



Joint Stock Company
«Luga Abrasive Plant»

32, Krasnoarmeyskaya street, Luga,
Leningrad region, Russia, 188230

Inquiry and sales services:

+7 81372 22593

+7 81372 22002

+7 81372 21937

Fax: +7 81372 40860

+7 81372 27800

+7 81372 41800

+7 81372 40780

e-mail: lap@abrasives.ru
www.abrasives.ru
www.lugaabrasiv.com

MAINTENANCE AND SAFETY GUIDANCE FOR WORK WITH BF BONDED GRINDING WHEELS

Russian Classification of Products by Economic Activities 2: 23.91.11.140
Customs Commodity Code EAEU : 6804 22 180 0

2017

The guidance is developed according to GOST R 52588 - 2011 "Abrasive tool. Safety requirements"

1. Conditions and storage period

1.1__BF bonded grinding wheels (hereinafter referred to as wheels) can be stored in dry, covered and well-ventilated rooms with a stable temperature within 15-20 ° C.

1.2__Wheels should not be stored together with chemicals and should not be subjected to one-sided heating, for example, should not be placed near heating elements.

1.3__Wheels should not be subjected to sudden shocks, hits and moisture.

1.4__Shelf life of the wheel since its manufacture – **3 years**. The date of manufacture is indicated on the metal bush ring which is pressed into a wheel.

2. Mounting and operation of abrasive tool on machine, precautions measures

2.1__Only people who have passed training, certification, qualification commission on occupational safety are allowed to work with grinding wheels.

2.2 __Equipment must be provided with:

- removing abrasive dust and waste from the working zone;
- protection of the worker against abrasive, metallic and non-metallic dust, particles of the processed material formed during the cutting;
- the abrasive tool and its fastenings should be protected by means of protection (protection hood, metal screen, protective shroud, etc.) included in the equipment, etc.

2.3 __Before installation on the machine, the wheels should be inspected

Do not use the wheel:

- **with cracks and scratches on the surface;**
- **without a mark for the test for mechanical strength;**
- **for face grinding.**

2.4__Wheels should be tested for mechanical strength with a test run rate of $V_{pr} - 100\%$ in accordance with GOST R 52588-2011. On the instrument that passed the test, must be a mark of the test indicating the serial number and the date of the test.

2.5__The cardboard blotter or flexible material blotter with the thickness from 0,5 up to 1,0ì ì must be placed between clamping flanges and a wheel. The blotter should cover the entire clamping surface and splay out proportionally along the whole circular length no less than 1 mm. Blotters did not use in a mounting wheel type 27. Label on a wheel as a blotter is prohibited to use.

2.6__Before you start the work, a wheel should be subject to a trial test by idle running on machine or portable grinder with the operating speed during 2 min -for wheels with diameter till 400mm , and 3 min for wheels with diameter more than 400mm.

2.7__During wheels fixing.

2.8__The operator must work in personal protective equipment:

Safety goggles

Ear protectors

Respiratory protection

Additionally, protective gloves must be used while working with a portable grinder

2.9__It is not allowed to use wheels on operations prohibited by safety signs, exceeding the speed indicated on the label.

2.10__When installing on equipment or hand tools, it is essential to comply with the safety requirements for the operation of this equipment.

3. The list of possible erroneous actions, which can lead to an accident

- mechanical damages of wheels;
- application of modes above permissible;
- mounting of inappropriate tools on machines;
- absence of machine balance according to the passport;
- absence of the consumer's test mark for the wheels ;
- rotational speed excess;
- absence of protection hood;
- absence of proper employees' training;
- the use of attachments to spanners, as well as a impact driver when securing the wheel;
- spindle wavering exceeding the standard;
- improper tool storage.

4. Guidelines for safe utilization

The worked-out wheels according to the "Federal Classificatory Catalogue of Waste" (FKKO-2017) refer to waste of the 5th class (code 456 100 01 51 5 "Abrasive wheels waste, scrap of used abrasive wheels"). Wastes from the worked-put wheels are not dangerous ecologically and can be recycled to the landfill of domestic and industrial waste.