

High capacity testing machine with temperature chamber

Customer: OJSC Magnitogorsk Iron and Steel Works (MMK)

Country: Russia

Sector: Steel



1. Description of the testing system

IBERTEST has supplied a tailor-made UMIB 1000E machine to MMK (one of the world's largest steel producers and leading Russian metals company).

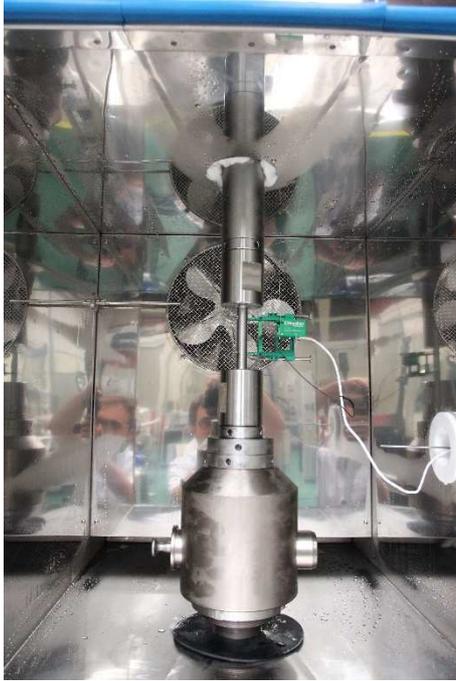
This testing system was configured in cooperation with our customer. The UMIB 1000E special testing machine is based on the versatile UMIB series which provide the possibility to adapt the testing space.

This universal servohydraulic testing machine allows to adjust the position of the upper crosshead using side hydraulic jacks.

This machine included hydraulic gripping heads for tensile tests, bending fixture, compression plates, fracture mechanics device (for CT specimen), threaded specimen testing devices and a temperature chamber to do tests at controlled temperature (between -70 °C and +100 °C). The testing solution for this customer also included a set of extensometers to determine the elongation of the sample and crack opening, as well as electronic calipers and micrometers.



Testing devices supplied with UMIB 1000E machine (*left*: bending fixture for SEB specimens; *center*: device for CT specimens, *right*: device for CT specimens inside temperature chamber and with extensometer)



Testing devices and specimens inside temperature chamber



UMIB 1000E machine at customer site, during installation and commissioning