STANDARD PHRASEOLOGY

SECTION G

l. This section of standard phraseology is for general use in piping disciplines.	
Hydrostatically test, using at PSIG for a minimum of minutes. Allowable leakage: None.	
G1	
NOTE: USE ASTM F993, OR 810-5596087, SUPSHIP PORTSMOUTH STANDARD DRAWING VALVE LOCKING DEVICE (FOR CABLE LOCKING DEVICES, BUTTERFLY VALVES, AND LOCKED POSITION INDICATORS).	
Install new locking devices on each valve listed in $__$ in accordance with 2. $_$.	
G2	
NOTE: USE IN REPAIR OR SHIPALT WORK ITEMS FOR CLEANING NEW AND MODIFIED LEVEL II (AS DEFINED IN GSO SECTION 505j2)	

Isolate components subject to damage and clean the new and modified piping system to a cleanliness level that results in the internal surfaces being visually free of grease, oil, flux, scale, dirt, loose particles, and any other contamination foreign to the base metal. Tap water residues on metals and light superficial rust on carbon steel surfaces, caused by a short time exposure to the atmosphere, are permitted. Light dust on cleaned surfaces is not objectionable, provided that the quantity and size of the particle does not adversely affect system operation.

PIPING SYSTEMS WHICH DO NOT REQUIRE SPECIAL CLEANING REQUIREMENTS. REFER TO NOTE 1 IN GSO SECTION 505K2 FOR

SYSTEMS REQUIRING SPECIAL CLEANING REQUIREMENTS.

G3a

USE FOR CLEANING NEW AND MODIFIED LEVEL III PIPING NOTE: SYSTEMS.

Isolate components subject to damage and clean the new and modified piping system to a cleanliness level that results in the internal system surfaces being cleaned free of contamination and any remaining residue on the surface does not interfere with the operation of or damage system components.

G3b

matter, where removal can be accomplished by hand tools. Take precautions to maintain phonographic finish on flanges that have it.
G4
The copper-nickel piping shall be MIL-T-16420, Type, Class, inch wall thickness.
G5a
The carbon steel piping shall be MIL-P-24691.
G5b
The copper piping shall be MIL-T-24107,inch wall thickness.
G5c
Purge, evacuate, and dehydrate in accordance with 2 Charge with refrigerant in accordance with 2
G6
NOTE: FOR USE WITH 810-4714432 REV J, FOR PIPING HANGERS.
NNSY Standard Drawing, Std Pipe Hangers Fabrication Dets & Instl Instr (Non-Nuc Constr)
G7
Empty and clean, including piping associated with this Work Item.
G8
Align the piping to each Piping shall be supported independently and shall not impose a strain.
G9a
Align the piping to each Piping shall be supported independently and shall not impose a strain on the equipment.
G9b

Restore piping flange mating surfaces exposed by disassembly of piping system. Repair by removing high spots, burrs, abrasions, and foreign

NOTE: FOR REFERENCE USE 804-1385781, HANGERS, PIPE, FOR
SURFACE SHIPS.
Install new hangers on new piping in accordance with 2
G10a
Install new hangers to support the piping and prevent vibration in accordance with $2._$.
G10b
Accomplish a static head pressure test of for minutes. Allowable leakage: None.
G11
Accomplish tests in accordance with General Notes of 2
G12
MIL-STD-777, Schedule of Piping, Valves, Fittings, and Associated Piping components for Naval Surface Ships
G14a
802-5959353, MIL-STD-777D Modified for DDG-51 Class, Schedule of Piping, Valves, fittings, and Associated Piping Components
G14b
NOTE: FOR REFERENCE USE MIL-STD-777, SCHEDULE OF PIPING, VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS FOR NAVAL SURFACE SHIPS.
New materials shall conform to 2, including Category and Group
G15

ALLOWS PLANNER USE OF OTHER NAVSEA-APPROVED GASKETS AND NOTE: FASTENERS NOT COVERED IN MIL-STD-777.

> FOR BUTTERFLY VALVES INSTALLED IN FIREMAIN AND SALTWATER SYSTEMS, USE GASKET MATERIAL CONFORMING TO MIL-DTL-24696, TYPE II (FOR DDG-51 CLASS ONLY).

Install each valve, installing new gaskets conforming to and new fasteners conforming to .

G16

FOR REFERENCE USE MIL-STD-777, SCHEDULE OF PIPING, NOTE: VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS FOR NAVAL SURFACE SHIPS.

Install each valve, installing new gaskets and fasteners conforming to 2. , including Category and Group ___.

G17

Accomplish an operational test of the new and disturbed piping at PSIG. Allowable external leakage: None.

G22

Accomplish an operational test of each newly installed valve at PSIG.

G23a

Cycle each valve from full closed to full open to full closed 4 times. Allowable external leakage: None.

G23b

NOTE: FOR REFERENCE USE S9086-RK-STM-010/CH-505, PIPING SYSTEMS.

Measure and record alignment of expansion joint piping flanges in accordance with Paragraphs 505-3.3.1 through 3.3.6.5 of 2. .

G24a

NOTE: WHEN NO HARD COPY IS REQUIRED, THE WORDS "HARD COPY OR" SHALL BE DELETED.

Submit one legible copy, in hard copy or approved transferrable media, of a report listing measurements taken to the SUPERVISOR.

G24b

Nitrogen pressure test each brazed and mechanical joint at PSIG for a minimum of 15 minutes.
G25a
Inspect each brazed and mechanical joint, using a soap bubble method. Allowable leakage: None.
G25b
Machine each seat and disc to remove hardfacing.
G26a
Weld build-up each seat and disc.
G26b
Accomplish the requirements of 009-12 of 2.1, including Table One, Column C, Lines One through 9.
G26c
Machine each seat and disc to
G26d
Accomplish nondestructive testing in accordance with Line $_$.
G26e
Machine each seal ring seating area to remove stainless steel inlay.
G27a
Weld build-up each seal ring seating area.
G27b
Accomplish the requirements of 009-12 of 2.1, including Table One, Column H, Lines One through 9.
G27c

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Machine each seal ring seating area to .
G27d
       Accomplish nondestructive testing in accordance with Line .
G27e
          NOTE:
                  FOR REFERENCE USE MIL-STD-777, SCHEDULE OF PIPING,
                   VALVES, FITTINGS, AND ASSOCIATED PIPING COMPONENTS FOR
                  NAVAL SURFACE SHIPS.
Install new valves in place of those removed in 3. . New materials
shall conform to 2. , including Category and Group \_\_.
G28a
Shop test and set each relief valve prior to installation.
G28b
   Test medium shall be .
G28c
   Seat tightness shall be .
G28d
   Lifting pressure shall be .
G28e
After setting each relief valve, install wire and leadlock seals and
attach a metal tag to each valve stamped with the following information:
   Ship name and hull number
   Valve number or identification
   Date valve tested and set
   Name of repair facility
G28f
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NOTE: FOR USE IN CLEANING OF NEW HYDRAULIC PIPING

FABRICATIONS. ENSURE WORK ITEM INCLUDES POST

FABRICATION HYDROSTATIC TESTING REQUIREMENTS IN SUPPORT

OF THE STANDARD AS WELL AS NSTM 505. PLANNER TO

SPECIFY FLUID USED FOR HYDROSTATIC TESTING.

Clean, pickle, and protect new hydraulic piping in accordance with MIL-STD-419.

G29