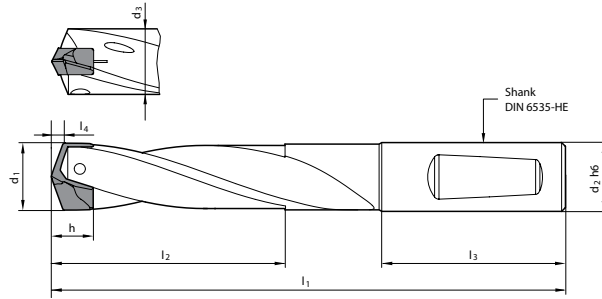


# HT 800 WP Interchangeable Insert Drills

## Extra length holders for drilling - Series 4109 (7xD) and 4110 (10xD) HSS, coolant fed, nickel treated



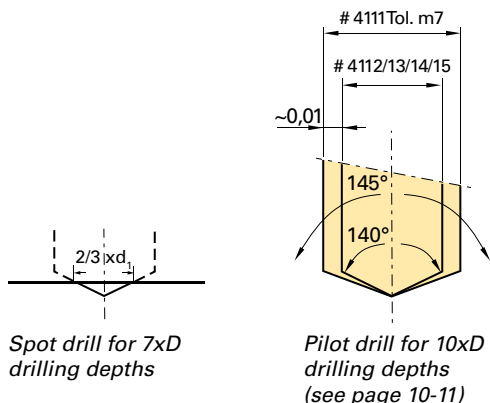
③ \*l1 dimensions listed include insert series 4112, 4113, 4114, and 4115 only. Pilot insert series 4111 has different h and l4 dimensions

Holder Size	d1 Insert Range mm	d2 mm	d2 in	d3 mm	l3 mm	Series 4109 (7xD)			Series 4110 (10xD)		
						EDP No.	l1* mm	l2 mm	EDP No.	l1* mm	l2 mm
110	11.00-11.49	12.00		10.70	45.00	9041090110000	147.00	82.60	9041100110000	182.00	117.10
110	11.00-11.49	12.70	1/2	10.70	45.00	9041090110050			9041100110050		
115	11.50-11.99	12.00		11.20	45.00	9041090115000	151.00	86.10	9041100115000	187.00	122.10
115	11.50-11.99	12.70	1/2	11.20	45.00	9041090115050			9041100115050		
120	12.00-12.49	12.00		11.70	45.00	9041090120000	156.00	89.70	9041100120000	194.00	127.20
120	12.00-12.49	12.70	1/2	11.70	45.00	9041090120050			9041100120050		
125	12.50-12.99	14.00		12.20	45.00	9041090125000	160.00	93.30	9041100125000	199.00	132.30
125	12.50-12.99	15.875	5/8	12.20	45.00	9041090125050			9041100125050		
130	13.00-13.49	14.00		12.70	45.00	9041090130000	164.00	96.90	9041100130000	205.00	137.50
130	13.00-13.49	15.875	5/8	12.70	45.00	9041090130050			9041100130050		
135	13.50-13.99	14.00		13.20	45.00	9041090135000	169.00	100.60	9041100135000	211.00	142.50
135	13.50-13.99	15.875	5/8	13.20	45.00	9041090135050			9041100135050		
140	14.00-14.49	14.00		13.70	45.00	9041090140000	173.00	104.20	9041100140000	217.00	147.70
140	14.00-14.49	15.875	5/8	13.70	45.00	9041090140050			9041100140050		
145	14.50-14.99	16.00		14.20	48.00	9041090145000	180.00	107.80	9041100145000	225.00	152.80
145	14.50-14.99	15.875	5/8	14.20	48.00	9041090145050			9041100145050		
150	15.00-15.49	16.00		14.70	48.00	9041090150000	185.00	111.30	9041100150000	232.00	157.80
150	15.00-15.49	15.875	5/8	14.70	48.00	9041090150050			9041100150050		
155	15.50-15.99	16.00		15.20	48.00	9041090155000	189.00	114.90	9041100155000	237.00	162.90
155	15.50-15.99	15.875	5/8	15.20	48.00	9041090155050			9041100155050		
160	16.00-16.49	16.00		15.70	48.00	9041090160000	193.00	118.90	9041100160000	243.00	168.00
160	16.00-16.49	15.875	5/8	15.70	48.00	9041090160050			9041100160050		
165	16.50-16.99	18.00		16.20	48.00	9041090165000	198.00	122.10	9041100165000	249.00	173.10
165	16.50-16.99	19.05	3/4	16.20	48.00	9041090165050			9041100165050		
170	17.00-17.49	18.00		16.70	48.00	9041090170000	202.00	125.80	9041100170000	255.00	178.30
170	17.00-17.49	19.05	3/4	16.70	48.00	9041090170050			9041100170050		
175	17.50-17.99	18.00		17.20	48.00	9041090175000	206.00	129.40	9041100175000	260.00	183.50
175	17.50-17.99	19.05	3/4	17.20	48.00	9041090175050			9041100175050		
180	18.00-18.49	18.00		17.70	48.00	9041090180000	211.00	132.90	9041100180000	267.00	188.40
180	18.00-18.49	19.05	3/4	17.70	48.00	9041090180050			9041100180050		

Holders are always supplied with clamping screw, Guhring no. 4071, and screwdriver, Guhring no. 1612.

# Holders

For drilling depths over 5xD, we generally recommend spot drilling prior to finish drilling to depth. Drilling depths over 7xD will typically require use of a series 4105 pilot drill with a series 4111 (145°) insert.



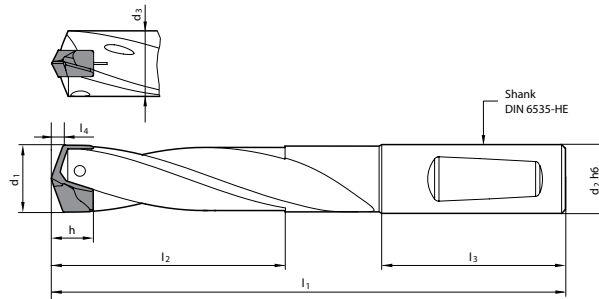
③

Holder Size	d1 Insert Range mm	d2 mm	d2 in	d3 mm	l3 mm	Series 4109 (7xD)			Series 4110 (10xD)		
						EDP No.	l1* mm	l2 mm	EDP No.	l1* mm	l2 mm
185	18.50-18.99	20.00		18.20	50.00	9041090185000	217.00	136.50	9041100185000	274.00	193.50
185	18.50-18.99	19.05	3/4	18.20		9041090185050			9041100185050		
190	19.00-19.49	20.00		18.70	50.00	9041090190000	221.00	140.10	9041100190000	280.00	198.70
190	19.00-19.49	19.05	3/4	18.70		9041090190050			9041100190050		
195	19.50-19.99	20.00		19.20	50.00	9041090195000	226.00	143.70	9041100195000	286.00	203.70
195	19.50-19.99	19.05	3/4	19.20		9041090195050			9041100195050		
200	20.00-20.49	20.00		19.70	50.00	9041090200000	230.00	147.30	9041100200000	292.00	208.90
200	20.00-20.49	19.05	3/4	19.70		9041090200050			9041100200050		
205	20.50-20.99	25.00		20.20	56.00	9041090205000	243.00	151.00	9041100205000	306.00	214.00
205	20.50-20.99	25.40	1.0"	20.20		9041090205050			9041100205050		
210	21.00-21.49	25.00		20.70	56.00	9041090210000	247.00	154.60	9041100210000	312.00	219.10
210	21.00-21.49	25.40	1.0"	20.70		9041090210050			9041100210050		
215	21.50-21.99	25.00		21.20	56.00	9041090215000	251.00	158.10	9041100215000	317.00	224.20
215	21.50-21.99	25.40	1.0"	21.20		9041090215050			9041100215050		
220	22.00-22.49	25.00		21.70	56.00	9041090220000	255.00	161.70	9041100220000	323.00	229.30
220	22.00-22.49	25.40	1.0"	21.70		9041090220050			9041100220050		
225	22.50-22.99	25.00		22.20	56.00	9041090225000	260.00	165.30	9041100225000	329.00	234.40
225	22.50-22.99	25.40	1.0"	22.20		9041090225050			9041100225050		
230	23.00-23.49	25.00		22.70	56.00	9041090230000	264.00	168.90	9041100230000	335.00	239.50
230	23.00-23.49	25.40	1.0"	22.70		9041090230050			9041100230050		
235	23.50-23.99	25.00		23.20	56.00	9041090235000	269.00	172.50	9041100235000	341.00	244.60
235	23.50-23.99	25.40	1.0"	23.20		9041090235050			9041100235050		
240	24.00-24.49	25.00		23.70	56.00	9041090240000	273.00	176.10	9041100240000	347.00	249.70
240	24.00-24.49	25.40	1.0"	23.70		9041090240050			9041100240050		
245	24.50-24.99	25.00		24.20	56.00	9041090245000	277.00	179.70	9041100245000	352.00	254.80
245	24.50-24.99	25.40	1.0"	24.20		9041090245050			9041100245050		
250	25.00-25.49	25.00		24.70	56.00	9041090250000	282.00	183.30	9041100250000	359.00	259.90
250	25.00-25.49	25.40	1.0"	24.70		9041090250050			9041100250050		
255	25.50-25.99	32.00		25.20	60.00	9041090255000	291.00	186.90	9041100255000	369.00	265.00
255	25.50-25.99	31.75		25.20		9041090255050			9041100255050		

Holders are always supplied with clamping screw, Guhring no. 4071, and screwdriver, Guhring no. 1612.

# HT 800 WP Interchangeable Insert Drills

## Extra length holders for drilling - Series 4109 (7xD) and 4110 (10xD) HSS, coolant fed, nickel treated



③ Continued from previous page

Holder Size	d1 Insert Range mm	d2 mm	d2 in	d3 mm	l3 mm	Series 4109 (7xD)			Series 4110 (10xD)		
						EDP No.	l1* mm	l2 mm	EDP No.	l1* mm	l2 mm
260	26.00 - 26.49	32.00		25.70		9041090260000			9041100260000		
260	26.00 - 26.49	31.75		25.70	60.00	9041090260050	297.00	190.00	9041100260050	377.00	270.00
265	26.50 - 26.99	32.00		26.20		9041090265000			9041100265000		
265	26.50 - 26.99	31.75		26.20	60.00	9041090265050	301.00	194.00	9041100265050	382.00	275.00
270	27.00 - 27.49	32.00		26.70		9041090270000			9041100270000		
270	27.00 - 27.49	31.75		26.70	60.00	9041090270050	306.00	197.20	9041100270050	388.00	280.10
275	27.50 - 27.99	32.00		27.20		9041090275000			9041100275000		
275	27.50 - 27.99	31.75		27.20	60.00	9041090275050	310.00	200.80	9041100275050	394.00	285.20
280	28.00 - 28.49	32.00		27.70		9041090280000			9041100280000		
280	28.00 - 28.49	31.75		27.70	60.00	9041090280050	314.00	204.40	9041100280050	400.00	290.30
285	28.50 - 28.99	32.00		28.20		9041090285000			9041100285000		
285	28.50 - 28.99	31.75		28.20	60.00	9041090285050	318.00	208.40	9041100285050	405.00	295.40
290	29.00 - 29.49	32.00		28.70		9041090290000			9041100290000		
290	29.00 - 29.49	31.75		28.70	60.00	9041090290050	323.00	212.50	9041100290050	412.00	300.50
295	29.50 - 29.99	32.00		29.20		9041090295000			9041100295000		
295	29.50 - 29.99	31.75		29.20	60.00	9041090295050	327.00	215.10	9041100295050	418.00	305.60
300	30.00 - 30.49	32.00		29.70		9041090300000			9041100300000		
300	30.00 - 30.49	31.75		29.70	60.00	9041090300050	332.00	218.60	9041100300050	424.00	310.60
305	30.50 - 30.99	32.00		30.20		9041090305000			9041100305000		
305	30.50 - 30.99	31.75		30.20	60.00	9041090305050	336.00	222.20	9041100305050	429.00	315.70
310	31.00 - 31.49	32.00		30.70		9041090310000			9041100310000		
310	31.00 - 31.49	31.75		30.70	60.00	9041090310050	340.00	225.80	9041100310050	435.00	320.80
315	31.50 - 31.99	32.00		31.20		9041090315000			9041100315000		
315	31.50 - 31.99	31.75		31.20	60.00	9041090315050	344.00	229.40	9041100315050	441.00	325.90