

IC192

Revision Level D

Revision Date September 06, 2001

LIQUID PENETRANT TEST MATERIAL REQTS PER NAVSEA 250-1500-1 & MIL-STD-2132

IC192-20010906

ALL TESTING SHALL BE PERFORMED ON THE MATERIAL IN THE FORM DELIVERED TO NEWPORT NEWS SHIPBUILDING BY THE SUPPLIER. THE LATEST REVISION OF A REFERENCED SPECIFICATION SHALL BE USED FOR TESTING, UNLESS OTHERWISE APPROVED. A "VENDOR INFORMATION REQUEST" SHALL BE SUBMITTED FOR ALL DEPARTURES AND PROPOSED DEPARTURES FROM THE FOLLOWING REQUIREMENTS.

1. EACH BATCH OF PENETRANT AND DEVELOPER MATERIALS, SHALL BE TESTED FOR RESIDUAL AMOUNT OF TOTAL HALOGENS AND TOTAL SULPHUR EXCLUSIVE OF CARRYING LIQUIDS OR GASES. TO DETERMINE THE RESIDUAL AMOUNT OF TOTAL HALOGENS AND SULPHUR, A QUANTITY OF DRY RESIDUE, SUFFICIENT FOR ANALYSIS BY THE TEST METHODS SPECIFIED BELOW, SHALL BE COLLECTED FROM EACH MATERIAL TO BE TESTED BY CAREFULLY EVAPORATING OFF THE SOLVENT. ANALYSIS OF THE RESIDUE FOR TOTAL SULPHUR SHALL BE IN ACCORDANCE WITH ASTM D-129, (EXCEPT FILTRATION PRIOR TO CONDUCTING THE SULPHUR ANALYSIS IS ACCEPTABLE) OR ASTM D-1552. ANALYSIS OF THE RESIDUE FOR TOTAL HALOGENS SHALL BE IN ACCORDANCE WITH ASTM D-808 AND ASTM E-165 (ANNEX 3). AS AN ALTERNATE, ANALYSIS OF THE RESIDUE FOR TOTAL HALOGENS AND SULPHUR SHALL BE IN ACCORDANCE WITH ASTM E-165 (ANNEX 4). THE RESIDUAL AMOUNT OF TOTAL HALOGENS AND TOTAL SULPHUR SHALL NOT EXCEED 1 PERCENT BY WEIGHT OF THE RESIDUE.

2. EACH BATCH OF DYE PENETRANT REMOVER SHALL BE TESTED FOR RESIDUE CONTENT BY ASTM D-1353, EXCEPT BAKING OF THE REMOVER MAY BE IN ACCORDANCE WITH ASME CODE PROCEDURES. IF THE RESIDUE CONTENT EXCEEDS 0.005 g/100 ml, THEN THE RESIDUE SHALL BE ANALYZED BY ASTM D-129 (OR ASTM D-1552), ASTM D-808, AND ASTM E-165 (ANNEX 3). AS AN ALTERNATE, ANALYSIS OF THE RESIDUE FOR TOTAL HALOGENS AND SULPHUR SHALL BE IN ACCORDANCE WITH ASTM E-165 (ANNEX 4). [IF THE RESIDUE IS NOT OF SUFFICIENT QUANTITY TO PERFORM THE TESTS FOR TOTAL HALOGENS AND SULPHUR AS SPECIFIED, A SUFFICIENT QUANTITY OF PENETRANT REMOVER SHALL BE REDUCED TO OBTAIN A SUFFICIENT AMOUNT OF RESIDUE FOR THE TESTS.] THE RESIDUAL AMOUNT OF TOTAL HALOGEN AND TOTAL SULFUR SHALL NOT EXCEED 1 PERCENT BY WEIGHT OF THE RESIDUE.