

passion
for precision

fraisa

Favora® Limited Edition –

Universal milling cutters – value for money and technically flawless

NEW



Favora®
**LIMITED
EDITION**

Favora® Limited Edition – Your cost-cutting cutter range

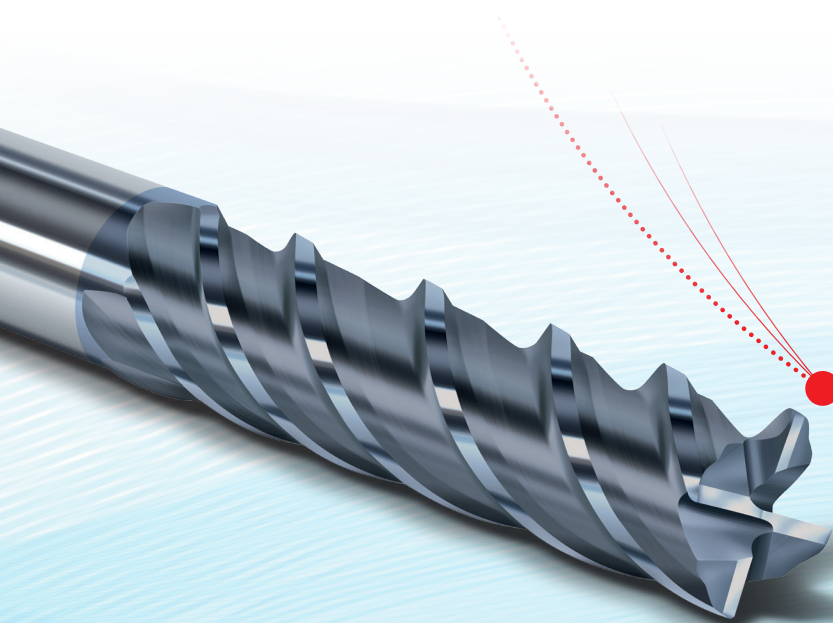
The **Favora® Limited Edition** from FRAISA is a small range of tools that fits perfectly in today's world. It combines an exceedingly **wide application spectrum with high performance** and has an **extremely attractive price**. This combination was achieved by embedding **proven high-performance geometries** with Swiss precision in production-optimized manufacturing.

The **Favora® Limited Edition** has become a true universal genius. The tool cuts through high-strength steels **rated far in excess of 1,000 N/mm²** as well as **stainless steel** superbly.

FRAISA ToolExpert provides precisely validated cutting data for the **Favora® Limited Edition** to guarantee **reliable and highly efficient tool use** at all times.

The benefits:

- **Highly attractive price/performance ratio**
Lowest costs per area of material machined
- **Exceedingly universal application range**
Good performance in low as well as high-strength steels, but also in stainless and acid-proof steels
- **Wide range**
The wide application range of the Favora® **Limited Edition** cuts in-house logistics costs
- **Proven cutting geometry**
The proven cutting edge geometry ensures dependable, long, and reproducible operating times
- **ToolExpert cutting data**
FRAISA ToolExpert delivers tried and tested cutting data, so that the tools can be used simply and reliably like "plug & play" devices



Tool technologies that features great value for money

The technologies



Milling tool with increased core diameter

- Improved tool rigidity and less tool deflection
- Higher performance in the area of the infeeds a_p , a_e and of the feed rate f_z
- Better component accuracy through less tool deflection



Milling tool with a variable helix angle

- Minimization of oscillation and vibrations
- Increase in material removal rates and tool life



Milling tool with a partially polished blade

- Reinforcement of the exposed cutting corner
- Absorption of high cutting forces

[3]

Geometry & scope of application

The geometry of the **Favora® Limited Edition** range of end mills has been set up in such a way that the tools do an excellent job across a **wide range of applications**. The **robust core** also allows difficult cutting in the roughing process.

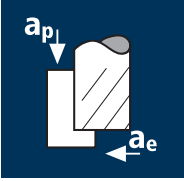
The **positive cutting edge** and variable helix guarantee good surfaces during finishing. The polished tooth of the cutting edge distributes the edge load over a large area and helps ensure the tools provide a **long service life**.

The flutes and the secondary flank face of the tools have been optimized in such a way that the tools feature both a **high chip removal rate** and innovative manufacturing. Great importance was attached to a **long service life** and **excellent application behavior** when choosing the substrate and coating too.

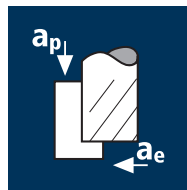


ToolExpert 2.0
cutting data
calculator

Product and cutting data for dependable tool use

Application	Material	d1 [mm]	z	v _c [m/min]	f _s [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _f [mm/min]	Q [cm ³ /min]
	Steel < 850 N/mm ²	6	4	140	0.041	9.0	2.4	7425	1220	26.4
		8	4	140	0.054	12.0	3.2	5570	1205	46.3
		10	4	140	0.068	15.0	4.0	4455	1210	72.6
		12	4	140	0.076	18.0	4.8	3715	1130	97.6
		16	4	140	0.086	24.0	6.4	2785	960	147.5
		20	4	140	0.099	30.0	8.0	2230	885	212.4
	Steel 850 - 1100 N/mm ²	6	4	125	0.035	9.0	2.4	6630	930	20.1
		8	4	125	0.047	12.0	3.2	4975	935	35.9
		10	4	125	0.059	15.0	4.0	3980	940	56.4
		12	4	125	0.070	18.0	4.8	3315	930	80.4
		16	4	125	0.079	24.0	6.4	2485	785	120.6
		20	4	125	0.090	30.0	8.0	1990	715	171.6
	Stainless steel [Cr-Ni/1.4301]	6	4	80	0.024	9.0	2.4	4245	410	8.9
		8	4	80	0.032	12.0	3.2	3185	410	15.7
		10	4	80	0.041	15.0	4.0	2545	415	24.9
		12	4	80	0.049	18.0	4.8	2120	415	35.9
		16	4	80	0.050	24.0	6.4	1590	320	49.2
		20	4	80	0.063	30.0	8.0	1275	320	76.8
	Cast iron (lamellar / spheroidal)	6	4	155	0.038	9.0	2.4	8225	1250	27.0
		8	4	155	0.050	12.0	3.2	6165	1235	47.4
		10	4	155	0.063	15.0	4.0	4935	1245	74.7
		12	4	155	0.076	18.0	4.8	4110	1250	108.0
		16	4	155	0.086	24.0	6.4	3085	1060	162.8
		20	4	155	0.099	30.0	8.0	2465	975	234.0
	Cold work tool steel (12% Cr), high alloyed [1.2379]	6	4	60	0.030	9.0	2.4	3185	380	8.2
		8	4	60	0.040	12.0	3.2	2385	380	14.6
		10	4	60	0.050	15.0	4.0	1910	380	22.8
		12	4	60	0.059	18.0	4.8	1590	375	32.4
		16	4	60	0.065	24.0	6.4	1195	310	47.6
		20	4	60	0.081	30.0	8.0	955	310	74.4
	Steel < 850 N/mm ²	6	4	110	0.026	7.5	6.0	5835	605	27.2
		8	4	110	0.035	10.0	8.0	4375	615	49.2
		10	4	110	0.044	12.5	10.0	3500	615	76.9
		12	4	110	0.049	15.0	12.0	2920	570	102.6
		16	4	110	0.056	20.0	16.0	2190	490	156.8
		20	4	110	0.064	25.0	20.0	1750	450	225.0
	Steel 850 - 1100 N/mm ²	6	4	100	0.023	7.5	6.0	5305	490	22.1
		8	4	100	0.030	10.0	8.0	3980	480	38.4
		10	4	100	0.038	12.5	10.0	3185	485	60.6
		12	4	100	0.046	15.0	12.0	2655	490	88.2
		16	4	100	0.051	20.0	16.0	1990	405	129.6
		20	4	100	0.059	25.0	20.0	1590	375	187.5
	Stainless steel [Cr-Ni/1.4301]	6	4	65	0.016	7.5	6.0	3450	220	9.9
		8	4	65	0.021	10.0	8.0	2585	215	17.2
		10	4	65	0.026	12.5	10.0	2070	215	26.9
		12	4	65	0.032	15.0	12.0	1725	220	39.6
		16	4	65	0.033	20.0	16.0	1295	170	54.4
		20	4	65	0.041	25.0	20.0	1035	170	85.0

Application



Material

Steel
< 850 N/mm²

Steel
850 - 1100 N/mm²

Stainless steel
[Cr-Ni/1.4301]

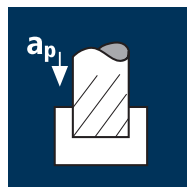
 

Cast iron
(lamellar / spheroidal)

Cold work tool steel
(12% Cr),
high alloyed
[1.2379]



Steel
< 850 N/mm²

Steel
850 - 1100 N/mm²

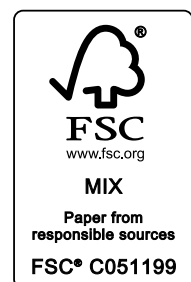
Stainless steel
[Cr-Ni/1.4301]

d1 [mm]	z	v _c [m/min]	f _t [mm]	a _p [mm]	a _e [mm]	n [min ⁻¹]	v _r [mm/min]	Q [cm ³ /min]
6	4	120	0.034	9.0	2.4	6365	865	18.7
8	4	120	0.046	12.0	3.2	4775	880	33.8
10	4	120	0.057	15.0	4.0	3820	870	52.2
12	4	120	0.064	18.0	4.8	3185	815	70.4
16	4	120	0.073	24.0	6.4	2385	695	106.8
20	4	120	0.084	30.0	8.0	1910	640	153.6
6	4	105	0.030	9.0	2.4	5570	670	14.5
8	4	105	0.040	12.0	3.2	4180	670	25.7
10	4	105	0.050	15.0	4.0	3340	670	40.2
12	4	105	0.060	18.0	4.8	2785	670	57.9
16	4	105	0.067	24.0	6.4	2090	560	86.0
20	4	105	0.077	30.0	8.0	1670	515	123.6
6	4	70	0.021	9.0	2.4	3715	310	6.7
8	4	70	0.028	12.0	3.2	2785	310	11.9
10	4	70	0.034	15.0	4.0	2230	305	18.3
12	4	70	0.041	18.0	4.8	1855	305	26.4
16	4	70	0.043	24.0	6.4	1395	240	36.9
20	4	70	0.054	30.0	8.0	1115	240	57.6
6	4	130	0.032	9.0	2.4	6895	885	19.1
8	4	130	0.043	12.0	3.2	5175	890	34.2
10	4	130	0.054	15.0	4.0	4140	895	53.7
12	4	130	0.064	18.0	4.8	3450	885	76.5
16	4	130	0.073	24.0	6.4	2585	755	116.0
20	4	130	0.084	30.0	8.0	2070	695	166.8
6	4	50	0.025	9.0	2.4	2655	265	5.7
8	4	50	0.034	12.0	3.2	1990	270	10.4
10	4	50	0.042	15.0	4.0	1590	265	15.9
12	4	50	0.050	18.0	4.8	1325	265	22.9
16	4	50	0.055	24.0	6.4	995	220	33.8
20	4	50	0.069	30.0	8.0	795	220	52.8
6	4	95	0.022	7.5	6.0	5040	445	20.0
8	4	95	0.030	10.0	8.0	3780	455	36.4
10	4	95	0.037	12.5	10.0	3025	450	56.3
12	4	95	0.042	15.0	12.0	2520	425	76.5
16	4	95	0.048	20.0	16.0	1890	365	116.8
20	4	95	0.055	25.0	20.0	1510	330	165.0
6	4	85	0.019	7.5	6.0	4510	345	15.5
8	4	85	0.026	10.0	8.0	3380	350	28.0
10	4	85	0.032	12.5	10.0	2705	345	43.1
12	4	85	0.039	15.0	12.0	2255	350	63.0
16	4	85	0.044	20.0	16.0	1690	295	94.4
20	4	85	0.050	25.0	20.0	1355	270	135.0
6	4	55	0.013	7.5	6.0	2920	150	6.8
8	4	55	0.018	10.0	8.0	2190	160	12.8
10	4	55	0.022	12.5	10.0	1750	155	19.4
12	4	55	0.027	15.0	12.0	1460	160	28.8
16	4	55	0.028	20.0	16.0	1095	125	40.0
20	4	55	0.035	25.0	20.0	875	125	62.5

Smooth-edged, medium length version

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for precision



HIB01917 09/2020 EN