press Working Die Sets Plain Type: Part 5 Rear Post Square Die Sets – Specification | - | - |
| **29** |  **IS 10068 (Part 6): 1996** | Press Working Die Sets Plain Type: Part 6 Rear Post Round Die Sets – Specification | - | - |
| **30** |  **IS 10644: 1983** | Recommendation on Preferred Shut Heights for Mechanical Presses | - | - |
| **31** | **IS 10650: 1983** | Specification for Pressure Pins | - | - |
| **32** |  **IS 10731: 2000** | Presses – Slide Holes for Locating the Shanks – Dimensions (First Revision) | DIN 810:1986 | No change |
| **33** |  **IS 11344: 1985** | Dimensions for Sintered Carbide Pellets Used in Heading Dies | ISO5407:1981 | No change |
| **34** |  **IS 11372: 1985** | Proforma for Purchase Specification and Technical Features for Belt Drop Hammers | - | - |
| **35** |  **IS 11443 (Part 1): 2016/ISO 6753- : 2005** | Tools for Pressing and Moulding – Machined Plates: Part 1 Machined Plates for Press Tools (Second Revision) | ISO adoption | No change |
| **36** |  **IS 11443 (Part 2): 2003/ISO 6753: 1998** | Tools for Pressing and Moulding – Machined Plates: Part 2 Machined Plates for Moulds (First Revision) | ISO adoption | No change |
| **37** | **IS 11505: 1986****ISO 5396: 1977** | Recommendations on Terminology of Hard metal Heading Dies | ISO adoption | No change |
| **38** | **IS 11524: 1986****ISO 1651: 1974** | Specification for Carbide Mandrels for Tube Drawing Dies | ISO adoption | Amd. Issuedin 1982 |
| **39** | **IS 11684: 1986** | Test Chart for Spinning and Planishing Lathes | DIN 55803:1979 | Withdrawn |
| **40** | **IS 11742: 1986** | Test Chart for Die Sets | DIN 9811(Part 1) :1980 | Revised in2018 |
| **41** |  **IS 12852: 1989** | Gap Frame Hydraulic Presses up to 4000 KN – Recommendation on Preferred Capacities andDimensions | - | - |
| **42** |  **IS 12984: 1990** | Proforma for Purchase Specification for Plate Bending Machines | DIN55805:1979 | Withdrawn |
| **43** |  **IS 14497: 1997** | Capacity Rating and Dimensions for Trimming Presses | - | - |
| **44** |  **IS 14757: 2000** | Recommendations on Preferred Capacities and Dimensions for Straight- Sided Column Type and Four Pillar Type Hydraulic Presses | - | - |
| **45** | **IS 14758: 2000** | Forging Machine Tools – Glossary of Terms | - | - |
| **46** |  **IS 14877 (Part 1):****2000** | Hydraulic Presses – Straight Sided Column/C- Frame Type: Part 1 Test Chart for GeometricalAccuracy | JIS B6403:1973 | Revised in’77 and ’94. |
| **47** |  **IS 14877 (Part 2) :2002** | Hydraulic Presses – Straight Sided Column/C- Frame Type: Part 2 Test Chart for Technical (Performance) Evaluation of Presses and Press Brakes | - | - |
| **48** | **IS 14878: 2000** | Test Chart for Plate Bending Machines | - | - |
| **49** |  **IS 15300: 2016****ISO 8695: 2010** | Tools for Pressing – Punches — NomenclatureAnd Terminology (First Revision) | ISO adoption | No change |
| **50** | **IS 15318: 2003****ISO 8540: 1993** | Open Front Mechanical Power Presses Vocabulary | ISO adoption | No change |
| **51** | **IS 15424 (Part 1): 2018/ISO 9182-1: 2013** | Tools for Pressing – Guide Pillars: Part 1 Types (First Revision) | ISO adoption | No change |
| **52** | **IS 15424 (Part 2): 2018/ISO 9182-2: 2013** | Tools for Pressing – Guide Pillars: Part 2 Type A, Straight Pillars (First Revision) | ISO adoption | No change |
| **53** | **IS 15424 (Part 3):2018/ISO 9182-3: 2020** | Tools for Pressing – Guide Pillars: Part 3 Type B, End- Locking Pillars (First Revision) | ISO adoption | No change |
| **54** | **IS 15424 (Part 4): 2018****ISO 9182-4: 2020** | Tools for Pressing – GuidePillars: Part 4 Type C, Pillars with Taper Lead and Bush (First Revision) | ISO adoption | No change |
| **55** | **IS 15424 (Part 5):2018****ISO 9182-5: 2020** | Tools for Pressing – Guide Pillars: Part 5 Type D, End- Locking Pillars with Flange(First Revision) | ISO adoption | No change |
| **56** | **IS 15448 (Part 1):2018****ISO 9448: 2013** | Tools for Pressing – Guide Bushes: Part 1 Forms | ISO adoption | No change |
| **57** | **IS 15448 (Part 2): 2017/ISO 9448-2: 2013** | Tools for Pressing – Guide Bushes: Part 2 Form A, Gliding Bushes, Plain, Type1 (First Revision) | ISO adoption | No change |
| **58** | **IS 15448 (Part 3): 2018/ISO 9448-3: 2013** | Tools for Pressing – Guide Bushes: Part 3 Form B, Ball Cage Bushes, Plain, Type 1 (First Revision) | ISO adoption | No change |
| **59** | **IS 15448 (Part 4): 2018/ISO 9448-4: 2013** | Tools for Pressing – Guide Bushes: Part 4 Form C, Gliding Bushes, Headed, Type 1 | ISO adoption | **Under adoption** |
| **60** | **IS 15448 (Part 5): 2018/ISO 9448-5: 2013** | Tools for Pressing – Guide Bushes: Part 5 Form D, Ball Cage Bushes, Headed, Type 1 (First Revision) | ISO adoption | No change |
| **61** | **IS 15448 (Part 6): 2018/ISO 9448-6: 2013** | Tools for Pressing – Guide Bushes: Part 6 Form E, Gliding Bushes, Flanged, Type 1 (First Revision) | ISO adoption | No change |
| **62** | **IS 15448 (Part 7): 2018/ISO 9448-7: 2013** | Tools for Pressing – Guide Bushes: Part 7 Form F, Ball Cage Bushes, Flanged, Type 1 (First Revision) | ISO adoption | No change |
| **63** | **IS 15448 (Part 8): 2018/ISO 9448-8: 2013** | Tools for Pressing – Guide Bushes: Part 8 Form G, Gliding Bushes, Stepped, Type 1 (First Revision) | ISO adoption | No change |
| **64** | **IS 15448 (Part 9): 2018/ISO 9448-9: 2013** | Tools for Pressing – Guide Bushes: Part 9 Form B, Ball Cage Bushes, Plain, Type 2 (First Revision) | ISO adoption | No change |
| **65** | **IS 15448 (Part 10) : 2018/ISO 9448-10: 2013** | Tools for Pressing – Guide Bushes: Part 10 Form E, Gliding Bushes, Flanged, Type 2 (First Revision) | ISO adoption | No change |
| **66** | **IS 15448 (Part 11) : 2018/ISO 9448-11 : 2013** | Tools for Pressing – Guide Bushes: Part 11 Form F, Ball Cage Bushes, Flanged, Type 2 (First Revision) | ISO adoption | No change |
| **67** |  **IS 15744 : 2007** | Angular Deflection for C Frame Mechanical Presses – Specification | - | - |
| **68** |  **IS 15745 : 2007** | Deflection for straight sided mechanical presses – Specification | - | - |
| **69** |  **IS 15746 : 2007** | Angular Deflection for ‘C’ Frame Hydraulic Presses – Specification | - | - |
| **70** |  **IS 15747: 2007** | Angular Deflection for Straight Sided Hydraulic Presses – Specification | - | - |
| **71** | **IS 16727: 2018****ISO 23480: 2013** | Tools for Pressing – Sliding Plates | ISO adoption | No change |
| **72** | **IS 16728: 2018****ISO 23481: 2021** | Tools for Pressing – Cam Driver Plates | ISO adoption | No change |
| **73** | **IS 16793 (Part 1):2019/ISO 11900-1: 2007** | Tools for Pressing – Ball- Lock Punch Retainers: Part 1 Types A and B, Rectangular and Square for Light Duty | ISO adoption | No change |
| **74** | **IS 16793 (Part 2)****: 2019/ISO 11900-2:2008** | Tools for pressing – Ball- Lock punch retainers: Part 2 Types C and D, Reduced for Light Duty | ISO adoption | No change |
| **75** | **IS 16793 (Part 3:****2018/ISO 11900-3: 2004** | Tools for Pressing – Ball- Lock Punch Retainers: Part 3 Type E, Reduced for Heavy Duty | ISO adoption | No change |
| **76** | **IS 16794 (Part 1): 2019 /ISO 10242-1: 2011** | Tools for Pressing – Punch Holder Shanks: Part 1 Type A | ISO adoption | No change |
| **77** | **IS 16794 (Part 2:****2019/ISO 10242-2: 2008** | Tools for Pressing – Punch Holder Shanks: Part 2 Type C | ISO adoption | No change |
| **78** | **IS 16794 (Part 3): 2019/ISO 10242-3:2008** | Tools for Pressing – Punch holder shanks: Part 3 Type D | ISO adoption | No change |
| **79** | **IS 16795: 2018/****ISO 11415: 1997** | Tools for Pressing – Die Sets | ISO adoption | No change |
| **80** |  **IS 16796: 2018/****ISO 10243: 2019** | Tools for Pressing – Compression Springs with Rectangular Section Housing – Dimensions and Color Coding | ISO adoption | No change |
| **81** | **IS 16799: 2018/****ISO 8977: 2003** | Tools for Pressing – Matrixes | ISO adoption | No change |
| **82** | **IS 16800 (Part 1): 2018/ISO 9183-1 : 2008** | Tools for Pressing – Wear Plates for Press Dies: Part 1 Type A | ISO adoption | No Change |
| **83** | **IS 16800 (Part 2): 2018/ISO 9183-2: 2011** | Tools for Pressing – Wear Plates for Press Dies: Part 2 Type B | ISO adoption | **Under adoption** |
| **84** | **IS 16924: 2018/****ISO 6751:2011** | Tools for Moulding – Ejector Pins with Cylindrical Head | ISO adoption | No change |
| **85** | **IS 16925: 2018/ISO 8017: 2007** | Tools for Moulding – Guide Pillars, Straight and Shouldered, and Locating Guide Pillars, Shouldered | ISO adoption | No change |
| **86** | **IS 16926: 2018/ISO 8018: 2007** | Tools for Moulding – Guide Bushes, Headed, and Locating Guide Bushes, Headed | ISO adoption | No change |
| **87** | **IS 16927: 2018/ISO 8404: 2021** | Tools for Moulding – Angle Pins | ISO adoption | No Change |
| **88** |  **IS 16928: 2018/ISO 8405: 2020** | Tools for Moulding – Ejector Sleeves with Cylindrical Head – Basic Series forGeneral Purposes | ISO adoption | No change |
| **89** | **IS 16929: 2018/ISO 8406: 2008** | Tools for Moulding – MouldBases – Round Locating Elements and Spacers | ISO adoption | No change |
| **90** | **IS 16930: 2018/ISO 8693: 2011** | Tools for Moulding – Flat Ejector Pins | ISO adoption | No change |
| **91** | **IS 16931: 2018/ISO 8694: 2011** | Tools for Moulding – Shouldered Ejector Pins | ISO adoption | No change |
| **92** | **IS 16932: 2018/ISO 9449: 2007** | Tools for Moulding – Centring Sleeves | ISO adoption | No change |
| **93** | **IS 16933: 2018/ISO 10072: 2004** | Tools for Moulding – Sprue Bushes – Dimensions | ISO adoption | No change |
| **94** | **IS 16934: 2018/ISO 10073: 2008** | Tools for Moulding – Support Pillars | ISO adoption | No change |
| **95** |  **IS 16935 (Part 1) :2018 /ISO 10907-1: 2008** | Tools for Moulding –Locating Rings: Part 1 Locating Rings for Mounting without Thermal Insulating Sheets in Small or Medium Moulds (Types A and B) | ISO adoption | No change |
| **96** | **IS 16935 (Part 2) : 2018/ ISO 10907-2 :****2007** | Tools for Moulding –Locating Rings: Part 2 Locating Rings for Mounting with Thermal Insulating Sheets in Small or MediumMoulds (Types C and D) | ISO adoption | No change |
| **97** | **IS 17219 (Part 1): 2019/ ISO 11901-1 :****2003** | Tools for Pressing – Gas Springs: Part 1 General Specifications | ISO adoption | No change |
| **98** | **IS 17219 (Part 2): 2019/ ISO 11901-2 :****2004** | Tools for Pressing – Gas springs: Part 2 Specification of Accessories | ISO adoption | No change |
| **99** | **IS 17219(Part 3): 2019/ ISO 11901-3:****2014** | Tools for Pressing – Gas springs: Part 3 Gas Spring with Increased Spring Force and Compact Built Height | ISO adoption | No change |
| **100** | **IS 17219 (Part 4): 2019/ ISO 11901-4 :****2014** | Tools for Pressing – Gas springs: Part 4 Gas Springs with Increased Spring Force and Same Built Height | ISO adoption | No change |
| **101** | **IS 17220: 2019/ ISO 11903: 2008** | Tools for Pressing – Guide Pillar Mountings | ISO adoption | No change |
| **102** | **IS 17221: 2019/ ISO 12165: 2019** | Tools for Moulding –Components of Compression and Injection Moulds and Diecasting Dies Terms and Symbols | ISO adoption | No change |
| **103** | **IS 17222: 2019/ ISO 15600: 2000** | Tools for Moulding –Thermal Insulating Sheets for Injection Moulds | ISO adoption | No change |
| **104** | **IS 17223: 2019/ ISO 16366: 2008** | Tools for Pressing – L- shaped Guides | ISO adoption | No change |
| **105** | **IS 17224: 2019/ ISO 16367: 2008** | Tools for Pressing – Guide Plates U- and V-Blocks | ISO adoption | No change |
| **106** | **IS 17225: 2019/ ISO 16915: 2003** | Tools for Moulding – Sprue Pullers | ISO adoption | No change |
| **107** | **IS 17226: 2019/ ISO 16916: 2016** | Tools for Moulding – Tool Specification Sheet for Injection Moulds | ISO adoption | No change |
| **108** | **IS 17227: 2019/ ISO 18084: 2011** | Press Tools for Tablets – Punches and Dies | ISO adoption | No change |
| **109** | **IS 17228: 2019/ ISO 24233: 2008** | Tools for Moulding – Tool Specification Sheet for Die-casting Dies | ISO adoption | No change |
| **110** | **IS 17229: 2019/ ISO 28238: 2010** | Compression and Injection Moulds Components for Gating Systems | ISO adoption | No change |