eco

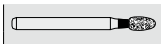
ecoline

Made in Germany

Super-coarse/SC

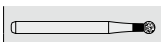

E 368 SC 314 018
300 [-]


E 368 SC 314 021
300 [-]

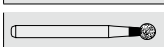

E 379 SC 314 018
450 [-]


E 379 SC 314 023
450 [-]


E 801 SC 314 014
450 [-]


E 801 SC 314 016
450 [-]


E 801 SC 314 018
450 [-]


E 801 SC 314 021
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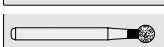
E 801 SC 314 023
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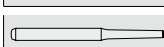
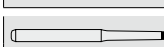

E 801L SC 314 016
300 [-]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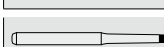
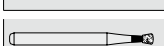
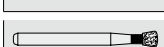
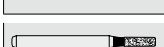

E 801L SC 314 021
300 [-]

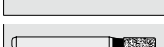

E 805 SC 314 012
450 [-]

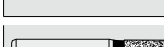

E 805 SC 314 014
450 [-]

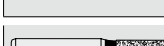

E 805 SC 314 021
450 [-]

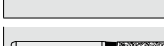

E 835 SC 314 010
450 [-]


E 835 SC 314 012
450 [-]

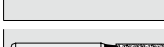

E 835 SC 314 014
450 [-]


E 836 SC 314 014
450 [-]


E 837 SC 314 012
450 [-]

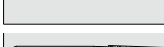

E 837 SC 314 014
450 [-]


E 837 SC 314 016
450 [-]


E KS2 SC 314 014
450 [-]

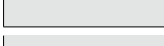

E 856 SC 314 014
450 [-]

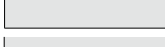

E 856 SC 314 016
450 [-]


E 856 SC 314 018
450 [-]


E 859 SC 314 016
450 [-]


E 862 SC 314 012
450 [-]


E 862 SC 314 014
450 [-]


E 863 SC 314 014
300 [-]

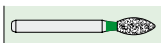

E 881 SC 314 012
450 [-]

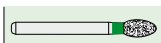

E 882 SC 314 014
450 [-]


E 885 SC 314 012
450 [-]


E 885 SC 314 014
450 [-]

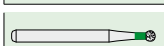
Coarse/FG


E 368 C 314 023
300 [-]

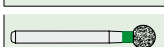

E 379 C 314 023
450 [-]

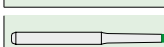

E 801 C 314 010
450 [BR-45C]

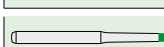

E 801 C 314 012
450 [BR-46C]


E 801 C 314 014
450 [-]


E 801 C 314 023
450 [-]


E 801 C 314 031
450 [-]


E 801L C 314 018
300 [-]


E 801L C 314 021
300 [-]


E 805 C 314 012
450 [SI-46C]

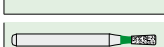

E 805 C 314 014
450 [SI-47C]


E 805 C 314 016
450 [SI-48C]


E 805 C 314 018
450 [SI-48C]


E 805 C 314 023
450 [SI-48C]

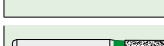

E 807 C 314 012
450 [-]

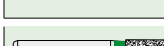

E 807 C 314 014
450 [-]


E 807 C 314 016
450 [-]


E 811 C 314 031
450 [-]


E 835 C 314 016
450 [-]

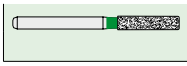

E 836 C 314 014
450 [SF-21C]


E 836 C 314 018
450 [-]

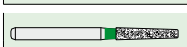

E 837 C 314 012
450 [SF-11C]

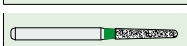
Coarse/FG

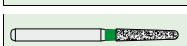

E 837 C 314 014
450 [SF-12C]

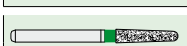

E 837 C 314 018
300 [-]


E 847 C 314 014
450 [-]


E 847 C 314 016
450 [-]


E 847KR C 314 014
450 [-]


E 847KR C 314 016
450 [-]


E 847KR C 314 018
450 [-]


E 848 C 314 018
300 [TF-13C]


E 850 C 314 014
300 [-]


E 850 C 314 016
300 [TR-25C]


E 850 C 314 018
300 [TR-26C]


E 855 C 314 018
300 [TR-62C]


E 856 C 314 012
300 [-]


E 856 C 314 014
450 [-]


E 856 C 314 016
450 [-]


E 856 C 314 018
300 [-]

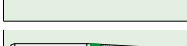

E 856 C 314 025
160 [-]

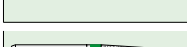

E 856L C 314 016
300 [-]


E 856L C 314 018
450 [TR-13C]

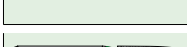

E 858 C 314 014
300 [TC-21C]


E 859 C 314 012
300 [-]


E 859 C 314 014
300 [-]


E 859 C 314 016
300 [TC-11C]


E 862 C 314 016
450 [FO-22C]


E 863 C 314 016
450 [-]


E 878 C 314 012
300 [-]


E 878 C 314 014
300 [-]

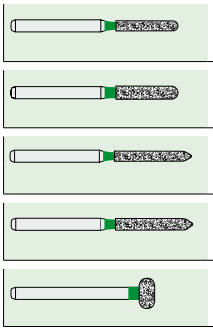

E 878 C 314 016
300 [-]


E 879 C 314 014
300 [-]


E 879 C 314 016
300 [-]

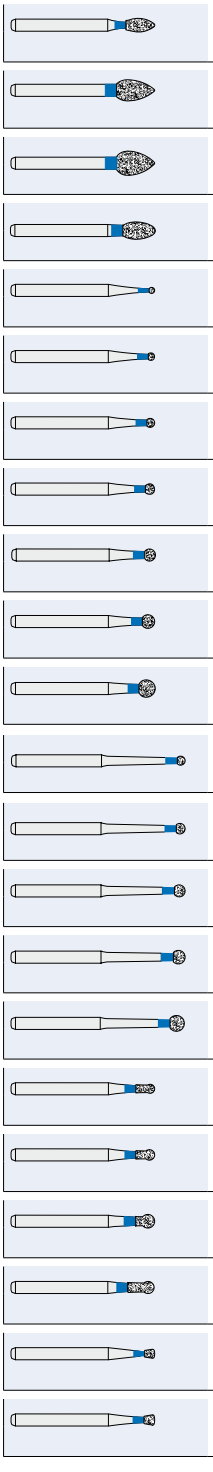
Maximum speed: 450 = 450.000 rpm | 300 = 300.000 rpm | 160 = 160.000 rpm

Coarse/FG



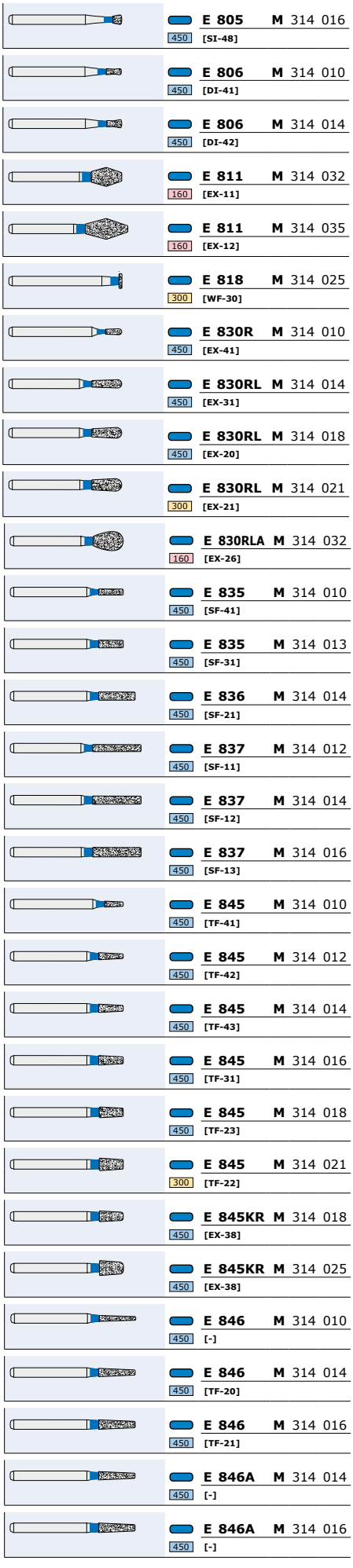
E 881	C 314 014	450	[SR-12C]
E 881	C 314 018	300	[-]
E 886	C 314 014	300	[-]
E 886	C 314 016	300	[-]
E 909	C 314 042	160	[WR-13C]

Standard/FG

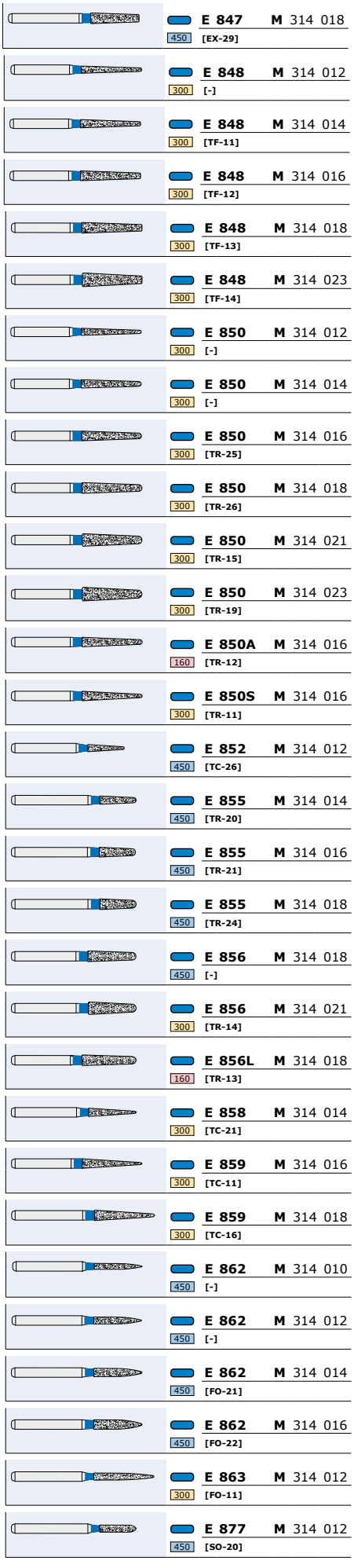


E 368	M 314 018	450	[FO-32]
E 368	M 314 028	160	[FO-25]
E 368	M 314 032	160	[FO-27]
E 379	M 314 023	450	[-]
E 801	M 314 008	450	[BR-49]
E 801	M 314 010	450	[BR-45]
E 801	M 314 012	450	[BR-46]
E 801	M 314 014	450	[BR-41]
E 801	M 314 016	450	[-]
E 801	M 314 018	450	[BR-31]
E 801	M 314 023	450	[-]
E 801L	M 314 012	300	[-]
E 801L	M 314 014	300	[-]
E 801L	M 314 016	300	[-]
E 801L	M 314 018	300	[-]
E 801L	M 314 021	300	[-]
E 802	M 314 012	450	[BC-43]
E 802	M 314 014	450	[BC-42]
E 802	M 314 018	450	[BC-31]
E 802L	M 314 016	450	[BC-32]
E 805	M 314 012	450	[SI-46]
E 805	M 314 014	450	[SI-47]

Standard/FG



E 805	M 314 016	450	[SI-48]
E 806	M 314 010	450	[DI-41]
E 806	M 314 014	450	[DI-42]
E 811	M 314 032	160	[EX-11]
E 811	M 314 035	160	[EX-12]
E 818	M 314 025	300	[WF-30]
E 830R	M 314 010	450	[EX-41]
E 830RL	M 314 014	450	[EX-31]
E 830RL	M 314 018	450	[EX-20]
E 830RL	M 314 021	300	[EX-21]
E 830RLA	M 314 032	160	[EX-26]
E 835	M 314 010	450	[SF-41]
E 835	M 314 013	450	[SF-31]
E 836	M 314 014	450	[SF-21]
E 837	M 314 012	450	[SF-11]
E 837	M 314 014	450	[SF-12]
E 837	M 314 016	450	[SF-13]
E 845	M 314 010	450	[TF-41]
E 845	M 314 012	450	[TF-42]
E 845	M 314 014	450	[TF-43]
E 845	M 314 016	450	[TF-31]
E 845	M 314 018	450	[TF-23]
E 845	M 314 021	300	[TF-22]
E 845KR	M 314 018	450	[EX-38]
E 845KR	M 314 025	450	[EX-38]
E 846	M 314 010	450	[-]
E 846	M 314 014	450	[TF-20]
E 846	M 314 016	450	[TF-21]
E 846A	M 314 014	450	[-]
E 846A	M 314 016	450	[-]



E 847	M 314 018	450	[EX-29]
E 848	M 314 012	300	[-]
E 848	M 314 014	300	[TF-11]
E 848	M 314 016	300	[TF-12]
E 848	M 314 018	300	[TF-13]
E 848	M 314 023	300	[TF-14]
E 850	M 314 012	300	[-]
E 850	M 314 014	300	[-]
E 850	M 314 016	300	[TR-25]
E 850	M 314 018	300	[TR-26]
E 850	M 314 021	300	[TR-15]
E 850	M 314 023	300	[TR-19]
E 850A	M 314 016	160	[TR-12]
E 850S	M 314 016	300	[TR-11]
E 852	M 314 012	450	[TC-26]
E 855	M 314 014	450	[TR-20]
E 855	M 314 016	450	[TR-21]
E 855	M 314 018	450	[TR-24]
E 856	M 314 018	450	[-]
E 856	M 314 021	300	[TR-14]
E 856L	M 314 018	160	[TR-13]
E 858	M 314 014	300	[TC-21]
E 859	M 314 016	300	[TC-11]
E 859	M 314 018	300	[TC-16]
E 862	M 314 010	450	[-]
E 862	M 314 012	450	[-]
E 862	M 314 014	450	[FO-21]
E 862	M 314 016	450	[FO-22]
E 863	M 314 012	300	[FO-11]
E 877	M 314 012	450	[SO-20]

Maximum speed: 450 = 450.000 rpm | 300 = 300.000 rpm | 160 = 160.000 rpm

Standard/FG

E 878	M 314 014	450	[SO-21]
E 878K	M 314 014	450	[-]
E 878K	M 314 016	450	[-]
E 878K	M 314 018	450	[-]
E 881	M 314 012	450	[SR-11]
E 881	M 314 014	450	[SR-12]
E 881	M 314 016	450	[SR-13]
E 909	M 314 042	160	[WR-13]

Standard/FGSS - short

E 801	M 313 010	450	[BR-S45]
E 801	M 313 012	450	[BR-S46]
E 802	M 313 012	450	[BC-S43]
E 802	M 313 014	450	[BC-S42]
E 805	M 313 012	450	[SI-S46]
E 805	M 313 016	450	[SI-S48]
E 806	M 313 010	450	[DI-S41]
E 835	M 313 010	450	[SF-S41]
E 845	M 313 010	450	[TF-S41]
E 845	M 313 016	450	[TF-S31]
E 845	M 313 018	450	[TF-S23]
E 845	M 313 021	300	[TF-S22]
E 846	M 313 014	450	[TF-S20]
E 846	M 313 016	450	[TF-S21]
E 848	M 313 016	300	[TF-S12]
E 855	M 313 016	450	[TR-S21]
E 856	M 313 018	450	[TR-S13]
E 858	M 313 014	300	[TC-S21]
E 862	M 313 014	450	[FO-S21]
E 877	M 313 012	450	[SO-S20]

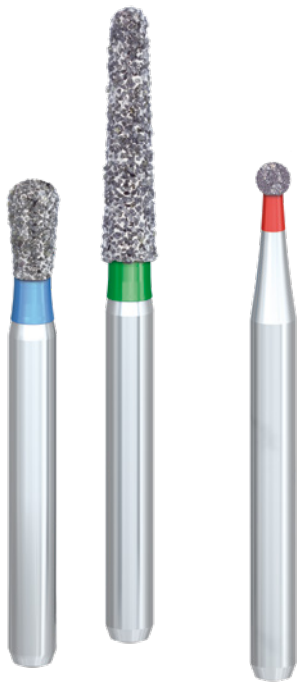
Fine/FG

E 368	F 314 016	450	[FO-30F]
E 368	F 314 018	450	[FO-32F]
E 379	F 314 014	450	[-]
E 379	F 314 018	450	[-]
E 379	F 314 023	450	[-]
E 392	F 314 016	450	[-]
E 801	F 314 006	450	[BR-48F]
E 825	F 314 016	450	[WR-31F]
E 830RL	F 314 014	450	[EX-31F]
E 830RL	F 314 021	300	[EX-21F]
E 835KR	F 314 008	450	[CD-62F]
E 837	F 314 014	450	[CE-11F]
E 838	F 314 007	450	[CD-60F]
E 838L	F 314 007	450	[CD-61F]
E 839	F 314 012	300	[EX-18F]
E 846	F 314 016	450	[TF-21F]
E 848	F 314 016	300	[TF-12F]
E 848	F 314 023	300	[CE-10F]
E 849	F 314 015	450	[CR-12F]
E 849	F 314 020	300	[CR-11F]
E 850	F 314 016	300	[TR-25F]
E 850	F 314 018	300	[TR-26F]
E 850S	F 314 016	300	[TR-11F]
E 855	F 314 012	450	[CR-21F]
E 855	F 314 016	450	[TR-21F]
E 856	F 314 018	450	[TR-13F]
E 856	F 314 021	300	[PRO-1F]
E 856L	F 314 014	450	[-]
E 858	F 314 014	300	[TC-21F]
E 859	F 314 016	300	[TC-11F]

E 862	F 314 012	450	[-]
E 862	F 314 014	450	[FO-21F]
E 862	F 314 016	450	[FO-22F]
E 878	F 314 012	300	[CR-22F]

Fine/FGSS - short

E 379	F 313 009	450	[CD-55F]
E 801	F 313 006	450	[CD-50F]
E 825	F 313 016	450	[WR-S31F]
E 835KR	F 313 008	450	[CD-58F]
E 838	F 313 007	450	[CD-51F]
E 838L	F 313 007	450	[CD-52F]
E 860	F 313 006	450	[CD-54F]
E 860	F 313 007	450	[CD-56F]
E 860L	F 313 007	450	[CD-57F]
E 955	F 313 007	450	[CD-53F]



ecoline

Maximum speed: 450 = 450.000 rpm | 300 = 300.000 rpm | 160 = 160.000 rpm

Extra Fine/FG

E 368	EF 314 016	450 [FO-30EF]
E 368	EF 314 018	450 [-]
E 368	EF 314 021	300 [-]
E 368	EF 314 023	300 [-]
E 368LS	EF 314 014	450 [FO-20EF]
E 379	EF 314 014	450 [-]
E 379	EF 314 018	450 [-]
E 379	EF 314 023	450 [-]
E 801	EF 314 014	450 [BR-40EF]
E 830RL	EF 314 021	300 [EX-21EF]
E 832	EF 314 010	300 [FO-40EF]
E 837	EF 314 014	450 [CE-11EF]
E 845KR	EF 314 018	450 [EX-38EF]
E 846	EF 314 016	450 [TF-21EF]
E 847	EF 314 018	450 [EX-29EF]
E 848	EF 314 016	300 [TF-12EF]
E 848	EF 314 023	300 [CE-10EF]
E 849	EF 314 015	450 [CR-12EF]
E 849	EF 314 020	300 [CR-11EF]
E 850	EF 314 016	300 [TR-25EF]
E 850	EF 314 018	300 [TR-26EF]
E 850S	EF 314 016	300 [TR-11EF]
E 855	EF 314 016	450 [TR-21EF]
E 856	EF 314 018	450 [-]
E 856	EF 314 021	300 [PRO-1EF]
E 856L	EF 314 018	160 [TR-13EF]
E 858	EF 314 014	300 [TC-21EF]
E 859	EF 314 014	300 [-]
E 859	EF 314 016	300 [TC-11EF]
E 862	EF 314 010	450 [-]
E 862	EF 314 012	300 [FO-42EF]
E 862	EF 314 014	450 [FO-21EF]
E 862	EF 314 016	450 [FO-22EF]
E 863	EF 314 012	300 [FO-11EF]
E 863	EF 314 016	300 [FO-11EF]

Extra Fine/FGSS - short

E 862	EF 313 012	450 [FO-41EF]

Disposable Crown Cutter/FG

ECC 1SU	314 012	450 Tungsten Carbide

Maximum speed: 450 = 450.000 rpm | 300 = 300.000 rpm | 160 = 160.000 rpm

General instructions for use and safety recommendations for the application of rotary dental instruments.

Rotary instruments for use in the dental sector are to be used only by doctors or other experts who are experienced in the safe handling of these instruments. **Area of application:** These general instructions for use and safety recommendations apply to all products and are to be generally observed.

1. Proper use

– Make sure that only technically and hygienically perfect and cleaned turbines are used. – Chuck the instruments as deeply as possible. – The instrument must be rotating before contact is made with the tooth. – Medical devices which are identified for single use (marked on the packaging) are not intended for reprocessing. Recommendations for safe reprocessing are therefore not supplied. – Avoid jamming and using the instrument as a lever as this leads to an increased risk of breakage. – Wear safety glasses as required. – Avoid unprotected contact with the instruments (use protective gloves). – Thermal damage caused by rotary instruments has to be avoided in any case (work at recommended speed and use sufficient water cooling). – Coarse and super coarse grit diamond instruments may lead to increased thermal stress. Therefore, when using such products, use sufficient water cooling (at least 50 ml/min) and work with minimal contact pressure. To achieve an optimum surface quality, subsequent finishing is necessary. – Preferably use instruments with rounded edges as the preparation of sharp-edged undercuts may lead to an increased risk of a damaging notch effect. Improper use leads to increased risk and inferior results. Therefore, stick to the application and speed recommendations indicated on the labels and in our instructions for use.

2. Recommended speeds

The general rule is: – The larger the working part, the lower the speed – Maximum speed 450 000 rpm means: Suited for micromotor handpieces and turbines with stable ball bearings. Not recommended for old turbines with air bearing. Not observing the maximum permissible speed leads to an increased safety risk.

3. Contact pressure

Excessive contact pressure (> 2N) has to be avoided. Increased contact pressure may lead to stripping of the grit on abrasive instruments or to clogging of the instruments and increased heat generation. **Increased contact pressure may also lead to thermal damage to the pulp. In extreme cases, instrument breakage may even occur.**

4. Elimination of worn instruments

Blank spots on the surface of diamond instruments are an indication of abrasive grit wear and reduced cutting efficiency. These deficiencies lead to excessive temperature and finally pulp damage. Therefore, bent or "out of true" instruments must be eliminated immediately. **Very important: Blunt and damaged instruments lead to applying higher contact pressure which may result in an increased operating temperature. This may lead to thermal pulp damage. Damaged instruments therefore have to be discarded immediately.**

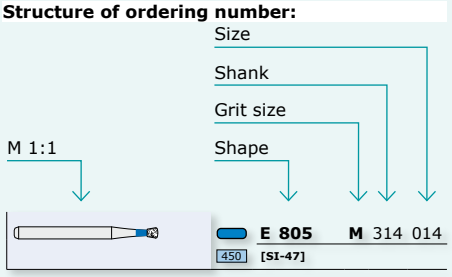
5. Sterilization procedure

– Prior to the first use on the patient and immediately after each use, all rotary instruments have to be (re)processed. – Those instruments that are supplied non sterile have to be prepared prior to first use. – Wear puncture resistant gloves when handling contaminated instruments. – Pre-soak instruments immediately after use to loosen debris. – For cleaning we recommend to use automated cleaning equipment (e.g. ultrasonic cleaner or washer disinfector). – Burs should be separated from each other in a bur block to prevent damage during immersion. – Brush away remaining debris with a metal cleaning brush and rinse instruments under running water. – Dry burs (e.g. by airblasting) to avoid corrosion. – Sterilization of the instruments is carried out using the known methods with autoclave. Minimum hold times: for 4 minutes at 132°C and 20 minutes drying. Times are hold times, running times are longer and may vary from unit to unit. The instructions provided by the device manufacturer have to be observed. – After sterilization, check instruments for defects on the surface (corrosion). Corroded instruments must not be used any longer. – The operator of medical products is responsible for seeing that proper treatment is carried out by qualified staff using the appropriate materials and suited equipment.

6. Specific instructions for individual instrument types Diamond

– Coarse and super coarse grit diamond instruments may lead to increased thermal stress. Therefore, when using such products, use sufficient water cooling (at least 50 ml/min) and work with minimal contact pressure. To achieve an optimum surface roughness, subsequent finishing is necessary.

Structure of ordering number:



Maximum speed:

450 = 450.000 rpm
300 = 300.000 rpm
160 = 160.000 rpm

Shank types:

Shank 313 = FG short

Shank 314 = FG normal

Diamond grit sizes:

	extra-fine	**EF**	25 µm
	fine	**F**	46 µm
	medium	**M**	107 µm
	coarse	**C**	151 µm
	super-coarse	**SC**	181 µm

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