

MOTOR SPINDLES FOR CAD/CAM MACHINERY

Ø 33mm - 62mm

HF/HT motor spindles for CAD/CAM grinding, cutting and drilling application with state of the art motor technology.

IBAG SilverEdition motor spindles have been developed for use on CAD/CAM machines in dental industries. Resulting with dramatically improved cutting efficiencies in medical and micro-manufacturing technologies.

IBAG spindles deliver the highest productivity and quality for all manufacturing processes, including finishing, grinding, micro-drilling, engraving and high speed cutting.

Typical applications include works on dental blanks made of wax, zirconium, steel, titanium or cobalt chrome. Models are available with maximum speed up to 80.000 RPM and a power of either 1.2 kW (uncooled) or 2.6 kW (watercooled).

IBAG CAD/CAM motor spindles are supplied as a complete package insuring the best high speed performance, installed on a new machine by the OEM, or as a retrofit on existing equipment.

The complete system includes the HF/HT motor spindle, supply unit, frequency converter and all necessary cables, tubes and connectors. All components have a two year warranty.



CAD/CAM MOTOR SPINDLES

Technical Specification

Many IBAG spindles use high-frequency AC motors. If higher power and torque are required, IBAG CAD/CAM motor spindles are also available with DC synchronous motor technology, providing the highest productivity and quality possible for finishing, grinding, micro-drilling, engraving and high speed milling.

The spindle housing dimensions are optimized to fit on most dental CAD/CAM machines. The complete system provided by IBAG guarantees an easy, fast, „Plug & Go“ installation.

Type	Speed in RPM	Power S6 40% in W	Power S1 in W	Torque S1 in Ncm	Shaft Ø in mm	Ø / length in mm	Weight in kg
HF 33 D/S 60	80'000	260	200	3.5	0.5 - 5.0	33 / 162.0	0.700
HT 33 D/S 60	80'000	520	400	4.8	0.5 - 5.0	33 / 162.0	0.700
HF 33 A 50	60'000	260	200	3.5	1.0 - 4.0	33 / 171.4	0.900
HF 33 A 60	60'000	260	200	3.5	1.0 - 4.0	33 / 205.5	0.900
HF 45 S 60	60'000	975	750	11.9	0.5 - 7.0	45 / 185.1	1.3
HF 45 S 80	90'000	1'300*	1'000*	16.0	0.5 - 7.0	45 / 185.1	1.3
HF 45 A 50	80'000	975	750	8.9	3.0 - 6.35	45 / 235.5	2.3
HF 45 A 60	60'000	975	750	11.9	3.0 - 6.35	45 / 235.5	2.3
HF 62 A 60	60'000	2'600*	2'000*	33.0	1.0 - 8.0	61.9 / 249.5	4.4
HF 62 A 70	70'000	1'200	900	15.0	1.0 - 6.0	61.9 / 239.5	3.7
HF 62 A 70	70'000	2'000*	1'500*	25.0	1.0 - 6.0	61.9 / 239.5	3.7
HF 62 A 80	80'000	1'300*	1'000*	12.0	1.0 - 6.0	61.9 / 239.5	3.7

* spindle housing with water cooling

EQUIPMENT

- > Hybrid Ceramic Ball Bearings with Lifetime Grease Lubrication
- > 2, 3 or 4 Ball Bearings
- > Optional: Self Cleaning Collet System
- > Advanced Protection using Double Labyrinth Air Seal
- > Lowest Vibration < 1mm/s
- > Highest Accuracy < 1µm Run-Out
- > Tooling Interface with High Precision Collets. HF 33 A, HF 45 A and HF 62 A with Automatic Tool Change (ATC)
- > Shaft with Spring-Preload for Higher Axial Stiffness
- > Hardened and Ground Spindle Parts
- > All Rotating Parts Balanced < G1 at Maximum Speed
- > Electrical Equipment: 230V/115V, 1 phase, 50/60Hz, Internally Fused, Power Transformer on Request
- > Supplied Documentation includes Operation Manual, Maintenance Instructions and Complete Troubleshooting Guide



COMPLETE SYSTEM

The complete system consists of:

HF/HT Motor Spindle > Supply Unit > Frequency Converter



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