

उत्पादन एवं सामान्य अभियांत्रिकी विभाग

PRODUCTION AND GENERAL ENGINEERING DEPARTMENT

Our Ref: PGD 32/A-2.11

हमारा सन्दर्भ: पीजीडी 32 /ए-2.11

28-11-2018

विषय : कर्तन औज़ार विषय समिति, पीजीडी 32 के अंतरगत भारतीय मानकों की पुनः पुष्टि

Subject: Reaffirmation of Indian Standards pertaining to Cutting Tools Sectional Committee, PGD 32

कर्तन औज़ार विषय समिति, पीजीडी 32 द्वारा (Annex I) में अनुलग्न भारतीय मानको की पुनः पुष्टि आगामी पांच वर्षों के लिए अक्टूबर 2018 के महीने के दौरान की गयी है।

The Indian Standards reaffirmed during the month of October 2018 from their respective due date by the concerned Sectional Committee for the period of five years are given in Annex 1.

निदेशक/क्रय /निदेशक(पुस्तकालय सेवा)/निदेशक/प्रकाशन (इन भारतीय मानकों की पुनः पुष्टि का वर्ष निर्धारित करने के लिए आवश्यक कार्यवाही करें।

Director (Sales)/DPT/Director (Library) may please take suitable action for affirming the year of reaffirmation to the above mentioned standards.

(ए रंगाराजन)/ (A Rengarajan)

वैज्ञानिक 'ई' एवं प्रमुख/Sc-E & Head

- i) All Regional Offices
 - ii) All Branch Offices
 - iii) All Inspection Offices
 - iv) All Technical Departments in HQ
 - v) All Labs
 - vi) ITS Dept - with the request to upload the information on BIS intranet
- (All by email)

Annex I

S.No.	IS No.	TITLE
1	IS 1715 : 2002	Self-Holding Tapers - Dimensions (Third Revision)
2	IS 1830 : 1982	Technical supply conditions for milling cutters (Second Revision)
3	IS 1850 : 1961	Dimensions for shank diameters and driving squares for rotating tools
4	IS 2594 : 2003	Hacksaw Blades - Specification (Second Revision)
5	IS 2669 : 1971	Woodruff Keyslot Milling Cutters with Parallel Shank
6	IS 2670 : 1991	Thread Milling Cutter Shell Type - Specification (First Revision)
7	IS 2671 : 1964	Specification for Interlocked Milling Cutters
8	IS 3019 : 1973	Specification for High Speed Steel Butt-Welded Single Point Turning Tools (First Revision)
9	IS 3239 : 1994	Die Stock for Circular Screwing Dies - Specification for (Second Revision /
10	IS 4914 : 1983	Tap Wrenches, Adjustable
11	IS 4921 : 1968	Extension Bars
12	IS 5031 : 1992	Saws - Metal Slitting - Specification (Second Revision)
13	IS 5099 : 2003	Technical Supply Conditions for Twist Drills (Second Revision)
14	IS 5100 : 1969	Twist Drills, Parallel Shanks, Stub Series for Right hand Cutting
15	IS 5101 : 1991	Twist Drills, Parallel Shank, Jobber Series - Specification (First Revision)
16	IS 5102 : 1969	Twist Drills, Parallel Shank, Long Series
17	IS 5103 : 1969	Specification for Twist Drills, Morse Taper Shanks
18	IS 5104 : 1969	Specification for Twist Drills, Oversize Morse Taper Shank
19	IS 5105 : 1969	Twist Drills, Taper Square Shanks for Ratchet Braces
20	IS 5106 : 1969	Specification for Twist Drills, Taper Square Shanks for Carpenter
21	IS 5360 : 1969	Dimensions For Driving Tenons
22	IS 5362 : 1969	Twist Drills, Parallel Shanks, Stub Series, Left Hand Cutting for Automatics
23	IS 5364 : 1969	Specification for Twist drills for taper pin holes with taper 1:50
24	IS 5365 : 1991	Core Drills, Parallel Shanks - Specification (Second Revision)
25	IS 5366 : 1978	Core Drills, Morse Taper Shanks
26	IS 5444 : 1978	Parallel Hand Reamers with Parallel Shanks
27	IS 5445 : 1978	Long Fluted Machine Reamers with Morse Taper Shanks
28	IS 5568 : 1978	Dimensions for tenons and cross-slots for tools with taper bore 1:30 (first Revlslon)
29	IS 5693 : 1988	Specification for Countersinks 90 \diamond , with Parallel Shanks and Solid Pilots (first Revlslon)
30	IS 5698 : 1970	Specification for Rotary Form-relieved Gear Cutters for Spur and Helical Gears
31	IS 5702 : 1970	Specification for Flat Thread Rolling Dies
32	IS 5703 : 1988	Specificaiton for Countersinks 90 with Morse Taper Shanks and Detachable Pilots (First Revision)
33	IS 5704 : 1988	Specification for Counterbores with Parallel Shanks and Solid Pilots (First Revision)
34	IS 5705 : 1988	Specification for Detachable Pilots for Use with Counterbores and Countersink 90 \diamond (First Revision)
35	IS 5710 : 1988	Specificatin for Counterbores with Morse Taper Shanks and Detachable Pilots (First Revision)
36	IS 5882 : 1970	Specification for Socket Reamers with Parallel Shanks

37	IS 5907 : 1970	Specification for Socket Reamers with Morse Taper Shanks
38	IS 5926 : 1970	Specification for Shell Reamers
39	IS 5927 : 1981	Specification for Reduction Sleeves 7/24 Tapers to Morse Tapers (First Revision)
40	IS 5936 : 1981	Specification for Arbors with Morse Taper Shanks for Shell Tools (First Revision)
41	IS 5989 : 1998	Hole Mills - Specification (Second Revision)
42	IS 6171 : 1992	Screwing Taps - Technical Supply Conditions
43	IS 6173 : Part 1 : 1992	Screwing Taps - Dimensions and Tolerances on Threaded Portion - Part 1 : For ISO Metric Screw Threads (First Revision)
44	IS 6173 : Part 2 : 1992	Screwing Taps - Dimensions and tolerances of threaded portion:Part 2 For pipe threads G, Rp and Rc series
45	IS 6175 : Part 1 : 1992	Screwing Taps - Part 1 : Hand, and Short Machine Screwing Taps for ISO Metric Screw Threads Sizes M1 to M2.5 - Specification (Second Revision)
46	IS 6175 : Part 2 : 1992	Screwing Taps - Part 2 : Hand and Short Machine Screwing Taps For ISO Metric Screw Threads Sizes M3 to M10 - Specification (Second Revision)
47	IS 6175 : Part 3 : 1992	Screwing Taps - Part 3 Hand and Short Machine Screwing Taps for ISO Metric Screw Threads Sizes M3 to M68 with Coarse Pitches and M3 to M100 with Fine Pitches - Specification (Second Revision)
48	IS 6175 : Part 4 : 1991	Screwing Taps - Part 4 : Long Shank Machine Screwing Taps for ISO Metric Screw Threads Sizes from M3 to M24 - Specification
49	IS 6175 : Part 5 : 1991	Screwing taps - Part 5 : Nut Screwing Taps for ISO Metric Screw Threads Sizes M3 to M68 with Coarse Pitches - Specification
50	IS 6175 : Part 6 : 1992	Screwing Taps - Part 6 : Screwing Taps for Pipe Threads Parallel G Series - Specification
51	IS 6175 : Part 7 : 1992	Screwing Taps - Part 7 : Screwing Taps for Pipe Threads Parallel Rp Series - Specification
52	IS 6175 : Part 8 : 1992	Screwing Taps - Part 8 : Screwing Taps for Pipe Threads Taper Rc Series - Specification
53	IS 6255 : 2013	Inverse Dovetail Cutters and Dovetail Cutters with Cylindrical Shanks (Third Revision)
54	IS 6257 : 1982	Specification for Shell End Mills (First Revision)
55	IS 6285 : 1971	Dimensions for interchangeability of milling cutters and milling arbors with key drive
56	IS 6308 : 1982	Specification for Side and Face Milling Cutters (First Revision)
57	IS 6309 : 1982	Specification for Cylindrical Milling Cutters (First Revision)
58	IS 6310 : 1971	Dimensions for interchangeability of milling cutters and milling arbors with tenon drive
59	IS 6314 : 1982	Specification for Single Corner Rounding Milling Cutters (First Revision)
60	IS 6322 : 1982	Specification for Concave Milling Cutters (First Revision)
61	IS 6323 : 1982	Specification for Convex Milling Cutters (First Revision)
62	IS 6324 : 1971	Specification for Single Angle Milling Cutters
63	IS 6325 : 1971	Specification for Double Angle Milling Cutters
64	IS 6326 : 1996	Equal Angle Milling Cutters - Specification (First Revision)
65	IS 6355 : 1982	Specification for Keyway Milling Cutters (First Revision)
66	IS/ISO 6462 : 1983	Face Milling Cutters with Indexable Inserts - Dimensions
67	IS 6550 : 1992	Thread Milling Cutter with Parallel Shank - Specificaiton (First Revision)
68	IS 6551 : 1992	Thread Milling Cutters with Morse Taper Shanks
69	IS 6681 : 1972	Dimensions for self-release 7/24 tapers for spindle noses for milling machines

70	IS 6682 : 1991	Morse Taper Extension Sockets - Specificaiton (First Revision)
71	IS 6702 : 1991	Morse Taper Reduction Sleeves
72	IS 6708 : 1977	Specificaiton for Centre Drills Type A (First Revision)
73	IS 6709 : 1977	Specificaiton for Centre Drills Type B (First Revision)
74	IS 6710 : 1977	Specificaiton for Centre Drills Type R (First Revision)
75	IS 6776 : 1980	Specificaiton for Knurling Wheels (First Revision)
76	IS/ISO 7388 : Part 1 : 2007	Tool Shanks with 7/24 Taper for Automatic Tool Changers Part 1 Dimensions and Designation of Shanks of Forms A,AD,AF,U,UD and UF
77	IS/ISO 7388 : Part 2 : 2007	Tool Shanks with 7/24 Taper for Automatic Tool Changers Part 2 Dimensions and Designation of Shanks of Forms J,JD and JF
78	IS/ISO 7388 : Part 3 : 2007	Tool Shanks with 7/24 Taper for Automatic Tool Changers Part 3 Retention Knobs for Shanks of Forms AC, AD, AF, UC, UD, UF, JD and JF
79	IS 7766 : 1975	Specificaiton for Twist Drills for Jig Boring Machines
80	IS 7772 : 1975	Specificaiton for Shell Core Drills
81	IS 7773 : 1975	Holding dimensions for broaching tools
82	IS 7778 : Part 1 : 2003	Small Tools Sampling Inspection Procedures - Part 1 : Twist Drills, Countersink and Counterbores (First Revision)
83	IS 7778 : Part 2 : 2003	Small Tools Sampling Inspection Procedures - Part 2 : Reamers (First Revision)
84	IS 7778 : Part 3 : 2003	Small Tools Sampling Inspection Procedures - Part 3 : Sleeves, Sockets and Adaptors (First Revision)
85	IS 7778 : Part 4 : 2003	Small Tools Sampling Inspection Procedures - Part 4 : Screwing Taps, Dies and Knurling Tools (First Revision)
86	IS 7778 : Part 5 : 2003	Small Tools Sampling Inspection Procedures - Part 5 : Milling Cutters (First Revision)
87	IS 7778 : Part 6 : 2003	Small Tools Sampling Inspection Procedures - Part 6 : Milling Arbors and Accessories (First Revision)
88	IS 7778 : Part 7 : 2003	Small Tools Sampling Inspection Procedures - Part 7 : Gear Cutting Tools and Broaches (First Revision)
89	IS 7778 : Part 8 : 2003	Small Tools Sampling Inspection Procedures - Part 8 : Saws (First Revision)
90	IS 7778 : Part 9 : 2003	Small Tools Sampling Inspection Procedures - Part 9 : Single Point (HSS and Carbide Tipped) Tools (First Revision)
91	IS 7778 : Part 10 : 2003	Small Tools Sampling Inspection Procedures - Part 10 : Carbide Tips and Indexable Inserts (First Revision)
92	IS 7778 : Part 11 : 2003	Small Tools Sampling Inspection Procedures - Part 11 : Hard Metal Burrs (First Revision)
93	IS 8305 : 1976	Twist Drills, Morse Taper Shank, Long Series
94	IS 8306 : 1976	Carbide Tipped Twist Drills, Morse Taper Shank
95	IS 8307 : 1976	Carbide Tipped, Twist Drills, Parallel Shank
96	IS 8405 : 2005	Circular Thread Rolling Dies - Specification (First Revision)
97	IS 8611 : 1988	Technical supply conditions for milling arbors and accessories (First Revision)
98	IS 8614 : Part 1 : 2013	Milling Machine Arbors with 7/24 Tapers Part 1 Dimension and Designation (Second Revision)
99	IS 8615 : 1993	Acceptance Conditions Of Mechanical--Dividing Heads For Machine Tools — Testing--Of Accuracy
100	IS 8616 : 1993	Stub Milling Arbors with Self-Release 7/24 Taper and with Key - Specification (First Revision)
101	IS 8618 : 1977	Specification for Spacing Collars for Milling Arbors

102	IS 8619 : 1977	Bearing Collars for Milling Arbors
103	IS 8620 : 1993	Clamping Nuts for Milling Arbors - Specification (First Revision)
104	IS 8621 : 1977	Retaining Screw for Milling Arbors
105	IS 8692 Part 2 : 2013	Cylindrical Shanks for Milling Cutters Part 2 Dimensional Characteristics of Flatted Cylindrical Shanks
106	IS 8692 : Part 3 : 2007	Cylindrical shanks for milling cutters : part 3 Dimensional characteristics of threaded shanks (Second Revision)
107	IS 8731 : 1978	Technical supply conditions for general purpose gear hobs
108	IS 8732 : 2003	Single Start Solid (Monobloc) Gear Hobs with Tenon Drive or Axial Keyway, 1 to 40 Module - Nominal Dimensions (First Revision)
109	IS 8842 : 1978	High Speed Steel Butt-welded Single Point Planing Tools
110	IS 8918 : 1978	Dimensions for spindle noses for adjustable adaptors
111	IS 9322 : 1980	Technical supply conditions for carbide tipped milling cutters
112	IS 9323 : 1991	Carbide Tipped End Mills with Parallel Shanks
113	IS 9324 : 1991	Carbide Tipped End Mills with Morse Taper Shanks (First Revision)
114	IS 9325 : 1996	Carbide tipped slot drills with parallel shanks - Specification (First Revision)
115	IS 9326 : 1996	Carbide Tipped Slot Drills with Morse Taper and Tapped End Shanks - Specification (First Revision)
116	IS 9771 : 1981	Specification for Carbide Tipped Core Drills with Morse Taper Shanks
117	IS 9897 : 2013	Indexable Inserts for Cutting Tools - Designation (Third Revision)
118	IS 10140 : 1982	Bandsaw Blades for Woodworking
119	IS 10255 : 1982	Tapered Die-Sinking Cutters with Parallel Shanks
120	IS 10293 : 1982	Dimensions for optional recess on morse taper shanks for tools
121	IS 10412 : 1983	System of designation and marking of single point cutting tools with carbide tips
122	IS 10465 : 1983	Chain Wheel Rotary Tooth form Milling Cutter
123	IS 10514 : 1983	Specification for Split Taper Socket for Tools with Parallel Shank and Driving Tenon
124	IS 10571 : 1983	Specification for Split Taper Sockets for Tools with Parallel Shank, Driving Square and Driving Tenon
125	IS 10591 : 1983	Specification for Segmental Saws for Cold Sawing
126	IS 10608 : 1998	Spline Hobs - Straight Sided - Specification (First Revision)
127	IS 11143 : 1984	Ground High Speed Steel Tool Bits
128	IS 11522 : Part 1 : 1986	Recommendations for basic quantities in cutting and grinding Part 1 : Geometry of the active part of cutting tools, general terms, reference systems, tools & working angles and chip breakers
129	IS 11523 : 1998	Indexable Hardmetal (Carbide) Inserts With Wiper Edges, Without Fixing Hole - Dimensions (First Revision)
130	IS 11741 : 1986	Specification for Circular Saws for Wood Working
131	IS 11829 : 1986	Specification for Miniature Hand Hacksaw Blades
132	IS 11934 : 1987	Carbide Tipped Shell Reamers
133	IS 11935 : 1987	Carbide Tipped Chucking Reamers with Morse Taper Shank with Long Cutting Edge
134	IS 11936 : 1987	Carbide Tipped Long Fluted Machine Reamer with Morse Taper Shank
135	IS 11937 : 1987	Carbide Tipped Machine Jig Reamer With Morse Taper Shank
136	IS 11938 : 1987	Tool Adaptors for Numerically Controlled Machine Tools (Tool Rotating Type)
137	IS 11943 : Part 1 :	Specification for Hard Metal Burrs - Part 1 : Technical Supply Conditions

	1987	
138	IS 11943 : Part 2 : 1987	Specification for Hard Metal Burrs - Part 2 : Cylindrical Burrs (Type A)
139	IS 11943 : Part 3 : 1987	Specification for Hard Metal Burrs - Part 3 : Cylindrical Round (ball) Nose Burrs (Type C)
140	IS 11943 : Part 4 : 1987	Specification for Hard Metal Burrs - Part 4 : Spherical Burrs (Type D)
141	IS 11943 : Part 5 : 1987	Specification for Hard Metal Burrs - Part 5 : Oval Burrs (Type E)
142	IS 11943 : Part 6 : 1987	Specification for Hard Metal Burrs - Part 6 : Arch Round - (Ball -) Nose Burrs (Type F)
143	IS 11943 : Part 7 : 1987	Specification for Hard Metal Burrs - Part 7 : Arch Pointed Nose Burrs (Type G)
144	IS 11943 : Part 8 : 1987	Specification for Hard Metal Burrs - Part 8 : Flame Burrs (Type H)
145	IS 11943 : Part 9 : 1987	Specification for Hard Metal Burrs - Part 9 : 60 and 90 Cone Burrs (Type J and K)
146	IS 11943 : Part 10 : 1987	Specification for Hard Metal Burrs - Part 10 : Conical Round - (Ball -) Nose Burrs (Type L)
147	IS 11943 : Part 11 : 1987	Specification for Hard Metal Burrs - Part 11 : Conical Pointed - Nose Burrs (Type M)
148	IS 11943 : Part 12 : 1987	Specification for Hard Metal Burrs - Part 12 : Inverted Cone Burrs (Type N)
149	IS 11949 : 1987	Specification for Turret Socket
150	IS 11950 : 1987	Specification for Tool Adaptors for Numerically Controlled Machine Tools (Tool Stationary Type)
151	IS 12319 : 1988	Circular screwing dies - General table of dimensions
152	IS 12320 : 1988	Technical supply conditions for circular screwing dies
153	IS 12321 : 1988	Specification for Circular Screwing Dies for ISO Metric Threads
154	IS 12322 : 1988	Specification for Circular Screwing Dies for Taper Pipe Threads, R-series
155	IS 12324 : 1988	Specification for Hexagonal Die Nuts
156	IS 12325 : 1988	Specification for Circular Screwing Dies for ISO Metric Conduit Pipe Threads
157	IS 12354 : 2002	Indexable Hard Material Inserts with Rounded Corners, with Partly Cylindrical Fixing Hole - Dimensions (First Revision)
158	IS 12536 : 1989	Small Tools - Disc Type Gear Shaper Cutters
159	IS 12537 : 1989	Small Tools - Hub Type Gear Shaper Cutters
160	IS 12538 : 1989	Small Tools - Shank Type Gear Shaper Cutter
161	IS 12687 : 1989	Small Tools - Subland Twist Drills with Morse Taper Shanks for Holes Prior to Tapping Screw Threads
162	IS 12688 : 1989	Small Tools - Subland Twist Drills with Morse Taper Shank for Clearance Holes and Countersinks for Countersunk Head Screws
163	IS 12689 : 1989	Small Tools - Subland Twist Drills with Parallel Shanks for Clearance Holes and Counterbores for Slotted Cheese Head Screws
164	IS 12690 : 1989	Small Tools - Subland Twist Drills With Morse Taper Shank for Clearance Holes and Counterbores for Slotted Cheese Head Screws
165	IS 12691 : 2013	Subland Twist Drills with Cylindrical Shanks for Holes Prior to Tapping Screw Threads
166	IS 12692 : 1989	Small Tools - Subland Twist Drills with Parallel Shanks for Clearance Holes and Countersinks for Countersunk Head Screws

167	IS 12716 : 2002	End Mills with Indexable Inserts - Specification (First Revision)
168	IS 12728 : 1989	Carbide Tips for Dead Centre
169	IS 13167 : 1991	Side and Face Milling Cutters with Indexable Inserts - Specification
170	IS 13303 : 1992	Countersinks 60°, 90° and 120°. with morse taper shanks - Specification
171	IS 13304 : 1992	Countersinks 60°, 90° and 120°. with parallel shanks - Specification
172	IS 13740 : 1993	Carbide Tipped Single Point Tools - Technical Supply Conditions
173	IS 13741 : Part 1 : 1993	Carbide Tips - Part 1 : Carbide Tips for Single Point Tools - Specification
174	IS 13741 : Part 2 : 1993	Carbide Tips - Part 2 : Carbide Tips for Single Point Tools for Light Cutting Operations - Specification
175	IS 13741 : Part 3 : 1993	Carbide Tips - Part 3 : Carbide Tips for Single Point Tools Blanks for Sliding Head Type Automats - Specification
176	IS 13741 : Part 4 : 1993	Carbide Tips - Part 4 : Carbide Tips for Multi Point Tools - Specification
177	IS 13741 : Part 5 : 1993	Carbide Tips - Part 5 : Carbide Tips for Twist Drills with Point Angle 115 - Specification
178	IS 13741 : Part 6 : 1993	Carbide Tips - Part 6 : Carbide Tips for Single Point Threading Tools - Specification
179	IS 13741 : Part 7 : 1993	Carbide Tips - Part 7 : Carbide Tips for Single Point Round Nose Turning Tools - Specification
180	IS 13742 : Part 1 : 1993	Carbide Tipped Single Point Tools - ISO Series - Part 1 : Straight Turning Tool (ISO 1) - Specification
181	IS 13742 : Part 3 : 1993	Carbide Tipped Single Point Tools - ISO Series - Part 3 : Cranked Finishing Tool (ISO 3) - Specification
182	IS 13742 : Part 4 : 1993	Carbide Tipped Single Point Tools - ISO Series - Part 4 : Broad Turning Tool (ISO 4) - Specification
183	IS 13742 : Part 5 : 1993	Carbide Tipped Single Point Tools - ISO Series - Part 5 : Cranked Facing Tool (ISO 5) - Specification
184	IS 13742 : Part 6 : 1993	Carbide Tipped Single Point Tools - ISO Series - Part 6 : Cranked Turning Tool (ISO 6) - Specification
185	IS 13742 : Part 7 : 1993	Carbide Tipped Single Point Tools - ISO Series - Part 7 : Parting off Tool (ISO 7) - Specification
186	IS 13742 : Part 8 : 1993	Carbide Tipped Single Point Tools - ISO series - Part 8 : Boring Tool (ISO 8) - Specification
187	IS 13742 : Part 9 : 1993	Carbide Tipped Single Point Tools - ISO Series - Part 9 : Boring and Facing Tool (ISO 9) - Specification
188	IS 13743 : Part 1 to 10 : 1997	Carbide Tipped Single Point Tools - Ind Series - Specification
189	IS 13776 : 1993	Machine tools - Morse taper shanks - Cotter slots with taper keys
190	IS 14532 : 1998	Reduction sleeves with tenon drive with external and internal 7/24 taper ISO Dimensions
191	IS 14584 : 1998	Splines and Hobs - Technical Supply Conditions for Hobs
192	IS 14585 : 1998	Spline Hobs - Involute Sided - Specification
193	IS 14586 : 1998	Serration Hobs - Straight Sided - Specification
194	IS 15067 : 2001	End Mills with Brazed Helical Hard Metal Tips - Dimensions
195	IS 15075 : 2001	Rotary and Rotary Impact Masonry Drill Bits with Hard Metal Tips - Dimensions
196	IS 15091 : Part 1 : 2002	Indexable Inserts for Cutting Tools - Ceramic Inserts with Rounded Corners - Part 1 : Dimensions of Inserts without Fixing Hole
197	IS 15092 : 2002	Single Point Cutting Tools - Corner Radii

198	IS 15094 : 2002	Classification and Designation of Approximate Chip Control Zones for Indexable Inserts with Chip Breakers
199	IS 15144 : 2002	Indexable Hardmetal (Carbide) Inserts with Rounded Corners with Partly Cylindrical Fixing Hole - Dimensions of Inserts With 7° Normal Clearance for Light Alloy and Plastic Components Turning
200	IS 15777 : 2008	Selection of hacksaw tooth for metal cutting - Recommendations
201	IS B15777 : 2008	Selection of Hacksaw Tooth for Metal Cutting – Recommendations
202	IS 16059 : 2013	Solid Carbide Parallel Shank Twist Drills Jobber Series - Specification
203	IS 16060 : 2013	Solid Carbide Parallel Shank Twist Drills Stub Series - Specification
204	IS 16136 : 2013	Solid Carbide End Mills with Continuous Parallel Shank - Specification