

EVALUATION CRITERIA OF MIRRORS WITH ILLUMINATION

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12.11.2019

Terminology:

The following definitions are referred to in the PN-EN 1036-1 standard:

Point defects: embryos (solid or gaseous inclusions), deposits, traces of seizure, etc. In some cases, point defects are accompanied by an optical distortion zone called "halo" (border, envelope). Embryos of point defects are measurable.

Brush marks: very thin, circular scratches, barely visible, associated with glass washing techniques. **Cluster:** a group of not less than 3 point defects, separated by no more than 50 mm.

1. Assessment of optical quality

Qualitative assessment of mirror elements

Mirrors, set in an upright position, are observed from a distance of 1 m with the naked eye, in natural daylight conditions or with lighting simulating such lighting. It is recommended that the appraiser during the assessment changes the angle at which he views the surface (the element remains stationary). The final result of the assessment can be affected only by defects visible under the conditions described.

Table. Acceptance criteria for product defects.

1. Glass defects - points and scratches

Glass surface	Point defects Surface defects				Surface defects	
	Central band		Edge band		Hairline scratches	Scratches
	≥ 0,3 mm ≤ 0,5 mm	> 0,5 mm ≤ 1,0 mm	≥ 0,3 mm ≤ 0,5 mm	> 0,5 mm ≤ 1,0 mm	< 50 mm	
≤ 0,3 m2	1	0	3	0	2	0
0,31 – 1,0 m2	3	1	3	1	3	0
1,01 – 1,5 m2	3	2	4	2	4	0
> 1,51 m2	4	3	5	3	4	0

The size of the edge band represents 15% of the mirror dimension from the sanded surface. Defects less than 0.3 mm are allowed only if it do not form clusters.

