

DRILLING

33-2023

NOVEMBER 2023

METRIC

NPA

New Product Announcement



Cost Effective
Insert



High
Productivity



For Non-Alloy and
Carbon Steels



SUMOCHAM
CHAMDRILL LINE

Expansion of the IHP Line

METRIC



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Insert



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Highlights

IHP Drilling Heads Are Now Available in the Range of 10.0 to 26.9 mm Diameters in Increments of 0.1 mm.

The IHP drilling heads ensure a hole tolerance of IT8-IT9 and can be mounted on any SUMOCHAM standard drill body in the appropriate pocket size.

Dedicated honing size strengthens the cutting edge and extends tool life when working with non-alloy / carbon steels.

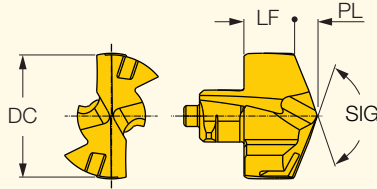
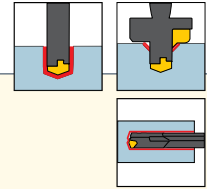
IHP drilling heads are made of IC948 special TiAlCrN PVD coated grade that substantially improves insert efficiency and reliability. In addition, high oxidation and chipping resistance can be achieved with the special multi-layered structure of the coating.

SUMOCHAM CHAMDRILL LINE

IHP

Exchangeable Drilling Heads for DCN Drills,
for Machining ISO P Materials (Non-alloy and Carbon Steel)

<https://www.iscar.com/eCatalog/Family.aspx?fnum=4810&mapp=DR&GFSTYP=M&srch=1>



Designation	Dimensions					Po. Size	IC948
	DC	PL	LF	SIG			
IHP 100	10.00	1.500	4.70	140	10.0	●	
NEW IHP 101	10.10	1.520	4.68	140	10.0	●	
NEW IHP 102	10.20	1.540	4.66	140	10.0	●	
IHP 103	10.30	1.550	4.65	140	10.0	●	
NEW IHP 104	10.40	1.570	4.63	140	10.0	●	
IHP 105	10.50	1.590	4.61	140	10.0	●	
NEW IHP 106	10.60	1.610	4.59	140	10.0	●	
NEW IHP 107	10.70	1.630	4.57	140	10.0	●	
IHP 108	10.80	1.650	4.55	140	10.0	●	
NEW IHP 109	10.90	1.660	4.54	140	10.0	●	
IHP 110	11.00	1.670	4.93	140	11.0	●	
NEW IHP 111	11.10	1.690	4.91	140	11.0	●	
NEW IHP 112	11.20	1.710	4.89	140	11.0	●	
NEW IHP 113	11.30	1.720	4.88	140	11.0	●	
NEW IHP 114	11.40	1.740	4.86	140	11.0	●	
IHP 115	11.50	1.760	4.84	140	11.0	●	
NEW IHP 116	11.60	1.780	4.82	140	11.0	●	
NEW IHP 117	11.70	1.800	4.80	140	11.0	●	
NEW IHP 118	11.80	1.820	4.78	140	11.0	●	
NEW IHP 119	11.90	1.830	4.77	140	11.0	●	
IHP 120	12.00	1.820	5.18	140	12.0	●	
NEW IHP 121	12.10	1.840	5.16	140	12.0	●	
NEW IHP 122	12.20	1.860	5.14	140	12.0	●	
IHP 123	12.30	1.870	5.13	140	12.0	●	
NEW IHP 124	12.40	1.890	5.11	140	12.0	●	
IHP 125	12.50	1.910	5.09	140	12.0	●	
IHP 126	12.60	1.930	5.07	140	12.0	●	
IHP 127	12.70	1.950	5.05	140	12.0	●	
NEW IHP 128	12.80	1.970	5.03	140	12.0	●	
NEW IHP 129	12.90	1.980	5.02	140	12.0	●	
IHP 130	13.00	1.960	5.64	140	13.0	●	
NEW IHP 131	13.10	1.980	5.62	140	13.0	●	
NEW IHP 132	13.20	2.000	5.60	140	13.0	●	
IHP 133	13.30	2.010	5.59	140	13.0	●	
NEW IHP 134	13.40	2.030	5.57	140	13.0	●	
IHP 135	13.50	2.050	5.55	140	13.0	●	
NEW IHP 136	13.60	2.070	5.53	140	13.0	●	
NEW IHP 137	13.70	2.090	5.51	140	13.0	●	
NEW IHP 138	13.80	2.110	5.49	140	13.0	●	
NEW IHP 139	13.90	2.120	5.48	140	13.0	●	

• Intermediate sizes can be supplied on request

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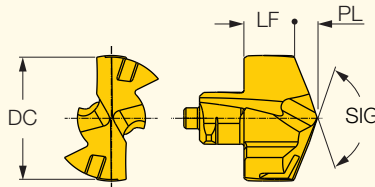
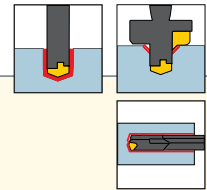
CHAMDRILL LINE

Continued

IHP

Exchangeable Drilling Heads for DCN Drills,
for Machining ISO P Materials (Non-alloy and Carbon Steel)

<https://www.iscar.com/eCatalog/Family.aspx?fnum=4810&mapp=DR&GFSTYP=M&srch=1>



Designation	Dimensions					Po. Size	IC948
	DC	PL	LF	SIG			
IHP 140	14.00	2.120	6.03	140	14.0	●	
IHP 141	14.10	2.140	6.01	140	14.0	●	
IHP 142	14.20	2.160	5.99	140	14.0	●	
IHP 143	14.30	2.170	5.98	140	14.01	●	
IHP 144	14.40	2.190	5.96	140	4.0	●	
IHP 145	14.50	2.210	5.94	140	14.0	●	
IHP 146	14.60	2.230	5.92	140	14.0	●	
IHP 147	14.70	2.250	5.90	140	14.0	●	
IHP 148	14.80	2.270	5.88	140	14.0	●	
IHP 149	14.90	2.280	5.87	140	14.0	●	
IHP 150	15.00	2.270	6.46	140	15.0	●	
IHP 151	15.10	2.290	6.44	140	15.0	●	
IHP 152	15.20	2.310	6.42	140	15.0	●	
IHP 153	15.30	2.320	6.41	140	15.0	●	
IHP 154	15.40	2.340	6.39	140	15.0	●	
IHP 155	15.50	2.360	6.37	140	15.0	●	
IHP 156	15.60	2.380	6.35	140	15.0	●	
IHP 157	15.70	2.400	6.33	140	15.0	●	
IHP 158	15.80	2.420	6.31	140	15.0	●	
IHP 159	15.90	2.430	6.30	140	15.0	●	
IHP 160	16.00	2.420	6.88	140	16.0	●	
IHP 161	16.10	2.440	6.86	140	16.0	●	
IHP 162	16.20	2.460	6.84	140	16.0	●	
IHP 163	16.30	2.470	6.83	140	16.0	●	
IHP 164	16.40	2.490	6.81	140	16.0	●	
IHP 165	16.50	2.510	6.79	140	16.0	●	
IHP 166	16.60	2.530	6.77	140	16.0	●	
IHP 167	16.70	2.550	6.75	140	16.0	●	
IHP 168	16.80	2.570	6.73	140	16.0	●	
IHP 169	16.90	2.580	6.72	140	16.0	●	
IHP 170	17.00	2.590	7.31	140	17.0	●	
IHP 171	17.10	2.610	7.29	140	17.0	●	
IHP 172	17.20	2.630	7.27	140	17.0	●	
IHP 173	17.30	2.640	7.26	140	17.0	●	
IHP 174	17.40	2.660	7.24	140	17.0	●	
IHP 175	17.50	2.680	7.22	140	17.0	●	
IHP 176	17.60	2.700	7.20	140	17.0	●	
IHP 177	17.70	2.720	7.18	140	17.0	●	
IHP 178	17.80	2.740	7.16	140	17.0	●	
IHP 179	17.90	2.750	7.15	140	17.0	●	

• Intermediate sizes can be supplied on request



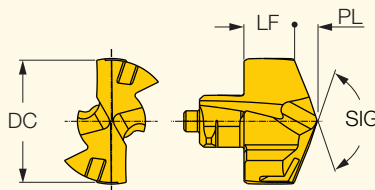
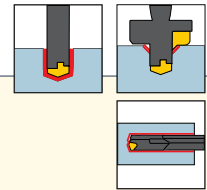
SUMOCHAM CHAMDRILL LINE

Continued

IHP

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Designation	Dimensions					IC948
	DC	PL	LF	SIG	Po. Size	
IHP 180	18.00	2.730	7.77	140	18.0	●
NEW IHP 181	18.10	2.750	7.75	140	18.0	●
NEW IHP 182	18.20	2.770	7.73	140	18.0	●
NEW IHP 183	18.30	2.780	7.72	140	18.0	●
NEW IHP 184	18.40	2.800	7.70	140	18.0	●
NEW IHP 185	18.50	2.820	7.68	140	18.0	●
NEW IHP 186	18.60	2.840	7.66	140	18.0	●
NEW IHP 187	18.70	2.860	7.64	140	18.0	●
NEW IHP 188	18.80	2.880	7.62	140	18.0	●
NEW IHP 189	18.90	2.890	7.61	140	18.0	●
IHP 190	19.00	2.880	8.12	140	19.0	●
NEW IHP 191	19.10	2.900	8.10	140	19.0	●
NEW IHP 192	19.20	2.920	8.08	140	19.0	●
NEW IHP 1925	19.25	2.930	8.07	140	19.0	●
NEW IHP 1927	19.27	2.930	8.07	140	19.0	●
NEW IHP 193	19.30	2.930	8.07	140	19.0	●
NEW IHP 194	19.40	2.950	8.05	140	19.0	●
NEW IHP 195	19.50	2.970	8.03	140	19.0	●
NEW IHP 196	19.60	2.990	8.01	140	19.0	●
NEW IHP 197	19.70	3.010	7.99	140	19.0	●
NEW IHP 198	19.80	3.030	7.97	140	19.0	●
NEW IHP 199	19.90	3.040	7.96	140	19.0	●
IHP 200	20.00	3.020	8.58	140	20.0	●
NEW IHP 201	20.10	3.040	8.56	140	20.0	●
NEW IHP 202	20.20	3.060	8.54	140	20.0	●
NEW IHP 203	20.30	3.070	8.53	140	20.0	●
NEW IHP 204	20.40	3.090	8.51	140	20.0	●
NEW IHP 205	20.50	3.110	8.49	140	20.0	●
NEW IHP 206	20.60	3.130	8.47	140	20.0	●
NEW IHP 207	20.70	3.150	8.45	140	20.0	●
NEW IHP 208	20.80	3.170	8.43	140	20.0	●
NEW IHP 209	20.90	3.180	8.42	140	20.0	●
IHP 210	21.00	3.180	9.00	140	21.0	●
NEW IHP 211	21.10	3.200	8.98	140	21.0	●
NEW IHP 212	21.20	3.220	8.96	140	21.0	●
NEW IHP 213	21.30	3.230	8.95	140	21.0	●
NEW IHP 214	21.40	3.250	8.93	140	21.0	●
NEW IHP 215	21.50	3.270	8.91	140	21.0	●
NEW IHP 216	21.60	3.290	8.89	140	21.0	●
NEW IHP 217	21.70	3.310	8.87	140	21.0	●

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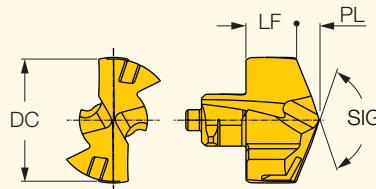
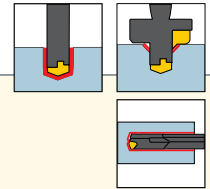
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		Dimensions					
	Designation	DC	PL	LF	SIG	Po. Size	IC948
NEW	IHP 218	21.80	3.330	8.85	140	21.0	●
NEW	IHP 219	21.90	3.340	8.84	140	21.0	●
	IHP 220	22.00	3.320	9.44	140	22.0	●
NEW	IHP 221	22.10	3.340	9.42	140	22.0	●
NEW	IHP 222	22.20	3.360	9.40	140	22.0	●
NEW	IHP 223	22.30	3.370	9.39	140	22.0	●
NEW	IHP 224	22.40	3.390	9.37	140	22.0	●
NEW	IHP 225	22.50	3.410	9.35	140	22.0	●
NEW	IHP 226	22.60	3.430	9.33	140	22.0	●
NEW	IHP 227	22.70	3.450	9.31	140	22.0	●
NEW	IHP 228	22.80	3.470	9.29	140	22.0	●
NEW	IHP 229	22.90	3.480	9.28	140	22.0	●
NEW	IHP 230	23.00	3.460	9.87	140	23.0	●
NEW	IHP 231	23.10	3.480	9.85	140	23.0	●
NEW	IHP 232	23.20	3.500	9.83	140	23.0	●
NEW	IHP 233	23.30	3.510	9.82	140	23.0	●
NEW	IHP 234	23.40	3.530	9.80	140	23.0	●
NEW	IHP 235	23.50	3.550	9.78	140	23.0	●
NEW	IHP 236	23.60	3.570	9.76	140	23.0	●
NEW	IHP 237	23.70	3.590	9.74	140	23.0	●
NEW	IHP 238	23.80	3.610	9.72	140	23.0	●
NEW	IHP 239	23.90	3.620	9.71	140	23.0	●
NEW	IHP 240	24.00	3.620	10.28	140	24.0	●
NEW	IHP 241	24.10	3.640	10.26	140	24.0	●
NEW	IHP 242	24.20	3.660	10.24	140	24.0	●
NEW	IHP 243	24.30	3.670	10.23	140	24.0	●
NEW	IHP 244	24.40	3.690	10.21	140	24.0	●
NEW	IHP 245	24.50	3.710	10.19	140	24.0	●
NEW	IHP 246	24.60	3.730	10.17	140	24.0	●
NEW	IHP 247	24.70	3.750	10.15	140	24.0	●
NEW	IHP 248	24.80	3.770	10.13	140	24.0	●
NEW	IHP 249	24.90	3.780	10.12	140	24.0	●
NEW	IHP 250	25.00	3.800	10.70	140	25.0	●
NEW	IHP 251	25.10	3.820	10.68	140	25.0	●
NEW	IHP 252	25.20	3.840	10.66	140	25.0	●
NEW	IHP 253	25.30	3.850	10.65	140	25.0	●
NEW	IHP 254	25.40	3.870	10.63	140	25.0	●
NEW	IHP 255	25.50	3.890	10.61	140	25.0	●
NEW	IHP 256	25.60	3.910	10.59	140	25.0	●
NEW	IHP 257	25.70	3.930	10.57	140	25.0	●

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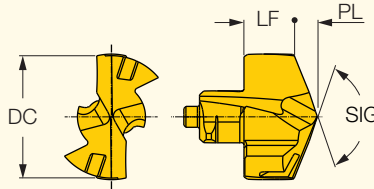
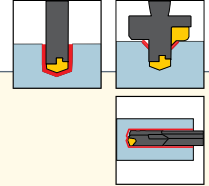
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		Dimensions					
	Designation	DC	PL	LF	SIG	Po. Size	IC948
NEW	IHP 258	25.80	3.950	10.55	140	25.0	●
NEW	IHP 259	25.90	3.960	10.54	140	25.0	●
NEW	IHP 260	26.00	3.950	11.12	140	26.0	●
NEW	IHP 261	26.10	3.970	11.10	140	26.0	●
NEW	IHP 262	26.20	3.990	11.08	140	26.0	●
NEW	IHP 263	26.30	4.000	11.07	140	26.0	●
NEW	IHP 264	26.40	4.020	11.05	140	26.0	●
NEW	IHP 265	26.50	4.040	11.03	140	26.0	●
NEW	IHP 266	26.60	4.060	11.01	140	26.0	●
NEW	IHP 267	26.70	4.080	10.99	140	26.0	●
NEW	IHP 268	26.80	4.100	10.97	140	26.0	●
NEW	IHP 269	26.90	4.110	11.12	140	26.0	●

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SUMOCHAM CHAMDRILL LINE

Material Groups

Recommended Machining Conditions

ISO	Material	Condition	Tensile Strength [N/mm ²]	Hardness HB	Material No. (1)	V m/min	SUMOCHAM					
							Feed vs. Drill Diameter					
							D=10-11.9	D=12-13.9	D=14-15.9	D=16-19.9	D=20-26.9	
P	Non-alloy steel and cast steel, free cutting steel	< 0.25 %C	Annealed	420	125	1	80- 110 -140					
		≥ 0.25 %C	Annealed	650	190	2	80- 105 -130					
		< 0.55 %C	Quenched and tempered	850	250	3	80- 100 -120	0.15	0.18	0.20	0.25	0.25
			Annealed	750	220	4	70- 90 -110	0.28	0.30	0.35	0.45	0.45
		≥ 0.55 %C	Quenched and tempered	1000	300	5	50- 70 -90					
	Low alloy and cast steel (less than 5% of alloying elements)	Annealed	600	200	6	80- 100 -120						
		Quenched and tempered	930	275	7	70- 90 -110	0.14	0.16	0.18	0.23	0.25	
			1000	300	8	50- 70 -90	0.21	0.24	0.26	0.31	0.35	
	High alloyed steel, cast steel and tool steel	Annealed	680	200	10	50- 70 -90	0.12	0.15	0.18	0.20	0.22	
		Quenched and tempered	1100	325	11	40- 60 -80	0.17	0.20	0.23	0.25	0.27	

■ Recommended cutting data