Feature Benefit sheet

MASTERtorque Mini M8700

KaVo Master Series **- Best treatment quality** **- Maximum treatment comfort** **- Highest patient satisfaction** And of course proven KaVo Quality			**Main sales arguments:** **1. Direct Stop technology (DST)** - bur stop in 1 sec. - **SAFETY** and relaxed working. - **ZERO BACK SUCTION** hygienic, and increases service life **2.** More **Power - up to 19 watts (2,8 bar)** **3. Noise reduction** while stopping, **quiet** during treatment up to **59 dB(A)** **4. Better view** and **focused light** **AND: Plasmatec surface and watrerfilter, cuck retention**		**Important technical data and connectors:** • Power: up to 19 W • Noise during treatment: up to 59db(A) • Bur stop in 1 second • Head height:12,1 mm • Head diameter: 10,8 mm • Bur cooling: 3 spray nozzles • Weight: 63 g (max 57 g für LS) • Sight angel reduced to: 22°	**Additional features:** - Plasmatec coating - Water filter easily replaceable by dentist - Pressure range 2.1 - 3.5 bar - 100° / 19° Angle combination - Connectors: KaVo Multiflex coupling and Sirona Click & Go - Kids version for market launch	**Tried and tested KaVo quality features**: Bur rentention force up to 32 N Tungsten carbide guide bush Original KaVo ceramic bearings Made in Germany 24 months warranty	Application areas • Crown stump preparation • All work on enamel • Removal of old fillings • Crown separation • Preparatory work for molar extraction • Bridge transection • All preparatory work for endodontics			
USP	**Prio**	**Benefit category**	**Request/ problem**	**Part / Technical description**	**Product property Explanation of the function**	**Benefits/ added value What's the point?**	**Proof**	**Comparison with the competition**			
								Morita 4H Par 4HUEX-O KV	**W & H TK 97 LM Synea Vision**	**Sirona T1 mini**	**NSK Z-Max Z800KL**
Main selling points											
1. Direct Stop technology	**1**	Safety	Dental bur stops immediately after being switched off	"Direct Stop technology" braking system brakes both rotor and bur:	DST (Direct Stop Technology) => short bur stop time; active **braking system** stops the bur within 1 second **(0,6 sec.)**. Stops nearly as fast as a speed-increasing handpiece.	• **Reduced danger of injuries** for the patient - when the patient jerks and the dental bur e.g. touches soft tissue. - **Effective**, short stop times - you can immediately carry on with the job - **Safety** helps working in a relaxed atmosphere	Measured stopping times **Stop test** Emotional: Animation/functional model/video (brake + back suction model - from 720 km/h to 0 in 1 sec.)	Morita quickstop system. Stops within **2 sec.**	measured **1.5 sec.**	measured **2 - 3 sec.**	measured 1,72 sec.
		Hygiene + safety	No suck-back of aerosol		DST (Direct Stop Technology) => Short stop time reduces the vacuum created by the turbine wheel => aerosols are no longer sucked into the rotor housing gap at the head. => Optimised design of the turbine cartridge and the head housing to reduce the vacuum. => No aerosols are sucked into the instrument during bur stop and **sealing disc**.	• During bur stop, no aerosols are sucked into the instrument => **Reduces cross contamination** => hygienic safety for dentist and patient	1. Comparative measurement of vacuum curves, KaVo vacuum not measurable, < 0.000001 bar **2. Test with device**	ASBD System = Zero Suck back	**no statement**	PHS System	clean head system, gets **contaminated** => cleaning after each patient
		Service life	Long service life - clean ball bearings			Anti-retraction valve/sealing disc keeps bearing clean, **no contaminant particles** in the ball bearing path=> distinct **increase of the service life** of the ball bearings	1. Comparative measurement of vacuum curves 2. Test with device 3. **Show movie** of suck back	0 bar	**3,3 mbar**	0,95 mbar	**12,3 mbar**
2. POWER	**2**	Efficiency	Low torque	KaVo rotor geometry of the newest generation, air supply and exhaust channel, inflow behavior improved to increase the efficiency of the turbine wheel	**19 W at 2,8 bar (recommended)** **up to 26,5 W possible at 3.5 bar**	• Faster preparation • More power and stabler speed during operation	1. **Test - mill in stone** or zirkonium 2. Internal measurement with a setting	20 W printed 18 W measured	18 W	up to 20 printed (2,7-3,0 bar) old: 2,7 bar, new: 2,7-3,0 bar 19 W measured	(23 W at NSK-coupler) 21 W at KaVo coupler printed **18,2 W at KaVo coupler measured**
3. Silence - noise design	**3**	Treatment quality	Noise level during treatment	Cartridge design, inflow design, quality of the turbine cartridge, gripping mechanism	• **Noise during treatment: up to 59 dB(A)** • **No annoying stopping noise**	• Extremely quiet turbine • Gentle on the practice team's health • Pleasant sound for the patient • Distinctly less stress • Danger of tinnitus averted	Turbine comparative **hearing test**	**66,8 dB**	62 dB	**64 dB**	**63,3 dB**
4. VISIBILITY & LIGHT	**4**	Treatment quality	Viewing problem / limited access in molar area	Head height	• **Head height: 12,1mm** • **Head height 17,7mm with 16mm mini-bur** • **Head diameter: 10,8 mm**	• Better view of the preparation area '• better access to molar regions, suitable for children and elderly men • More free space for all treatment situations	Measurements	**height 12,7 mm**, diameter 9 mm	**height 13,1 mm,** dimeter 10,05 mm	**heigth 12,8 mm**, diameter 10,3 mm	height 12,1 mm, diameter 10,8 mm
		Treatment quality	Viewing problem / limited access in molar area	Head heigh with burs	**Allows the following bur length:** **Miniature - 16mm** **Standard - 19mm** **Long - 21mm**	• Better view of the preparation area '• better access to molar regions, suitable for children and elderly men • More free space for all treatment situations	Show height with **short and long bur**	burs up to 21 mm Shaft min. 10mm => **Standard and Long**	**only 21 mm burs allowed**	burs up to 21 mm Mini, Standard and Long	burs up to 21 mm Shaft min. 10mm => **Standard and Long**
		Treatment quality	Difficult access	Combination of angles	**Patented KaVo 100°/19° head/elbow angle combination**	• Molar area always easy to view and to access • Optimum freedom of movement -> Improved treatment conditions	Measurements	No, 15°	No	No	No
		Treatment quality	Difficult access	New head shape	• **Improved viewing angle (22°)** **- Smaller head** **- Head tapers towards the bur**	• **Improved view** - Larger field of vision	Measurements	16,75°	21,86°	23°	21,35°
		Treatment quality	Dazzling by atomized spray	Light and spray - direction of emission	Offset light and spray outlet	• **No dazzling (no "high beam" on atomised spray)** - Optimum view for precise preparations -> Safe detection of preparation margins	1st image Head spray/light outlet Comparison: driving a car in foggy conditions				
		Treatment quality	Insufficient light at the preparation site		• **25,000 LUX** light power at drill bit • KaVo glass rod light optical fibre LUX	• Best view for precise preparations -> Safe detection of preparation margins	Measurements at the same distance	25.000 lux	25.000 lux	25.000 lux	no statement
		Quality	Decrease in luminance by thermo-disinfection/sterilisation	Glass rod	• 25,000 LUX light power at drill bit • KaVo glass rod light optical fibre LUX	• **Thermodisinfectable** • Sterilisable • No light loss • Hard, no scratches		glass rod	penta LED for W & H couplings **no hard surface**	glass rod	glass rod
Further Points											
5. Surface coating	**5**	Quality	Service life of the dental instruments and traces of wear	Plasmatec	• Plasmatec coating • KaVo hygienic sealing	• High wear resistance -> Well cared-for dental instruments -> Good-looking dental instruments	**Test the grip.** Hold it and detist should try to remove Compare with competitors	ceramic coating	special coating which offers a scratch resistant surface	titanium housing	DURAgrip coating on titanium body, similar resistance to plasmatec
	6	Safety	Time-consuming manual removal of contaminants from the knurl. Time required. Unpopular job	Plasmatec	• Plasmatec coating • KaVo hygienic sealing	• High hygienic safety • Quick cleaning success		more surface structure = not so easy to clean	more surface structure = not so easy to clean	Titanium is bio-compatible, **good for bacterias**	DURAgrip coating on titanium body, similar resistance to plasmatec
6. Warranty	**7**	Quality	Long service life and investment security	2 years warranty	2 years warranty	Investment security		2 years warranty	2 years warranty	2 years warranty (only CA have 3)	not defined
7. Bur guide	**8**	Quality	Perfect bur guide	Hard metal guide bushing	Hard metal guide bushing	Perfect concentricity of the dental bur	Quiet turbine thanks to excellent concentricity **Show the darker part**				
8. Microfilter	**9**	Safety	Poor spray quality due to contamination in the spray channel	Microfilter	• Spray microfilter	• Constant cooling -> Best protection of the tooth against thermal damage	1. Mounting situation in drawing	No	No	No	exchangable only by technican
	10	Easy to handle	Time-consuming removal of contaminants from the spray channel	Microfilter	• Spray microfilter easily replaceable	• Instrument quickly ready for use • Low susceptibility to time-consuming maintenance work	**Demonstrate filter exchange** Video of the filter exchange	No	No	No	exchangable only by technican
9. Surface	**11**	Treatment comfort	Rough surfaces result in painful pressure points, smooth surfaces cause undue muscle fatigue (high effort)	Plasmatec	• Plasmatec coating	• Relaxed treatment • More "sensitivity" in the fingers • No more re-gripping required -> No pressure points on the hands -> No fatigue from long-term treatment -> Safe handling	Visual and tactile test	**less grip**	less grip	very smooth titanium surface	good grip at the beginning, loss of grip