

1. Record Nr.	UNINA9910688558703321
Autore	Wang Limeng
Titolo	Image Analysis and Evaluation of Cylinder Bore Surfaces in Micrographs
Pubbl/distr/stampa	KIT Scientific Publishing, 2013
ISBN	1000041878
Descrizione fisica	1 electronic resource (II, 115 p. p.)
Collana	Forschungsberichte aus der Industriellen Informationstechnik / Institut für Industrielle Informationstechnik (IIIT), Karlsruher Institut für Technologie
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	This work presents two image-based inspection approaches for the quality evaluation of cylinder bore surfaces. In the first algorithm, metal folds on plateau-honed surfaces are inspected with scanning electron microscopy. An edge-aware structure tensor is proposed for feature extraction and localization of surface defects. The second algorithm uses a morphographical method for detecting graphite grains in optical micrographs. Based on the inspection results, quality parameters are proposed.