

Intelligent optimization of mold design and process parameters in injection molding. Doctoral thesis accepted by University of South Australia, Adelaide, Australia

Moayyedian, Mehdi, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20509060&lokasi=lokal>

Abstrak

This book describes an effective framework for setting the right process parameters and new mold design to reduce the current plastic defects in injection molding. It presents a new approach for the optimization of injection molding process via (i) a new mold runner design which leads to 20 percent reduction in scrap rate, 2.5 percent reduction in manufacturing time, and easier ejection of injected part, (ii) a new mold gate design which leads to less plastic defects; and (iii) the introduction of a number of promising alternatives with high moldability indices. Besides presenting important developments of relevance academic research, the book also includes useful information for people working in the injection molding industry, especially in the green manufacturing field.