



**POLTAVA
DIAMOND
TOOLS**



Traditions of quality since 1966

Diamond Profile Dressing Rollers

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Diamond profile dressing rollers are an integral part of modern grinding technology and are mainly used in serial and mass production. Diamond rollers are used for dressing of abrasive wheels.

With the help of diamond rollers, a copy of the profile of the required part is created on the surface of the working abrasive wheel. Then the abrasive wheel transfers this profile to the workpiece. At the same time, diamond rollers allow to combine several processing transitions at once, including turning, milling and preliminary grinding.

The production program of **POLTAVA DIAMOND TOOLS** includes the production of diamond rollers which are used for:

- crankshaft processing;
- processing of ball pins;
- grinding of piston rings;
- valve handling;
- manufacturing of turbine blades;
- manufacturing of cogwheels;
- manufacturing of threaded connections;
- manufacturing of details of the bearing industry.

Advantages in application of diamond profile dressing rollers:

- creation of the abrasive wheel's surface within minimum possible time;
- profiling the surface of the abrasive wheel in one operation;
- high accuracy even during the creation of very complex profiles.

Picture 1

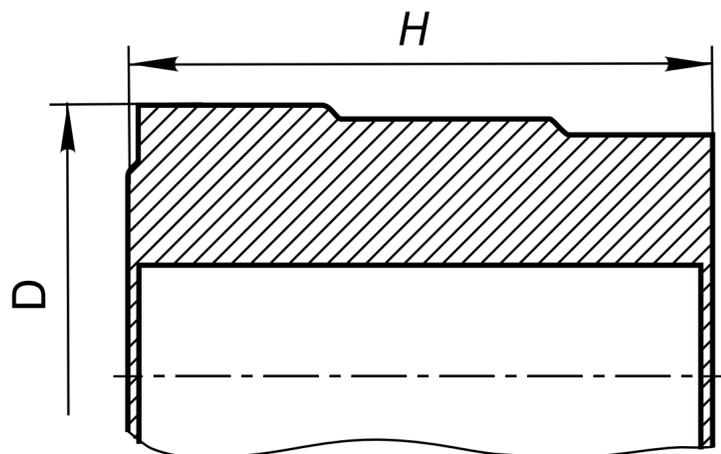


Table 1

Dimensions	Diamond roller Dimensions, mm 02H*
D max	160
D min	26
H max	140
H min	10

* - 02H - the method of electroforming with a non-orientable arrangement of diamonds bonded with a metal bond. The ratio of the diameter of the diamond roller to its height should be no more than 0.9

Picture 2
Minimum tolerances for the shape and arrangement of diamond roller surfaces

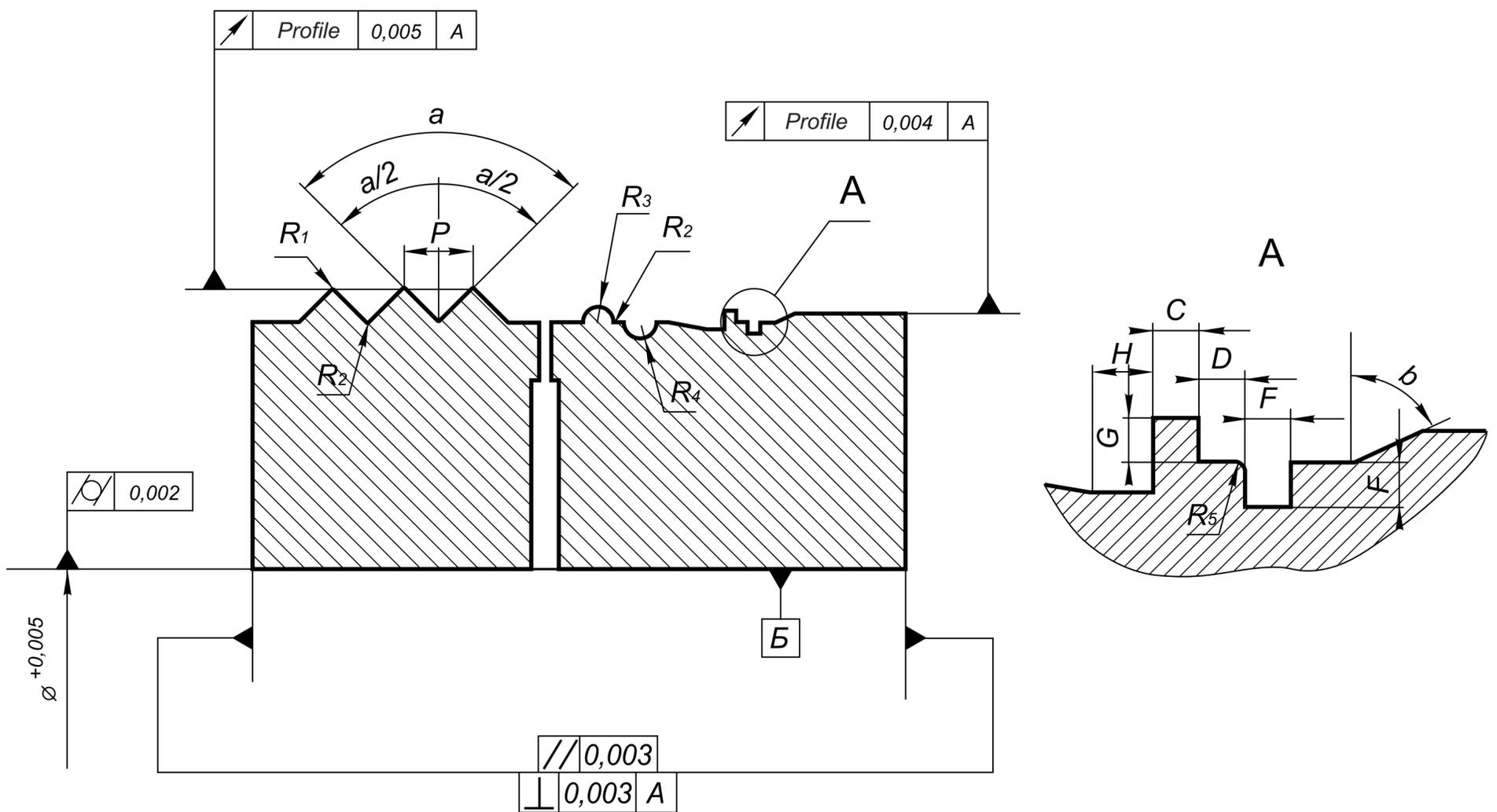


Table 2

$C = \pm 0,02$	$H = \pm 0,02$	$R_4 = 0,01$
$D = \pm 0,02$	$P = \pm 0,003$	$R_5 = 0,012$
$E = \pm 0,02$	$R_1 = 0,15$	$a = \pm 3'$
$F = \pm 0,02$	$R_2 = \pm 0,12$	$a/2 = \pm 3'$
$G = \pm 0,01$	$R_3 = \pm 0,01$	$b = \pm 3'$

Examples of order

Шифр	D, мм	H, мм	d, мм
R-0628	90	30	52
R22612	90	38	52
R24330	90	64	63

Diamond roller R-0628 (analog IK628) 90-30-52 from diamonds AC160, grit size D301.
(The type and size of the diamond are agreed with the customer)

Diamond roller R-22612 (analog IK2261) 90-38-52 from diamonds AC160, grit size D251.
(The type and size of the diamond are agreed with the customer)

Diamond roller R-24330 (analog IK2433) 90-64-63 from diamonds AC160, grit size D426.
(The type and size of the diamond are agreed with the customer)

Each roller is accompanied by a measurement protocol that meets the customer's requirements, as well as a control sample of the roll profile.

Attention: POLTAVA DIAMOND TOOLS also produces other shapes and types of diamond rollers.



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