

# HOFMANN HK5000 HYDROKOMPENSER BALANCER UPGRADE

Due to popular demand, Schmitt Europe is pleased to present a complete electronic upgrade kit for the Hofmann Hydrokompenser HK-4410 and HK-5000 grinding wheel balancer controllers. The Hydrokompenser is one of the original grinding wheel balancers, and has been around for almost 30 years with hundreds still in operation worldwide.

The Hydrokompenser uses the grinding machine coolant as a balancing mass to compensate for imbalance in the grinding wheel and spindle assembly. A filtered supply of coolant is injected into an annular ring container mounted either inside the grinding wheel arbour or on the flange of the wheel arbour. The mass of the coolant held in the container counteracts the imbalance in the wheel assembly. This is done as the wheel is rotating at normal grinding speed ensuring optimum balance of the whole assembly is quickly achieved. The original electronic controller used to drive the balancer was the HK 4410, which was superseded by the HK 5000. The Hydrokompenser is still a popular system with many grinding machine OEMs and end users.

The upgrade is 'Plug-and-Play', installing in minutes, and features Schmitt's latest SB-4500 series modular electronic controller. The upgrade kit comprises of 3 parts: an SB-4500-H control unit, SB-4901 adapter cable to operate the existing Hofmann solenoid valve block, and a magnetically or stud mounted SB-1440 vibration sensor with cable. If the HK5000 was interfaced with the machine PLC or CNC, an optional SB-4902 CNC interface adapter is available which means no complex re-wiring to the grinder PLC or CNC is required. Many HK-5000 controllers were fixed into electronic consoles using a 19 inch rack mount, and again, this is also an option available for the new generation SB-4500-H controller.

The new electronics of the SB-4500-H offer fast and accurate in-process balancing of the wheel and spindle assembly. Other benefits include a large

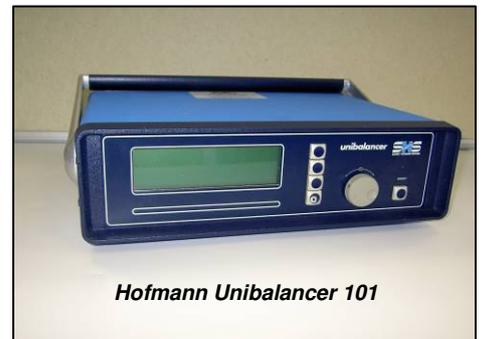


*Hofmann HK-5000 controller with new SB-4500-H upgrade*

easy to read LCD display, multi language firmware, a Plot Vibration analysis of the whole of the grinding machine - useful for balancing, spindle problem solving and predictive maintenance. The modular concept means that Schmitt's AEMS (Acoustic Emission Monitoring System) for grinding machine gap and crash control can be added with simplicity at any future date.

As well as electronic upgrades, Schmitt Europe carry a large stock of HK-5000 Hydrokompenser consumable items and spare parts at their Coventry, UK base. These include coolant filters, speed sensors, vibration sensors, replacement valve blocks and individual solenoid valves to keep old systems running. Complete new Hydrokompenser systems are also available featuring the SB-4500-H controller, and are especially useful for high speed spindles or applications where a mechanical balance head simply won't

fit. Schmitt Europe offer service, support and repairs for other Hofmann products such as the SWM2, Microvib, MS 100 and Unibalancer 101/102 portable balancers. Upgrades for Hofmann's Finibalance and MK3000D mechanical type balancers are also available.



*Hofmann Unibalancer 101*

An unbalanced grinding wheel will increase machine vibration and decrease the life of spindle, bearings, grinding wheel and diamond dresser. Poor surface finish, chatter marks, work-piece ovality and grinder/ surface burn can often be attributed to a badly balanced wheel.

Contact Schmitt Europe today to improve your grinding process and to reduce your scrap and costs.



*Hofmann MK3000 and Finibalance can also be upgraded*

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