Assignment 12

The due date for submitting this assignment has passed.

Due on 2020-02-22, 23:59 HST.

1. Metallurgical investigation on defect is necessary to identify the following:
   - Grain chemistry
   - Grain properties
   - Origins of defect
   - No, the answer is incorrect.
   - Accepted answers
   - Origin of defect

2. It is necessary to specifically study the following feature of defects:
   - Size and shape
   - Location
   - None of these
   - No, the answer is incorrect.
   - Accepted answers
   - Size and shape

3. Though a precise microstructure is necessary for the following:
   - Determining a reoccurrence
   - Preventing future occurrence
   - None
   - No, the answer is incorrect.
   - Accepted answers
   - Preventing future occurrence

4. Under conditions of stress or corrosive medium, crack may be traced to:
   - Poor cleanliness
   - Process variation
   - Stress concentration
   - No, the answer is incorrect.
   - Accepted answers
   - Stress concentration

5. Put more current analysis, ... study has to be supplemented with:
   - Nothing
   - Process analysis
   - Prior knowledge
   - No, the answer is incorrect.
   - Accepted answers
   - Process analysis

6. A watertight sheet in a wrought steel plate may have its origin in:
   - Corrosive environment
   - Refining furnace
   - Hot working temperature
   - Sulfur centering on crack side
   - Heat deformation per pass
   - No, the answer is incorrect.
   - Accepted answers
   - Sulfur centering on crack side

7. The general of entrainment of defect can be specifically found out by:
   - Optical microscope
   - EDS with XRD – XPS
   - Uniaxial test
   - No, the answer is incorrect.
   - Accepted answers
   - EDS with XRD – XPS

8. The following feature apparent to a crack in final product can ascertain whether crack was pre-existing in cast stage, or got generated during final point processing:
   - Deformation
   - Corrosion
   - Cracks
   - No, the answer is incorrect.
   - Accepted answers
   - Corrosion

9. Possible solutions for edge crack in AISI-304 stainless steel is:
   - Low - 0
   - Low finishing temperature
   - High - 0
   - No, the answer is incorrect.
   - Accepted answers
   - Low - 0

10. Possible solutions for intergranular cracks in austenitic steel:
    - Nothing
    - Chemistry adjustment
    - Protective coating powder
    - No, the answer is incorrect.
    - Accepted answers
    - Chemistry adjustment