§ 162.050–17 Separator test rig.

(a) This section contains requirements for test rigs used in approval testing of separators. A diagram of a typical test rig is shown in Figure 162.050–17(a).

(b) Each mixture pump on a test rig must—

(1) Be a centrifugal pump capable of operating at 1,000 revolutions per minute or more;

(2) Have a delivery capacity of at least 1.5 times the maximum throughput at which the separator being tested is designed to operate;

(3) Have a maximum delivery pressure that is equal to or greater than the maximum influent pressure at which the separator is designed to operate; and

(4) Have either bypass piping to its suction side or a throttle valve or orifice on its discharge side.

(c) The inlet piping of the test rig must be sized so that—

(1) Influent water flows at a Reynolds Number of at least 10,000;

(2) The influent flow rate is between one and three meters per second; and

(3) Its length is at least 20 times its inside diameter.
(d) Each sample point on a test rig must meet the design requirements described in Figure 162.050–17(d) and must be in a vertical portion of the test rig piping.

FIGURE 162.050–17(d)—SAMPLE POINT

§ 162.050–19 Oil content meter and bilge alarm test rig.

(a) This section contains requirements for test rigs used in approval testing of oil content meters and meter. A typical test rig is described in Figure 162.050–19. The mixture pipe shown in Figure 162.050–19 is the portion of test rig piping between the oil injection point and the meter or bilge alarm piping.

(b) Each sample point on a test rig must be of the type described in Figure 162.050–17(e) and must be in a vertical portion of the test rig piping.

(c) Each test rig must have a centrifugal pump that is designed to operate at 1,000 revolutions per minute or more.

(d) The mixture pipe on a test rig must have a uniform inside diameter.

FIGURE 162.050–19—MONITOR AND BILGE ALARM TEST RIG