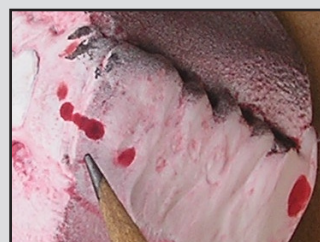




Penetrant Professor Approved



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Find Cracks Fast

A Guide to Visible Dye Penetrant Inspection



Encuentre las Discontinuidades Rapidamente

Inspección con Penetrantes Rojos



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Method "C" Instructions

Use **Met-L-Chek® E-59A, R-503,** or **R-504** cleaner to remove oil, grease and other contaminants from test surface. Spray surface and wipe clean. Repeat as needed. Allow part to dry completely before applying penetrant.



Apply penetrant onto clean dry test surface which is at a temperature between 40°-125°F (4°-52°C). Allow a minimum penetration time of 10 minutes for specification work.



Use clean lint-free cloth to remove most of the surface penetrant. Dampen a clean cloth with **E-59, E-59A, R-503,** or **R-504** and wipe remaining penetrant from the surface. **Do not spray cleaner directly onto the surface as sensitivity will be impaired.**



Shake **Met-L-Chek® D-70** before using to re-suspend developer. Spray a thin even coating on the part surface. Avoid a wet runny coating. Allow 10 minutes for thorough indication development.



Inspect **visible penetrants** under bright white light.



Instrucciones del Método "C"

Use el limpiador de **Met-L-Chek® E-59A, R-503,** ó **R-504** para remover aceite, grasa, y otros contaminantes de la superficie. Aplique el limpiador a la superficie y con un trapo frote hasta que quede limpio. Repita tantas veces lo requiera. Deje que la parte seque completamente antes de aplicar el penetrante

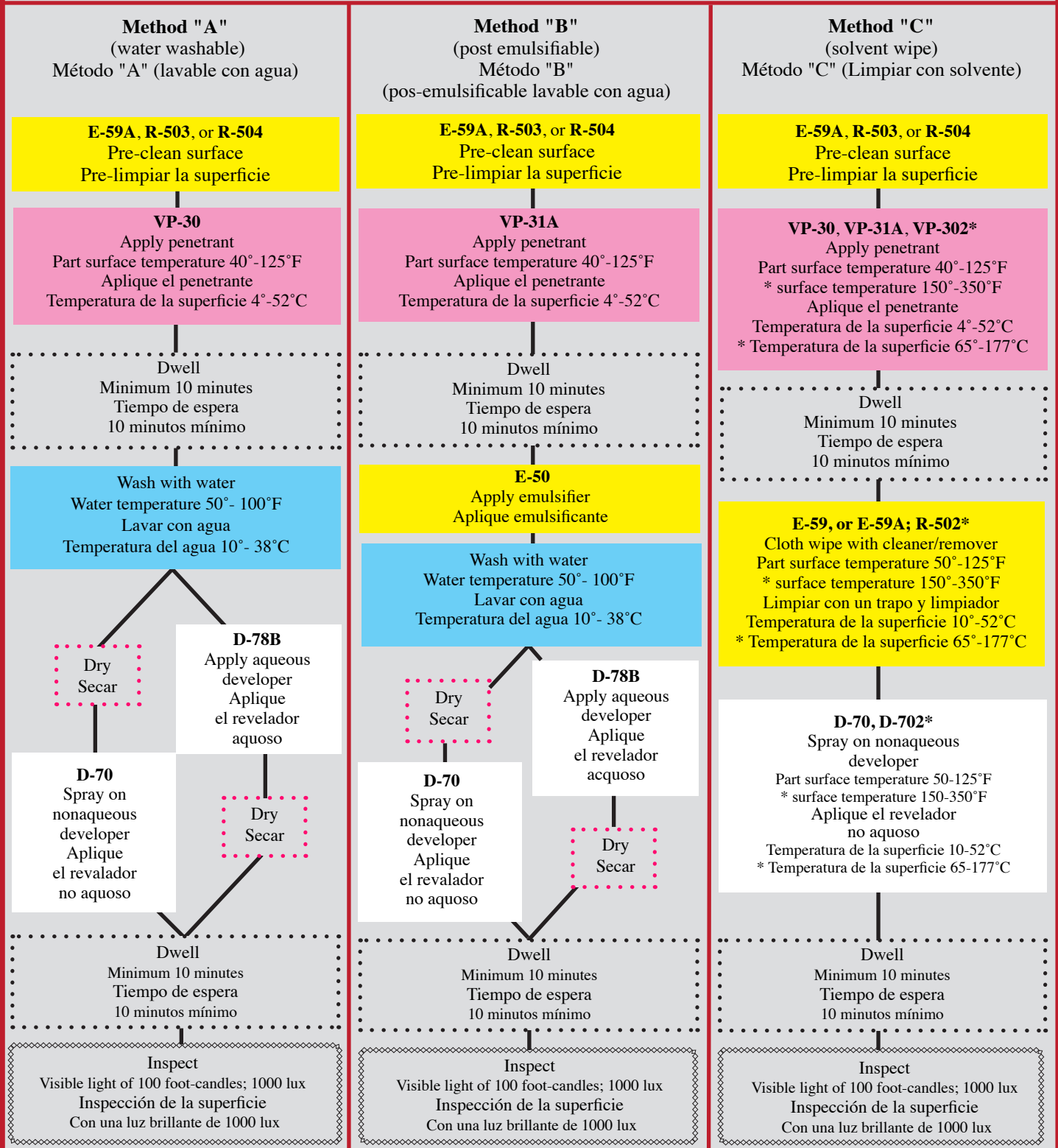
Aplique el penetrante en la superficie limpia, que debe estar a una temperatura entre 4°-52°C (40°-125°F). Permita un tiempo mínimo de 10 minutos para que el penetrante entre en las discontinuidades de la superficie.

Use un trapo limpio para remover el exceso del penetrante. Humedezca un trapo con **E-59, E-59A, R-503,** o **R-504** y páselo nuevamente para quitar el restante. **No aplique el limpiador directamente a la superficie, puede disminuir la sensibilidad.**

Agítese bien el revelador **Met-L-Chek® D-70** antes de cada uso. Aplíquese una capa uniforme y delgada en la superficie, evite que la capa se humedezca. Permitase 10 minutos para que el penetrante emerja de las discontinuidades.

Inspeccione los **penetrantes visibles** bajo una luz clara y brillante.

Visible Penetrant Inspection Methods based on **ASTM E-1417**
 Los métodos de inspección con penetrantes rojos segun **ASTM E-1417**



Met-L-Chek® means Quality (Calidad).

Met-L-Chek® penetrant inspection materials are approved to **AMS-2644**. They are certified to meet the **ASME Boiler and Pressure Vessel Code, ASTM E-1417, NAVSEA 250-1500-1, and RDT** requirements.

Met-L-Chek® means Expertise (Experiencia).

Met-L-Chek® has been supplying the NDT field since **1952**.

Met-L-Chek® means Value (Valor).

Met-L-Chek® es calidad, experiencia, y servicio; valor total.

Met-L-Chek® visible (Type 2) penetrant materials per ASME & ASTM E-1417

NAME	MATERIAL TYPE	Sulfur	Chlorine
VP-30	Penetrant, water washable (lavable con agua)	< 200 ppm	< 100 ppm
VBP-300	Penetrant, water washable (lavable con agua)	< 200 ppm	< 100 ppm
VP-31A	Penetrant, post emulsifiable (pos-emulsificable lavar con agua)	< 200 ppm	< 100 ppm
VP-302	Penetrant, high temperature (alta temperatura)	< 100 ppm	< 100 ppm
E-50	Emulsifier(emulsificador)	< 200 ppm	< 200 ppm
E-59	Remover (limpiador)	< 100 ppm	<100 ppm
E-59A	Cleaner/Remover(limpiador)	< 50 ppm	< 50 ppm
R-502	Cleaner/Remover, high temperature (alta temperatura)	< 300 ppm	< 300 ppm
R-503	Cleaner/Remover(limpiador)	< 100 ppm	< 100 ppm
R-504	Cleaner/Remover(limpiador)	< 100 ppm	< 100 ppm
D-70	Developer, nonaqueous (revelador no acuoso)	< 200 ppm	< 200 ppm
D-78B	Developer, water suspendible (revelador acuoso)	NA	NA
D-702	Developer, high temperature (alta temperatura)	< 200 ppm	< 200 ppm

INSPECTION KITS: (Estuches de inspección que contienen todo lo necesario para ejecutar inspecciones).

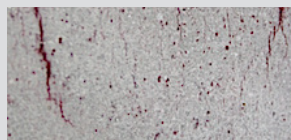
Test Kit #1016: Water washable or solvent wipe technique; VP-30, E-59A, & D-70 (Método A o C).

Test Kit #2016: Solvent wipe technique; VP-31A, E-59A, & D-70 (Método B o C).

Test Kit #8000: High temperature penetrant, wipe technique; VP-302, R-502, & D-702, (Método C, alta temperatura)

Available in 4 or 8 can kits, cases of 12 - 400 ml (16 oz. vol) aerosols, and bulk.

Disponibles en estuches de 4 o 8 aerosoles, cajas de 12 sprays de 400 ml. y en cantidades mas grandes.



High Temperature
Penetrant Inspection



Authorized Distributor