

**621.883.002.56**

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**1.**

, [1, 2].  
 [3, 4].  
 [3, 4].  
 [1, 5],  
 [4, 6].  
 [7].  
 2742—94 ( 5006—94).  
 [8]. [2, 3].

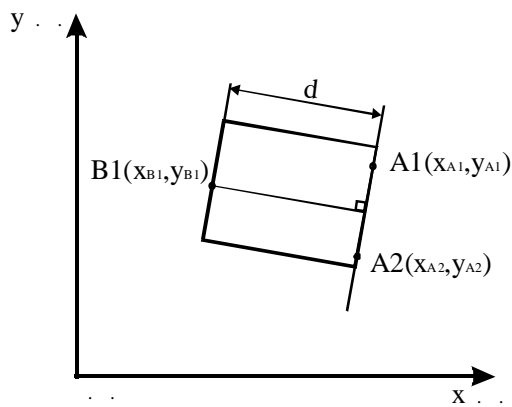
2.

[7]:

$$\frac{(x \cos(\alpha) + y \sin(\alpha) - x_0 \cos(\alpha) - y_0 \sin(\alpha))^2}{a^2} + \frac{(-x \sin(\alpha) + y \cos(\alpha) + x_0 \sin(\alpha) - y_0 \cos(\alpha))^2}{b^2} = 1,$$

$x_0, y_0$  —  
 ;  
 a, b —

[7],



. 1.

$y(x) = kx + b,$  (1)

$\left. \begin{aligned} y_{A1} &= kx_{A1} + b, \\ y_{A2} &= kx_{A2} + b, \end{aligned} \right\}$  (2)

$k = \frac{y_{A1} - y_{A2}}{x_{A1} - x_{A2}},$   
 $b = \frac{x_{A1}y_{A2} - x_{A2}y_{A1}}{x_{A1} - x_{A2}}.$  (3)

$y(x) = \frac{y_{A1} - y_{A2}}{x_{A1} - x_{A2}}x + \frac{x_{A1}y_{A2} - x_{A2}y_{A1}}{x_{A1} - x_{A2}}.$  (4)

[9].

$Ax + By + C = 0,$  (5)

$A = -\frac{y_{A1} - y_{A2}}{x_{A1} - x_{A2}},$   
 $B = 1;$  (6)

$C = -\frac{x_{A1}y_{A2} - x_{A2}y_{A1}}{x_{A1} - x_{A2}}.$  (7)

[9]:  
 $\mu = \frac{1}{\sqrt{A^2 + B^2}}.$  (8)

$\mu = \frac{x_{A1} - x_{A2}}{\sqrt{(y_{A1} - y_{A2})^2 + (x_{A1} - x_{A2})^2}}.$  (9)

[9]:

$$x \cos \alpha + y \sin \alpha + p = 0, \quad (10)$$

:

$$\cos \alpha = A\mu = -\frac{y_{A1} - y_{A2}}{\sqrt{(y_{A1} - y_{A2})^2 + (x_{A1} - x_{A2})^2}}; \quad (11)$$

$$\sin \alpha = B\mu = \frac{x_{A1} - x_{A2}}{\sqrt{(y_{A1} - y_{A2})^2 + (x_{A1} - x_{A2})^2}}, \quad (12)$$

p -

:

$$p = -\frac{x_{A1}y_{A2} - x_{A2}y_{A1}}{\sqrt{(y_{A1} - y_{A2})^2 + (x_{A1} - x_{A2})^2}}; \quad (13)$$

 $\alpha$  - ,

Ox

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$$(11), (12) \quad (13) \quad (10) \quad -$$

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$$-x(y_{A1} - y_{A2}) + y(x_{A1} - x_{A2}) - (x_{A1}y_{A2} - x_{A2}y_{A1}) = 0. \quad (14)$$

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(14):

$$d = -x_{B1}(y_{A1} - y_{A2}) + y_{B1}(x_{A1} - x_{A2}) - (x_{A1}y_{A2} - x_{A2}y_{A1}),$$

 $x_{B1}, y_{B1}$  -

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$$M = \frac{R_M}{d} = \frac{R_M}{-x_{B1}(y_{A1} - y_{A2}) + y_{B1}(x_{A1} - x_{A2}) - (x_{A1}y_{A2} - x_{A2}y_{A1})},$$

 $R_M$  —

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**DEFINITION OF THE IMAGE SCALE FACTOR  
TEETH OF HUB GEAR COUPLING**

*The paper shows the definition of scale factor for images sleeve gear couplings, from the end of the ring gear produced by the scanner. To determine the scaling factor is introduced into the measuring system of the object whose dimensions are known in advance - a measure of terminal lengths. The obtained value of the scale factor to determine the actual size of the image under consideration sleeve gear couplings, obtained from a scanner.*

**Keywords:** gear clutch, teeth of hub, surface depressions of the teeth, the base end, an ellipse, scale factor.