

STANDARD PHRASEOLOGY

SECTION G

1. 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) PIPING SYSTEMS WHICH DO NOT REQUIRE SPECIAL CLEANING REQUIREMENTS. REFER TO NOTE 1 IN GSO SECTION **505J2** FOR SYSTEMS REQUIRING SPECIAL CLEANING REQUIREMENTS.

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.

G3a

NOTE: USE FOR CLEANING NEW AND MODIFIED LEVEL III PIPING 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

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

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

NOTE: ALLOWS PLANNER USE OF OTHER NAVSEA-APPROVED GASKETS AND 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

NOTE: FOR REFERENCE USE MIL-STD-777, SCHEDULE OF PIPING, 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

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

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

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