

EN 12515:1997**Hot environments - Analytical determination and interpretation of thermal stress using calculation of required sweat rate (ISO 7933:1989 modified)**

Specifies a method of analytical evaluation and interpretation of the thermal stress experienced by a subject in a hot environment. It describes a method of calculating the heat balance as well as the sweat rate that the human body should produce to maintain this balance in equilibrium: this sweat rate is called the "required sweat rate". The various terms used in the determination of the required sweat rate show the influence of the different physical parameters of the environment on the thermal stress experienced by the subject. In this way, this International Standard makes it possible to determine which parameter or group of parameters should be modified, and to what extent, in order to reduce the risk of physiological strains. The main objectives of this International Standard are a) the evaluation of the thermal stress in conditions likely to lead to excessive core temperature increase or water loss for the standard subject. b) the determination of the modifications to be brought to the work situation in order to reduce or exclude these effects. c) the determination of the maximum allowable exposure times required to limit physiological strain to an acceptable value.