



# Process description according to ASTM E1417 SURFACE PREPARATION:



The surface to be examined shall be clean, dry and free of all material that could prevent the penetrant from entering discontinuities. One or more cleaning methods such as solvent cleaning, vapor degreasing, ultrasonic cleaning, aqueous-based cleaning can be used. Chemical or Mechanical cleaning shall be done if necessary.

#### PENETRANT APPLICATION:



Type 2 - Method C:

MR® 62 Penetrant red (AMS 2644) - solvent removable

Type 2 - Method A/C:

MR® 311-R Penetrant red (AMS 2644) – water washable / solvent removable

Application:

By spraying, dipping, brushing or other method to provide coverage

Penetrant dwell time:

Minimum 10 min. for temperatures between 50 and 125 °F (10 to 52 °C) Minimum 20 min. for temperatures between 40 and 50 °F (4 to 10 °C)

#### **PENETRANT REMOVAL:**



Method A:

With water

Water-washable penetrants shall be removed with a manual or automated water spray, or a manual wipe, or an air agitated immersion wash.



Method C:

With MR $^{\rm @}$  79 Remover (AMS 2644) – Class 2 - Solvent With MR $^{\rm @}$  88 Remover (AMS 2644) – Class 2 - Solvent

Water-washable or Solvent-removable penetrants shall be removed by first wiping the excess penetrant with a clean, dry cloth, then the remainder of the surface penetrant is removed with a solvent-dampened cloth or towel.

## **DRYING:**

The components shall be dried prior to the application of non-aqueous developer.

## **DVELOPING**



 $\rm MR^{8}$  70 I Developer (AMS 2644) - Form e shall be applied over the entire surface to form a uniform white coating.

<u>Development time\*:</u> Minimum: 10 min. / Maximum: 60 min.

## **EXAMINATION**



Daylight: Examination surface shall be minimum 100 fc (1076 lx). All components shall be interpreted before the maximum developing time.

If necessary: recording, post-cleaning and protection

01.07.2019 \*\*Technical changes reserve!\*\*

<sup>\*</sup>unless otherwise specified