1. Record Nr. UNINA9910576868703321 Autore Nagel Sven Titolo Design of Cast Steel Components under Cyclic Loading Pubbl/distr/stampa Karlsruhe, : KIT Scientific Publishing, 2022 **ISBN** 1000137373 Descrizione fisica 1 electronic resource (296 p.) Collana Berichte zum Stahl- und Leichtbau Soggetti Civil engineering, surveying & building Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto This work presents a design approach that links fatigue resistance of cast steel component to permissible defect sizes. It is based on fractures mechanics, is in line with experiences of the last 60 years and validated by extensive experimental as well as numerical investigations on different scales and under consideration of real casting defects. By following established assessment methods, the design concept is

adapted to practical building applications.