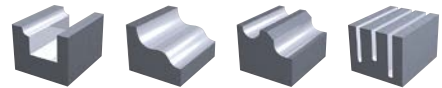




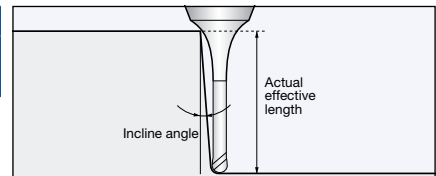
EPDB | Epoch Deep Ball

V max High Speed		HRC 69	No. of Teeth 2
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Carbide Micro Grain	TH45+ Nano-PVD Coating	Rake Angle Positive
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Helix Angle	R Tol. [mm]	d Tol.
20°	R0.05~R0.25: +/-0.003 R0.3~R3: +/-0.005	h5



D 0.1 – D 1.0 mm

Size										Actual Effective Length in Incline angles				
ID Code	Item Code	Z	D	R	I _n	I	dn	L	d	0.5°	1°	1.5°	2°	3°
EP519	EPDB-2001-0.2	2	0.1	0.05	0.2	0.08	0.08	45	4	0.35	0.37	0.39	0.41	0.44
EP520	EPDB-2001-0.3				0.3					0.46	0.48	0.5	0.53	0.57
EP521	EPDB-2001-0.5				0.5					0.67	0.7	0.73	0.76	0.81
EP317	EPDB-2002-0.5		0.2	0.1	0.5	0.15	0.17	1.2		1.35	1.52	1.68	2.01	
EP522	EPDB-2002-1				1			1.76		1.97	2.17	2.37	2.74	
EP318	EPDB-2002-1.5				1.5			2.32		2.57	2.8	3.02	3.44	
EP523	EPDB-2002-2		2	0.25	0.27	2.88	3.16	3.42		3.66	4.11			
EP319	EPDB-2003-1		1			1.76	1.96	2.16		2.35	2.72			
EP524	EPDB-2003-1.5		1.5			2.32	2.56	2.79		3.01	3.42			
EP320	EPDB-2003-2		0.3	0.15	2	0.25	0.27	2.88		3.16	3.41	3.65	4.09	
EP525	EPDB-2003-2.5				2.5			3.43		3.74	4.02	4.27	4.74	
EP526	EPDB-2003-3				3			3.98		4.32	4.62	4.89	5.39	
EP321	EPDB-2004-1		0.4	0.2	1	0.3	0.37	1.75		1.95	2.14	2.33	2.7	
EP527	EPDB-2004-2				2			2.87		3.15	3.4	3.63	4.07	
EP322	EPDB-2004-3				3			3.97		4.31	4.61	4.88	5.37	
EP528	EPDB-2004-4		4	0.35	0.47	5.07	5.45	5.79		6.09	6.63			
EP529	EPDB-2005-1		1			1.74	1.94	2.13		2.31	2.68			
EP530	EPDB-2005-2		2			2.86	3.14	3.39		3.62	4.06			
EP531	EPDB-2005-3		0.5	0.25	3	0.35	0.47	3.97		4.3	4.6	4.87	5.36	
EP323	EPDB-2005-4				4			5.06		5.45	5.78	6.08	6.61	
EP532	EPDB-2005-5				5			6.15		6.57	6.94	7.26	7.84	
EP324	EPDB-2005-6		6	0.6	0.3	0.4	0.57	7.23		7.69	8.08	8.43	9.05	
EP533	EPDB-2006-2		2					2.86		3.13	3.38	3.61	4.04	
EP325	EPDB-2006-4		4					5.06		5.44	5.77	6.07	6.6	
EP534	EPDB-2006-6		0.6	0.3	6	0.4	0.57	7.22		7.69	8.08	8.42	9.04	
EP326	EPDB-2006-8				8			9.36		9.9	10.34	10.72	11.4	
EP535	EPDB-2006-10				10			11.49		12.09	12.57	12.99	13.72	
EP327	EPDB-2008-2		0.8	0.4	2	0.5	0.77	2.85		3.11	3.35	3.58	4.01	
EP536	EPDB-2008-4				4			5.05		5.43	5.75	6.05	6.58	
EP328	EPDB-2008-6				6			7.21		7.68	8.06	8.41	9.02	
EP537	EPDB-2008-8	1	0.5	8	0.8	0.96	9.36	9.89	10.33	10.71	11.38			
EP329	EPDB-2008-10			10			11.49	12.08	12.56	12.98	13.7			
EP538	EPDB-2010-2			2			2.9	3.15	3.37	3.59	4.01			
EP330	EPDB-2010-3	3	0.8	0.96	55	60	4	4.31	4.59	4.84	5.32			
EP331	EPDB-2010-4	4					5.09	5.45	5.77	6.06	6.58			
EP332	EPDB-2010-6	6					7.25	7.7	8.08	8.41	9.02			
EP333	EPDB-2010-8	8					9.39	9.91	10.34	10.72	11.38			
EP334	EPDB-2010-10	10					11.52	12.09	12.57	12.98	13.7			
EP335	EPDB-2010-12	12					13.63	14.26	14.78	15.22	15.99			
EP539	EPDB-2010-14	14					15.74	16.42	16.97	17.44	18.54			
EP336	EPDB-2010-16	16					17.84	18.56	19.14	19.64	21.2			
EP540	EPDB-2010-18	18	0.8	0.96	55	60	19.93	20.7	21.31	21.83	23.85			
EP337	EPDB-2010-20	20					22.02	22.83	23.47	24.01	26.51			

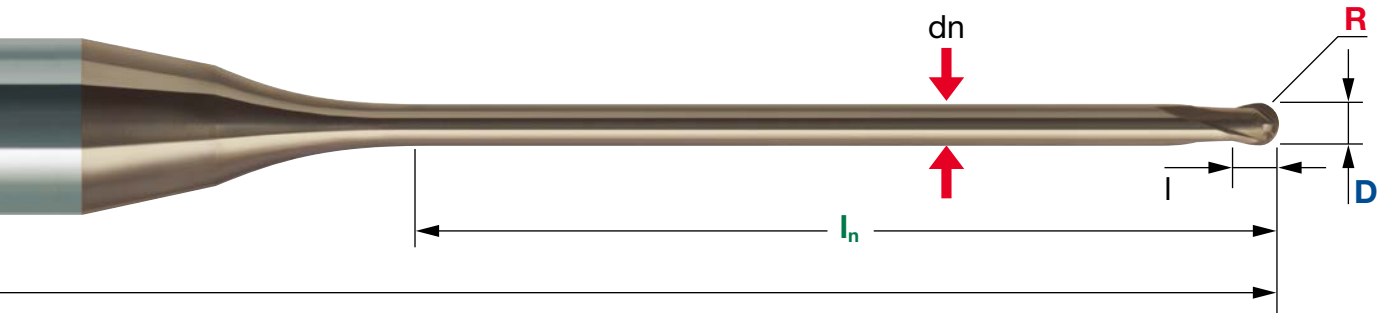
Cutting Conditions | Schnittwerte | Condizioni di taglio | Condiciones de Corte | Conditions de coupe | Valores de corte:

EPDB | D 0.1 – 6

Page 8 – 9

EPDS | D 0.1 – 4

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D 1.2 – D 6.0 mm

ID Code	Item Code	Z	Size				L	d
			D	R	ln	I		
EP338	EPDB-2012-8	2	1.2	0.6	8	1.1	1.15	50
EP339	EPDB-2012-12				12			55
EP340	EPDB-2014-8		1.4	0.7	8	1.3	1.34	50
EP541	EPDB-2014-12				12			55
EP341	EPDB-2014-16		1.5	0.75	16	1.35	1.44	50
EP542	EPDB-2015-4				4			50
EP342	EPDB-2015-8				8			55
EP343	EPDB-2015-12				12			55
EP543	EPDB-2015-16		1.6	0.8	16	1.4	1.54	50
EP344	EPDB-2015-20				20			60
EP544	EPDB-2016-8				8			50
EP345	EPDB-2016-12				12			55
EP545	EPDB-2016-16		1.8	0.9	16	1.6	1.73	50
EP346	EPDB-2016-20				20			60
EP546	EPDB-2018-8				8			50
EP347	EPDB-2018-12				12			55
EP547	EPDB-2018-16		2	1	16	1.7	1.92	60
EP348	EPDB-2018-20				20			60
EP548	EPDB-2020-3				3			50
EP549	EPDB-2020-4				4			50
EP349	EPDB-2020-6				6			50
EP350	EPDB-2020-8				8			50
EP351	EPDB-2020-10				10			50
EP352	EPDB-2020-12				12			55
EP353	EPDB-2020-16				16			55
EP354	EPDB-2020-20				20			60
EP355	EPDB-2020-25				25			65
EP356	EPDB-2020-30				30			70
EP550	EPDB-2020-35				35			75
EP551	EPDB-2020-40		3	1.5	40	2.5	2.88	80
EP552	EPDB-2030-8				8			55
EP357	EPDB-2030-10				10			55
EP553	EPDB-2030-16				16			60
EP358	EPDB-2030-25				25			70
EP554	EPDB-2030-30				30			75
EP359	EPDB-2030-35				35			80
EP555	EPDB-2040-10		4	2	10	3	3.9	55
EP360	EPDB-2040-16				16			60
EP556	EPDB-2040-25				25			70
EP361	EPDB-2040-35				35			80
EP557	EPDB-2040-40				40			80
EP362	EPDB-2040-50		5	2.5	50	3.5	4.9	100
EP363	EPDB-2050-25				25			70
EP364	EPDB-2050-40				40			80
EP365	EPDB-2060-30		6	3	30	6	5.9	75
EP366	EPDB-2060-50				50			100

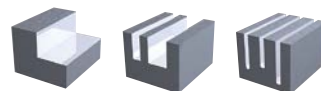
Actual Effective Length in Incline angles					
0.5°	1°	1.5°	2°	3°	
9.42	9.93	10.35	10.72	11.38	4
13.66	14.28	14.78	15.23	15.99	
9.45	9.94	10.36	10.73	11.38	
13.68	14.29	14.79	15.23	15.99	
17.88	18.59	19.16	19.65	21.2	
5.16	5.49	5.79	6.06	6.57	
9.45	9.94	10.35	10.72	11.37	
13.68	14.29	14.79	15.23	15.98	
17.88	18.59	19.16	19.65	21.18	
22.06	22.85	23.48	24.01	x	
9.44	9.93	10.35	10.71	11.37	
13.68	14.28	14.78	15.22	15.98	
17.88	18.58	19.15	19.64	21.16	
22.06	22.85	23.47	24.01	x	
9.47	9.95	10.36	10.72	11.37	
13.79	14.42	14.79	15.41	16.21	
18.1	18.87	19.16	20.05	21.16	
22.08	22.86	23.48	24.01	x	
4.16	4.4	4.64	4.86	5.29	
5.23	5.54	5.81	6.07	6.55	
7.38	7.77	8.11	8.43	9	
9.5	9.97	10.37	10.73	11.37	
11.62	12.15	12.6	12.99	13.69	
13.73	14.31	14.8	15.23	15.98	
17.92	18.61	19.17	19.65	x	
22.1	22.87	23.49	24.02	x	
27.3	28.16	28.84	x	x	
32.49	33.42	34.29	x	x	
37.65	38.67	x	x	x	
42.81	43.89	x	x	x	
9.61	10.03	10.4	10.74	11.35	6
11.72	12.21	12.63	13	13.67	
18.01	18.65	19.19	19.66	21.13	
27.37	28.2	28.86	29.96	x	
32.55	33.46	34.32	35.94	x	
37.71	38.7	40.03	41.92	x	
11.63	12.11	12.53	12.9	13.57	
17.93	18.58	19.11	19.58	20.91	
27.31	28.14	28.8	29.81	x	
37.66	38.65	39.9	x	x	
42.82	43.87	x	x	x	
53.11	54.55	x	x	x	
27.29	28.11	x	x	x	
42.8	x	x	x	x	
x	x	x	x	x	
x	x	x	x	x	

x = no contact



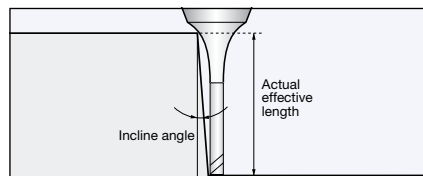
EPDS | Epoch Deep Square

V max High Speed		HRC 69	No. of Teeth 2
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Carbide Micro Grain	TH45+ Nano-PVD Coating	Rake Angle Positive
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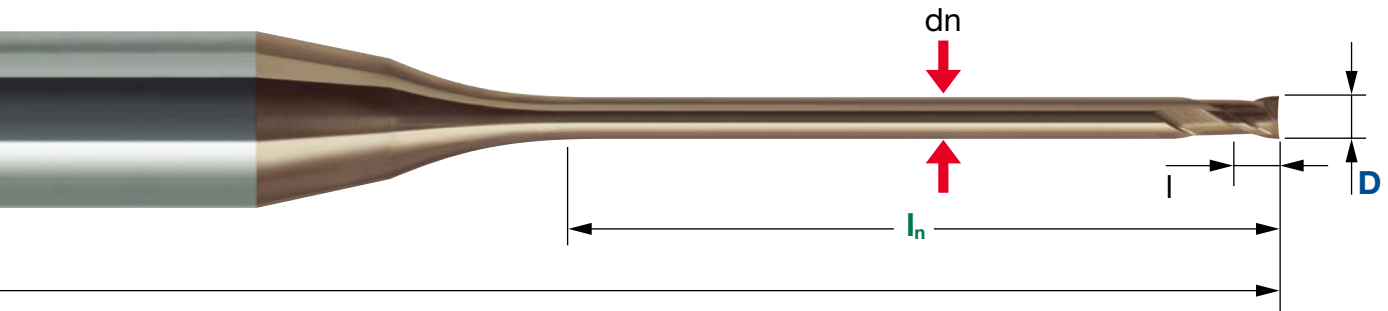
Helix Angle	D Tol. [mm]	d Tol.
30°	D0.1~D0.5: 0/-0.007 D0.6~D0.9: 0/-0.01 D1~D4: 0/-0.015	h5



D 0.1 – D 1.0 mm

		Size						
ID Code	Item Code	Z	D	I _n	I	dn	L	d
EP558	EPDS-2001-0,3	2	0.1	0.3	0.15	0.08	45	4
EP559	EPDS-2001-0,5			0.5				
EP560	EPDS-2001-1			1				
EP267	EPDS-2002-0,5		0.2	0.5	0.3	0.17		
EP561	EPDS-2002-1			1				
EP268	EPDS-2002-1,5			1.5				
EP562	EPDS-2003-1		0.3	1	0.45	0.27		
EP269	EPDS-2003-1,5			1.5				
EP563	EPDS-2003-2,5			2.5				
EP270	EPDS-2003-3			3				
EP565	EPDS-2004-1		0.4	1	0.6	0.37		
EP271	EPDS-2004-1,5			1.5				
EP566	EPDS-2004-2			2				
EP272	EPDS-2004-3			3				
EP588	EPDS-2004-4		0.5	4	0.75	0.47		
EP273	EPDS-2004-5			5				
EP567	EPDS-2005-1			0.5	1	0.75	0.47	
EP274	EPDS-2005-2		2					
EP568	EPDS-2005-3		3					
EP275	EPDS-2005-4		4					
EP569	EPDS-2005-5		0.6	5	0.9	0.57		
EP276	EPDS-2005-6			6				
EP570	EPDS-2006-2		0.6	2	0.9	0.57		
EP277	EPDS-2006-4			4				
EP571	EPDS-2006-6			6				
EP278	EPDS-2006-8			8				
EP279	EPDS-2007-4		0.7	4	1.05	0.67		
EP280	EPDS-2007-10			10				
EP281	EPDS-2008-4	0.8	4	1.2	0.77			
EP572	EPDS-2008-6		6					
EP282	EPDS-2008-8		8					
EP283	EPDS-2008-12	0.9	12	1.35	0.86	55		
EP284	EPDS-2009-6		6			60		
EP285	EPDS-2009-12		12			55		
EP573	EPDS-2010-2		1			2	1.5	
EP574	EPDS-2010-4	4						
EP286	EPDS-2010-6	6						
EP287	EPDS-2010-8	8						
EP288	EPDS-2010-10	10						
EP289	EPDS-2010-12	12						
EP290	EPDS-2010-14	14		55				
EP291	EPDS-2010-16	16						

Actual Effective Length in Incline angles					
0.5°	1°	1.5°	2°	3°	
0.46	0.49	0.51	0.53	0.58	
0.67	0.71	0.74	0.76	0.82	
1.2	1.25	1.29	1.33	1.4	
1.21	1.38	1.55	1.72	2.06	
1.78	1.99	2.2	2.4	2.78	
2.34	2.59	2.83	3.05	3.47	
1.78	1.99	2.2	2.4	2.78	
2.34	2.59	2.83	3.05	3.47	
3.44	3.76	4.05	4.31	4.79	
3.99	4.34	4.64	4.92	5.42	
1.78	1.99	2.2	2.4	2.78	
2.34	2.59	2.83	3.05	3.47	
2.89	3.18	3.44	3.69	4.14	
3.99	4.34	4.64	4.92	5.42	
5.08	5.48	5.82	6.12	6.67	
6.17	6.6	6.97	7.3	7.89	
1.78	1.99	2.2	2.4	2.78	
2.89	3.18	3.44	3.69	4.14	
3.99	4.34	4.64	4.92	5.42	
5.08	5.48	5.82	6.12	6.67	
6.17	6.6	6.97	7.3	7.89	
7.24	7.72	8.12	8.47	9.09	
2.89	3.18	3.44	3.69	4.14	
5.08	5.48	5.82	6.12	6.67	
7.24	7.72	8.12	8.47	9.09	
9.38	9.93	10.37	10.76	11.45	
5.08	5.48	5.82	6.12	6.67	
11.51	12.11	12.6	13.03	13.76	
5.08	5.48	5.82	6.12	6.67	
7.24	7.72	8.12	8.47	9.09	
9.38	9.93	10.37	10.76	11.45	
13.63	14.28	14.81	15.26	16.04	
7.29	7.75	8.14	8.49	9.11	
13.66	14.3	14.82	15.28	16.06	
2.95	3.23	3.48	3.72	4.17	
5.13	5.52	5.85	6.15	6.69	
7.29	7.75	8.14	8.49	9.11	
9.42	9.95	10.4	10.78	11.46	
11.55	12.14	12.62	13.04	13.78	
13.66	14.3	14.82	15.28	16.06	
15.76	16.46	17.01	17.49	18.7	
17.86	18.6	19.19	19.69	21.36	



D 1.2 – D 4.0 mm

		Z	Size					Actual Effective Length in Incline angles					
ID Code	Item Code		D	I _n	l	dn	L	d	0.5°	1°	1.5°	2°	3°
EP292	EPDS-2012-6	2	1.2	6	1.8	1.15	50	4	7.33	7.78	8.17	8.51	9.13
EP293	EPDS-2012-12			12			55		13.69	14.33	14.84	15.29	16.08
EP294	EPDS-2014-6		1.4	6	2.1	1.34	50		7.37	7.81	8.19	8.54	9.15
EP295	EPDS-2014-10			10			55		11.61	12.19	12.66	13.08	13.8
EP296	EPDS-2014-16		1.5	16	2.25	1.44	50		17.92	18.64	19.22	19.72	21.42
EP575	EPDS-2015-4			4			50		5.22	5.59	5.91	6.2	6.74
EP297	EPDS-2015-6			6			55		7.37	7.81	8.19	8.54	9.15
EP576	EPDS-2015-10			10			60		11.61	12.19	12.66	13.08	13.8
EP298	EPDS-2015-12			12			65		13.72	14.35	14.86	15.31	16.11
EP577	EPDS-2015-16			16			65		17.92	18.64	19.22	19.72	x
EP299	EPDS-2015-18		1.6	18	2.4	1.54	60		20.01	20.77	21.38	21.9	x
EP300	EPDS-2015-25			25			65		27.3	28.18	28.88	30.08	x
EP301	EPDS-2016-6			6			50		7.37	7.81	8.19	8.54	9.15
EP302	EPDS-2016-12	2	1.8	12	2.7	1.73	55		13.72	14.35	14.86	15.31	16.11
EP303	EPDS-2016-20			20			60		22.09	22.9	23.53	24.1	x
EP304	EPDS-2018-8			8			50		9.53	10.04	10.46	10.84	11.51
EP305	EPDS-2018-14		2	14	3	1.92	55		15.85	16.52	17.06	17.54	18.8
EP306	EPDS-2018-20			20			60		22.12	22.91	23.55	24.12	x
EP578	EPDS-2020-4			4			50		5.31	5.66	5.97	6.25	6.78
EP579	EPDS-2020-6		2.5	6	3.75	2.4	50		7.44	7.87	8.24	8.58	9.18
EP307	EPDS-2020-8			8			55		9.56	10.06	10.48	10.86	11.53
EP580	EPDS-2020-10			10			60		11.67	12.23	12.7	13.11	13.83
EP308	EPDS-2020-12			12			65		13.78	14.39	14.9	15.34	16.17
EP309	EPDS-2020-16			16			70		17.97	18.68	19.25	19.75	x
EP310	EPDS-2020-20			20			80		22.14	22.93	23.56	24.15	x
EP582	EPDS-2020-25	2	3	25	4.5	2.88	60	6	27.34	28.22	28.91	x	x
EP311	EPDS-2020-30			30			70		32.52	33.47	34.43	x	x
EP312	EPDS-2025-12		2.5	12			55		13.84	14.43	14.93	15.37	x
EP313	EPDS-2025-20			20			60		22.19	22.96	23.59	x	x
EP583	EPDS-2030-8		3	8	6	3.85	60		9.69	10.16	10.57	10.94	11.59
EP314	EPDS-2030-12			12			70		13.89	14.48	14.97	15.4	16.3
EP315	EPDS-2030-20			20			80		22.24	23	23.62	24.26	26.92
EP316	EPDS-2030-30		4	30			60		32.6	33.53	34.53	36.23	x
EP584	EPDS-2040-12			12			70		13.97	14.54	15.02	15.45	16.39
EP585	EPDS-2040-20			20			80		22.3	23.05	23.66	24.35	x
EP586	EPDS-2040-30			30			90		32.65	33.57	34.61	x	x
EP587	EPDS-2040-40		4	40			90		42.96	44.01	x	x	x

x = no contact