

100 MBRS, 101 MBRS Balancing Machine for Turbocharger Core Assemblies



- Fast and precise low-speed balancing
- Digital measuring system with direct display of unbalance and correction data
- Simple management of type data
- Easy change-over to different rotor types
- Closed oil system
- Optional integration with correction systems

Range of application

Determination of the dynamic unbalance of fully assembled turbocharger core assemblies by low-speed balancing. Reduction of unbalance prior to high-speed balancing of the core assembly. Use of the machine in the production of small, medium and large volumes, in quality control and development. Unbalance measurement in two planes, programmable conversion of unbalance values to suitable correction planes. Unbalance correction with optional processing unit by grinding and milling in multiple correction steps. Manual loading and unloading.

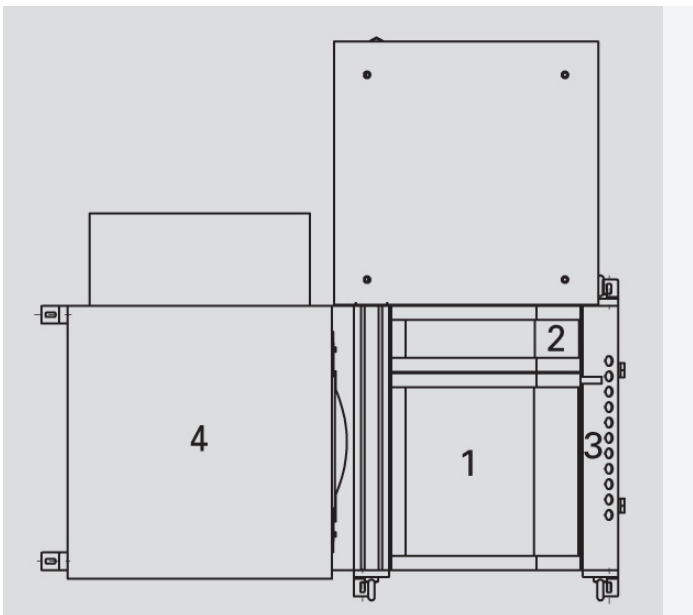
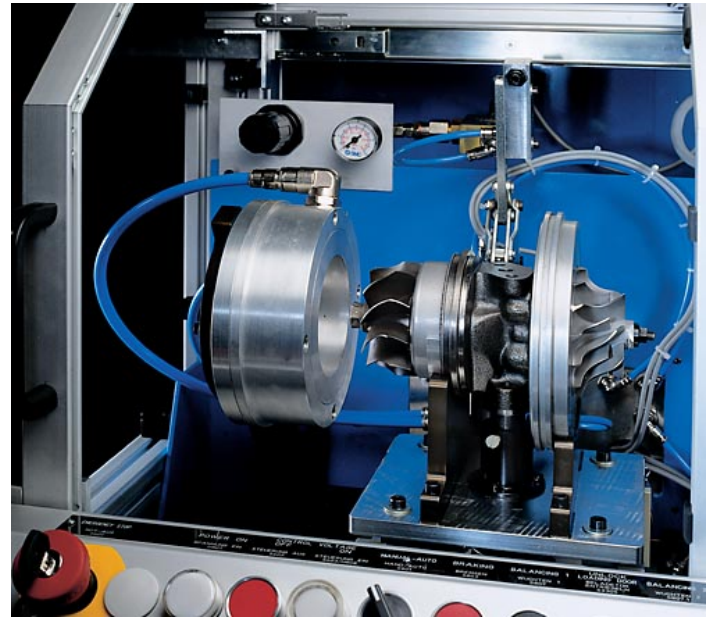
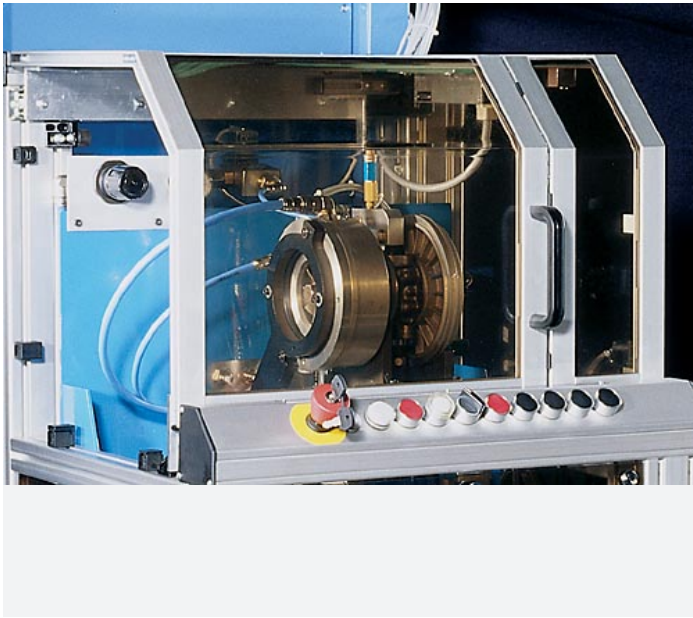
Design

Machine with horizontal balancing unit with integrated oil system. Vibration-optimized machine frame made from aluminum profiles. Type-dependent, interchangeable bearing units and drive rings. Processing of measured data through CAB 750 measuring unit, display of measured values in vector form or in easy-to-read numbers.

Sequence of operations

- Apply reference mark to the compressor wheel of the core assembly for measurement and unbalance correction
- Manually load core assembly into the balancing unit
- Manually position air drive (automatic positioning available as option)
- Close shroud. Automatic coupling of oil supply, start of automatic measurement process.
- Unload rotor from measuring station

100 MBRS, 101 MBRS Balancing Machine for Turbocharger Core Assemblies



1 Balancing unit 2 Protective hood 3 Operating panel 4 Switch cabinet with CAB 750 measuring system

Plan view (non-binding example)

100 MBRS, 101 MBRS Balancing Machine for Turbocharger Core Assemblies

Technical data at a glance	100 MBRS	101 MBRS
Measuring unit	CAB 950	CAB 950
Automatic unbalance measurement	•	•
Manual unbalance correction	•	•
Manual rotor handling	•	•

Turbocharger core assemblies

Weight, max.	[kg]	5	4 - 16
--------------	------	---	--------

Machine

Width A	[mm]	745	745
Depth B	[mm]	905	905
Height C	[mm]	1700	1700
Balancing speed, approx.	[min ⁻¹]	5000	5000
Measuring uncertainty	[gmm]	0,02 - 0,3	0,15 - 0,9
Change over time	[min]	1 - 2	1 - 2
Air pressure	[kPa]	450 - 700	450 - 700

Order No.	R0420100.01	R0430100.01
-----------	-------------	-------------

Order No.	R0420101.01	R0430101.01
-----------	-------------	-------------

Correction station	Order No.	R0420102.01	R0430102.01
--------------------	-----------	-------------	-------------

Printer	Order No.	R0420103.01	R0430103.01
---------	-----------	-------------	-------------

Master core assemblies	Order No.	R0420104.01	R0430104.01
------------------------	-----------	-------------	-------------

2) Data non-binding, depending on respective equipment