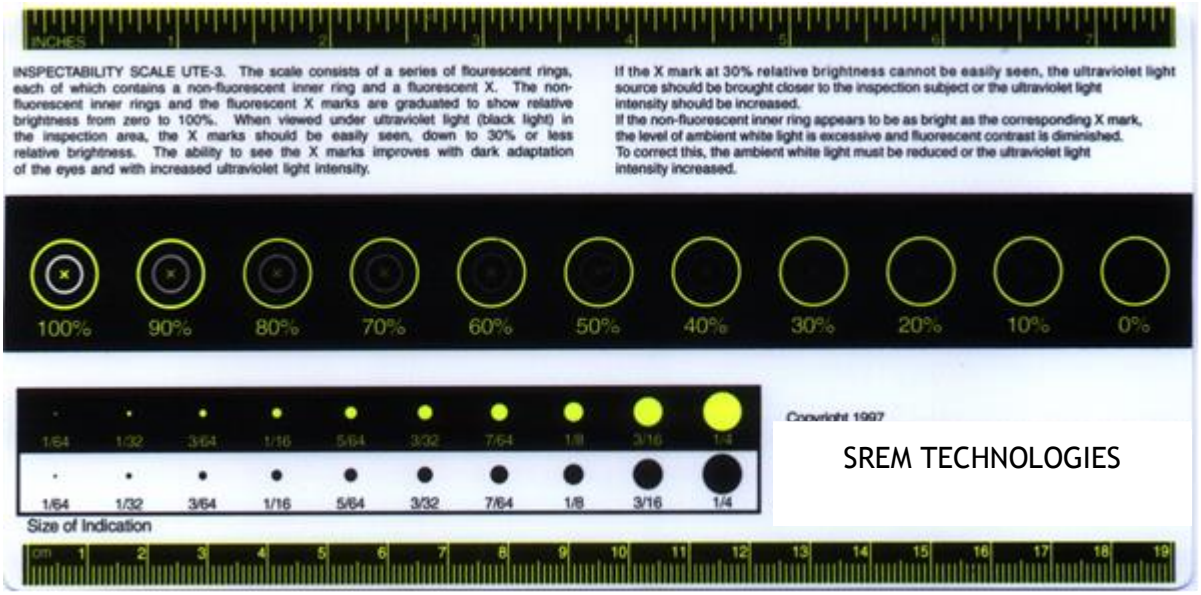
INSPECTABILITY SCALE UTE-3 FOR INSPECTION UNDER ULTRAVIOLET RADIATION (UV-A)



The inspectability scale UTE-3 for inspection under ultraviolet radiation (UV-A) enables you to determine if the fluorescent brightness of the indications on the surface under inspection is sufficient, and if it offers adequate contrast with the ambient white light. It also allows you to ascertain whether the inspector's vision has adapted sufficiently to be able to distinguish the dimensional readings that he is looking for.
The UTE-3 scale is made up of a series of concentric circles inside which there are smaller white concentric circles, with a fluorescent “X” cross mark at the centre. The fluorescent brightness of each of the white circles with successive fluorescent “X” marks gradually diminishes until the last in the series is no longer visible.

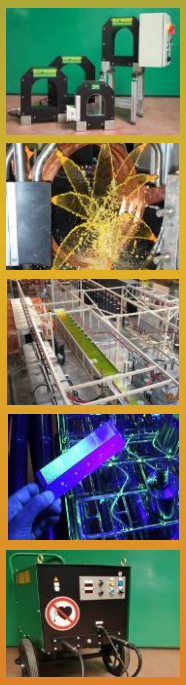
PROCEDURE:

Place the UTE-3 scale in the inspection cabin (or the inspection area), under ultraviolet radiation (UV-A), on the work surface or on the surface to be inspected so that the inspector can determine which of the “X” marks he can still see. The inspector must be able to see them easily, as far as those corresponding to a relative fluorescence brightness of 30% or even less.

If this is not the case, the inspector must wait a moment longer before inspecting the parts. This waiting time corresponds to the time necessary for visual adaptation under ultraviolet radiation (UV-A) in the inspection cabin (or the inspection area). After exposure to daytime brightness, even for a short time, the human eye only gradually recovers its sensitivity to low brightness; this visual adaptation, which must therefore be checked, generally takes several minutes.

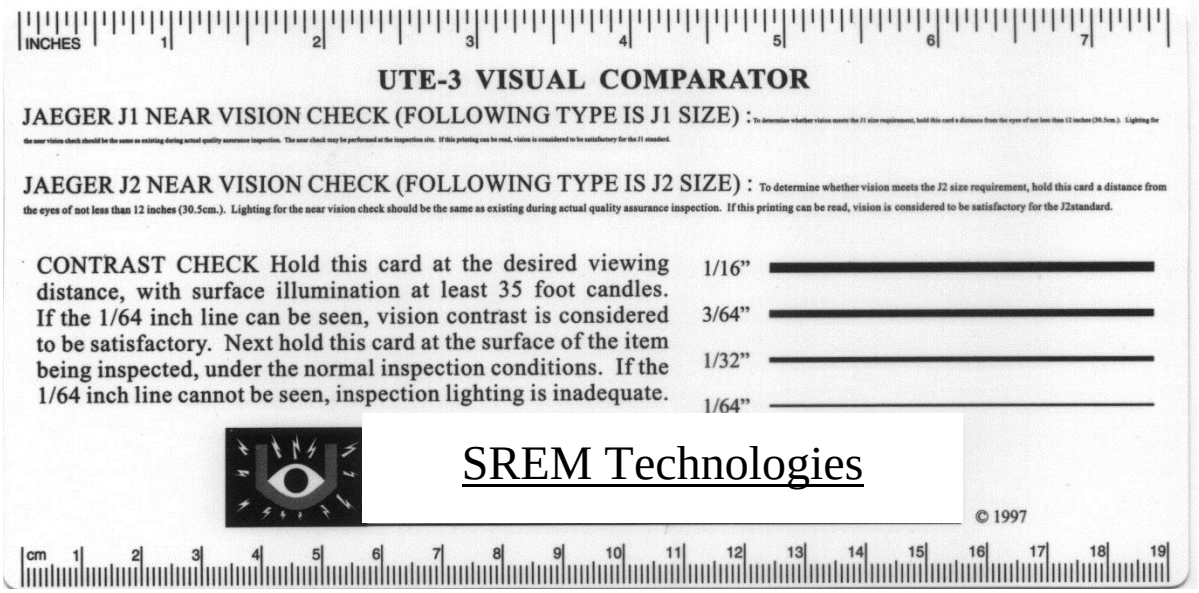
The visibility of these “X” marks is improved:

- Either by increasing the ultraviolet irradiance (UV-A), for example by moving the ultraviolet (UV-A) light source nearer to the surface to be inspected.
- Or by visual adaptation in ultraviolet light (UV-A).

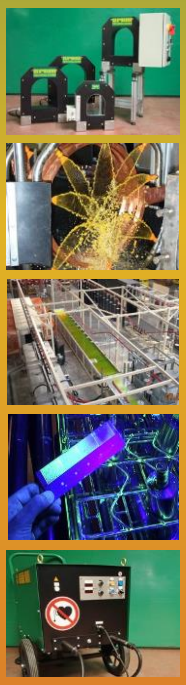


SREM Technologies
ZI Ouest,
14 rue des Frères Chappe
72200 La Flèche
Tel: 02 43 48 15 10
Mail: info@srem.fr
Web: www.srem.fr

VISUAL ACUITY COMPARATOR:



The visual acuity comparator, which is on the other side of the UTE-3 inspectability scale for inspection under ultraviolet radiation (UV-A), includes sentences printed in Jaeger 1 (J1) and Jaeger 2 (J2) font. The ability to read the appropriate sentence (J1 or J2 according to the applicable specification) on the inspected surface indicates the visual acuity of the inspector in the test illumination conditions. If the inspector can read lines J1 and J2 normally with the naked eye but is unable to do so on the inspected surface (in the same illumination conditions), this means that the illumination conditions are not appropriate and must be improved.
There is also a series of lines with specified thicknesses which must be visible if the contrast is correct in the test illumination conditions. If the 1/64'' line is not clearly visible when the Comparator is applied on the surface under inspection, this means that the illumination is not correct.



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SREM Technologies
ZI Ouest,
14 rue des Frères Chappe
72200 La Flèche
Tel: 02 43 48 15 10
Mail: info@srem.fr
Web: www.srem.fr