

- BETTER WORKING PRECISION
- LONGER LIFE OF THE DISC
- LONGER DURATION OF GRINDING MACHINES



EVOLUTION AND REVOLUTION IN THE GRINDING WORLD

MAX-FUN (ADV) V. DB-24

GLOBE is proud to introduce **VIBLOCK**, the first truly effective set of damping flanges on the market designed for depressed center grinding discs. **VIBLOCK** has been carefully designed and patented to significantly improve comfort, well-being, productivity and reduce the operating costs of our grinding wheels. The particular conformation and the use of appropriate rubbers with suitable physical and mechanical characteristics allows a remarkable absorption of the vibrations generated during grinding operations on a wide range of frequencies. The reduction of vibrations has been confirmed and validated by a study conducted by the **Department of Mechanical Engineering of the University of Parma** with field measurements obtained by means of accelerometers applied to the handles of the grinding machine.

WHAT IS VIBLOCK?

VIBLOCK system consists of a pair of flanges (a rear flange Ø 78 mm and a front threaded flange Ø 44 mm); both are coated with an elastic and shock-absorbing material. The abrasive wheel is not rigidly clamped between two flanges Ø 44 mm of equal diameter as happens with traditional flanges, but is mounted in a sandwich between the two layers of rubber remaining free to undergo micro-oscillations without transmitting to the grinder and to the operator's hands the vibrations that are instead absorbed by the rubber itself. The grinding wheel is therefore floating and not rigidly bound.

Thanks to this technology, the jumping and vibrations of the grinding wheel that normally occur during use, caused by distortions, imbalances, density variations, etc., are drastically reduced.

The resulting vibration level is comparable to that generated by the use of a flap disc but with much greater stock removal performance and versatility of use.

ADVANTAGES OF VIBLOCK

REDUCTION OF VIBRATIONS

VIBLOCK significantly reduces the vibrations transmitted to the user's hands. Studies have shown an average reduction in vibrations of 25%.

This leads to an immediate well-being and less fatigue for the operator and therefore also to a strong reduction of the risk related to the exposure to vibrations.

REDUCTION OF COSTS AND WORKING TIME

the work, becoming less hard, requires fewer stops and brings greater productivity. The lower vibrations, allow a very comfortable use (even with medium-hard grinding wheels such as those with ceramic or zirconium grit), while the long life and high removal reduce the consumption of discs, their purchase cost, labor and energy costs.

INCREASE IN DISCS' PERFORMANCE

the absorption of vibrations and micro-shocks between the grinding wheel and the work-piece reduces the stress on the abrasive grains of the disc, increasing its durability. In addition, the reduction of micro-shocks prevents the classic chipping of the edge that causes a further increase in vibration. The edge of the grinding wheel is thus perfectly homogeneous and regular, providing an improved comfort of use for the operator.

MORE PRECISION

COMPARATIVE LABORATORY TEST

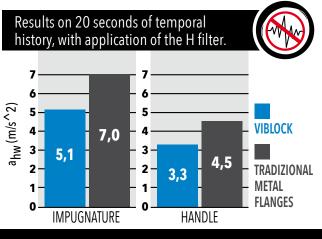
of the grinding wheel, increasing the working precision and surface finishing.



VIBLOCK is quick and easy to assemble. (photos above), and mounts only on Globe Type 27 discs. On the left VIBLOCK on a Globe Ceramic Power 'CD' disc.

The Engineering Department of the University of Parma, has measured the vibrations transmitted to the operator's hands by 2 different types of flange sets for mounting grinding wheels on grinders: the first one of "traditional" type, the second with **VIBLOCK**, the flange designed and patented by GLO-BE which, thanks to a special rubber insert, reduces vibrations and increases comfort. According to normative specifications, a single "ahw" index, indicative of the amount of acceleration transmitted to the operator's hands, has been measured in two positions: handle (1), and grip (2). The results show a positive effect as regards the transmission of vibrations from machine to operator, introducing a maximum decrease of the RMS values indicated by the standard of about 25%.

In conclusion, the rubber insert analyzed, provides a greater beneficial effect for the comfort of the operator during grinding operation.







Member of OSA Organization for the Safety of Abrasives

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