Molten metal splash test equipment

Description:

The equipment consists of a self-contained steel cabinet, comprising three chambers.

The lowest chamber houses an air cylinder, which provides the means to eject the molten metal charge (instead of the spring-loaded piston mechanism referred to in the standard).

The centre chamber contains the ejector head which is fitted to the end of the piston rod of the air cylinder. A crucible containing a molten metal charge is loaded in here using the tongs provided.

The top chamber contains the sample mounting platform, which has a vertical hole connecting to the centre chamber, allowing the ejected metal charge to impact upon the underside of the sample which is secured to the platform.

Also shown in the upper photograph is the hand operated, spring return mushroom button air valve, which is normally located on the left side of the cabinet at the top and the compressed air line feeding this valve. When pressed, the valve causes the metal charge to be ejected.

Services required:

Floor mounted
Compressed air at a pressure up to 8 bar

Relevant standards:

EN 168 : 2001, para 10.1
AS/NZS 1337-1:2010, appendix R and figure R1

Approximate packed size & weight:

110 x 60 x 40 cm : 120 kg