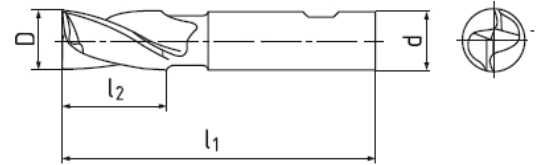


**Fresa HSS – Z2 – Serie Estándar**

• Características: HSS-CO8 – DIN 327 – Tipo N – Corte 25/12°

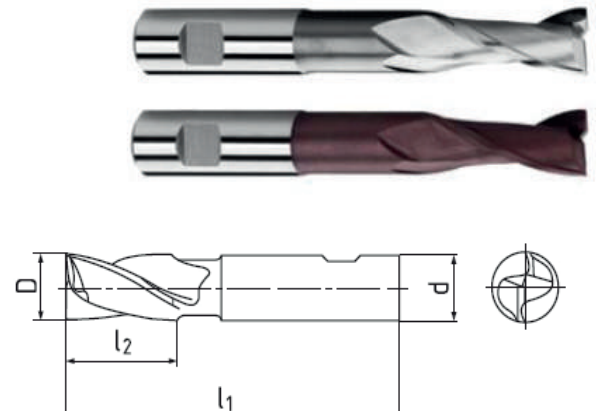
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF112.010	HF113.010	1	6	47	2.5	2
HF112.015	HF113.015	1.5	6	47	3	2
HF112.020	HF113.020	2	6	48	4	2
HF112.025	HF113.025	2.5	6	49	5	2
HF112.028	HF113.028	2.8	6	49	5	2
HF112.030	HF113.030	3	6	49	5	2
HF112.035	HF113.035	3.5	6	50	6	2
HF112.038	HF113.038	3.8	6	51	7	2
HF112.040	HF113.040	4	6	51	7	2
HF112.045	HF113.045	4.5	6	51	7	2
HF112.048	HF113.048	4.8	6	52	8	2
HF112.050	HF113.050	5	6	52	8	2
HF112.055	HF113.055	5.5	6	52	8	2
HF112.0575	HF113.0575	5.75	6	52	8	2
HF112.060	HF113.060	6	6	52	8	2
HF112.065	HF113.065	6.5	10	60	10	2
HF112.070	HF113.070	7	10	60	10	2
HF112.075	HF113.075	7.5	10	60	10	2
HF112.0775	HF113.0775	7.75	10	61	11	2
HF112.080	HF113.080	8	10	61	11	2
HF112.085	HF113.085	8.5	10	61	11	2
HF112.090	HF113.090	9	10	61	11	2
HF112.095	HF113.095	9.5	10	61	11	2
HF112.097	HF113.097	9.7	10	63	13	2
HF112.100	HF113.100	10	10	63	13	2
HF112.105	HF113.105	10.5	12	70	13	2
HF112.110	HF113.110	11	12	70	13	2
HF112.115	HF113.115	11.5	12	70	13	2
HF112.117	HF113.117	11.7	12	70	13	2
HF112.120	HF113.120	12	12	73	16	2
HF112.125	HF113.125	12.5	12	73	16	2
HF112.130	HF113.130	13	12	73	16	2
HF112.135	HF113.135	13.5	12	73	16	2
HF112.137	HF113.137	13.7	12	73	16	2
HF112.140	HF113.140	14	12	73	16	2
HF112.150	HF113.150	15	15	73	16	2
HF112.160	HF113.160	16	16	79	19	2
HF112.170	HF113.170	17	16	79	19	2
HF112.177	HF113.177	17.7	16	79	19	2
HF112.180	HF113.180	18	16	79	19	2
HF112.190	HF113.190	19	16	79	19	2
HF112.200	HF113.200	20	20	88	22	2
HF112.210	HF113.210	21	20	88	22	2
HF112.220	HF113.220	22	20	88	22	2
HF112.240	HF113.240	24	25	102	26	2
HF112.27020	HF113.27020	24,7*	20	96	26	2
HF112.250	HF113.250	25	25	102	26	2
HF112.25020	HF113.25020	25*	20	96	26	2
HF112.260	HF113.260	26	25	102	26	2
HF112.280	HF113.280	28	25	102	26	2
HF112.28020	HF113.28020	28*	20	96	26	2
HF112.300	HF113.300	30	25	102	26	2
HF112.320	HF113.320	32	32	112	32	2
HF112.360	HF113.360	36	32	112	32	2
HF112.400	HF113.400	40	40	130	38	2
HF112.40032	HF113.40032	40*	32	118	38	2



**Fresa - Z2 - Serie Larga**

• Características: HSS-CO8 - ISO 1641 - Tipo N - Corte 25/12°

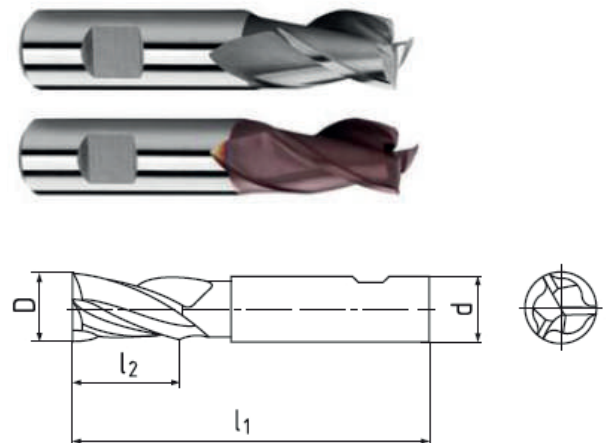
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF114.020	HF115.020	2	6	54	7	2
HF114.030	HF115.030	3	6	56	8	2
HF114.035	HF115.035	3.5	6	59	10	2
HF114.040	HF115.040	4	6	63	11	2
HF114.045	HF115.045	4.5	6	63	11	2
HF114.050	HF115.050	5	6	68	13	2
HF114.055	HF115.055	5.5	6	68	13	2
HF114.060	HF115.060	6	6	68	13	2
HF114.065	HF115.065	6.5	10	80	16	2
HF114.070	HF115.070	7	10	80	16	2
HF114.080	HF115.080	8	10	88	19	2
HF114.085	HF115.085	8.5	10	88	19	2
HF114.090	HF115.090	9	10	88	19	2
HF114.100	HF115.100	10	10	95	22	2
HF114.110	HF115.110	11	12	102	22	2
HF114.120	HF115.120	12	12	110	26	2
HF114.130	HF115.130	13	12	110	26	2
HF114.140	HF115.140	14	12	110	26	2
HF114.150	HF115.150	15	12	110	26	2
HF114.160	HF115.160	16	16	123	32	2
HF114.180	HF115.180	18	16	123	32	2
HF114.190	HF115.190	19	16	123	32	2
HF114.200	HF115.200	20	20	141	38	2
HF114.220	HF115.220	22	20	141	38	2
HF114.240	HF115.240	24	25	166	45	2
HF114.250	HF115.250	25	25	166	45	2
HF114.260	HF115.260	26	25	166	45	2
HF114.280	HF115.280	28	25	166	45	2
HF114.300	HF115.300	30	25	166	45	2
HF114.320	HF115.320	32	32	186	53	2
HF114.350	HF115.350	35	32	186	53	2
HF114.360	HF115.360	36	32	186	53	2
HF114.40032	HF115.40032	40*	32	196	63	2



**Fresa HSS - Z3 - Serie Corta**

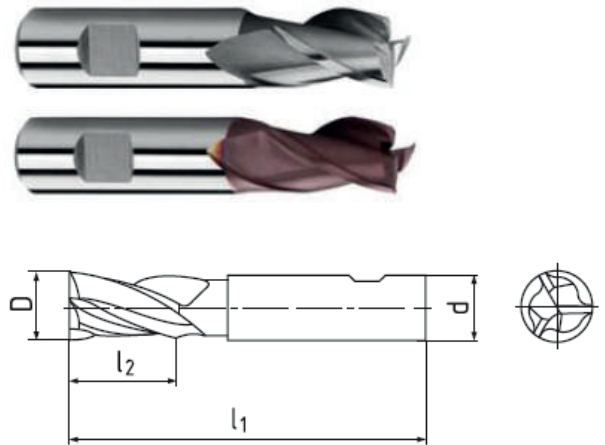
• Características: HSS-CO8 - DIN 327 - Tipo N - Corte 30/12°

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF116.020	HF117.020	2	6	48	4	3
HF116.030	HF117.030	3	6	49	5	3
HF116.035	HF117.035	3.5	6	50	6	3
HF116.040	HF117.040	4	6	51	7	3
HF116.045	HF117.045	4.5	6	51	7	3
HF116.050	HF117.050	5	6	52	8	3
HF116.055	HF117.055	5.5	6	52	8	3
HF116.060	HF117.060	6	6	52	8	3
HF116.065	HF117.065	6.5	10	60	10	3
HF116.070	HF117.070	7	10	60	10	3
HF116.070	HF117.070	7.5	10	60	10	3
HF116.080	HF117.080	8	10	61	11	3
HF116.090	HF117.090	9	10	61	11	3
HF116.095	HF117.095	9.5	10	61	11	3
HF116.100	HF117.100	10	10	63	13	3
HF116.110	HF117.110	11	12	70	13	3
HF116.120	HF117.120	12	12	73	16	3
HF116.130	HF117.130	13	12	73	16	3



**FRESA HSS – Z3 – Serie Corta (Continuación)**

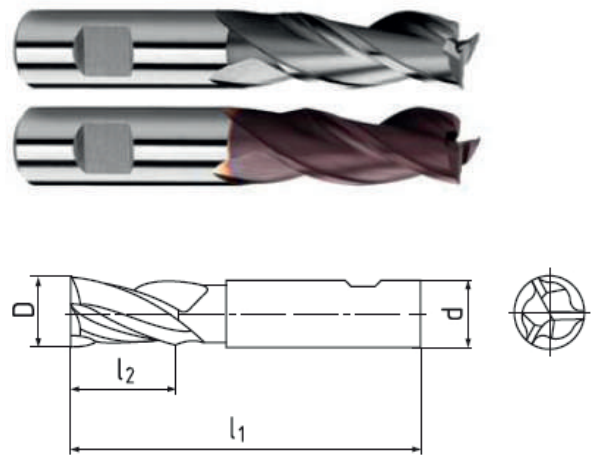
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF116.140	HF117.140	14	12	73	16	3
HF116.150	HF117.150	15	12	73	16	3
HF116.160	HF117.160	16	16	79	19	3
HF116.180	HF117.180	18	16	79	19	3
HF116.197	HF117.197	19.7	16	88	22	3
HF116.200	HF117.200	20	20	88	22	3
HF116.217	HF117.217	21.7	20	88	22	3
HF116.220	HF117.220	22	20	88	22	3
HF116.247	HF117.247	24,7	25	102	26	3
HF116.250	HF117.250	25	25	102	26	3
HF116.280	HF117.280	28	25	102	26	3
HF116.300	HF117.300	30	25	102	26	3
HF116.320	HF117.320	32	32	112	32	3



**Fresa HSS – Z3 – Serie Larga**

• Características: HSS-CO8 – DIN 327 – Tipo N – Corte 30/12°

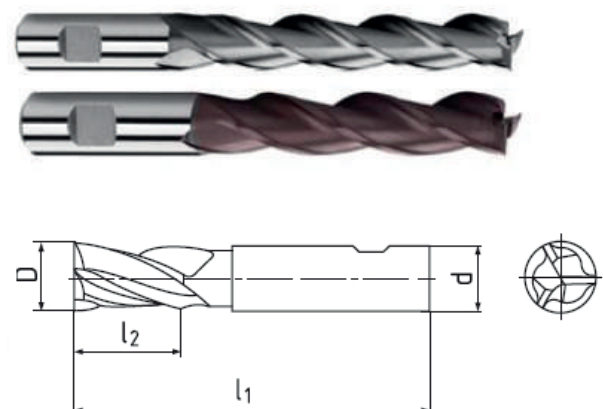
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF118.028	HF119.028	2.8	6	52	8	3
HF118.030	HF119.030	3	6	52	8	3
HF118.038	HF119.038	3.8	6	55	11	3
HF118.040	HF119.040	4	6	55	11	3
HF118.055	HF119.055	5	6	57	13	3
HF118.060	HF119.060	6	6	57	13	3
HF118.070	HF119.070	7	10	66	16	3
HF118.080	HF119.080	8	10	69	19	3
HF118.090	HF119.090	9	10	69	19	3
HF118.100	HF119.100	10	10	72	22	3
HF118.110	HF119.110	11	12	79	22	3
HF118.120	HF119.120	12	12	83	26	3
HF118.130	HF119.130	13	12	83	26	3
HF118.140	HF119.140	14	12	83	26	3
HF118.150	HF119.150	15	12	83	26	3
HF118.160	HF119.160	16	16	92	32	3
HF118.180	HF119.180	18	16	92	32	3
HF118.200	HF119.200	20	20	104	38	3
HF118.220	HF119.220	22	20	104	38	3
HF118.240	HF119.240	24	25	121	45	3
HF118.250	HF119.250	25	25	121	45	3



**Fresa HSS – Z3 – Serie Larga**

• Características: HSS-CO8 – DIN 327 – Tipo N – Corte 30/12°

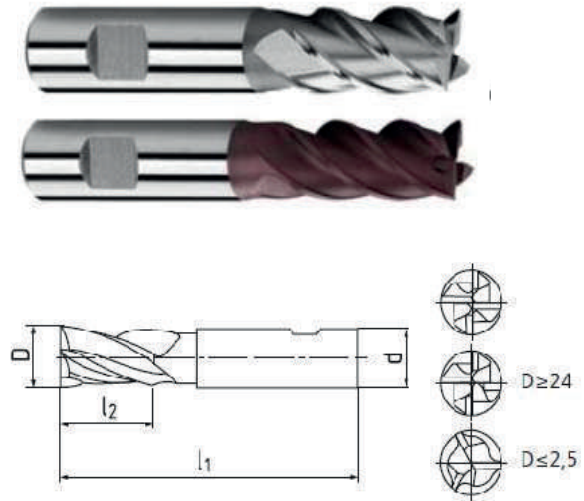
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF120.020	HF121.020	2	6	54	10	3
HF120.030	HF121.030	3	6	56	12	3
HF120.040	HF121.040	4	6	63	19	3
HF120.050	HF121.050	5	6	68	24	3
HF120.060	HF121.060	6	6	68	24	3
HF120.080	HF121.080	8	10	88	38	3
HF120.090	HF121.090	9	10	88	38	3
HF120.100	HF121.100	10	10	95	45	3
HF120.120	HF121.120	12	12	110	53	3
HF120.140	HF121.140	14	12	110	53	3
HF120.160	HF121.160	16	16	123	63	3
HF120.180	HF121.180	18	16	123	63	3
HF120.200	HF121.200	20	20	141	75	3
HF120.220	HF121.220	22	20	141	75	3
HF120.250	HF121.250	25	25	166	90	3



**Fresa HSS Z4 / Z5 – Serie Estándar**

• Características: HSS-CO8 – DIN 844 Tipo N – Corte 40/12°

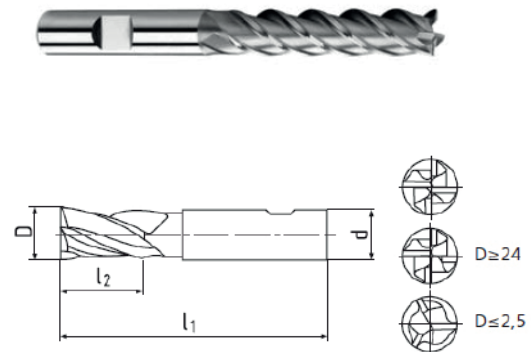
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF124.020	HF125.020	2	6	51	7	3
HF124.025	HF125.025	2.5	6	52	8	3
HF124.030	HF125.030	3	6	52	8	4
HF124.035	HF125.035	3.5	6	54	10	4
HF124.040	HF125.040	4	6	55	11	4
HF124.045	HF125.045	4.5	6	55	11	4
HF124.050	HF125.050	5	6	57	13	4
HF124.055	HF125.055	5.5	6	57	13	4
HF124.060	HF125.060	6	6	57	13	4
HF124.065	HF125.065	6.5	10	66	16	4
HF124.070	HF125.070	7	10	66	16	4
HF124.075	HF125.075	7.5	10	66	16	4
HF124.080	HF125.080	8	10	69	19	4
HF124.085	HF125.085	8.5	10	69	19	4
HF124.090	HF125.090	9	10	69	19	4
HF124.095	HF125.095	9.5	10	69	19	4
HF124.100	HF125.100	10	10	72	22	4
HF124.110	HF125.110	11	12	79	22	4
HF124.120	HF125.120	12	12	83	26	4
HF124.130	HF125.130	13	12	83	26	4
HF124.140	HF125.140	14	12	83	26	4
HF124.150	HF125.150	15	12	83	26	4
HF124.160	HF125.160	16	16	92	32	4
HF124.170	HF125.170	17	16	92	32	4
HF124.180	HF125.180	18	16	92	32	4
HF124.190	HF125.190	19	16	92	32	4
HF124.200	HF125.200	20	20	104	38	4
HF124.220	HF125.220	21	20	104	38	4
HF124.240	HF125.240	22	25	121	45	5
HF124.250	HF125.250	24	25	121	45	5
HF124.280	HF125.280	25	25	121	45	5
HF124.300	HF125.300	28	25	121	45	5
HF124.320	HF125.320	30	32	133	53	6



**Fresa HSS Serie Larga**

• Características: HSS-CO8 – DIN 844 - Tipo N – Corte 40/12°

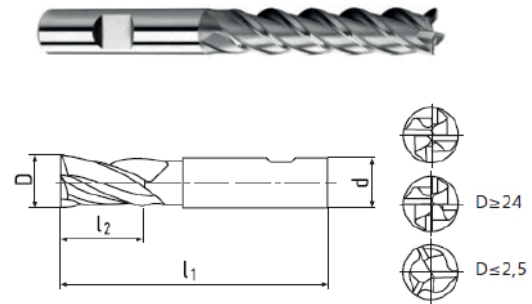
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF126.020	HF127.020	2	6	54	10	3
HF126.025	HF127.025	2.5	6	56	12	3
HF126.030	HF127.030	3	6	56	12	4
HF126.035	HF127.035	3.5	6	59	15	4
HF126.040	HF127.040	4	6	63	19	4
HF126.045	HF127.045	4.5	6	63	19	4
HF126.050	HF127.050	5	6	68	24	4
HF126.055	HF127.055	5.5	6	68	24	4
HF126.060	HF127.060	6	6	68	24	4
HF126.065	HF127.065	6.5	10	80	30	4
HF126.070	HF127.070	7	10	80	30	4
HF126.075	HF127.075	7.5	10	80	30	4
HF126.080	HF127.080	8	10	88	38	4
HF126.085	HF127.085	8.5	10	88	38	4
HF126.090	HF127.090	9	10	88	38	4
HF126.095	HF127.095	9.5	10	88	38	4
HF126.100	HF127.100	10	10	95	45	4
HF126.110	HF127.110	11	12	102	45	4
HF126.120	HF127.120	12	12	110	53	4
HF126.130	HF127.130	13	12	110	53	4
HF126.140	HF127.140	14	12	110	53	4
HF126.150	HF127.150	15	12	110	53	4



**Fresa HSS Serie Larga - Continuación**

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF126.160	HF127.160	16	16	123	63	4
HF126.170	HF127.170	17	16	123	63	4
HF126.180	HF127.180	18	16	123	63	4
HF126.190	HF127.190	19	16	123	63	4
HF126.200	HF127.200	20	20	141	75	4
HF126.220	HF127.220	22	20	141	75	4
HF126.240	HF127.240	24	25	166	90	5
HF126.250	HF127.250	25	25	166	90	5
HF126.280	HF127.280	28	25	166	90	5
HF126.300	HF127.300	30	25	166	90	5
HF126.320	HF127.320	32	32	186	106	6

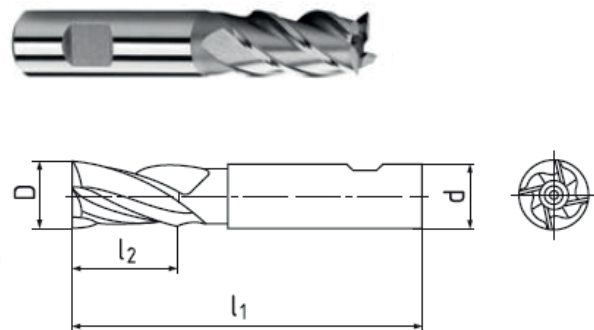
• Características: HSS-CO8 – DIN 844- Tipo N – Corte 40/12°



**Fresa Z4/5/6 – Serie Estándar**

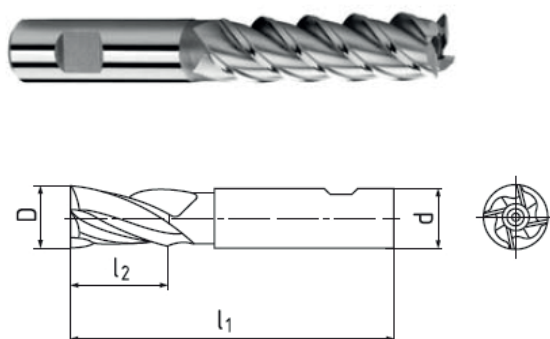
• Características: HSS-CO8 – DIN 844 - Tipo N – Corte 40/12° / 35/12°

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF128.060	HF129.060	6	6	57	13	4
HF128.070	HF129.070	7	10	66	16	4
HF128.080	HF129.080	8	10	69	19	4
HF128.090	HF129.090	9	10	69	19	4
HF128.100	HF129.100	10	10	72	22	4
HF128.110	HF129.110	11	12	79	22	4
HF128.120	HF129.120	12	12	83	26	4
HF128.130	HF129.130	13	12	83	26	4
HF128.140	HF129.140	14	12	83	26	4
HF128.150	HF129.150	15	12	83	26	4
HF128.160	HF129.160	16	16	92	32	4
HF128.170	HF129.170	17	16	92	32	4
HF128.180	HF129.180	18	16	92	32	4
HF128.190	HF129.190	19	16	92	32	4
HF128.200	HF129.200	20	20	104	38	4
HF128.210	HF129.210	21	20	104	38	5
HF128.220	HF129.220	22	20	104	38	5
HF128.240	HF129.240	24	25	121	45	5
HF128.250	HF129.250	25	25	121	45	5
HF128.280	HF129.280	28	25	121	45	5
HF128.300	HF129.300	30	25	121	45	6
HF128.320	HF129.320	32	32	133	53	6
HF128.360	HF129.360	36	32	133	53	6
HF128.400	HF129.400	40*	32	143	63	6



**Fresa HSS Z4/5/6 – Serie Larga**

• Características: HSS-CO8 – DIN 844  
• Tipo N – Corte 40/12°

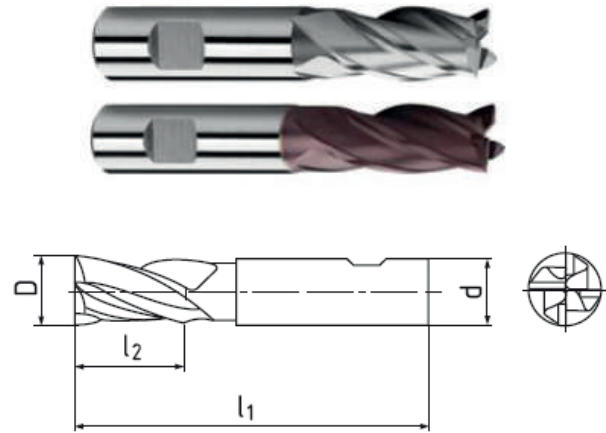


Referencia	Referencia TIALN	D	d	L1	L2	Z
HF130.060	HF131.060	6	6	68	24	4
HF130.070	HF131.070	7	10	80	30	4
HF130.080	HF131.080	8	10	88	38	4
HF130.090	HF131.090	9	10	88	38	4
HF130.100	HF131.100	10	10	95	45	4
HF130.110	HF131.110	11	12	102	45	4
HF130.120	HF131.120	12	12	110	53	4
HF130.130	HF131.130	13	12	110	53	4
HF130.140	HF131.140	14	12	110	53	4
HF130.150	HF131.150	15	12	110	53	4
HF130.160	HF131.160	16	16	123	63	4
HF130.170	HF131.170	17	16	123	63	4
HF130.180	HF131.180	18	16	123	63	4
HF130.200	HF131.200	20	20	141	75	4
HF130.220	HF131.220	22	20	141	75	4
HF130.250	HF131.250	25	25	166	90	5
HF130.280	HF131.280	28	25	166	90	5
HF130.300	HF131.300	30	25	166	90	5
HF130.320	HF131.320	32	32	186	106	5
HF130.360	HF131.360	36	32	186	106	5

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF132.020	HF133.020	2	6	51	7	3
HF132.025	HF133.025	2.5	6	52	8	3
HF132.030	HF133.030	3	6	52	8	4
HF132.035	HF133.035	3.5	6	54	10	4
HF132.040	HF133.040	4	6	55	11	4
HF132.045	HF133.045	4.5	6	55	11	4
HF132.050	HF133.050	5	6	57	13	4
HF132.055	HF133.055	5.5	6	57	13	4
HF132.060	HF133.060	6	6	57	13	4
HF132.065	HF133.065	6.5	10	66	16	4
HF132.070	HF133.070	7	10	66	16	4
HF132.075	HF133.075	7.5	10	66	16	4
HF132.080	HF133.080	8	10	69	19	4
HF132.085	HF133.085	8.5	10	69	19	4
HF132.090	HF133.090	9	10	69	19	4
HF132.095	HF133.095	9.5	10	69	19	4
HF132.100	HF133.100	10	10	72	22	4
HF132.105	HF133.105	10.5	12	79	22	4
HF132.110	HF133.110	11	12	79	22	4
HF132.120	HF133.120	12	12	83	26	4
HF132.130	HF133.130	13	12	83	26	4
HF132.140	HF133.140	14	12	83	26	4
HF132.150	HF133.150	15	12	83	26	4
HF132.160	HF133.160	16	16	92	32	4
HF132.170	HF133.170	17	16	92	32	4
HF132.180	HF133.180	18	16	92	32	4
HF132.200	HF133.200	20	20	104	38	4
HF132.210	HF133.210	21	20	104	38	5
HF132.220	HF133.220	22	20	104	38	5
HF132.240	HF133.240	24	25	121	45	5
HF132.250	HF133.250	25	25	121	45	5
HF132.260	HF133.260	26	25	121	45	5
HF132.270	HF133.270	27	25	121	45	5
HF132.280	HF133.280	28	25	121	45	5
HF132.300	HF133.300	30	25	121	45	5
HF132.320	HF133.320	32	32	133	53	6
HF132.340	HF133.340	34	32	133	53	6
HF132.350	HF133.350	35	32	133	53	6
HF132.360	HF133.360	36	32	133	53	6
HF132.400	HF133.400	40	32	143	63	6

**Fresa HSS Z3/4/5/6 – Serie Estándar**

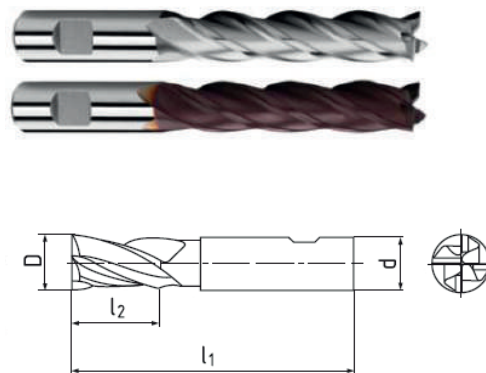
- Características: HSS-CO8 – DIN 844
- Tipo N – Corte 30/8°



Referencia	Referencia TIALN	D	d	L1	L2	Z
HF134.020	HF135.020	2	6	54	10	3
HF134.030	HF135.030	3	6	56	12	4
HF134.035	HF135.035	3.5	6	59	15	4
HF134.040	HF135.040	4	6	63	19	4
HF134.045	HF135.045	4.5	6	63	19	4
HF134.050	HF135.050	5	6	68	24	4
HF134.055	HF135.055	5.5	6	68	24	4
HF134.060	HF135.060	6	6	68	24	4
HF134.070	HF135.070	7	10	80	30	4
HF134.080	HF135.080	8	10	88	38	4
HF134.090	HF135.090	9	10	88	38	4
HF134.100	HF135.100	10	10	95	45	4
HF134.110	HF135.110	11	12	102	45	4
HF134.120	HF135.120	12	12	110	53	4
HF134.130	HF135.130	13	12	110	53	4
HF134.140	HF135.140	14	12	110	53	4
HF134.150	HF135.150	15	12	110	53	4
HF134.160	HF135.160	16	16	123	63	4
HF134.180	HF135.180	18	16	123	63	4

**Fresa HSS Z3/4/5/6 – Serie Larga**

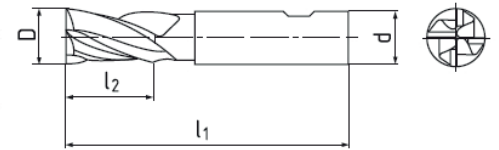
- Características: HSS-CO8 – DIN 844
- Tipo N – Corte 30/8°



**Fresa HSS Z3/4/5/6 – Serie Larga - Continuación**

• Características: HSS-CO8 – DIN 844 - Tipo N – Corte 30/8°

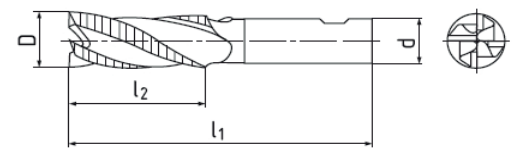
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF134.200	HF135.200	20	20	141	75	4
HF134.220	HF135.220	22	25	141	75	5
HF134.240	HF135.240	24	25	166	90	5
HF134.250	HF135.250	25	25	166	90	5
HF134.280	HF135.280	28	25	166	90	5
HF134.300	HF135.300	30	25	166	90	5
HF134.320	HF135.320	32	32	186	106	6
HF134.360	HF135.360	36	32	186	106	6
HF134.40032	HF135.40032	40	32	205	125	6
HF134.400	HF135.400	40	40	217	125	6



**Fresa HSS Desbaste Medio Z4/Z5 – Serie Estándar**

• Características: HSS-CO8 – DIN 844 – Tipo HR – Corte 30/10° - Acabado Tipo RA6.3

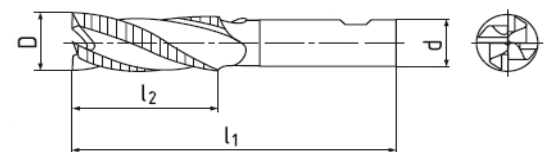
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF140.060	HF141.060	6	6	57	13	4
HF140.070	HF141.070	7	10	66	16	4
HF140.080	HF141.080	8	10	69	19	4
HF140.090	HF141.090	9	10	69	19	4
HF140.100	HF141.100	10	10	72	22	4
HF140.110	HF141.110	11	12	79	22	4
HF140.120	HF141.120	12	12	83	26	4
HF140.130	HF141.130	13	12	83	26	4
HF140.140	HF141.140	14	12	83	26	4
HF140.150	HF141.150	15	12	83	26	4
HF140.160	HF141.160	16	16	92	32	4
HF140.170	HF141.170	17	16	92	32	4
HF140.180	HF141.180	18	16	92	32	4
HF140.200	HF141.200	20	20	104	38	5
HF140.220	HF141.220	22	20	104	38	5
HF140.240	HF141.240	24	25	121	45	5
HF140.250	HF141.250	25	25	121	45	5
HF140.260	HF141.260	26	25	121	45	5
HF140.280	HF141.280	28	25	121	45	5
HF140.300	HF141.300	30	25	121	45	5
HF140.320	HF141.300	32	32	133	53	6



**Fresa HSS Desbaste Medio Z4/Z5 – Serie Larga**

• Características: HSS-CO8 – DIN 844 – Tipo HR – Corte 30/10° - Acabado Tipo RA6.3

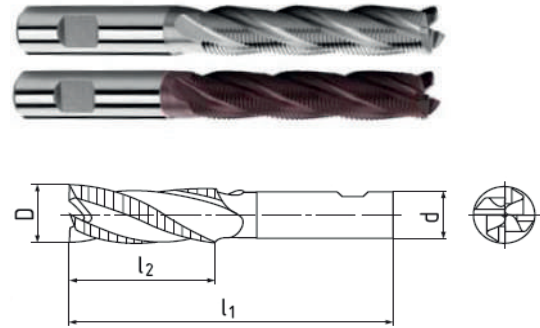
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF142.060	HF143.060	6	6	68	24	4
HF142.080	HF143.080	7	10	88	38	4
HF142.100	HF143.100	10	10	95	45	4
HF142.110	HF143.110	11	12	102	45	4
HF142.120	HF143.120	12	12	110	53	4
HF142.130	HF143.130	13	12	110	53	4
HF142.140	HF143.140	14	12	110	53	4
HF142.160	HF143.160	16	16	123	63	4
HF142.180	HF143.180	18	16	123	63	4
HF142.200	HF143.200	20	20	141	75	5
HF142.220	HF143.220	22	20	141	75	5
HF142.240	HF143.240	24	25	166	90	5
HF142.250	HF143.250	25	25	166	90	5
HF142.260	HF143.260	26	25	166	90	5
HF142.280	HF143.280	28	25	166	90	5
HF142.300	HF143.300	30	25	166	90	5
HF142.320	HF143.320	32	32	186	106	6



**Fresa HSS Desbaste Fuerte - Z4/Z5 – Serie Extra Larga**

• Características: HSS-CO8 – DIN 844 – Tipo NR – Corte 30/12° - Acabado Tipo RA 12.5

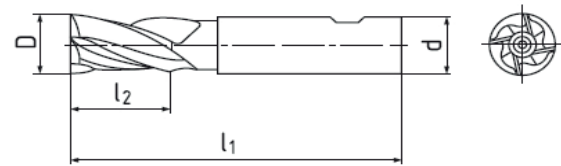
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF146.100	HF147.100	10	10	110	60	4
HF146.120	HF147.120	12	12	137	80	4
HF146.140	HF147.140	14	12	137	80	4
HF146.160	HF147.160	16	16	160	100	4
HF146.180	HF147.180	18	16	160	100	4
HF146.200	HF147.200	20	20	191	125	4
HF146.220	HF147.220	22	20	191	125	5
HF146.250	HF147.250	25	25	216	140	5
HF146.280	HF147.280	28	25	216	140	5
HF146.300	HF147.300	30	25	216	140	5
HF146.320	HF147.320	32	32	260	180	6



**Fresa HSS Acabado - Z4/Z5 – Serie extra Larga**

• Características: HSS-CO8 – DIN 844 – Corte 30/12°

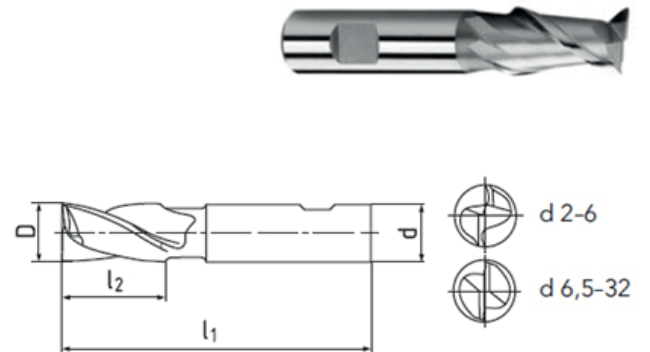
Referencia	Referencia TIALN	D	d	L1	L2	Z
HF148.100	HF149.100	10	10	110	60	4
HF148.120	HF149.120	12	12	137	80	4
HF148.140	HF149.140	14	12	137	80	4
HF148.160	HF149.160	16	16	160	100	5
HF148.180	HF149.180	18	16	160	100	5
HF148.200	HF149.200	20	20	191	125	5
HF148.220	HF149.220	22	20	191	125	5
HF148.250	HF149.250	25	25	216	140	6
HF148.280	HF149.280	28	25	216	140	6
HF148.300	HF149.300	30	25	216	140	6
HF148.320	HF149.320	32	32	260	180	6



**Fresa Z2 – ALU – Serie Estándar**

• Características: HSS-CO8 – DIN 844 – Tipo W – Corte 40/20° - Uso Aluminios y materiales no férricos

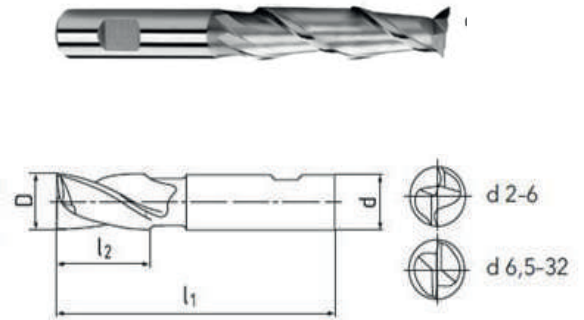
Referencia	D	d	L1	L2	Z
HF160.020	2	6	51	7	2
HF160.030	3	6	52	8	2
HF160.040	4	6	55	11	2
HF160.050	5	6	57	13	2
HF160.055	5.5	6	57	13	2
HF160.060	6	10	57	13	2
HF160.070	7	10	66	16	2
HF160.080	8	10	69	19	2
HF160.090	9	10	69	19	2
HF160.100	10	10	72	22	2
HF160.110	11	12	79	22	2
HF160.120	12	12	83	26	2
HF160.130	13	12	83	26	2
HF160.140	14	12	83	26	2
HF160.150	15	12	83	26	2
HF160.160	16	16	92	32	2
HF160.170	17	16	92	32	2
HF160.180	18	16	92	32	2
HF160.190	19	16	92	32	2
HF160.200	20	20	104	38	2
HF160.210	21	20	104	38	2
HF160.220	22	20	104	38	2
HF160.230	23	20	104	38	2
HF160.240	24	25	121	45	2
HF160.250	25	25	121	45	2
HF160.260	26	25	121	45	2
HF160.280	28	25	121	45	2
HF160.300	30	25	121	45	2
HF160.320	32	32	133	53	2



**Fresa Z2 – ALU – Serie Larga**

• Características: HSS-CO8 – DIN 844 – Tipo W – Corte 40/20° - Uso Aluminios y materiales no férricos

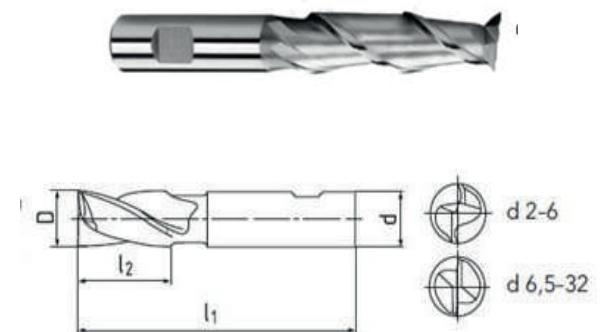
Referencia	D	d	L1	L2	Z
HF162.020	2	6	54	10	2
HF162.030	3	6	56	12	2
HF162.040	4	6	63	19	2
HF162.050	5	6	68	24	2
HF162.060	6	6	68	24	2
HF162.070	7	10	80	30	2
HF162.080	8	10	88	38	2
HF162.100	10	10	95	45	2
HF162.110	11	12	102	45	2
HF162.120	12	12	110	53	2
HF162.130	13	12	110	53	2
HF162.140	14	12	110	53	2
HF162.150	15	12	110	53	2
HF162.160	16	16	123	63	2
HF162.180	18	16	123	63	2
HF162.200	20	20	141	75	2
HF162.220	22	20	141	75	2
HF162.250	25	25	166	90	2



**Fresa Z3 – ALU – Serie Estándar**

• Características: HSS-CO8 – DIN 844 – Tipo W – Corte 40/25° - Uso Aluminios y materiales no férricos

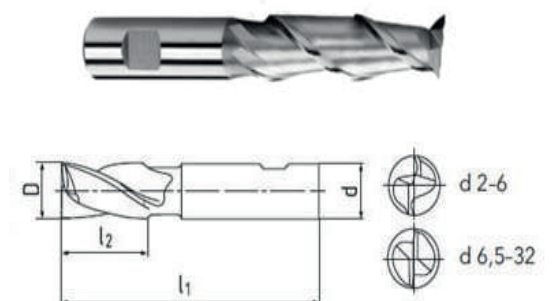
Referencia	D	d	L1	L2	Z
HF164.020	2	6	51	7	3
HF164.030	3	6	52	8	3
HF164.040	4	6	55	11	3
HF164.045	4.5	6	55	11	3
HF164.050	5	6	57	13	3
HF164.060	6	6	57	13	3
HF164.070	7	10	66	16	3
HF164.080	8	10	69	19	3
HF164.090	9	10	69	19	3
HF164.100	10	10	72	22	3
HF164.110	12	12	83	26	3
HF164.120	14	12	83	26	3
HF164.130	15	12	83	26	3
HF164.140	16	16	92	32	3
HF164.180	18	16	92	32	3
HF164.200	20	20	104	38	3



**Fresa Z3 – ALU – Serie Larga**

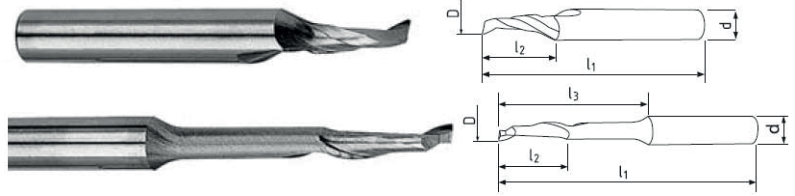
• Características: HSS-CO8 – DIN 844 – Tipo W – Corte 40/25° - Uso Aluminios y materiales no férricos

Referencia	Referencia TIALN	D	d	L1	L2	Z
HF166.060	HF167.060	6	6	68	24	3
HF166.070	HF167.070	7	10	80	30	3
HF166.080	HF167.080	8	10	88	38	3
HF166.090	HF167.090	9	10	88	38	3
HF166.100	HF167.100	10	10	95	45	3
HF166.120	HF167.120	12	12	110	53	3
HF166.140	HF167.140	14	12	110	53	3
HF166.150	HF167.150	15	12	110	53	3
HF166.160	HF167.160	16	16	123	63	3
HF166.180	HF167.180	18	16	123	63	3
HF166.200	HF167.200	20	20	141	75	3



**Fresa HSS – Z1 – ALU**

- Características: HSS-CO5 – DIN 844 - Tipo W – Corte 30/20°
- Serie HF110 - Estándar
- Serie HF111 - Larga

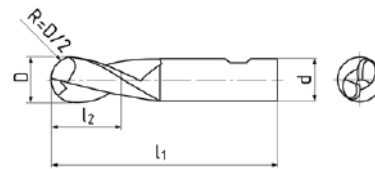


Referencia	D	Ø Amarre	Longitud Total	Longitud Corte
HF110.030	3	8	60	12
HF110.040	4	8	60	12
HF110.050	5	8	60	14
HF110.060	6	8	60	14
HF110.070	7	8	60	14
HF110.080	8	8	80	14
HF110.090	9	8	80	14
HF110.100	10	8	80	14
HF110.120	12	8	80	14

Referencia	D	Ø Amarre	Longitud Total	Longitud Corte	Longitud Rebajado
HF111.040	3	8	80	16	45
HF111.050	4	8	80	16	45
HF111.050L	5	8	120	16	84
HF111.060	6	8	90	16	45
HF111.080	8	8	100	30	70
HF111.080L	8	8	120	16	90

**Fresa HSS Bola - Z2**

- Características: HSS-CO8 - DIN 1889 - Weldon Din 1835B - Corte 25/10°

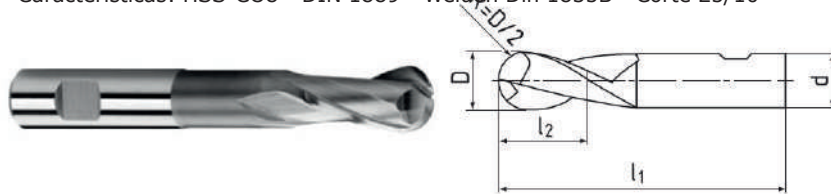


Referencia	D	Ø Amarre	Longitud Total	Longitud Corte
HF150.020	2	6	48	4
HF150.030	3	6	49	5
HF150.040	4	6	51	7
HF150.045	4.5	6	51	7
HF150.050	5	6	52	8
HF150.060	6	6	60	8
HF150.070	7	10	61	10
HF150.080	8	10	61	11
HF150.090	9	10	63	11
HF150.100	10	10	70	13
HF150.110	11	12	73	13
HF150.120	12	12	73	16
HF150.130	13	12	73	16

Referencia	D	Ø Amarre	Longitud Total	Longitud Corte
HF150.140	14	12	73	16
HF150.150	15	12	73	16
HF150.160	16	16	79	19
HF150.180	18	16	79	19
HF150.200	20	20	88	22
HF150.220	22	20	88	22
HF150.240	24	25	102	26
HF150.250	25	25	102	26
HF150.280	28	25	102	26
HF150.300	30	25	102	26
HF150.320	32	32	102	32

**Fresa HSS Bola - Z2 Serie Larga**

- Características: HSS-CO8 - DIN 1889 - Weldon Din 1835B - Corte 25/10°

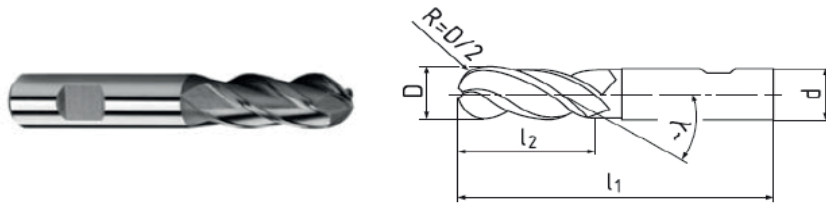


Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF152.020	2	6	7	54
HF152.030	3	6	8	56
HF152.040	4	6	11	63
HF152.050	5	6	13	68
HF152.060	6	6	13	68
HF152.070	7	10	16	80
HF152.080	8	10	19	88
HF152.090	9	10	19	88
HF152.100	10	10	22	95
HF152.110	11	12	22	102
HF152.120	12	12	26	110
HF152.130	13	12	26	110

Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF152.140	14	12	26	110
HF152.150	15	12	26	110
HF152.160	16	16	32	123
HF152.180	18	16	32	123
HF152.200	20	20	38	141
HF152.220	22	20	38	141
HF152.240	24	25	45	166
HF152.250	25	25	45	166
HF152.280	28	25	45	166
HF152.300	30	25	45	166
HF152.320	32	32	53	186

**Fresa HSS Bola – Z4**

• Características: HSS-CO8 – DIN 1889 – Weldon Din 1835B – Corte 12°

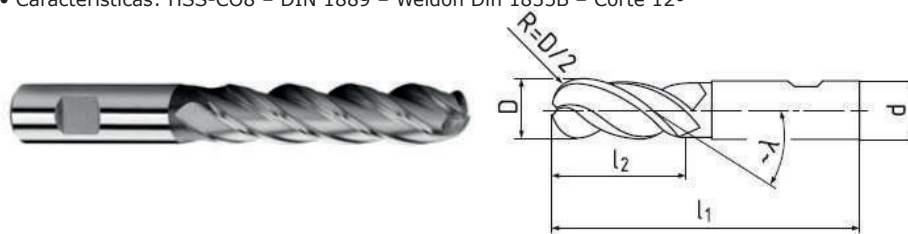


Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF154.040	4	6	11	55
HF154.050	5	6	13	57
HF154.060	6	6	13	57
HF154.080	8	10	19	69

Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF154.100	10	10	22	72
HF154.120	12	12	26	83
HF154.160	16	16	32	92
HF154.200	20	20	38	104

**Fresa HSS Bola – Z4 – Serie Larga**

• Características: HSS-CO8 – DIN 1889 – Weldon Din 1835B – Corte 12°

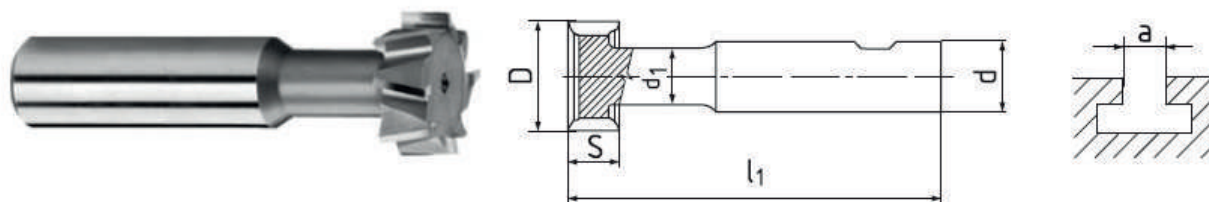


Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF156.040	4	6	19	63
HF156.050	5	6	24	68
HF156.060	6	6	24	68
HF156.080	8	10	38	88

Referencia	D	Ø Amarre	Longitud Corte	Longitud Total
HF156.100	10	10	45	95
HF156.120	12	12	53	110
HF156.160	16	16	63	123
HF156.200	20	20	75	141

**Fresa en T - Mango Cilíndrico**

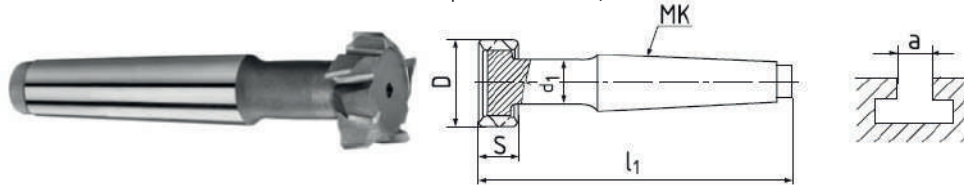
• Características: Fresa HSS-CO5 - DIN 851 - Tipo N – Corte 10/10° - HSS-CO5



Referencia	Diametro D	Amarre d	Altura S	Mango Reducido d1	Longitud Total L1	Dientes Z	Ancho Ranura a
HF214.110	11	10	4	4	53.5	6	5
HF214.125	12.5	10	6	5	57	6	6
HF214.160	16	10	8	7	62	6	8
HF214.180	18	12	8	8	70	6	10
HF214.190	19	12	9	8	71	6	8
HF214.210	21	12	9	10	74	6	12
HF214.220	22	12	10	10	75	6	10
HF214.250	25	16	11	12	82	8	14
HF214.280	28	16	12	13	85	8	13
HF214.320	32	16	14	15	90	8	18
HF214.360	36	25	16	17	103	8	17
HF214.400	40	25	18	19	108	10	22
HF214.450	45	25	20	21	113	10	21
HF214.500	50	32	22	25	124	10	28
HF214.600	60	32	28	30	139	10	36

**Fresa en T - Mango Cono Morse**

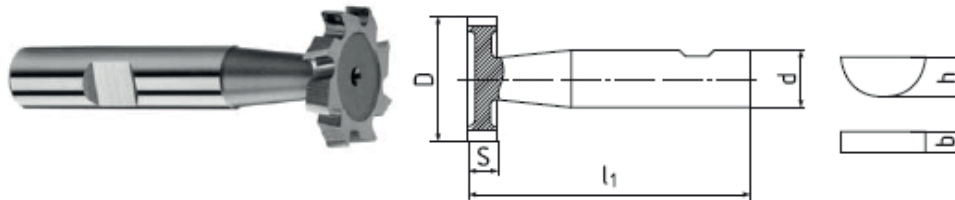
• Características: Fresa HSS-CO5 - DIN 851 - Tipo N - Corte 10/10° - HSS - Amarre Cono Mose 228A



Referencia	Diametro	Cono Morse	Anchura	Diametro Min	Longitud Total	Dientes	Ancho
HF216.180	18	1	8	8	82	8	10
HF216.210	21	2	9	10	102	8	12
HF216.250	25	2	11	12	104	8	14
HF216.320	32	2	14	16	111	8	18
HF216.400	40	3	18	20	138	8	22
HF216.500	50	4	22	25	173	8	28
HF216.600	60	4	28	31	188	10	36
HF216.720	72	5	35	36	229	10	42

**Fresa en T - Woodruff**

• Características: Fresa HSS-CO5 - DIN 850 - Corte 10/10° - HSS-CO5 - Amarre Weldon DIN-1835B

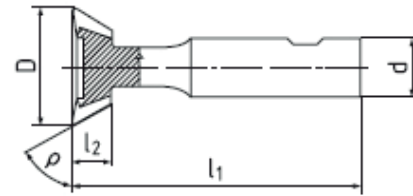


Referencia	Diametro	Amarre	Altura	Longitud Total	Diente	B	H
HF218.045	4.5	6	1	50	6	1	1.4
HF218.075	7.5	6	1.5	50	6	1.5	2.6
HF218.0752	7.5	6	2	50	6	2	2.6
HF218.105	10.5	6	2	50	6	2	3.7
HF218.1052	10.5	6	2.5	50	6	2.5	3.7
HF218.1053	10.5	6	3	50	6	3	3.7
HF218.135	13.5	10	2	56	6	-	-
HF218.1352	13.5	10	3	56	6	3	5
HF218.1353	13.5	10	4	56	6	4	5
HF218.165	16.5	10	3	56	6	3	6.5
HF218.1652	16.5	10	4	56	6	4	6.5
HF218.1653	16.5	10	5	56	6	5	6.5
HF218.195	19.5	10	3	63	8	-	-
HF218.1952	19.5	10	4	63	8	4	7.5
HF218.1953	19.5	10	5	63	8	5	7.5
HF218.1954	19.5	10	6	63	8	6	7.5
HF218.225	22.5	10	4	63	8	-	-
HF218.2252	22.5	10	5	63	10	5	9
HF218.2253	22.5	10	6	63	10	6	9
HF218.2254	22.5	10	8	63	10	8	9
HF218.255	25.5	10	5	63	10	-	-
HF218.2552	25.5	10	6	63	10	6	10
HF218.285	28.5	10	6	63	10	6	11
HF218.2852	28.5	10	8	63	10	8	11
HF218.2853	28.5	12	10	71	10	10	11
HF218.325	32.5	12	6	71	10	-	-
HF218.3252	32.5	12	7	71	10	-	-
HF218.3253	32.5	12	8	71	10	8	13
HF218.3254	32.5	12	10	71	10	10	13
HF218.385	38.5	12	8	71	10	-	-
HF218.455	45.5	12	8	71	12	-	-
HF218.4552	45.5	12	10	71	12	10	16

**Fresa Cónica Angular**

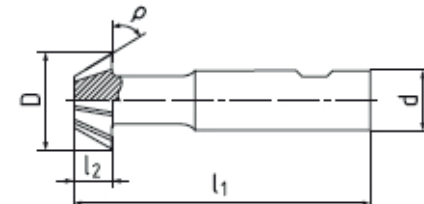
• Características: Fresa HSS-CO5 - DIN 1833A - Corte 0/0° - HSS-CO5 - Amarre Weldon DIN-1835B

Referencia	Ángulo	Diametro	Amarre	Longitud Total	Altura	Diente
HF220.04516	45	16	12	60	4	10
HF220.04520	45	20	12	63	5	10
HF220.04525	45	25	12	67	6.3	10
HF220.04532	45	32	16	71	8	12
HF220.04540	45	40	16	80	10	12
HF220.05016	50	16	12	80	5	10
HF220.05020	50	20	12	60	6.3	10
HF220.05025	50	25	12	63	8	10
HF220.05516	55	16	12	67	5.6	10
HF220.05520	55	20	12	60	7.1	10
HF220.05525	55	25	12	63	9	10
HF220.06016	60	16	12	67	6.3	10
HF220.06020	60	20	12	60	8	10
HF220.06025	60	25	12	63	10	10
HF220.06032	60	32	12	67	12.5	12
HF220.06040	60	40	12	71	16	12
HF220.06516	65	16	12	80	6.3	10
HF220.06525	65	25	12	60	10	12
HF220.07016	70	16	12	67	7	10
HF220.07020	70	20	12	60	9	10
HF220.07025	70	25	16	63	11	10
HF220.07516	75	16	12	67	8	10
HF220.07525	75	25	12	60	10	12
HF220.08016	80	16	12	67	8	10
HF220.08025	80	25	12	60	10	12
HF220.08516	85	16	12	67	8	10
HF220.08525	85	25	12	60	10	12


**Fresa Cónica Angular**

• Características: Fresa HSS-CO5 - DIN 1833A - Corte 0/0° - HSS-CO5 - Amarre Weldon DIN-1835B

Referencia	Ángulo	Diametro	Amarre	Longitud Total	Altura	Diente
HF222.04516	45	16	12	60	4	10
HF222.04520	45	20	12	63	5	10
HF222.04525	45	25	12	67	6.3	10
HF222.04532	45	32	16	71	8	12
HF222.04540	45	40	16	80	10	12
HF222.05016	50	16	12	60	5	12
HF222.05020	50	20	12	63	6.3	12
HF222.05025	50	25	12	67	8	12
HF222.05516	55	16	12	60	5.6	10
HF222.05520	55	20	12	63	7.1	10
HF222.05525	55	25	12	67	9	12
HF222.06016	60	16	12	60	6.3	10
HF222.06020	60	20	12	63	8	10
HF222.06025	60	25	12	67	10	10
HF222.06516	65	16	16	60	6.3	10
HF222.06525	65	25	16	67	10	12
HF222.07016	70	16	12	60	7	10
HF222.07020	70	20	12	63	9	10
HF222.07516	75	16	12	60	8	10
HF222.07525	75	25	12	67	10	12



**Fresa Radio**

• Características: DIN 6518 - Corte 0/9° - HSS-CO8 - Amarre Weldon DIN 1835B

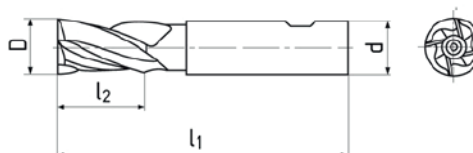


Referencia	Radio	Diametro	Amarre	Long. Total	Dientes
HF224.010	1	8	10	60	4
HF224.0125	1.25	9	10	60	4
HF224.015	1.5	9	10	60	4
HF224.016	1.6	9.2	10	60	4
HF224.020	2	10	10	60	4
HF224.025	2.5	11	10	60	4
HF224.030	3	12	12	60	4
HF224.035	3.5	13	12	60	4
HF224.040	4	14	12	60	4
HF224.045	4.5	15	12	60	4
HF224.050	5	16	12	60	4
HF224.055	5.5	19	16	67	4
HF224.060	6	20	16	67	4
HF224.063	6.3	20.6	16	71	4
HF224.065	6.5	21	16	71	4
HF224.070	7.0	22	16	71	4
HF224.075	7.5	23	16	71	4

Referencia	Radio	Diametro	Amarre	Long.Total	Dientes
HF224.080	8	24	16	71	4
HF224.085	8.5	25	25	85	4
HF224.090	9	26	25	85	4
HF224.095	9.5	27	25	85	4
HF224.100	10	28	25	85	4
HF224.105	10.5	31	25	90	4
HF224.110	11	32	25	90	4
HF224.120	12	34	25	90	4
HF224.125	12.5	41	25	100	6
HF224.130	13	42	25	100	6
HF224.140	14	44	25	100	6
HF224.150	15	46	25	100	6
HF224.160	16	48	25	100	6
HF224.170	17	50	32	112	6
HF224.180	18	52	32	112	6
HF224.190	19	56	32	112	6
HF224.200	20	56	32	112	6

**Fresa Acabado Mango Cilíndrico**

• Características: Modelo: Z6/Z8 - HSS-CO8 - Tipo: N - Helice 30°/12°

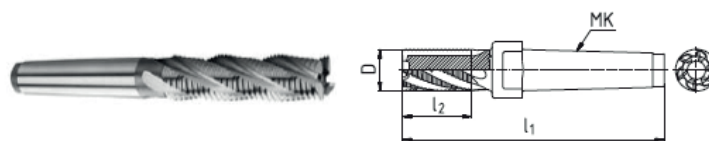


Referencia	Referencia TIALN	D	d	L1	L2	Z
HF212.300	HF213.300	30	20	90	30	6
HF212.350	HF213.350	35	20	90	30	6
HF212.400	HF213.400	40	25	90	32	8
HF212.500	HF213.500	50	32	100	36	8

**Fresa Desbaste Cono Morse**

• Características: DIN 845B/C - Tipo NR - Corte 30/12° - HSS-CO8

Referencia	D	MK	Long. Total	Long. Corte	Z
HF226.100	10	1	92	22	4
HF226.120	12	1	96	26	4
HF226.140	14	2	111	26	4
HF226.160	16	2	117	32	4
HF226.180	18	2	117	32	4
HF226.200	20	2	123	38	4
HF226.220	22	2	123	38	5
HF226.240	24	3	147	45	5
HF226.250	25	3	147	45	5
HF226.260	26	3	147	45	5
HF226.280	28	3	147	45	5
HF226.300	30	3	147	45	6
HF226.320	32	4	201	53	6
HF226.350	35	4	201	53	6
HF226.360	36	4	201	53	6
HF226.400	40	4	211	63	6
HF226.410	41	4	211	63	6
HF226.450	45	4	211	63	6
HF226.500	50	5	261	75	6
HF226.630	63	5	276	90	6

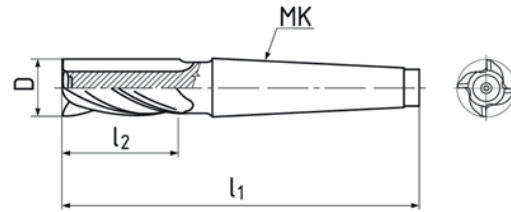


- Serie HF226 - Estándar
- Serie HF228 - Larga

Referencia	D	MK	Long. Total	Long. Corte	Z
H228.160	16	2	148	63	4
H228.200	20	2	160	75	4
H228.220	22	3	160	75	5
H228.240	24	3	192	90	5
H228.250	25	3	192	90	5
H228.260	26	3	192	90	5
H228.280	28	3	192	90	5
H228.300	30	3	192	90	5
H228.320	32	4	254	106	6
H228.360	36	4	254	106	6
H228.400	40	4	273	125	6
H228.450	45	4	273	125	6
H228.500	50	5	336	150	8
H228.630	63	5	366	180	8

**Fresa Z-2 Cono Morse**

• Características: DIN 326 - Tipo N - Corte 25/12° - HSS-CO5



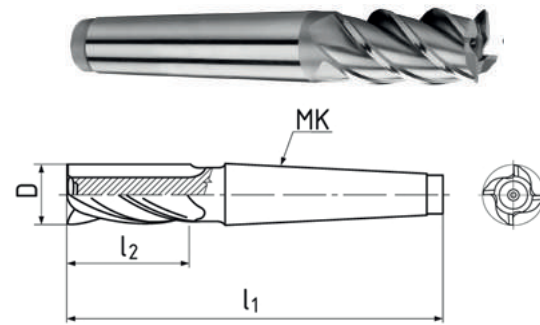
Referencia	D	MK	Long. Total	Long. Corte	Z
HF230.120	12	1	85	14	2
HF230.140	14	2	100	16	2
HF230.160	16	2	105	8	2
HF230.180	18	2	110	20	2
HF230.200	20	2	115	20	2
HF230.220	22	2	120	22	2
HF230.240	24	3	140	25	2
HF230.250	25	3	140	25	2

Referencia	D	MK	Long. Total	Long. Corte	Z
HF230.280	28	3	145	28	2
HF230.300	30	3	150	30	2
HF230.320	32	4	175	32	2
HF230.360	36	4	175	34	2
HF230.400	40	4	180	38	2
HF230.450	45	4	185	42	2
HF230.500	50	5	220	45	2

**Fresa Cono Morse**

• Características: DIN 845B/C - Tipo W - Corte 45/22° - HSS-CO5

Referencia	D	MK	Long. Total	Long. Corte	Z
HF232.100	10	1	92	22	3
HF232.120	12	2	111	26	3
HF232.160	16	2	117	32	3
HF232.200	20	2	123	38	3
HF232.220	22	2	123	38	3
HF232.240	24	3	147	45	4
HF232.250	25	3	147	45	4
HF232.260	26	3	147	45	4
HF232.280	28	3	147	45	4
HF232.300	30	3	147	45	4
HF232.320	32	4	178	53	4
HF232.360	36	4	178	53	4
HF232.400	40	4	188	63	4
HF232.450	45	4	188	63	4
HF232.500	50	5	233	75	5
HF232.630	63	5	248	90	6



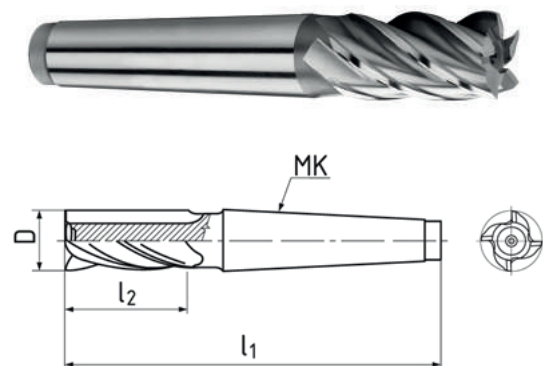
**Serie Larga**

Referencia	D	MK	Long. Total	Long. Corte	Z
HF234.250	25	3	192	90	4
HF234.320	32	4	231	106	4
HF234.400	40	4	250	125	4
HF234.500	50	5	308	150	5
HF234.630	63	5	338	180	6

**Fresa Acabado Cono Morse**

• Características: DIN 845B/C - Tipo W Corte 45/22° - HSS-CO5

Referencia	D	MK	Long. Total	Long. Corte	Z
HF244.100	10	1	92	22	4
HF244.120	12	1	96	26	4
HF244.140	14	2	111	26	4
HF244.160	16	2	117	32	4
HF244.180	18	2	117	32	4
HF244.200	20	2	123	38	4
HF244.220	22	2	123	38	5
HF244.250	25	3	147	45	5
HF244.280	28	3	147	45	5
HF244.300	30	3	147	45	6
HF244.320	32	4	178	53	6
HF244.360	36	4	178	53	6
HF244.400	40	4	188	63	6
HF244.450	45	4	188	63	6
HF244.500	50	5	233	75	6



### Fresas Disco HSS-C05 - Diente Cruzado

- Características: Diente Cruzado y Uso Universal
- DIN 885A – DIN 138 – Tipo N – Corte 10/12° - HSS-C05



Referencia	Diametro	Espesor	Agujero	Dientes
HF258.05003	50	3	16	12
HF258.05004	50	4	16	12
HF258.05005	50	5	16	12
HF258.05006	50	6	16	12
HF258.05008	50	8	16	12
HF258.05010	50	10	16	12
HF258.06303	63	3	22	12
HF258.06304	63	4	22	12
HF258.06305	63	5	22	12
HF258.06306	63	6	22	12
HF258.06308	63	8	22	12
HF258.06310	63	10	22	12
HF258.06312	63	12	22	12
HF258.06314	63	14	22	12
HF258.06316	63	16	22	12
HF258.06318	63	18	22	12
HF258.08003	80	3	27	14
HF258.08004	80	4	27	14
HF258.08005	80	5	27	14
HF258.08006	80	6	27	14
HF258.08008	80	8	27	14
HF258.08010	80	10	27	14
HF258.08012	80	12	27	14
HF258.08014	80	14	27	14
HF258.08016	80	16	27	14
HF258.08018	80	18	27	14
HF258.08020	80	20	27	14
HF258.10003	100	3	32	14
HF258.10004	100	4	32	14
HF258.10005	100	5	32	14
HF258.10006	100	6	32	14
HF258.10008	100	8	32	14
HF258.10010	100	10	32	14
HF258.10012	100	12	32	14
HF258.10014	100	14	32	14
HF258.10016	100	16	32	14
HF258.10018	100	18	32	14
HF258.10020	100	20	32	14
HF258.10022	100	22	32	14
HF258.10025	100	25	32	14
HF258.12504	125	4	32	16
HF258.12505	125	5	32	16
HF258.12506	125	6	32	16
HF258.12508	125	8	32	16
HF258.12510	125	10	32	16
HF258.12512	125	12	32	16
HF258.12514	125	14	32	16
HF258.12516	125	16	32	16
HF258.12518	125	18	32	16
HF258.12520	125	20	32	16
HF258.12522	125	22	32	16
HF258.12525	125	25	32	16
HF258.12528	125	28	32	16

### Fresas Disco HSS-C05 - Diente Cruzado

- Características: Diente Cruzado y Materiales Duros
- DIN 885A – DIN 138 – Tipo H – Corte 10/8° - HSS-C05



Referencia	Diametro	Agujero	Espesor	Dientes
HF260.05003	50	3	16	16
HF260.05004	50	4	16	16
HF260.05005	50	5	16	16
HF260.05006	50	6	16	16
HF260.05008	50	8	16	16
HF260.05010	50	10	16	16
HF260.06303	63	3	22	18
HF260.06304	63	4	22	18
HF260.06305	63	5	22	18
HF260.06306	63	6	22	18
HF260.06308	63	8	22	18
HF260.06310	63	10	22	18
HF260.06312	63	12	22	18
HF260.06314	63	14	22	18
HF260.06316	63	16	22	18
HF260.08004	80	4	27	20
HF260.08005	80	5	27	20
HF260.08006	80	6	27	20
HF260.08008	80	8	27	20
HF260.08010	80	10	27	18
HF260.08012	80	12	27	18
HF260.08014	80	14	27	18
HF260.08016	80	16	27	18
HF260.08018	80	18	27	18
HF260.08020	80	20	27	18
HF260.10003	100	3	32	20
HF260.10004	100	4	32	20
HF260.10005	100	5	32	20
HF260.10006	100	6	32	20
HF260.10008	100	8	32	20
HF260.10010	100	10	32	20
HF260.10012	100	12	32	20
HF260.10014	100	14	32	20
HF260.10016	100	16	32	20
HF260.10018	100	18	32	20
HF260.10020	100	20	32	20
HF260.10025	100	25	32	20
HF260.12505	125	5	32	24
HF260.12506	125	6	32	24
HF260.12508	125	8	32	24
HF260.12510	125	10	32	22
HF260.12512	125	12	32	22
HF260.12514	125	14	32	22
HF260.12516	125	16	32	22
HF260.12518	125	18	32	22
HF260.12520	125	20	32	22
HF260.12525	125	25	32	22
HF260.12528	125	28	32	22

**Fresas Disco HSS-C05 - Diente Cruzado - Continuación**

Referencia	Diametro	Espesor	Agujero	Dientes
HF258.16006	160	6	40	18
HF258.16008	160	8	40	18
HF258.16010	160	10	40	18
HF258.16012	160	12	40	18
HF258.16014	160	14	40	18
HF258.16016	160	16	40	18
HF258.16018	160	18	40	18
HF258.16020	160	20	40	18
HF258.16025	160	25	40	18
HF258.16032	160	32	40	18
HF258.20008	200	8	40	24
HF258.20010	200	10	40	18
HF258.20012	200	12	40	18
HF258.20014	200	14	40	18
HF258.20016	200	16	40	18
HF258.20018	200	18	40	18
HF258.20020	200	20	40	18
HF258.20025	200	25	40	18
HF258.20032	200	32	40	18

Referencia	Diametro	Agujero	Espesor	Dientes
HF260.16006	160	6	40	26
HF260.16008	160	8	40	26
HF260.16010	160	10	40	26
HF260.16012	160	12	40	26
HF260.16014	160	14	40	26
HF260.16016	160	16	40	26
HF260.16018	160	18	40	26
HF260.16020	160	20	40	26
HF260.16025	160	25	40	26
HF260.16032	160	32	40	26
HF260.20008	200	8	40	32
HF260.20010	200	10	40	32
HF260.20012	200	12	40	32
HF260.20014	200	14	40	32
HF260.20016	200	16	40	32
HF260.20018	200	18	40	32
HF260.20020	200	20	40	32
HF260.20025	200	25	40	32
HF260.20032	200	32	40	32
HF260.25008	250	8	40	38
HF260.25010	250	10	40	38
HF260.25012	250	12	40	38

**Fresas Disco HSS-C08 - Recto**

- Características: Diente Recto - Uso Universal
- DIN 885B - DIN 138 - Tipo H - Corte 0/8° - HSS-C08



Referencia	Diametro	Espesor	Agujero	Dientes
HF261.05004	50	4	16	16
HF261.05005	50	5	16	16
HF261.05006	50	6	16	16
HF261.05008	50	8	16	16
HF261.05010	50	10	16	16
HF261.06304	63	4	22	18
HF261.06305	63	5	22	18
HF261.06306	63	6	22	18
HF261.06308	63	8	22	18
HF261.06310	63	10	22	18
HF261.06312	63	12	22	18
HF261.06314	63	14	22	18
HF261.06316	63	16	22	18
HF261.06318	63	18	22	18
HF261.08004	80	4	27	20
HF261.08005	80	5	27	20
HF261.08006	80	6	27	20
HF261.08008	80	8	27	20
HF261.08010	80	10	27	20
HF261.08012	80	12	27	20
HF261.08014	80	14	27	20
HF261.08016	80	16	27	20
HF261.08018	80	18	27	20
HF261.08020	80	20	27	20
HF261.10006	100	6	32	24
HF261.10008	100	8	32	24
HF261.10010	100	10	32	24

Referencia	Diametro	Espesor	Agujero	Dientes
HF261.10012	100	12	32	24
HF261.10014	100	14	32	24
HF261.10016	100	16	32	24
HF261.10018	100	18	32	24
HF261.10020	100	20	32	24
HF261.10022	100	22	32	24
HF261.10025	100	25	32	24
HF261.12506	125	6	32	24
HF261.12508	125	8	32	24
HF261.12510	125	10	32	24
HF261.12512	125	12	32	24
HF261.12514	125	14	32	24
HF261.12516	125	16	32	24
HF261.12518	125	18	32	24
HF261.12520	125	20	32	24
HF261.12525	125	25	32	24
HF261.16010	160	10	40	24
HF261.16012	160	12	40	24
HF261.16014	160	14	40	24
HF261.16016	160	16	40	24
HF261.16018	160	18	40	24
HF261.16020	160	20	40	24
HF261.20010	200	10	40	32
HF261.20012	200	12	40	32
HF261.20014	200	14	40	32
HF261.20016	200	16	40	32
HF261.20018	200	18	40	32
HF261.20020	200	20	40	32

### Fresas Disco HSS-C05 - Diente Cruzado

- Características: Diente Cruzado - DIN 885A  
DIN 138 - Tipo N - Corte 10/12° - HSS-C05
- Serie HF262 - Uso Universal Serie HF264:  
Uso Materiales Duros



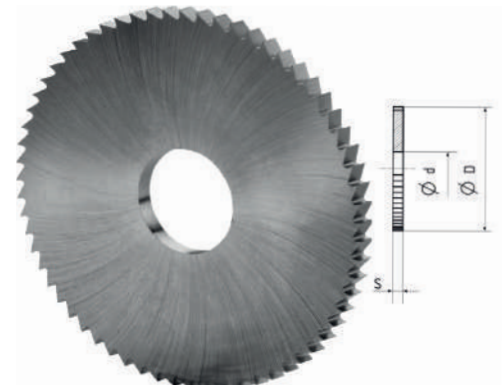
Referencia	Diametro	Espesor	Agujero	Dientes
#HF262.063016	63	1.6	22	28
HF262.063020	63	2	22	28
HF262.063025	63	2.5	22	28
HF262.063030	63	3	22	28
HF262.063040	63	4	22	28
HF262.063050	63	5	22	28
HF262.063060	63	6	22	28
HF262.080016	80	1.6	27	32
HF262.080020	80	2	27	32
HF262.080025	80	2.5	27	32
HF262.080030	80	3	27	32
HF262.080040	80	4	27	32
HF262.080050	80	5	27	32
HF262.080060	80	6	27	32
HF262.100016	100	1.6	32	24
HF262.100020	100	2	32	24
HF262.100025	100	2.5	32	24
HF262.100030	100	3	32	24
HF262.100040	100	4	32	24
HF262.100050	100	5	32	24
HF262.100060	100	6	32	24
HF262.100080	100	8	32	24
HF262.125016	125	1.6	32	26
HF262.125020	125	2	32	26
HF262.125025	125	2.5	32	26
HF262.125030	125	3	32	26
HF262.125040	125	4	32	26
HF262.125050	125	5	32	26
HF262.125060	125	6	32	26
HF262.125080	125	8	32	26
HF262.125100	125	10	32	26
HF262.160020	160	2	40	30
HF262.160025	160	2.5	40	30
HF262.160030	160	3	40	30
HF262.160040	160	4	40	30
HF262.160050	160	5	40	30
HF262.160060	160	6	40	30
HF262.160080	160	8	40	30
HF262.160100	160	10	40	30
HF262.160120	160	12	40	30
HF262.200030	200	3	40	36

Referencia	Diametro	Espesor	Agujero	Dientes
HF264.050016	50	1.6	16	24
HF264.050020	50	2	16	24
HF264.050025	50	2.5	16	24
HF264.050030	50	3	16	24
HF264.050035	50	3.5	16	24
HF264.050040	50	4	16	24
HF264.050050	50	5	16	22
HF264.063016	63	1.6	22	28
HF264.063020	63	2	22	28
HF264.063025	63	2.5	22	28
HF264.063030	63	3	22	28
HF264.063035	63	3.5	22	28
HF264.063040	63	4	22	28
HF264.063050	63	5	22	28
HF264.063060	63	6	22	28
HF264.080016	80	1.6	27	32
HF264.080020	80	2	27	32
HF264.080025	80	2.5	27	32
HF264.080030	80	3	27	32
HF264.080035	80	3.5	27	32
HF264.080040	80	4	27	32
HF264.080050	80	5	27	32
HF264.080060	80	6	27	32
HF264.100016	100	1.6	32	36
HF264.100020	100	2	32	36
HF264.100025	100	2.5	32	36
HF264.100030	100	3	32	36
HF264.100035	100	3.5	32	36
HF264.100040	100	4	32	36
HF264.100050	100	5	32	36
HF264.100060	100	6	32	36
HF264.100080	100	8	32	28
HF264.125016	125	1.6	32	40
HF264.125020	125	2	32	40
HF264.125025	125	2.5	32	40
HF264.125030	125	3	32	40
HF264.125035	125	3.5	32	40
HF264.125040	125	4	32	40
HF264.125050	125	5	32	40
HF264.125060	125	6	32	40
HF264.125070	125	7	32	32
HF264.125080	125	8	32	32
HF264.125100	125	10	32	32
HF264.160020	160	2	40	48
HF264.160025	160	2.5	40	48
HF264.160030	160	3	40	48
HF264.160035	160	3.5	40	48
HF264.160040	160	4	40	48
HF264.160050	160	5	40	48
HF264.160060	160	6	40	48
HF264.160080	160	8	40	36
HF264.160100	160	10	40	36
HF264.160120	160	12	40	36
HF264.200020	200	2	40	52
HF264.200025	200	2.5	40	52
HF264.200030	200	3	40	52
HF264.200040	200	4	40	52
HF264.200050	200	5	40	52
HF264.200060	200	6	40	52
HF264.200080	200	8	40	40
HF264.200100	200	10	40	40
HF264.200120	200	12	40	40
HF264.200140	200	14	40	40

**Disco Corte HSS-C05**

• Características: HSS – DIN 1837 – Tipo H - Corte Recto Fino (HF280) -- HSS – DIN 1838 Tipo W - Corte Recto Grueso (HF282)

Diámetro Espesor	Ø Agujero	HF280	HF282	Diámetro Espesor	Ø Agujero	HF280	HF282	Diámetro Espesor	Ø Agujero	HF280.	HF282.
20x0,20	5	200020	-	40x1	10	400100	-	80x5	22	800500	800500
20x0,25	5	200025	-	40x1,2	10	400120	-	80x6	22	800600	800600
20x0,30	5	200030	-	40x1,5	10	400150	-	100x0,4	22	1000040	1000040
20x0,40	5	200040	-	40x1,6	10	400160	-	100x0,5	22	1000050	1000050
20x0,50	5	200050	-	40x2	10	400200	-	100x0,6	22	1000060	1000060
20x0,60	5	200060	-	40x2,5	10	400250	-	100x0,7	22	1000070	1000070
20x0,70	5	200070	-	40x3	10	400300	-	100x0,8	22	1000080	1000080
20x0,80	5	200080	-	50x0,2	13	500020	500020	100x0,9	22	1000090	1000090
20x0,90	5	200090	-	50x0,25	13	500025	500025	100x1	22	1000100	1000100
20x1,00	5	200100	-	50x0,3	13	500030	500030	100x1,2	22	1000120	1000120
20x1,20	5	200120	-	50x0,4	13	500040	500040	100x1,5	22	1000150	1000150
20x1,50	5	200150	-	50x0,5	13	500050	500050	100x1,6	22	1000160	1000160
20x1,60	5	200160	-	50x0,6	13	500060	500060	100x2	22	1000200	1000200
20x2,00	5	200200	-	50x0,7	13	500070	500070	100x2,5	22	1000250	1000250
20x2,50	5	200250	-	50x0,8	13	500080	500080	100x3	22	1000300	1000300
20x3,00	5	200300	-	50x0,9	13	500090	500090	100x3,5	22	1000350	1000350
25x0,15	8	250015	-	50x1	13	500100	500100	100x4	22	1000400	1000400
25x0,20	8	250020	-	50x1,2	13	500120	500120	100x5	22	1000500	1000500
25x0,25	8	250025	-	50x1,5	13	500150	500150	100x6	22	1000600	1000600
25x0,30	8	250030	-	50x1,6	13	500160	500160	125x0,5	22	1250050	1250050
25x0,40	8	250040	-	50x2	13	500200	500200	125x0,6	22	1250060	1250060
25x0,50	8	250050	-	50x2,5	13	500250	500250	125x0,7	22	1250070	1250070
25x0,60	8	250060	-	50x3	13	500300	500300	125x0,8	22	1250080	1250080
25x0,70	8	250070	-	50x4	13	500400	500400	125x0,9	22	1250090	1250090
25x0,80	8	250080	-	50x5	13	500500	500500	125x1	22	1250100	1250100
25x0,90	8	250090	-	63x0,25	16	630025	630025	125x1,2	22	1250120	1250120
25x1,00	8	250100	-	63x0,3	16	630030	630030	125x1,5	22	1250150	1250150
25x1,20	8	250120	-	63x0,4	16	630040	630040	125x1,6	22	1250160	1250160
25x1,50	8	250150	-	63x0,5	16	630050	630050	125x2	22	1250200	1250200
25x1,60	8	250160	-	63x0,6	16	630060	630060	125x2,5	22	1250250	1250250
25x2,00	8	250200	-	63x0,7	16	630070	630070	125x3	22	1250300	1250300
25x2,50	8	250250	-	63x0,8	16	630080	630080	125x3,2	22	1250320	1250320
25x3	8	250300	-	63x0,9	16	630090	630090	125x3,5	22	1250350	1250350
32x0,15	8	320015	-	63x1	16	630100	630100	125x4	22	1250400	1250400
32x0,2	8	320020	-	63x1,2	16	630120	630120	125x5	22	1250500	1250500
32x0,25	8	320025	-	63x1,5	16	630150	630150	125x6	22	1250600	1250600
32x0,3	8	320030	-	63x1,6	16	630160	630160	160x1	32	1600100	1600100
32x0,4	8	320040	-	63x2	16	630200	630200	160x1,2	32	1600120	1600120
32x0,5	8	320050	-	63x2,5	16	630250	630250	160x1,5	32	1600150	1600150
32x0,6	8	320060	-	63x3	16	630300	630300	160x1,6	32	1600160	1600160
32x0,7	8	320070	-	63x3,5	16	630350	630350	160x2	32	1600200	1600200
32x0,8	8	320080	-	63x4	16	630400	630400	160x2,5	32	1600250	1600250
32x0,9	8	320090	-	63x5	16	630500	630500	160x3	32	1600300	1600300
32x1	8	320100	-	63x6	16	630600	630600	160x3,5	32	1600350	1600350
32x1,2	8	320120	-	80x0,3	22	800030	800030	160x4	32	1600400	1600400
32x1,5	8	320150	-	80x0,4	22	800040	800040	160x4,5	32	1600450	1600450
32x1,6	8	320160	-	80x0,5	22	800050	800050	160x5	32	1600500	1600500
32x2	8	320200	-	80x0,6	22	800060	800060	160x6	32	1600600	1600600
32x2,5	8	320250	-	80x0,7	22	800070	800070				
32x3	8	320300	-	80x0,8	22	800080	800080				
32x4	8	320400	-	80x0,9	22	800090	800090				
40x0,2	10	400020	-	80x1	22	800100	800100				
40x0,25	10	400025	-	80x1,2	22	800120	800120				
40x0,3	10	400030	-	80x1,5	22	800150	800150				
40x0,4	10	400040	-	80x1,6	22	800160	800160				
40x0,5	10	400050	-	80x2	22	800200	800200				
40x0,6	10	400060	-	80x2,5	22	800250	800250				
40x0,7	10	400070	-	80x3	22	800300	800300				
40x0,8	10	400080	-	80x3,5	22	800350	800350				
40x0,9	10	400090	-	80x4	22	800400	800400				



### Disco Corte HSS-CO5 - Continuación -

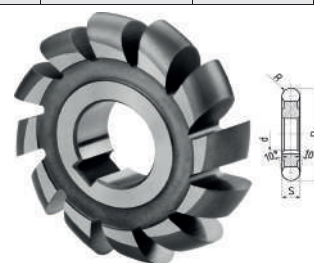
• Características: HSS – DIN 1837 – Tipo H - Corte Recto Fino (HF280) -- HSS – DIN 1838 Tipo W - Corte Recto Grueso (HF282)

Diámetro Espesor	Ø Agujero	HF280	HF282	Diámetro Espesor	Ø Agujero	HF280	HF282	Diámetro Espesor	Ø Agujero	HF280	HF282
200x1	32	2000100	2000100	225x1,5	32	2250150	2250150	250x6,00	32	2500600	2500600
200x1,2	32	2000120	2000120	225x1,6	32	2250160	2250160	275x1,75	32	2750175	2750175
200x1,5	32	2000150	2000150	225x1,8	32	2250180	2250180	275x2,00	32	2750200	2750200
200x1,6	32	2000160	2000160	225x2,00	32	2250200	2250200	275x2,50	32	2750250	2750250
200x1,8	32	2000180	2000180	225x2,50	32	2250250	2250250	275x3,00	32	2750300	2750300
200x2	32	2000200	2000200	225x3,00	32	2250300	2250300	275x3,50	32	2750350	2750350
200x2,5	32	2000250	2000250	225x3,50	32	2250350	2250350	285x2,00	32	2850200	2850200
200x3	32	2000300	2000300	225x4,00	32	2250400	2250400	300x2,00	32	3000200	3000200
200x3,5	32	2000350	2000350	250x1,50	32	2500150	2500150	300x2,50	32	3000250	3000250
200x4	32	2000400	2000400	250x1,60	32	2500160	2500160	300x3,00	32	3000300	3000300
200x4,5	32	2000450	2000450	250x2,00	32	2500200	2500200	300x3,50	40	3000350	3000350
200x5	32	2000500	2000500	250x2,50	32	2500250	2500250	315x2,00	40	3150200	3150200
200x5,5	32	2000550	2000550	250x3,00	32	2500300	2500300	315x2,50	40	3150250	3150250
200x6	32	2000600	2000600	250x3,50	32	2500350	2500350	315x3,00	40	3150300	3150300
				250x4,00	32	2500400	2500400	315x4,00	40	3150400	3150400
				250x4,50	32	2500450	2500450	315x4,50	40	3150450	3150450
				250x5,00	32	2500500	2500500	315x5,00	40	3150500	3150500
				250x5,50	32	2500550	2500550	315x6,00	40	3150600	3150600

### Fresa Disco HSS Convexo

• Características: DIN 856 – DIN 138 – Tipo N - Corte 0/10° - HSS-CO

Referencia	Diametro	Radio	Agujero	Espesor	Z
HF266.0500100	50	1	16	2	14
HF266.0500125	50	1.25	16	2.5	14
HF266.0500150	50	1.5	16	3	14
HF266.0500160	50	1.6	16	3.2	14
HF266.0500200	50	2	16	4	14
HF266.0630250	63	2.5	22	5	12
HF266.0630300	63	3	22	6	12
HF266.0630315	63	3.15	22	6.3	12
HF266.0630350	63	3.5	22	7	12
HF266.0630400	63	4	22	8	12
HF266.0630450	63	4.5	22	9	12
HF266.0630500	63	5	22	10	12
HF266.0800550	80	5.5	27	11	12
HF266.0800600	80	6	27	12	12
HF266.0800630	80	6.3	27	12.6	12
HF266.0800650	80	6.5	27	13	12
HF266.0800700	80	7	27	14	12
HF266.0800750	80	7.5	27	15	12
HF266.0800800	80	8	27	16	12



Referencia	Diametro	Radio	Agujero	Espesor	Z
HF266.1000850	100	8.5	32	17	12
HF266.1000900	100	9	32	18	12
HF266.1000950	100	9.5	32	19	12
HF266.1001000	100	10	32	20	12
HF266.1001100	100	11	32	22	12
HF266.1001200	100	12	32	24	12
HF266.1001250	100	12.5	32	25	12
HF266.1251400	125	14	40	28	12
HF266.1251500	125	15	32	30	12
HF266.1251600	125	16	32	32	12
HF266.1251750	125	17.5	40	35	12
HF266.1251800	125	18	40	36	12
HF266.1252000	125	20	32	40	12
HF266.1602500	160	25	40	50	12

### Fresa Disco Angular

• Características: DIN 1824A – DIN 138 - Tipo N – Corte 0/0° - HSS

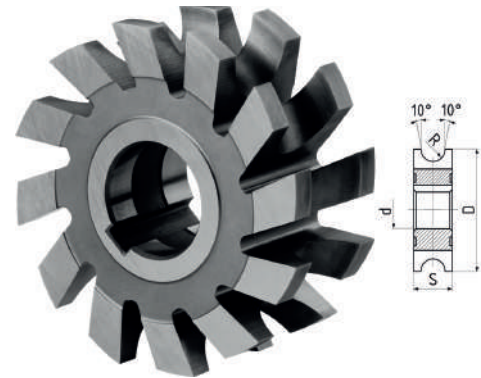
Referencia	Angulo	Diametro	Espesor	Agujero	Radio	Dientes
HF268.20063	20	63	6	16	1	14
HF268.20100	20	100	10	27	1.5	18
HF268.25063	25	63	6	22	1	14
HF268.25080	25	80	10	22	1	16
HF268.25100	25	100	14	27	1.5	18
HF268.25125	25	125	18	27	2	20
HF268.25160	25	160	22	32	2.5	22
HF268.30063	30	63	8	22	1	14
HF268.30100	30	100	14	27	1.5	18



**Fresa Disco Concava**

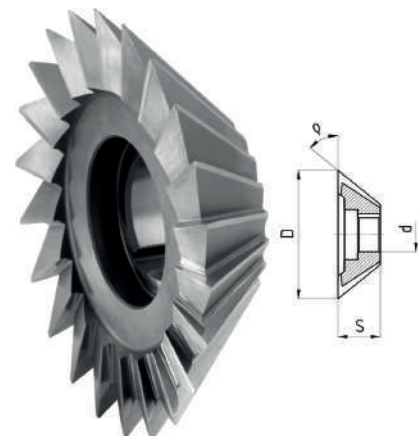
- Características: DIN 885A – DIN 138 – Tipo N – Corte 0/10° - HSS-CO5

Referencia	Diametro	Radio	Agujero	Espesor	Dientes
HF270.0500100	50	1	16	6	14
HF270.0500125	50	1.25	16	6	14
HF270.0500150	50	1.5	16	8	14
HF270.0500200	50	2	16	9	14
HF270.0630250	63	2.5	22	10	14
HF270.0630300	63	3	22	12	12
HF270.0630400	63	4	22	16	12
HF270.0630500	63	5	22	20	10
HF270.0800600	80	6	27	24	10
HF270.0800800	80	8	27	32	10
HF270.1000900	100	9	32	32	10
HF270.1000100	100	10	32	36	10
HF270.1000120	100	12	32	40	10
HF270.1250200	125	20	32	60	10


**Fresa Angulo Cónica**

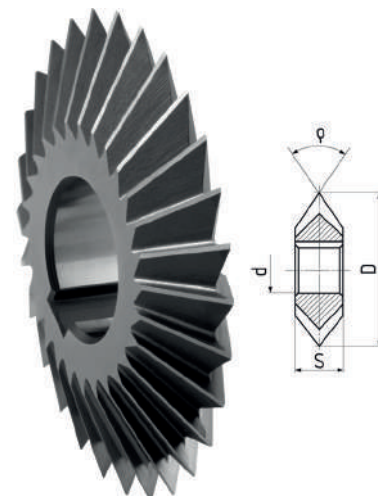
- Características: DIN 842 – DIN 138 – Tipo N – Corte 0/2° - HSS-CO5

Referencia	Angulo	Diametro	Espesor	Agujero	Dientes
HF272.045040	45	40	10	14	14
HF272.045050	45	50	13	13	16
HF272.045063	45	63	18	16	16
HF272.045080	45	80	22	22	18
HF272.045100	45	100	28	27	20
HF272.050040	50	40	13	10	14
HF272.050050	50	50	16	13	16
HF272.050063	50	63	20	16	16
HF272.050080	50	80	25	20	18
HF272.050100	50	100	32	27	20
HF272.060040	60	40	13	10	14
HF272.060050	60	50	16	13	16
HF272.060063	60	63	20	16	16
HF272.060080	60	80	25	22	18
HF272.060100	60	100	32	27	20


**Fresa Angular 45/60/80-90°**

- Características: DIN 842 – DIN 138 – Tipo N – Corte 0/2° - HSS-CO5

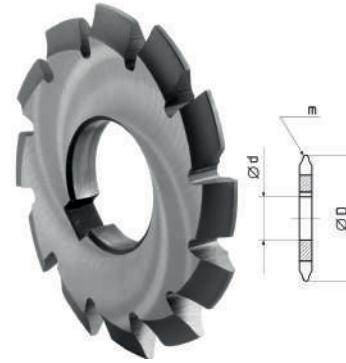
Referencia	Angulo	Diametro	Espesor	Agujero	Dientes
HF274.045050	45	50	8	16	16
HF274.045063	45	63	10	22	16
HF274.045080	45	80	12	27	20
HF274.045100	45	100	18	32	20
HF274.060050	60	50	10	16	16
HF274.060063	60	63	14	22	16
HF274.060080	60	80	18	22	18
HF274.060100	60	100	25	32	20
HF274.080063	80	63	16	22	16
HF274.090050	90	50	14	16	16
HF274.090063	90	63	20	22	16
HF274.090080	90	80	22	27	18
HF274.090100	90	100	32	32	20



### Fresa Disco Modular

• Características: DIN 3972 – DIN 138 – Tipo N – Corte 0/0° - HSS-CO5

Referencia	Mm	Diametro	Agujero
HF276.050	0.5	40	16
HF276.075	0.75	40	16
HF276.100	1	50	16
HF276.125	1.25	50	16
HF276.150	1.50	63	22
HF276.175	1.75	63	22
HF276.200	2	63	22
HF276.225	2.25	63	22
HF276.250	2.5	63	22
HF276.275	2.75	70	27
HF276.300	3	70	27
HF276.325	3.25	70	27
HF276.350	3.5	80	27
HF276.375	3.75	80	27



Referencia	Mm	Diametro	Agujero
HF276.400	4	80	27
HF276.425	4.25	80	27
HF276.450	4.5	90	27
HF276.475	4.75	90	27
HF276.500	5	90	32
HF276.550	5.5	90	32
HF276.600	6	100	32

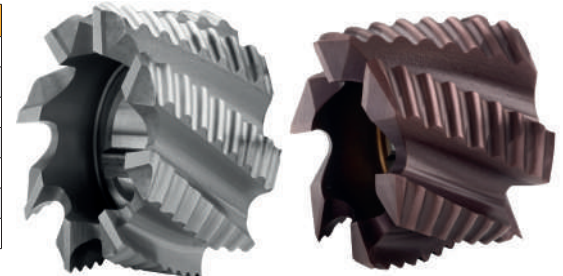
1	2	3	4	5	6	7	8
12-13	14-16	17-20	21-25	26-34	35-54	55-134	135-00

### Fresa Frontal Desbaste

• Características: Fresa HSS-CO5 - DIN 1880 - DIN 138 – Tipo NR – Corte 30/12° - HSS-CO5

Referencia	Referencia Tialn	Diametro	Agujero	Altura	Dientes
HF250.040	HF251.040	40	16	32	6
HF250.050	HF251.050	50	22	36	6
HF250.063	HF251.063	63	27	40	8
HF250.080	HF251.080	80	27	45	8
HF250.100	HF251.100	100	32	50	10
HF250.125*	-	125	40	56	12
HF250.160*	-	160	50	63	14

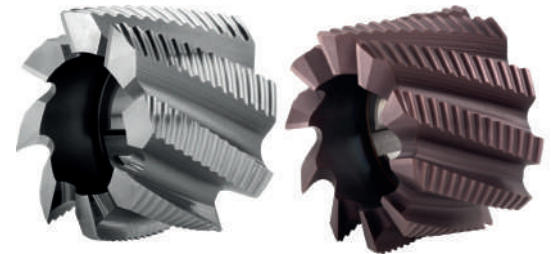
(\*) Modelo con HSS-CO8%



### Fresa Frontal Desbaste Fino

• Características: DIN 1880 – DIN 138 – Tipo HR – Corte 30/10° - HSS-CO5

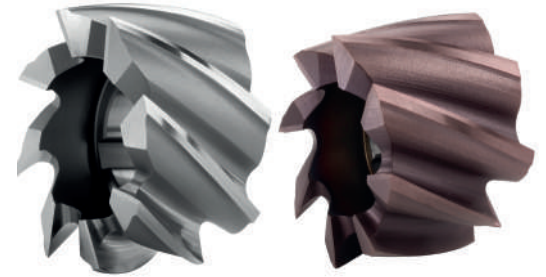
Referencia	Referencia Tialn	Diametro	Agujero	Altura	Dientes
HF252.040	HF253.040	40	16	32	8
HF252.050	HF253.050	50	22	36	8
HF252.063	HF253.063	63	27	40	10
HF252.080	HF253.080	80	27	45	10
HF252.100	HF253.100	100	32	50	12



**Fresa Frontal Guesa Tipo N**

• Características: Fresa HSS-CO5 - DIN 1880 - DIN 138 - Tipo N - Corte 30/12° - HSS-CO5

Referencia	Referencia Tialn	Diametro	Agujero	Altura	Dientes
HF254.040	HF255.040	40	16	32	6
HF254.050	HF255.050	50	22	36	8
HF254.063	HF255.063	63	27	40	8
HF254.080	HF255.080	80	27	45	10
HF254.100	HF255.100	100	32	50	10
HF254.125(*)	HF255.125	125	40	56	14
HF254.160(*)	-	160	50	63	16


**Fresa Frontal Fina Tipo N**

• Características: DIN 138 - Tipo N - Corte 30/12° - HSS-CO5

Referencia	Diametro	Agujero	Altura	Dientes
HF256.05040	50	22	40	8
HF256.05063	50	22	63	8
HF256.05080	50	22	80	8
HF256.06350	63	27	50	8
HF256.06370	63	27	70	8
HF256.08063	80	32	63	8
HF256.080100	80	32	100	8
HF256.10070	100	40	70	10


**Fresa Frontal Din 841**

• Características: DIN 841 - Tipo N - Corte 30/12° - HSS-CO5

Referencia	Diametro	Agujero	Altura	Dientes
HF278.030	30	13	30	6
HF278.040	40	16	20	8
HF278.050	50	22	25	8
HF278.0505	50	22	50	8
HF278.060	60	27	30	8
HF278.0606	60	27	60	8
HF278.075	75	27	35	10
HF278.0757	75	27	75	10
HF278.080	80	27	35	10
HF278.110	110	32	35	12

