



Core Lab

Crush Cell Test Apparatus, CSC-100 Datasheet

Drilling & Stimulation Properties



Crush Cell Test Apparatus, CSC-100

Crush Cell Test Apparatus is designed specifically to meet the criteria laid out in API RP56, Section 8 for Sand Crush Resistance Testing. The equipment comprises a press capable of delivering in excess of 12,000 lb. force; a calibrated test gauge of 0-6,000 psi; a crush cell with piston of two inch diameter.

System Specifications

Press: The press consists of 10-ton hydraulic press mounted on a one-inch thick steel base plate. Two one inch thick steel plates, with recesses for the crush cell, hold the crush cell whilst the load is applied by the manual pump. The pressure exerted on the cell (not force) is measured by means of a calibrated 0-6,000 psi test gauge. A pressure relief valve ensures that the press cannot be overpressurised. The pressure can be adjusted up to a maximum of 6,000 psi and a needle valve on the jack body enables the pressure to be released.

Crush Cell: The crush cell consists of a cylinder sample container and piston both made from highgrade tool steel. The cell is made to the specifications laid out in API RP56, Section 8, Figure 8.1. The cylinder and piston are made to high tolerances to minimise the loss of fines generated through crushing.

Other testing requirements: two sieves of the relevant size and sieve shaker; balance capable of measuring 40 grams of sample to 0.1g tolerance. These are normally available in most laboratories or can be provided by Core Laboratories.