

P1DWB

***BALANCING AND MONITORING SYSTEM
ON GRINDING MACHINES***



MARPOSS

Description

The P1dWB is the MARPOSS entry-level system for grinding wheel balancing and process monitoring specially designed to meet the requirements of grinding machines. The P1dWB is the successor of previous MARPOSS electronic systems such as the E78 and the E82, tens of thousands of which have been sold all over the world. The system can manage a single balancing head and simultaneously an integrated acoustic sensor (if present) both for FT and ST models. As well as boasting full backward compatibility, the P1dWB is enhanced with new functions such as pre-balancing and spectral analysis of the imbalance, making it unique in its market sector.

Other features not shared by entry-level systems but available on the P1dWB are the multilevel login function for more secure management of data and settings, and the self-diagnostics function that proves very useful for quick problem solving

The P1dWB complies with modern ergonomic criteria and fits perfectly with the new characteristic style introduced for new MARPOSS brand products

It is available in 3 versions (rack, stand-alone and remote panel) and is completed by a modern 4.3 inch touch-screen, elegant but at the same time suitable for the hostile environments typical of mechanical machining.

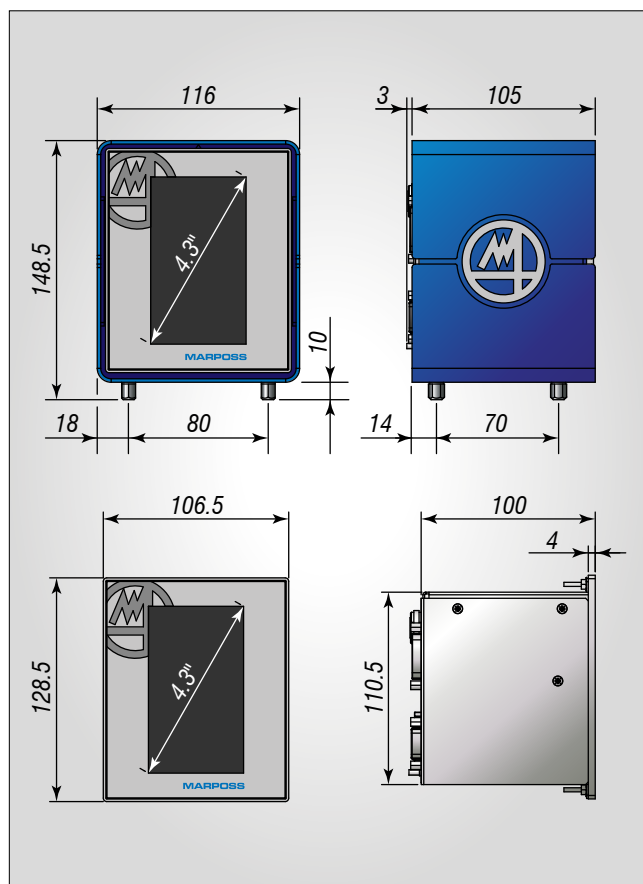
Main features

- Management of all balancing options (pre-balancing, manual and automatic)
- Connection of all FT and ST balancing heads equipped with retractable contacts and contactless transmission
- Monitoring integrated in the balancing function (for balancing heads equipped with sensors)
- Spectral analysis of the unbalance



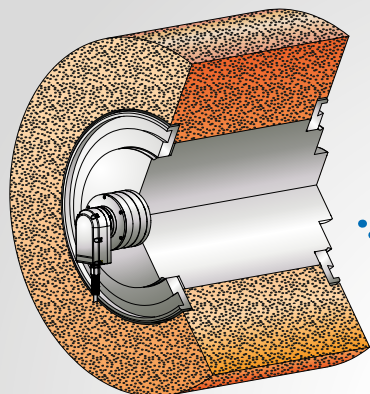
P1dWB Unit

Compact, user-friendly and sturdy, these are the intrinsic features of the P1dWB. The unit can be installed outside of the machine tool or integrated in the operator panel.

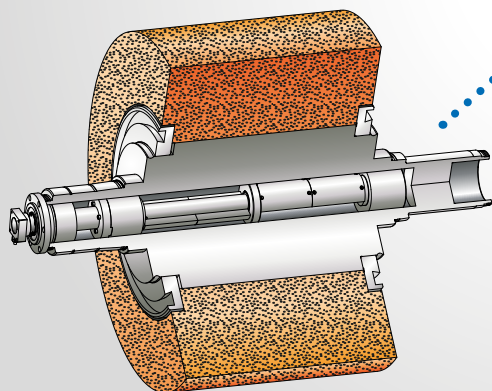


STRUCTURE	<ul style="list-style-type: none"> • Stand-alone • Rack • Remote panel
DISPLAY	4.3" (480 x 272) capacitive LCD
VERSIONS	<ul style="list-style-type: none"> • Heads with retractable contacts • Heads with contactless transmission
FUNCTIONS	<ul style="list-style-type: none"> • Automatic balancing cycle • Pre-balancing • FFT analyses • Gap & Crash control with AE sensor
POWER SUPPLY	24V DC $\pm 20\%$ - SELV type
POWER CONSUMPTION	0.8 A
STATUS LEDS	On rear panel
OPERATING TEMPERATURE	5 to 45 °C
STORAGE TEMPERATURE	-25 ÷ 70 °C
WEIGHT	~0.9 kg (rack) / ~2 kg (stand alone)
PROTECTION DEGREE <i>IEC 60529</i>	IP54 <i>(only front panel)</i>
MACHINE CNC CONTROL (I/O)	Cannon 24V DC optocoupler connector 15 pins => retractable contacts 25 pins => contactless transmission
I/O SIGNALS	<ul style="list-style-type: none"> • Sink or Source • Input current 9 mA • Output current 50 mA (max)
INTERFACE	<ul style="list-style-type: none"> • RS232 • Ethernet
ELECTRICAL SAFETY STANDARDS	EN 61010-1
EMC STANDARDS	EN 61326-1

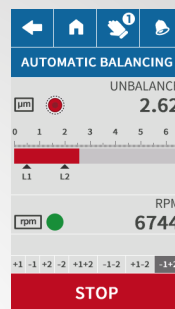
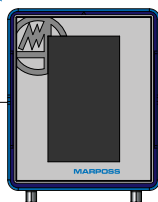
Application examples



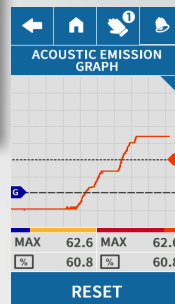
FT balancing head



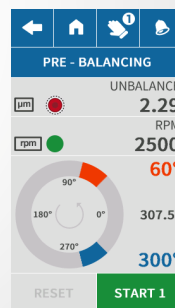
ST balancing head



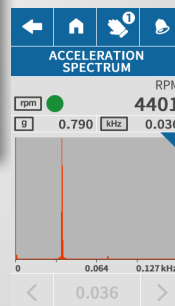
Automatic balancing



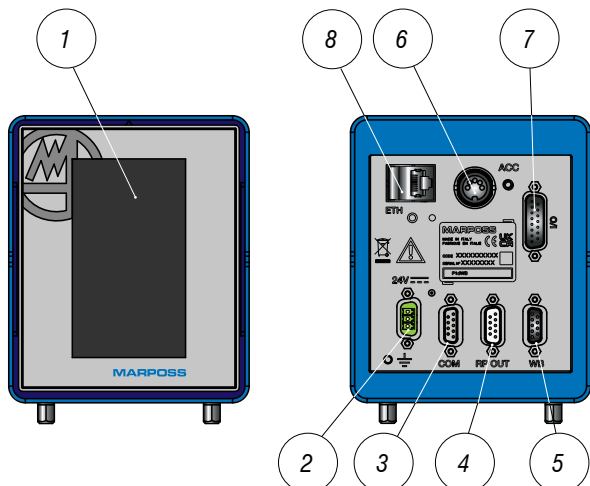
Acoustic Emission Graph



Manual pre-balancing



Acceleration spectrum (FFT)



1	4.3" touch-screen panel
2	Power supply unit 24V DC
3	COM = RS232 serial interface
4	RP OUT = Remote panel
5	WB = Wheel Balancer
6	ACC = Vibration sensor
7	I/O = Input/Output signals a. 15 pins → retractable contacts b. 25 pins → contactless transmission
8	ETH = Ethernet port



www.marposs.com

For a full list of address locations, please consult the Marposs official website

D6105100G0 - 08/2023 Edition - Specifications are subject to changes
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