

Brecon Vibrationstechnik GmbH, Cologne, Germany

Mobile vibration controls increasingly used for concrete compaction

In 1995 Brecon, of Cologne, Germany, took over the worldwide sales of the Bosch vibration technology. Since 1997 the company's own control manufacturing unit has been producing an extensive standard range of frequency controls. Since then over 200 control systems have been delivered for perma-

nently mounted installations - mostly for the operation of several different types of formwork. The Omnivib expandable system is already mainly aimed at customised special solutions, using PLC programming and radio remote control.

For some years Brecon has noticed that the market is moving towards customized special controls. As a result of the development of the precast element market away from standard concrete elements towards special elements with smaller batch sizes, the controls have also had to be able to adapt quickly to changing requirements in production. For this reason, in recent years ever more precasting plants have decided on using mobile controls. However, the possibility of programming the production sequence and controlling the vibration process remotely remains unchanged on the plants' wish list.

The possibilities begin with small portable frequency inverters (fig. 1). These portable devices go up to outputs of 7.5 kilowatts, with which small formworks with around six vibrators can be operated. The next step is small mobile controls with one axle (fig. 2) and outputs of up to 18.5 kilowatts, for the supply of up to 17 high frequency typically sized external vibrators (10 to 14 kN centrifugal force at 6000 revolutions per minute).



The end user contributes to details such as circumferential protective frame, single phase power outlet and power input on a cable drum

Beyond that there are the four-wheeled mobile controls (fig. 3), where the user has practically no limits to the output. The logistics and space requirements in the plant are often the measures for the layout. Over the course of time it has become the rule that, with all sizes of control

mentioned above, the end users contribute in detail to deciding which additional items are needed, such as for example a circumferential protective frame, additional single phase power outlet, a cable drum for power inlet or a system to keep extension cables in order. Today there are hardly any two concrete plants that use the same frequency controllers. It is not only the electrical and electronic functions that are specific to the equipment, but also the operation of the equipment itself, to promote improvements in productivity and flexibility.

Further information:

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Small portable frequency inverter



Mobile control with one axle