

Work roll surface degradation in hot rolling: on site and laboratory evaluation methods.

S. Flament^{1,a}, G. Walmag¹, J. Malbrancke¹, G. Moreas¹, M. Sinnaeve²
¹CRM Group, ²MK

^aflament@rdmetal.ulg.ac.be

Abstract: CRM is now equipped with a series of laboratory and on-site methods for evaluating the surface degradation behavior of work roll material. These methods are used for developing new work roll materials as well as for evaluating and solving unexpected degradation behavior on site

These methods includes classical mechanical testing (tensile and compression testing, hot hardness measurement) and specifically developed evaluation test and procedure either in laboratory three discs wear machine, pilot mill trials on work roll with inserts) or on site (rollscope, on-site microscopy).

This paper describes some examples of the application of these methods and the role they have played in a better understanding the work roll surface degradation mechanisms.