

VIBMATIC® 8000

Vibration stress relief

VIBMATIC® 8000 is the fully automatic system for vibration stress relief. The further developed 6th generation of VSR – treatment is based on the precise **MODAL ANALYSIS** and stabilises metallic workpieces in their dimensions by vibration.



VIBMATIC® 8000

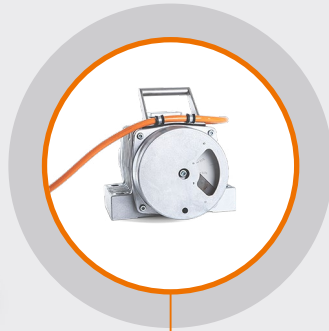
with MODAL ANALYSIS

The control unit

The control unit regulates the motor speed, controls the modal impactor, measures, shows and processes necessary data. For this purpose, the especially further developed VIBMATIC® 8000 software is used. The gained informations (strike capability of the modal impactor and the measured data from the triaxial accelerometer) are now the computation base for the modal analysis.



VIBMATIC® CONTROL UNIT



VIBRATION MOTOR



MODAL IMPACTOR



ACCELEROMETER

The vibration motor

The vibration motor with centrifugal force of up to 25.000 N works in a frequency range from 12,5 – 100 Hz equal to 750 – 6000 RPM. It is easily adjustable from its outside, tough and durable. A vibration treatment comprises five working steps with up to ten operating speeds individually determined for the workpiece.

Flexible vibration treatment of small and huge workpieces



from 100 kg



up to



over 200 t

VIBMATIC® 8000

with MODAL ANALYSIS

The modal impactor

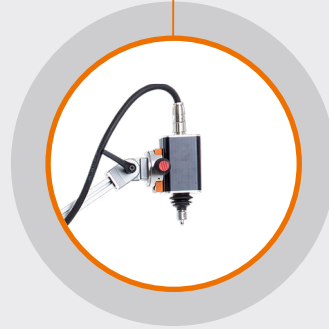
The modal impactor generates multiple, very short force impulses with optimized power of impact induce the workpiece several times.



VIBMATIC® CONTROL UNIT



VIBRATION MOTOR



MODAL IMPACTOR



ACCELEROMETER

The Accelerometers

The induced acceleration in the workpiece is determined by the triaxial accelerometer. Precise parameters are necessary for the calculation of the optimal working frequencies by the control unit. Triaxial and monaxial accelerometers are measuring steadily the acceleration in the workpiece.

Supplies

Scope of supply are 4 vibration dampers, 2 C-Clamps and 1 colour printer.



4 x Vibration dampers



2 x C-clamps



1 x Colour printer

Good reasons for the **VIBMATIC® 8000**

Reduces significantly cumulative costs

Treatment duration Ø 50 min.

High precision by using
MODAL ANALYSIS

Simplified production sequencies
with shorter processing time

The positive effect is clearly loggable

Significantly less power consumption
compared to stress-relief annealin

On-site operation

No logistic or transport costs

Suitable for nearly all steels and
workpiece geometries

No descaling of the workpiece and
straightening of distortion is needed

Reduction of CO2 emissions





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