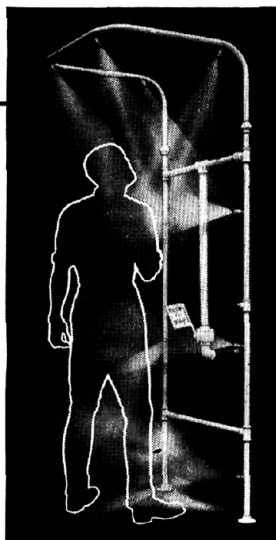


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Burning, corrosive, caustic contamination can inflict injuries more dangerous than blazing clothing! Contamination by acids, chemicals, volatile fuels, radioactive elements, etc., must be instantly countered by first aid. Immediate drenching with clear water is the first precaution against permanent injury. HAWS leads in design and production of Emergency Drench Showers! Ask for our complete catalog.



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victim from all angles.

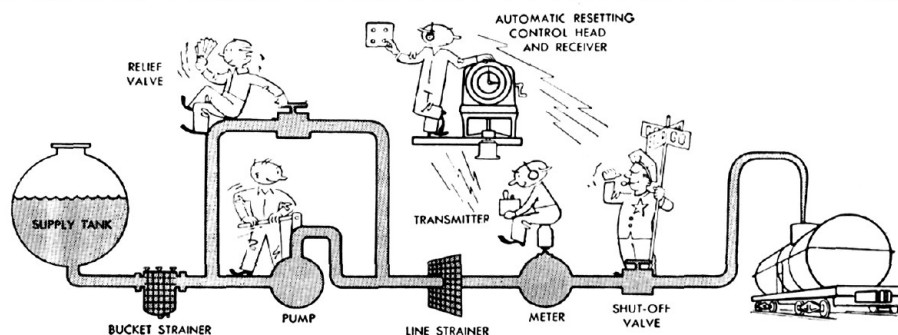


DRENCH SHOWERS

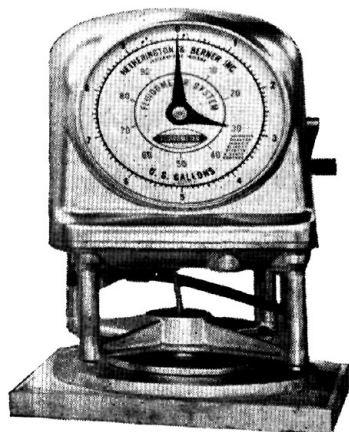
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TYPICAL REMOTE CONTROL FLUIDOMETER SYSTEM



For Use Where Meters Must Be Located In Hard-to-get-to Places

This animated picture illustrates a typical remote control Fluidometer application. Remote control of this general type is recommended when plant conditions or arrangement make direct control impractical or impossible. With a system of this type the Fluidometer control head can be located away from the meter. Shown at the left is the automatic resetting control head, which controls the operation of the shut-off valve to give completely automatic batching. Available either jacketed or unjacketed—"tailor made" to fit your needs. New Bulletin FI-56 will be sent on request. For information on jacketed pipe and fittings write for Bulletin J-56.

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SAFETY

the vent pipe near the bottom of the interior wall. Pressures of the strong shock were calculated in some cases from measurements of the shock velocity taken from the Fastax film. In the shots for which pressure gages were located 7 feet and 11 feet from the cell mouth, the weak shock signals were recorded, but the strong shock drove the traces off the scope. The time of arrival of each shock at each gage was known and, therefore, the propagation velocities and shock pressure could be calculated. The peak incident blast pressures 9 feet from the mouth are shown as a function of charge weight in Figure 1. Included in this plot are the pressures measured 1 foot from the south wall, 5½ feet back from the mouth. The direct blast wave reaching this point is less intense than the blast reflection from the safe wall. The pressures behind the safe wall were not readable for the 1-pound charges, and for larger charges the meaning of the readings from this position is questionable because the safe wall was blown down.

The maximum pressure readings obtained at the window positions B and C are shown as a function of charge weight in Figure 2. No pressures were recorded at the A position 800 feet north of the cell, although in some tests pressures were recorded 100 feet north of the cell. Pressures are lower for charges fired within the cell than for charges fired outside the cell. Also, pressures at B and C were found to be lower when the safe wall was present.

For a 2-pound charge of TNT fired in free air, the expected pressure at a distance of 280 feet is 0.190 p.s.i., and at 500 feet it is 0.105 (2). The measured values are lower than these figures. This is probably because blast waves of short duration are more readily attenuated by surface irregularities than those of longer duration. Also, the snow and brush may have been responsible for some reduction in pressure. Furthermore, when charges are fired in the cell, some energy absorption takes place, and shock reflection phenomena are present. Multiple shocks were recorded at B and C positions on many tests. If reflections in and near the cell had not generated multiple shocks, the single blast wave might have had a higher peak pressure.