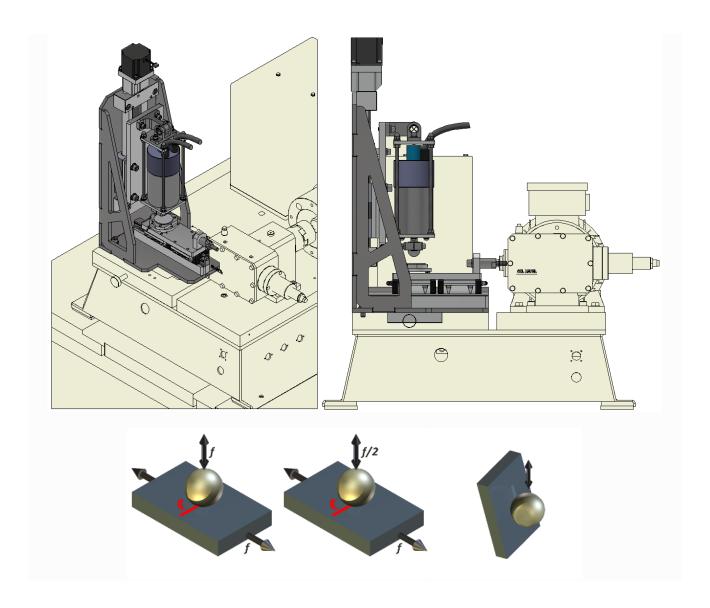
TE 77 IMPACT SLIDING ADAPTER



Description

The impact sliding adapter is mounted in place of the standard fixed specimen assembly and comprises a voice coil actuator mounted vertically on a motorised linear slide. A reciprocating plate specimen assembly is driven by the standard scotch yoke mechanism, with the vertical motion of the voice coil actuator synchronised with the horizontal motion.

The voice coil actuator is suspended from a flexural bearing with the armature extension rod restrained in the horizontal plane by a piezo transducer, acting in line with the horizontal reciprocating motion. The plate specimen is mounted on piezo transducer which detect normal force.

The method of operation is to start the synchronised vertical and horizontal motion with the specimens out of contact. The linear slide is then incrementally indexed downwards until the specimens come into contact and the required peak impact force is generated.

The adapter can generate maximum forces of 100 N at a maximum frequency of 20 Hz.