



**Wheel Balancing Machines
Manufacturing**

www.stormbalans.ru

THE COMPANY WAS FOUNDED IN 1991



The company "STORM" was established in 1991 in Saint Petersburg at the premises of the former defense plant and since that time has been developing and manufacturing machines for balancing various bodies of revolution such as car and commercial vehicle wheels.

"STORM" is the first company in Russian Federation to specialize in development and manufacturing of Wheel Balancers, and currently, "STORM" is a leader in this segment of Automotive Service Equipment.

Over the course of more than two decades of successful operation, "STORM" acquired a great wealth of experience in satisfying various requirements of our clients and today can offer the optimal range of models of "STORM" Balancing Machines. All of our machines are being produced using state-of-the-art equipment and high-quality materials.

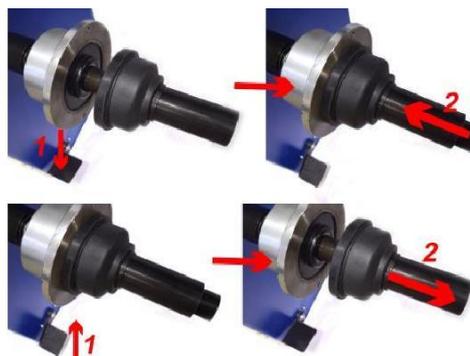


"STORM" has its own research and development facilities, as well as experimental service centers, offering tire fitting and wheel balancing services. This gives a quick feedback to the Company's development engineers. Every year the consumer properties are being further improved in accordance with end-users requests.



The following represents the most current model range of wheel balancers, manufactured in Saint Petersburg.

Wheel Balancer PROXY-6PC



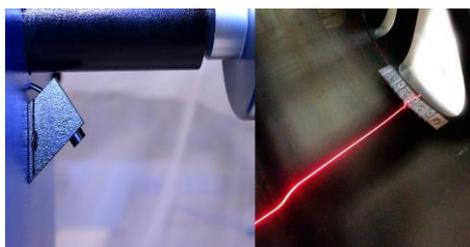
Super-automatic Wheel Balancer.

This balancing stand has a pneumatic wheel hold-down function, ultrasonic measurement of disc parameters, capability of being tucked tight against the wall and many more!

- Online cam-based observation system allows the user to see all that is happening on site from any location on the planet with an Internet access. The camera's rotation angle is controlled by the user, so virtually any area of the premises is in the scope of the camera. The camera transmits color video and audio.



- The laser targeting system with read laser beam clearly shows to the operator the precise position for cleaning, degreasing and adding of self-adhesive weights. This function provides for significant time savings, lightens the work of an operator, and what is most important, increases the precision of the large-radius aluminum disc balancing in 6-hour mode.



- PROXY-6PC is equipped with «Electronic Secretary» feature and will never forget to send daily, weekly or monthly activity reports to your email address, provided it is connected to a power source and the Internet. The report includes the number of balancing operations and attempts for each employee by name and **the number of clip-on or stick-on weights used for each employee individually and in the aggregate.**

| Версия ПО V7.15 | Дата сброса грузов 26.08.2014 | | | |
|-----------------|-------------------------------|---------|----------|---------|
| | К.колес | К.старт | НАБ.груз | КЛ.груз |
| БОНАКОВ | 000023 | 000120 | 001620 | 004270 |
| Оператор2 | 000000 | 000000 | 000000 | 000000 |
| Оператор3 | 000001 | 000002 | 000005 | 000000 |
| Оператор4 | 000000 | 000000 | 000000 | 000000 |
| Оператор5 | 000000 | 000000 | 000000 | 000000 |
| Оператор6 | 000000 | 000000 | 000000 | 000000 |
| Оператор1 | 000000 | 000000 | 000000 | 000000 |
| Всего | 000024 | 000122 | 001625 | 004270 |

- The new option for disc run-out measurement.

The operator just needs to fix the disc on a shaft, switch on the disc run-out measurement function and the stand will start to spin the disc without measurement of unbalance for 30 seconds or until forced stoppage (only for visual diagnostics).

- «AUTO PROGRAM» function allows the user to perform balancing in any automatic or semi-automatic mode without the use of pushbuttons (the machine chooses the necessary mode by itself and intellectually adjusts its performance to the operators' work habits).

- Option «BRAKES», when necessary, allows reducing balancing process time by connecting, not just the motor, but also a brake cheek. This should save on average 6 seconds per cycle. This function makes this model one of the «fastest» among the world analogues in the premium segment.



- «3D-DISK» function allows seeing the 3D projection of a wheel on the monitor.



- «AUTO-SONAR» function provides an option of the disc parameters read-out in an automatic mode with the use of an ultrasonic sensor.
- Function «MEMORY» allows keeping a cumulative performance statistics of the machine for a certain period of time or an individual statistics.
- «AUTO-SUPPLY» function automatically turns a wheel further, so there is no need to turn it manually.
- Function «MOTO» allows balancing of motorcycle wheels.
- The new keyboard, specifically developed in accordance with the requests of many of our customers, is located directly under the monitor. The keyboard is equipped with tactile keys, new user-friendly menu, option to choose a control panel ground color, new sturdy operation desk with a great number of bins, allowing to have a necessary weight always at hand. All this and many more ensures fast and quality wheel balancing with less effort from the operator.



Consequently the use of PROXY-4PC will bring the maximum profit to your enterprise and earn it a solid reputation.

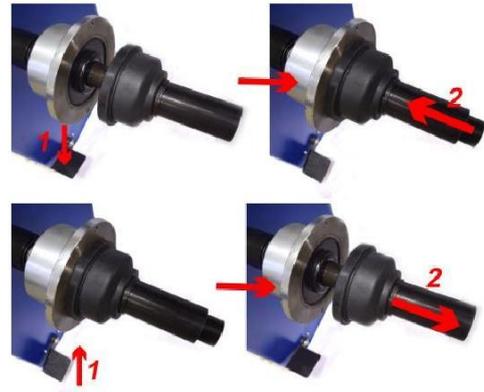
Standard list of equipment also includes such important accessories as:

- Extension shaft 40 mm in diameter
- Small, medium and large cones
- Hammer-pliers for removing and fitting weights on a disc.

Main technical characteristics:

- Accuracy readability, g 1
- Angular position measurement, angle grad 2,5
- Wheels parameters:
 - Rim diameter, inch (mm) 9(229) – 28(711)
For manual input - up to 30(762)
 - Rim width inch (mm) 15(381)-20(508)
 - Max. wheel weight, kg кг 80
- Power supply, V 220V±10%, 50 hz
- Max. power consumption, W no more than 250
- Pneumatic working pressure kg/sm² 7-10
- Dimensions (mm)
 - Housing 1100*700*1145(h)
 - Protective hood 900*500*450(h)
- Machine weight, kg no more than 120

Wheel Balancer PROXY-6P



Simplified version of **PROXY-6PC** does not have a cam in its standard list of equipment and does not have a feature for sending activity reports via e-mail.

Wheel Balancer PROXY5



The new user-friendly menu, option to choose a control panel ground color, new sturdy operation desk with a great number of bins, allowing to have a necessary weight always at hand. All this and many more ensures fast and quality wheel balancing with less effort from the operator. Consequently the use of PROXY5 will bring the maximum profit to your enterprise and earn it a solid reputation.

The new keyboard, specifically developed in accordance with the requests of many of our customers, is located directly under the monitor and has tactile keys.

PROXY5 has the following functions:

- «AUTO-SONAR» function provides an option of the disc parameters read-out in an automatic mode with the use of an ultrasonic sensor.
- «AUTO PROGRAM» function allows the user to perform balancing in any automatic or semi-automatic mode without the use of pushbuttons (the machine chooses the necessary mode by itself and intellectually adjusts its performance to the operators' work habits).



- Option «BRAKES», when necessary, allows reducing balancing process time by connecting, not just the motor, but also a brake cheek. This should save on average 6 seconds per cycle. This function makes this model one of the «fastest» among the world analogues in the premium segment.

- Special function for wheel balancing in any mode without the use of pushbuttons – the machine chooses the mode automatically.

- «3D-DISK» function allows seeing the 3D projection of a wheel on the monitor.



- «Function «MOTO» allows balancing of motorcycle wheels.

- Function «MEMORY» allows keeping a cumulative performance statistics of the machine for a certain period of time or an individual statistics.

- « AUTO-SUPPLY » function automatically turns a wheel further, so there is no need to turn it manually.

Standard list of equipment also includes such important accessories as:

- Extension shaft 40 mm in diameter
- Quick-lock nut by «Haweka» (Germany) (complete package)
- Small, medium and large cones
- Hammer-pliers for removing and fitting weights on a disc.

Main technical characteristics:

| | |
|--|--|
| - Accuracy readability, g | 1 |
| - Angular position measurement, angle grad | 2,5 |
| - Wheels parameters: | |
| • Rim diameter, inch (mm) | 9(229)-28(711) For manual input up to 30(762) |
| • Rim width inch (mm) | 15(381)-20(508) |
| • Max. wheel weight, kg кг | 80 |
| - Power supply, V | 220V±10%, 50 hz |
| - Max. power consumption, W | 250 |
| - Dimensions (mm) | |
| • Housing | 1100*700*1145(h) |
| • Protective hood | 900*500*450(h) |
| - Machine weight, kg | no more than 110 |

Universal Wheel Balancer "Maxi"



This model is a Universal Balancer for car and truck wheels. It is manufactured in three modifications: with digital data display and manual wheel lift, digital data display and pneumatic wheel lift, and with 17-inch color digital data display and pneumatic wheel lift.

For heavy wheel lifting (up to 200 kg) the machine is equipped with a vehicle dolly with built-in pneumatic lift. Mounting and demounting of a wheel is accomplished with the use of pneumatic cylinders and controlled by an operator with a joystick (considerable savings of time and effort) or manually.

Standard list of equipment includes a universal adapter for most types of truck wheels and a set of cones for cars.

Key features and embedded functions:

- New economical electric motor drive built from special «Mitsubishi» templates;
- «Car» and «truck» operating modes;
- Automatic recognition of a wheel type: car or truck;
- Special program brings the wheel to the correct position for application of corrective weights;
- Two-dimensional measuring scale for automatic input of wheel offset and diameter values;



- «ALU-P» program for selection of a correction plane for balancing wheels with light-alloy rims;
- «SPLIT» program for balancing weights application behind wheel spokes;
- «OPT» program for optimal positioning of a tyre on a rim;

- 8 balancing programs: «STANDARD», «STATIC», «5 ALU», «ALU-P»;
- Automatic brake;
- Brake for wheel locking;
- Independent mode setting for «truck» and «car»;
- 4 operators (memorization of the last settings and disc parameters);
- Automatic counting of balancing operations;
- Static unbalance minimization program;
- Self-diagnosis;
- Self-calibration.



Main technical characteristics:

| | Car mode | Truck mode |
|--|-------------------|-----------------|
| - Accuracy readability, g | 1 | 1 |
| - Measurement range, g | 0-150 | 0-450 |
| - Maximum permissible error with unbalance in one correction plane, g. no more than Where «M» is a measuring weight of a load | $\pm(3+0,1 M)$ | $\pm(3+0,1 M)$ |
| - Maximum permissible error for angular position measurement of the mass of the unbalance load, angle grad, no more than | ± 6 | ± 6 |
| - Wheels parameters: | | |
| • Rim diameter, inch (mm) with manual input up to 30(762) | 9(229)-28(711) | 9(229)-28(711) |
| • Rim width inch (mm) | 15(381)-20(508) | 15(381)-20(508) |
| • Max. wheel weight, kg | 70 | 200 |
| - Max. power consumption, W, no more than | 800 | |
| - Dimensions (mm): | | |
| • Without the hood | 1250x620x1050 (h) | |
| • With the hood | 1360x1360x1375 | |
| - Machine weight, kg, no more than | 130 | |

Balancing Stand "Plaza"



This model is a new modification of the low-cost balancer «Plaza».

It is equipped with a 21-inch color monitor and newly designed keyboard with tactile keys, located directly on the machine's top cover.

The telescopic arm provides for automatic input of two parameters: wheel diameter and the distance to the inner side of a correction plane.

The 21-inch color monitor with membrane keypad creates a user-friendly interface. It indicates the size of the weight and precise weight adding position, as well as diameter and width of the wheel. Control of the operation mode and activation of necessary functions is achieved by pushing a single button, which significantly simplifies the work process and reduces set-up time.

The software package has been extended. Besides the standard 5 «ALU» programs, it has «ALU-P » program for balancing high-quality wheels with light-alloy rims and «SPLIT» program for application of the invisible balancing weights behind wheel spokes for better appearance. Double-operation program is introduced; allowing storing the dimensions of two different types of wheels. Thus two operators can work simultaneously on two different cars with different sizes of wheels using the same balancing machine. Switching from one size to another is achieved by pushing a single button.



Main technical characteristics:

| | |
|------------------------------------|--|
| - Accuracy readability, g | 1 |
| - Wheels parameters: | |
| • Rim diameter, inch (mm) | 9(229)-20(508) For manual input up to 24(610) |
| • Rim width inch (mm) | 15(381)-20(508) |
| • Max. wheel weight, kg | 65 |
| - Power supply, V | 380/220V±10%, 50 hz |
| - Max. power consumption, W | 200 |
| - Dimensions (mm): | |
| • Housing with the hood lowered | 1100*910*1150(h) |
| • Housing with the hood raised | 1100*1380*1650(h) |
| - Machine weight, kg, no more than | 80 |



Balancing Stand "Patriot 2"



We would like to introduce to you a new model of a balancing machine LS 111, that went into production in 2014, - «Patriot 2».

Virtually every single module and unit of the machine has been modified. The computational unit is designed on the basis of 32-bit processor with ARM-7 core from «Philips». 2014 modification – is a new, more convenient and ergonomic faceplate and 40mm shaft for faster and quality wheel balancing.

The telescopic arm provides for automatic input of two parameters: wheel diameter and the distance to the inner side of a correction plane.

Faceplate with membrane keypad creates a user-friendly interface. It indicates the size of the weight and precise weight adding position, as well as diameter and width of the wheel. Control of the operation mode and activation of necessary functions is achieved by pushing a single button, which significantly simplifies the work process and reduces set-up time.

The software package has been extended. Besides the standard 5 «ALU» programs, it has «ALU-P » program for balancing high-quality wheels with light-alloy rims and «SPLIT» program for application of the invisible balancing weights behind wheel spokes for better appearance. Double-operation program is introduced; allowing storing the dimensions of two different types of wheels. Thus two operators can work simultaneously on two different cars with different sizes of wheels using the same balancing machine. Switching from one size to another is achieved by pushing a single button.



Main technical characteristics:

| | |
|------------------------------------|--|
| - Accuracy readability, g | 1 |
| - Wheels parameters: | |
| • Rim diameter, inch (mm) | 9(229)-20(508) For manual input up to 24(610) |
| • Rim width inch (mm) | 15(381)-20(508) |
| • Max. wheel weight, kg | 65 |
| - Power supply, V | 380/220V±10%, 50 hz |
| - Max. power consumption, W | 200 |
| - Dimensions (mm): | |
| • Housing with the hood lowered | 1100*910*1150(h) |
| • Housing with the hood raised | 1100*1380*1650(h) |
| - Machine weight, kg, no more than | 70 |

Balancer "Levsha"



«Levsha» is a microprocessor controlled machine capable of calculating the unbalance and the mass of corrective weights in a single measurement cycle. It is intended for use with passenger cars, SUVs and light trucks.

Features:

- Electric wheel brake;
- Automatic input of the distance;
- Zero adjustment;
- Automatic counting of balancing operations;
- 5 «ALU» programs;
- Static balancing program;
- Automatic calibration;
- Self-diagnosis.



Main technical characteristics:

| | |
|------------------------------------|-----------------|
| - Accuracy readability, g | 1 |
| - Wheels parameters:: | |
| • Rim diameter, inch (mm) | 9(229)-20(508) |
| • Rim width inch (mm) | 15(381)-15(381) |
| • Max. wheel weight, kg | 65 |
| - Power supply, V | 220V±10%, 50 hz |
| - Max. power consumption, W | 180 |
| - Dimensions (mm): | |
| • Housing | 460*830*900(h) |
| - Machine weight, kg, no more than | 60 |

Note: Balancing machine LS-21 comes without the protective hood.



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