

**Safe and simple handling**

**High measuring accuracy**

**Extensive protective devices and safety guards for:**

- **Operating staff**
- **Machine**
- **Environment**

**Modular design for various applications**

**Integration of correction units allow for measuring and correcting in one machine**

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## **Balancing Machines for Cardan Shafts**

### **Series HGW**

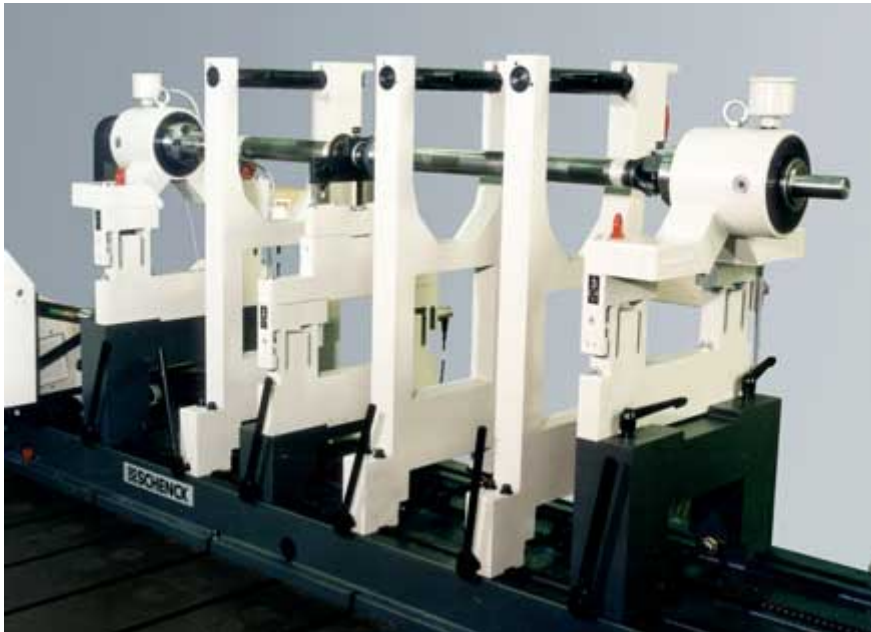
#### **Range of application**

The horizontal, hard-bearing balancing machines of series HGW are especially designed for the balancing of cardan shafts in overhaul and repair shops and for small volume production.

The modular design provides for easy exchange of standard components, thus allowing adaptation to other balancing tasks such as balancing of electric armatures, crankshafts etc.

# Balancing Machines for Cardan Shafts HGW

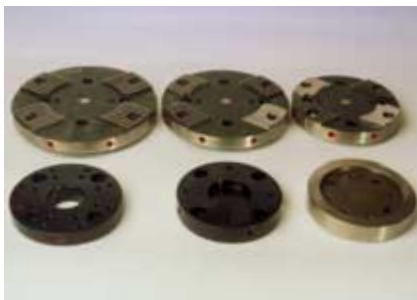
## Special features



HGW 30 B with option center bearing pedestal and 3 safety catching blocks

- Wide weight range
- Careful dimensioning of all machine components ensures long service life and high availability and operational safety
- Special spindle bearings cover wide speed range and high centrifugal forces
- Sliding spindle for a comfortable loading and unloading of the cardan shafts
- The dynamometer principle for permanent calibration allows large initial unbalances and guarantees high balancing accuracy
- Sophisticated safety concept

## Extension

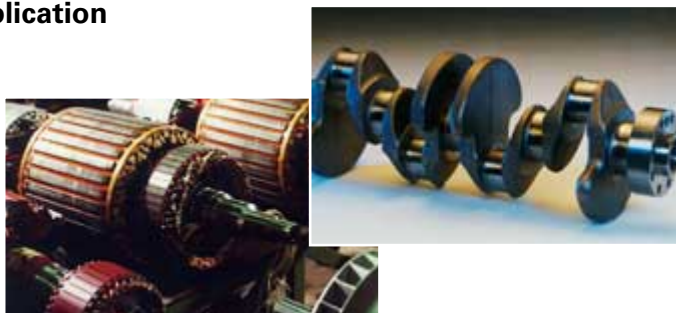


◀ Adapter flanges make the use of a variety of cardan shaft connections possible.

Welding and drilling can be integrated for unbalance correction after measuring. ▶



## Universal application



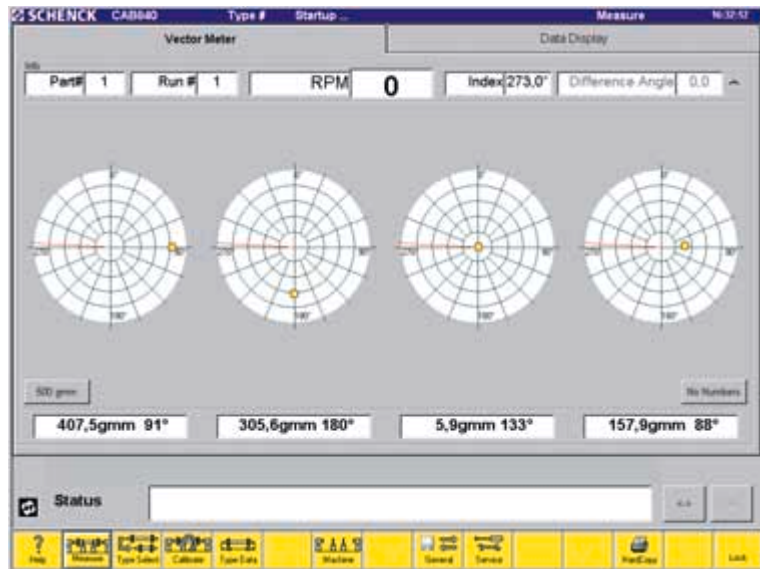
◀ Due to the modular design of the machines of series HGW, replacement of the spindle bearing with roller carriages is quite simple, therefore, rotors with journals of their own, such as electric armatures, crankshafts, etc. can also be balanced.

## Measuring unit CAB 840

The integrated Schenck measuring unit makes balancing a self-explanatory task:

- Softkeys and a sophisticated window technique guide the operator simply and easily through the balancing procedure
- Clear display of information on the large colour monitor
- The balancing procedure may start after the input of only a few rotor data. No calibration runs are necessary within the specified range
- Quick change-over for different rotor types
- The angular protractor makes a quick and accurate indexing of the correction position possible
- The software "Compensation index balancing" automatically subtracts the unbalance components of spindles and flanges from the

overall unbalance. Only the unbalance of the rotor to be balanced is displayed

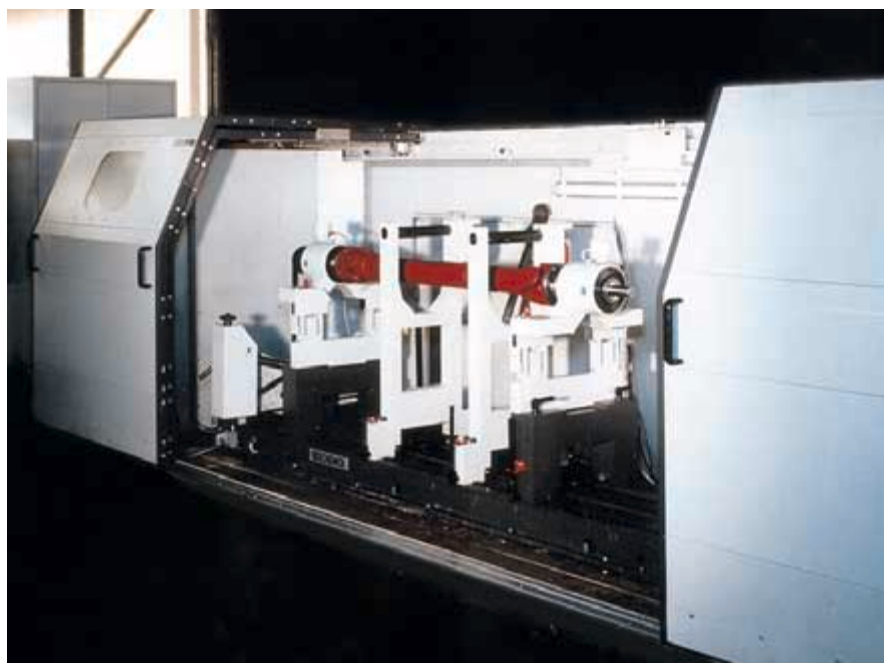


With the measuring unit CAB 840, balancing of multi-part cardan shafts in up to four planes becomes routine.

## Protective devices and safety guards

Series HGW is characterised by a comprehensive safety concept for man and machine:

- A bearing force monitoring system automatically switches off the machine drive in case of inadmissibly high vibrations at the spindle bearing
- Stable safety catching blocks are designed to prevent damage to man and machine in case of failure (e.g. cardan shaft fracture)
- Protective guard of safety class C 600 as per ISO 7475 as protection against projected parts, such as e.g. correction weights.



HGW 30 B with 2 safety catching blocks and protective guard of safety class C 600

## Important data at a glance

		HGW 20 B	HGW 30 B	HGW 40 B
Spindle bearing (for cardan shafts)				
Cardan shaft weight max.	kg	180	450	1000
Balancing speed max.	min <sup>-1</sup>	100 - 6000		

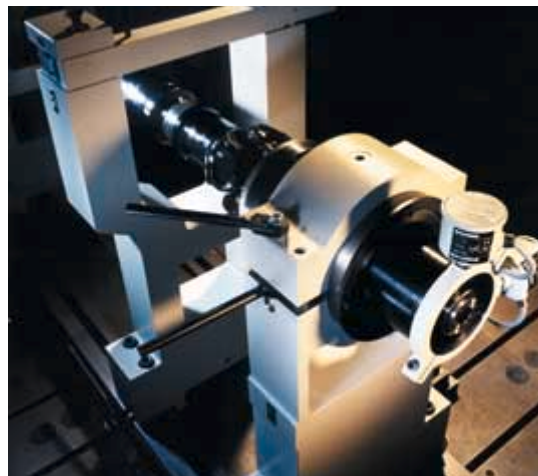
### Typical field of application

Low weight / high speed		•	•	•
Mean weight / mean speed			•	•
High weight / low speed				•
Schenck measuring unit		CAB 700 / CAB 802 / CAB 840		
UMAR*	gmm/kg	0,5 (no better than 25 gmm)		
Centre line height	mm	800		
Rated power	kW	4	4	7,5
Type of drive		Belt drive		
Supply connection		400V × 3 phase × 50/60 Hz		

### Roller bearings (optional for industrial rotors with journals)

Rotor weight max.	kg	100	700	3000
UMAR*	gmm/kg	0,1 (no better than 5 gmm)		
Rotor diameter max.	mm	1600		
Bearing journal diameter	mm	9-140	10-160	15-240

\* Minimum achievable residual unbalance per balancing plane



### Series HK

Our series HK perfectly fits your "Heavy Duty" applications (high weight and speed ranges).

**SCHENCK**

**Balancing and Diagnostic Systems**

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The **DÜRR** Group