

The method allows the mechanical characterization of a metallic material relative to a material constituting a part to be repaired and the validation of an installation for repairing said part by build-up welding with said metallic material. According to this method, a cavity is machined in a bar of said metal, the cavity is build-up welded (54) by means of said installation, a test piece (56) is cut from said bar so that it has a central zone consisting only of build-up weld metal and the test piece is subjected to an axial vibration fatigue test.