



English Summary:

Machinery functional safety according to EN ISO 13849-1 and EN ISO 13849-2.

Work equipment complying with the Machinery Directive (MD - 2006/42/EC) must meet the safety requirements contained in Annex I. For what concerns functional safety, chapter 1.2.1 of Machinery Directive asks for control systems to be designed and constructed in such a way as to avoid dangerous situations. In particular, dangerous situations shall not arise after a failure in the hardware or software of the control system. The ISO 13849-1 standard establishes the design criteria and principles for safety-related parts of control systems while ISO 13849-2 concerns the validation of the design carried out. The present work aims to introduce the procedure for assessing the level of performance required for the safety-related part of the control system, for evaluating the level of performance obtained by the design, for estimating whether common cause failures are below a certain maximum fraction of the dangerous failures, for the validation of a safety related part of control system and measures to limit the effects of systematic failures.

Italian document under:

<https://www.inail.it/cs/internet/comunicazione/pubblicazioni/catalogo-generale/pubbl-sistemi-comando-macchine-secondo-norma.html>