



HSS Bohrer

E HSS drills

I HSS punte elicoidali






































HSS Bohrer
HSS drills
HSS punte elicoidali

D **Übersicht**
HSS-Spiralbohrer

E **Overview**
HSS twist drills

I **Sommario**
Punte elicoidali HSS

								
DIN 340	DIN 1869						WN	DIN 345
Forte	R1, RN	R2, RN	R3, RN	R1, Forte	R2, Forte	R3, Forte	Forte	RN
10xd	>10xd	>10xd	>10xd	>10xd	>10xd	>10xd	10xd	5xd
HSS-Co5	HSS	HSS	HSS	HSS-Co5	HSS-Co5	HSS-Co5	HSS-Co5	HSS
							ALUNIT-S*	
130°	118°	118°	118°	130°	130°	130°	118°	118°
AC	AC	AC	AC	AC	AC	AC	C	A / AC
1-14	2-13	3-13	3,5-13	3-13	3-13	3,5-13	3-10	5-70
511	101	111	121	201	211	221	141, 151	202
245	246	247	248	249	250	250	251, 252	253
								
								
								
								
								
								
								
								
								
								
								
								
								



D **Übersicht**
HSS-Spiralbohrer

E **Overview**
HSS twist drills

I **Sommario**
Punte elicoidali HSS

D Die Schnittwerte für alle Werkzeuge entnehmen Sie bitte unserem separaten Zerspanungshandbuch.

E You will find the cutting conditions for all tools in our separate cutting manual.

I Per i parametri di lavorazione per tutti gli utensili richiedete il nostro manuale tecnico.



Norm / Standard	DIN 345	DIN 341	DIN 1870		WN
Typ / Type / Tipo	RN	RN	R1, RN	R2, RN	H
Bohrtiefe / Depth of drilling / Profondità foro	5xd	10xd	>10xd	>10xd	3xd
Schneidstoff / Cutting material / Acciaio punta	HSS-Co5	HSS	HSS	HSS	HSS-Co8
Beschichtung / Coating / Rivestimento					
Spitzenwinkel / Lip angle / Angolo affilatura	135°	118°	118°	118°	130°
Sonderanschiff / Special point shape / Affilatura speciale	C	A / AC	A / AC	A / AC	C
Ø mm	8-40	10-50	8-30	9-30	8-40
Code / Codice	203	222	262	282	832
Seite / Page / Pagina	255	256	257	258	259

Geeignet für / Suitable for / Adatte per					
 Stähle < 400 N/mm² Acciai < 400 N/mm²					
 Stähle < 850 N/mm² Acciai < 850 N/mm²					
 Stähle < 1.100 N/mm² Acciai < 1.100 N/mm²					
 Stähle < 1.300 N/mm² Acciai < 1.300 N/mm²					
 Stähle > 45 HRC Acciai > 45 HRC					
 Rostfreie Stähle < 850 N/mm² Stainless steels < 850 N/mm² Acciai inossidabili < 850 N/mm²					
 Rostfreie Stähle > 850 N/mm² Stainless steels > 850 N/mm² Acciai inossidabili > 850 N/mm²					
 Grauguss, Temperguss Cast iron, malleable cast iron Ghisa grigia, ghisa malleabile					
 Titan- und Titanlegierung Titanium and titanium alloys Titanio e leghe di Titanio					
 Kupfer, Messing Copper, brass Rame, ottone					
 Aluminium Aluminium Alluminio					
 Kunststoffe Plastics Materie plastiche					

D Übersicht

Mehrfasen-Stufenbohrer

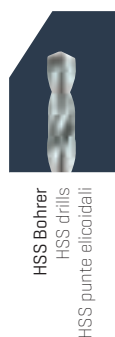
E Overview

Subland drills

I Sommario

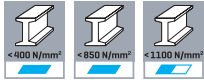
Punte a gradino per sedi viti

DIN 8374		DIN 8376	DIN 8378	DIN 8377
RN-M	RN-F	RN-M	RN-M	RN-M
HSS	HSS	HSS	HSS	HSS
118° / 90°	118° / 90°	118° / 180°	118° / 90°	118° / 180°
A	A	A	A	A
M5-M8	M3-M10	M3-M10	M3-M12	M10-M16
841	841	851	861	852
260	260	261	261	262



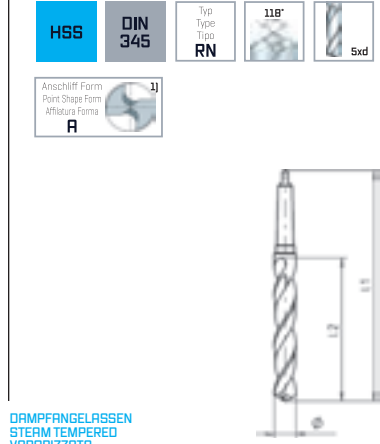
D **Spiralbohrer mit Morsekegel, kurz, DIN 345 RN**

Einsatzbereich:
Hochleistungsbohrer zum Bohren von legierten und unlegierten Stählen und Stahlguss, Grauguss, Temperguss, Kupferlegierungen, Neusilber, Graphit, Sinterisen.



E **Morse taper shank drills, short series, DIN 345 RN**

Range of application:
Premium quality twist drills for drilling steel and steel castings, alloy and plain carbon, grey iron castings, copper-alloys, nickel-silver, graphite and similar materials.



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

I **Punte elicoidali serie corta, cono morse, DIN 345 RN**

Impiego:
Foratura di acciai legati, non legati, ghisa, ghisa grigia, ghisa malleabile, leghe rame, alpaca, grafite, acciai sinterizzati.



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA



\varnothing_{h8} mm	l1 mm	l2 mm		Code 202 Art.-Nr.	
5,00	133	52	1	00 202005001 00	1
5,50	138	57	1	00 202005501 00	1
6,00	138	57	1	00 202006001 00	1
6,50	144	63	1	00 202006501 00	1
7,00	150	69	1	00 202007001 00	1
7,50	150	69	1	00 202007501 00	1
8,00	156	75	1	00 202008001 00	1
8,50	156	75	1	00 202008501 00	1
9,00	162	81	1	00 202009001 00	1
9,50	162	81	1	00 202009501 00	1
9,80	168	87	1	00 202009801 00	1
10,00	168	87	1	00 202010001 00	1
10,20	168	87	1	00 202010201 00	1
10,25	168	87	1	00 202010251 00	1
10,50	168	87	1	00 202010501 00	1
10,75	175	94	1	00 202010751 00	1
11,00	175	94	1	00 202011001 00	1
11,25	175	94	1	00 202011251 00	1
11,50	175	94	1	00 202011501 00	1
11,75	175	94	1	00 202011751 00	1
12,00	182	101	1	00 202012001 00	1
12,25	182	101	1	00 202012251 00	1
12,50	182	101	1	00 202012501 00	1
12,75	182	101	1	00 202012751 00	1
13,00	182	101	1	00 202013001 00	1
13,25	189	108	1	00 202013251 00	1
13,50	189	108	1	00 202013501 00	1
13,75	189	108	1	00 202013751 00	1
14,00	189	108	1	00 202014001 00	1
14,25	212	114	2	00 202014251 00	1
14,50	212	114	2	00 202014501 00	1
14,75	212	114	2	00 202014751 00	1
15,00	212	114	2	00 202015001 00	1
15,25	218	120	2	00 202015251 00	1
15,50	218	120	2	00 202015501 00	1
15,75	218	120	2	00 202015751 00	1
16,00	218	120	2	00 202016001 00	1
16,25	223	125	2	00 202016251 00	1

\varnothing_{h8} mm	l1 mm	l2 mm		Code 202 Art.-Nr.	
16,50	223	125	2	00 202016501 00	1
16,75	223	125	2	00 202016751 00	1
17,00	223	125	2	00 202017001 00	1
17,25	228	130	2	00 202017251 00	1
17,50	228	130	2	00 202017501 00	1
17,75	228	130	2	00 202017751 00	1
18,00	228	130	2	00 202018001 00	1
18,25	233	135	2	00 202018251 00	1
18,50	233	135	2	00 202018501 00	1
18,75	233	135	2	00 202018751 00	1
19,00	233	135	2	00 202019001 00	1
19,25	238	140	2	00 202019251 00	1
19,50	238	140	2	00 202019501 00	1
19,75	238	140	2	00 202019751 00	1
20,00	238	140	2	00 202020001 00	1
20,25	243	145	2	00 202020251 00	1
20,50	243	145	2	00 202020501 00	1
20,75	243	145	2	00 202020751 00	1
21,00	243	145	2	00 202021001 00	1
21,25	248	150	2	00 202021251 00	1
21,50	248	150	2	00 202021501 00	1
21,75	248	150	2	00 202021751 00	1
22,00	248	150	2	00 202022001 00	1
22,25	248	150	2	00 202022251 00	1
22,50	253	155	2	00 202022501 00	1
22,75	253	155	2	00 202022751 00	1
23,00	253	155	2	00 202023001 00	1
23,50	276	155	3	00 202023501 00	1
23,75	281	160	3	00 202023751 00	1
24,00	281	160	3	00 202024001 00	1
24,50	281	160	3	00 202024501 00	1
24,75	281	160	3	00 202024751 00	1
25,00	281	160	3	00 202025001 00	1
25,25	286	165	3	00 202025251 00	1
25,50	286	165	3	00 202025501 00	1
25,75	286	165	3	00 202025751 00	1
26,00	286	165	3	00 202026001 00	1
26,50	286	165	3	00 202026501 00	1



⁽¹⁾ Anschliff Form A / Point shape form A / Affilatura forma A > \varnothing 16,0 mm - \varnothing 40,0 mm
Anschliff Form AC / Point shape form AC / Affilatura forma AC \leq \varnothing 16,0 mm



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

Ø _{H8} mm	l1 mm	l2 mm		Code 202 Art.-Nr.	
27,00	291	170	3	00 202027001 00	1
27,50	291	170	3	00 202027501 00	1
27,75	291	170	3	00 202027751 00	1
28,00	291	170	3	00 202028001 00	1
28,25	296	175	3	00 202028251 00	1
28,50	296	175	3	00 202028501 00	1
28,75	296	175	3	00 202028751 00	1
29,00	296	175	3	00 202029001 00	1
29,50	296	175	3	00 202029501 00	1
29,75	296	175	3	00 202029751 00	1
30,00	296	175	3	00 202030001 00	1
30,25	301	180	3	00 202030251 00	1
30,50	301	180	3	00 202030501 00	1
31,00	301	180	3	00 202031001 00	1
31,50	301	180	3	00 202031501 00	1
31,75	301	180	3	00 202031751 00	1
32,00	334	185	4	00 202032001 00	1
32,50	334	185	4	00 202032501 00	1
33,00	334	185	4	00 202033001 00	1
33,50	334	185	4	00 202033501 00	1
34,00	339	190	4	00 202034001 00	1
34,50	339	190	4	00 202034501 00	1
35,00	339	190	4	00 202035001 00	1
35,50	339	190	4	00 202035501 00	1
36,00	344	195	4	00 202036001 00	1
36,50	344	195	4	00 202036501 00	1
37,00	344	195	4	00 202037001 00	1
37,50	344	195	4	00 202037501 00	1
38,00	349	200	4	00 202038001 00	1

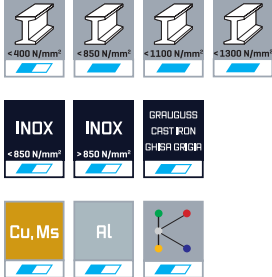
DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

Ø _{H8} mm	l1 mm	l2 mm		Code 202 Art.-Nr.	
38,50	349	200	4	00 202038501 00	1
39,00	349	200	4	00 202039001 00	1
39,50	349	200	4	00 202039501 00	1
40,00	349	200	4	00 202040001 00	1
40,50	354	205	4	00 202040501 00	1
41,00	354	205	4	00 202041001 00	1
41,50	354	205	4	00 202041501 00	1
42,00	354	205	4	00 202042001 00	1
42,50	354	205	4	00 202042501 00	1
43,00	359	210	4	00 202043001 00	1
44,00	359	210	4	00 202044001 00	1
45,00	359	210	4	00 202045001 00	1
46,00	364	215	4	00 202046001 00	1
47,00	364	215	4	00 202047001 00	1
48,00	369	220	4	00 202048001 00	1
49,00	369	220	4	00 202049001 00	1
50,00	369	220	4	00 202050001 00	1
51,00	412	225	5	00 202051001 00	1
52,00	412	225	5	00 202052001 00	1
53,00	412	225	5	00 202053001 00	1
54,00	417	230	5	00 202054001 00	1
55,00	417	230	5	00 202055001 00	1
56,00	417	230	5	00 202056001 00	1
57,00	422	235	5	00 202057001 00	1
58,00	422	235	5	00 202058001 00	1
59,00	422	235	5	00 202059001 00	1
60,00	422	235	5	00 202060001 00	1
65,00	432	245	5	00 202065001 00	1
70,00	437	250	5	00 202070001 00	1

D **Spiralbohrer mit Morsekegel, kurz, DIN 345 RN**

Einsatzbereich:

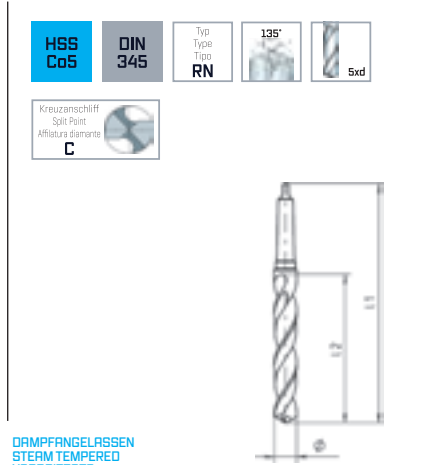
5% kobaltlegierter Spiralbohrer mit sehr hoher thermischer Belastbarkeit zum Bohren von Werkstoffen mit höherem Legierungsgehalt und Festigkeit über 800 N/mm².



E **Morse taper shank drills, short series, DIN 345 RN**

Range of application:

5% cobalt-alloyed drills with high heat resistance for drilling steels with tensile strength over 800 N/mm².



I **Punte elicoidali serie corta, cono morse, DIN 345 RN**

Impiego:

Punte al 5% Co ad elevata resistenza al calore, adatte per foratura di materiali altamente legati con R > 800 N/mm².



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

Ø h8 mm	l1 mm	l2 mm		Code 203 Art.-Nr.	
8,00	156	75	1	00 203008001 00	1
9,00	162	81	1	00 203009001 00	1
10,00	168	87	1	00 203010001 00	1
10,20	168	87	1	00 203010201 00	1
10,50	168	87	1	00 203010501 00	1
10,80	175	94	1	00 203010801 00	1
11,00	175	94	1	00 203011001 00	1
11,50	175	94	1	00 203011501 00	1
11,80	175	94	1	00 203011801 00	1
12,00	182	101	1	00 203012001 00	1
12,20	182	101	1	00 203012201 00	1
12,50	182	101	1	00 203012501 00	1
13,00	182	101	1	00 203013001 00	1
13,50	189	108	1	00 203013501 00	1
13,80	189	108	1	00 203013801 00	1
14,00	189	108	1	00 203014001 00	1
14,25	212	114	2	00 203014251 00	1
14,50	212	114	2	00 203014501 00	1
15,00	212	114	2	00 203015001 00	1
15,25	218	120	2	00 203015251 00	1
15,50	218	120	2	00 203015501 00	1
15,75	218	120	2	00 203015751 00	1
16,00	218	120	2	00 203016001 00	1
16,25	223	125	2	00 203016251 00	1
16,50	223	125	2	00 203016501 00	1
17,00	223	125	2	00 203017001 00	1
17,50	228	130	2	00 203017501 00	1
17,75	228	130	2	00 203017751 00	1
18,00	228	130	2	00 203018001 00	1
18,50	233	135	2	00 203018501 00	1
18,75	233	135	2	00 203018751 00	1
19,00	233	135	2	00 203019001 00	1
19,50	238	140	2	00 203019501 00	1
19,75	238	140	2	00 203019751 00	1
20,00	238	140	2	00 203020001 00	1
20,50	243	145	2	00 203020501 00	1
20,75	243	145	2	00 203020751 00	1
21,00	243	145	2	00 203021001 00	1

Ø h8 mm	l1 mm	l2 mm		Code 203 Art.-Nr.	
21,50	248	150	2	00 203021501 00	1
22,00	248	150	2	00 203022001 00	1
22,50	253	155	2	00 203022501 00	1
23,00	253	155	2	00 203023001 00	1
23,50	276	155	3	00 203023501 00	1
24,00	281	160	3	00 203024001 00	1
24,50	281	160	3	00 203024501 00	1
25,00	281	160	3	00 203025001 00	1
25,50	286	165	3	00 203025501 00	1
26,00	286	165	3	00 203026001 00	1
26,50	286	165	3	00 203026501 00	1
27,00	291	170	3	00 203027001 00	1
27,50	291	170	3	00 203027501 00	1
28,00	291	170	3	00 203028001 00	1
28,50	296	175	3	00 203028501 00	1
29,00	296	175	3	00 203029001 00	1
29,50	296	175	3	00 203029501 00	1
30,00	296	175	3	00 203030001 00	1
30,50	301	180	3	00 203030501 00	1
31,00	301	180	3	00 203031001 00	1
31,50	301	180	3	00 203031501 00	1
32,00	334	185	4	00 203032001 00	1
32,50	334	185	4	00 203032501 00	1
33,00	334	185	4	00 203033001 00	1
33,50	334	185	4	00 203033501 00	1
34,00	339	190	4	00 203034001 00	1
34,50	339	190	4	00 203034501 00	1
35,00	339	190	4	00 203035001 00	1
35,50	339	190	4	00 203035501 00	1
36,00	344	195	4	00 203036001 00	1
36,50	344	195	4	00 203036501 00	1
37,00	344	195	4	00 203037001 00	1
37,50	344	195	4	00 203037501 00	1
38,00	349	200	4	00 203038001 00	1
38,50	349	200	4	00 203038501 00	1
39,00	349	200	4	00 203039001 00	1
39,50	349	200	4	00 203039501 00	1
40,00	349	200	4	00 203040001 00	1



HSS Bohrer
HSS drills
HSS punte elicoidali

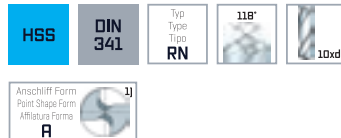
D **Spiralbohrer**
lang, mit Morsekegel,
DIN 341 RN

Einsatzbereich:
Hochleistungsbohrer zum Bohren von legierten und unlegierten Stählen und Stahlguss, Grauguss, Temperguss, Kupferlegierungen, Neusilber, Graphit, Sintereisen.



E **Morse taper shank drills,**
long series, DIN 341 RN

Range of application:
High efficiency drills for drilling steel and steel castings, alloy and plain carbon, grey iron castings, copper-alloys, nickel-silver, graphite and similar materials.



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

I **Punte elicoidali**
serie lunga, cono morse,
DIN 341 RN

Impiego:
Foratura di acciai legati, non legati, ghisa, ghisa grigia, ghisa malleabile, leghe rame, alpaca, grafite, acciai sinterizzati.



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

\emptyset_{h8} mm	l1 mm	l2 mm		Code 222 Art.-Nr.	
10,00	197	116	1	00 222010001 00	1
10,50	197	116	1	00 222010501 00	1
11,00	206	125	1	00 222011001 00	1
11,50	206	125	1	00 222011501 00	1
12,00	215	134	1	00 222012001 00	1
12,50	215	134	1	00 222012501 00	1
13,00	215	134	1	00 222013001 00	1
13,50	223	142	1	00 222013501 00	1
14,00	223	142	1	00 222014001 00	1
14,25	245	147	2	00 222014251 00	1
14,50	245	147	2	00 222014501 00	1
15,00	245	147	2	00 222015001 00	1
15,50	251	153	2	00 222015501 00	1
16,00	251	153	2	00 222016001 00	1
16,50	257	159	2	00 222016501 00	1
17,00	257	159	2	00 222017001 00	1
17,50	263	165	2	00 222017501 00	1
18,00	263	165	2	00 222018001 00	1
18,50	269	171	2	00 222018501 00	1
19,00	269	171	2	00 222019001 00	1
19,50	275	177	2	00 222019501 00	1
20,00	275	177	2	00 222020001 00	1
20,50	282	184	2	00 222020501 00	1

\emptyset_{h8} mm	l1 mm	l2 mm		Code 222 Art.-Nr.	
21,00	282	184	2	00 222021001 00	1
21,50	289	191	2	00 222021501 00	1
22,00	289	191	2	00 222022001 00	1
22,50	296	198	2	00 222022501 00	1
23,00	296	198	2	00 222023001 00	1
24,00	327	206	3	00 222024001 00	1
25,00	327	206	3	00 222025001 00	1
26,00	335	214	3	00 222026001 00	1
27,00	343	222	3	00 222027001 00	1
28,00	343	222	3	00 222028001 00	1
29,00	351	230	3	00 222029001 00	1
30,00	351	230	3	00 222030001 00	1
31,00	360	239	3	00 222031001 00	1
32,00	397	248	4	00 222032001 00	1
33,00	397	248	4	00 222033001 00	1
35,00	406	257	4	00 222035001 00	1
38,00	426	277	4	00 222038001 00	1
39,00	426	277	4	00 222039001 00	1
40,00	426	277	4	00 222040001 00	1
42,00	436	287	4	00 222042001 00	1
45,00	447	298	4	00 222045001 00	1
48,00	470	321	4	00 222048001 00	1
50,00	470	321	4	00 222050001 00	1

⁽¹⁾ Anschliff Form A / Point shape form A / Affilatura forma A > \emptyset 16,0 mm - \emptyset 40,0 mm; Anschliff Form AC / Point shape form AC / Affilatura forma AC \leq \emptyset 16,0 mm

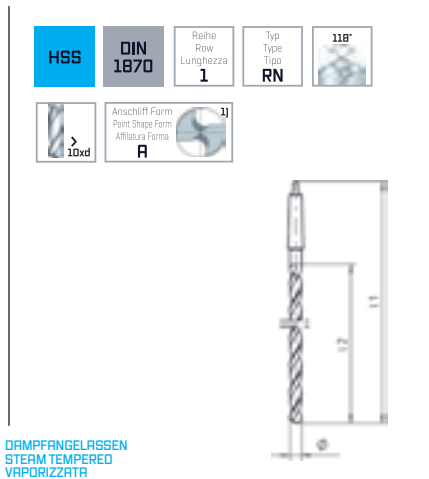
D **Spiralbohrer**
überlang, mit Morsekegel,
DIN 1870 R1 RN

Einsatzbereich:
Hochleistungsbohrer zum Bohren von sehr tiefen Löchern, wobei Schnittgeschwindigkeit, Vorschub und Kühlung sowie häufige Spanentleerung zu beachten sind.



E **Morse taper shank drills,**
extra long series,
DIN 1870 R1 RN

Range of application:
High efficiency drills for extremely deep holes where working conditions such as cutting speed, feed, coolant and frequent chip removal have to be observed.



I **Punte elicoidali**
serie extra lunga, cono morse
DIN 1870 L1 RN

Impiego:
Punte ad elevata produttività adatte per lavorazioni di fori molto profondi, per le quali tuttavia è necessario prevedere una corretta impostazione della velocità, dell'avanzamento, adeguato refrigerante ed una frequente evacuazione dei trucioli.



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

Ø h8 mm	l1 mm	l2 mm		Code 262 Art.-Nr.	
8,00	265	165	1	00 262008001 00	1
9,00	275	175	1	00 262009001 00	1
10,00	285	185	1	00 262010001 00	1
11,00	300	195	1	00 262011001 00	1
12,00	310	205	1	00 262012001 00	1
13,00	310	205	1	00 262013001 00	1
14,00	325	220	1	00 262014001 00	1
14,50	340	220	2	00 262014501 00	1
15,00	340	220	2	00 262015001 00	1
15,50	355	230	2	00 262015501 00	1
16,00	355	230	2	00 262016001 00	1
16,50	355	230	2	00 262016501 00	1
17,00	355	230	2	00 262017001 00	1
17,50	370	245	2	00 262017501 00	1
18,00	370	245	2	00 262018001 00	1

Ø h8 mm	l1 mm	l2 mm		Code 262 Art.-Nr.	
18,50	370	245	2	00 262018501 00	1
19,00	370	245	2	00 262019001 00	1
19,50	385	260	2	00 262019501 00	1
20,00	385	260	2	00 262020001 00	1
21,00	385	260	2	00 262021001 00	1
22,00	405	270	2	00 262022001 00	1
23,00	405	270	2	00 262023001 00	1
24,00	440	290	3	00 262024001 00	1
25,00	440	290	3	00 262025001 00	1
26,00	440	290	3	00 262026001 00	1
27,00	460	305	3	00 262027001 00	1
28,00	460	305	3	00 262028001 00	1
29,00	460	305	3	00 262029001 00	1
30,00	460	305	3	00 262030001 00	1

⁽¹⁾ Anschlag Form A / Point shape form A / Affilatura forma A > Ø 16,0 mm
Anschlag Form AC / Point shape form AC / Affilatura forma AC ≤ Ø 16,0 mm



D **Spiralbohrer mit Morsekegel**
überlang, DIN 1870 R2 RN

Einsatzbereich:

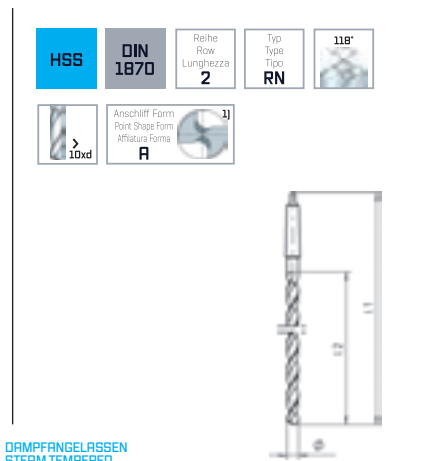
Hochleistungsbohrer zum Bohren von sehr tiefen Löchern, wobei Schnittgeschwindigkeit, Vorschub und Kühlung sowie häufige Spanentleerung zu beachten sind.



E **Morse taper shank drills, extra long series,**
DIN 1870 R2 RN

Range of application:

High efficiency drills for extremely deep holes where working conditions such as cutting speed, feed, coolant and frequent chip removal have to be observed.



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

I **Punte elicoidali serie extra lunga, cono morse**
DIN 1870 L2 RN

Impiego:

Punte ad elevata produttività adatte per lavorazioni di fori molto profondi, per le quali tuttavia è necessario prevedere una corretta impostazione della velocità, dell'avanzamento, adeguato refrigerante ed una frequente evacuazione dei trucioli.



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

Ø _{h8} mm	l1 mm	l2 mm		Code 282 Art.-Nr.	
9,00	345	220	1	00 282009001 00	1
10,00	360	235	1	00 282010001 00	1
10,50	360	235	1	00 282010501 00	1
11,00	375	250	1	00 282011001 00	1
11,50	375	250	1	00 282011501 00	1
12,00	395	260	1	00 282012001 00	1
12,50	395	260	1	00 282012501 00	1
13,00	395	260	1	00 282013001 00	1
13,50	410	275	1	00 282013501 00	1
14,00	410	275	1	00 282014001 00	1
14,50	425	275	2	00 282014501 00	1
15,00	425	275	2	00 282015001 00	1
15,50	445	295	2	00 282015501 00	1
16,00	445	295	2	00 282016001 00	1

Ø _{h8} mm	l1 mm	l2 mm		Code 282 Art.-Nr.	
16,50	445	295	2	00 282016501 00	1
17,00	445	295	2	00 282017001 00	1
17,50	465	310	2	00 282017501 00	1
18,00	465	310	2	00 282018001 00	1
19,00	465	310	2	00 282019001 00	1
20,00	490	325	2	00 282020001 00	1
21,00	490	325	2	00 282021001 00	1
22,00	515	345	2	00 282022001 00	1
23,00	515	345	2	00 282023001 00	1
24,00	555	365	3	00 282024001 00	1
25,00	555	365	3	00 282025001 00	1
26,00	555	365	3	00 282026001 00	1
28,00	580	385	3	00 282028001 00	1
30,00	580	385	3	00 282030001 00	1

¹⁾ Anschliff Form A / Point shape form A / Affilatura forma A > Ø 16,0 mm
Anschliff Form AC / Point shape form AC / Affilatura forma AC ≤ Ø 16,0 mm

D **Spiralbohrer mit Morsekegel kurz**

Einsatzbereich:

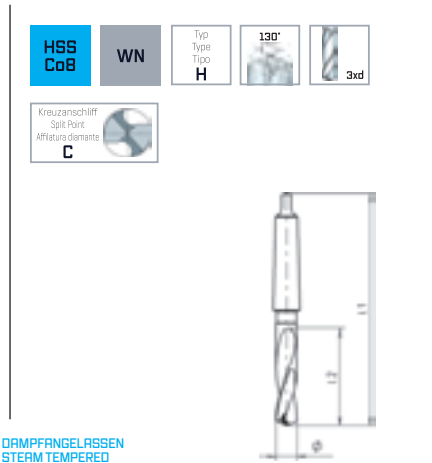
8% kobaltlegierter Spiralbohrer mit verstärktem Kerndurchmesser. Besonders geeignet für zähe und harte Werkstoffe, wie Manganstahl, hochfeste Feinkornstähle (Hardox 400/500) sowie Baustähle über 1100 N/mm².



E **Morse taper shank drills short series**

Range of application:

8% cobalt-alloyed drills with re-inforced web. Specially suitable for drilling extremely hard materials such as manganese steel, high-tensile fine grained machinery steel (Hardox 400/500) and alloyed steel over 1100 N/mm².



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

I **Punte elicoidali serie corta, cono morse**

Impiego:

Punte 8% Co con nucleo rinforzato adatte per lavorazioni di materiali plastici, duri, quali acciai al manganese, acciai a grana fine (Hardox 400/500) ed acciai da costruzione con R > 1100 N/mm².



DAMPFANGELASSEN
STEAM TEMPERED
VAPORIZZATA

Ø _{h8} mm	l1 mm	l2 mm		Code 832 Art.-Nr.	
8,00	124	43	1	00 832008001 00	1
8,50	124	43	1	00 832008501 00	1
9,00	127	46	1	00 832009001 00	1
10,00	131	50	1	00 832010001 00	1
10,50	131	50	1	00 832010501 00	1
11,00	136	55	1	00 832011001 00	1
12,00	157	59	2	00 832012001 00	1
12,50	157	59	2	00 832012501 00	1
13,00	157	59	2	00 832013001 00	1
14,00	161	63	2	00 832014001 00	1
14,50	164	66	2	00 832014501 00	1
15,00	164	66	2	00 832015001 00	1
16,00	168	70	2	00 832016001 00	1
New 16,50	171	73	2	00 832016501 00	1
17,00	171	73	2	00 832017001 00	1
New 17,50	175	77	2	00 832017501 00	1
18,00	175	77	2	00 832018001 00	1
New 18,50	201	80	3	00 832018501 00	1
19,00	201	80	3	00 832019001 00	1
New 19,50	204	83	3	00 832019501 00	1
20,00	204	83	3	00 832020001 00	1

Ø _{h8} mm	l1 mm	l2 mm		Code 832 Art.-Nr.	
21,00	208	87	3	00 832021001 00	1
22,00	211	90	3	00 832022001 00	1
23,00	215	94	3	00 832023001 00	1
24,00	219	98	3	00 832024001 00	1
25,00	219	98	3	00 832025001 00	1
26,00	224	103	3	00 832026001 00	1
27,00	256	107	4	00 832027001 00	1
28,00	256	107	4	00 832028001 00	1
29,00	261	112	4	00 832029001 00	1
30,00	261	112	4	00 832030001 00	1
31,00	266	117	4	00 832031001 00	1
32,00	271	122	4	00 832032001 00	1
33,00	271	122	4	00 832033001 00	1
34,00	277	128	4	00 832034001 00	1
35,00	277	128	4	00 832035001 00	1
36,00	282	132	4	00 832036001 00	1
37,00	282	132	4	00 832037001 00	1
38,00	288	139	4	00 832038001 00	1
39,00	288	139	4	00 832039001 00	1
40,00	288	139	4	00 832040001 00	1



HSS Bohrer
HSS drills
HSS punte elicoidali