

Contents

	Page
Foreword	6
1st SECTION - Mechanical and metallurgical technologies of hot rolling strip processes.	8 - 87
101 Coiling geometry and side guide system to minimize primary and secondary eye telescoping David T. Blazevic	9
102 Actual descaling photographs and engineering principles for a descaling formula David T. Blazevic	20
103 Optimisation of technologies for hydro-mechanical descaling of steel Jürgen W. Frick	28
104 QSP technology at OMK, feedbacks from operations Pigani Alessandro	37
105 Flatness transferring effects of hot rolled steel strip at Twin Stand Steckel Mill to cold rolled steel strip Chen Yusheng, Yang Qi, Yang Hao, Wang Jun Hong	45
106 The technology of rolling 2 mm thick carbon steel graded as Q235B on Twin Stand Steckel Mill Yang Qi, Yang Hao, Cheng Wei, Chen Yusheng, Cui Maoxiang, Wang Jun Hong, Huang Yuanfeng	58
107 Simulation of backup roll fatigue, length of campaign and dressing amount Daniel Hajduk, Pavel Šimeček	65
108 Experience from using roll lubrication technology at U. S. Steel Košice hot strip mill Richard Arnken, Sebastien Rolland, Otto Bauer, Štefan Novák, Norbert Kubík, Gabriel Ádam	74
109 Backup roll lubrication technology testing on Twin Stand Steckel Mill Radim Pachlopník, Robert Mokroš, Jan Vahalík, Richard Arnken, Otto Bauer, Sebastien Rolland	82
2nd SECTION - Mechanical and metallurgical technologies of cold rolling strip processes.	88 - 157
201 The latest Cold Strip Complexes at Arvedi and Marcegaglia Plants Alfonso Rigotti	89
202 Solid AGC for rolling mills with electromechanical screwdown Pavel Ettler, František Jirkovský	96
203 Fundamentals of roll cooling and control of flatness at primary cold reduction Daron Lloyd	103
204 Influence of reducing salt bath to stainless steels pickling Pavel Váňa, Petra Vánová, Roman Pěňčík, Radim Koláček	112
205 Advanced non-oriented electrical steels from U. S. Steel Košice	124

	production Miloš Predmerský, Ján Huňady, Martin Černík	
206	Surface treatment of hot dip galvanized sheets from U. S. Steel Košice production František Hollý, Vanda Tomková, Juraj Graban, Viera Kohúteková	132
207	Influence of coatings' chemical composition on corrosion resistance of galvanized steel Juraj Graban, Mária Kollárová, Peter Zimovčák, Viera Kohúteková, František Hollý	139
208	Influence of post-coating annealing temperature and hold time on microstructure evolution of galvanized coatings Mária Kollárová, Pavol Záhumenský, Lucia Hrabčáková	146
209	MSA process implementation on vertical electrolytic tinning line No. 1 at U. S. Steel Košice, s.r.o. Roman Gburík, Robert Leggat, Miroslav Imrich, Peter Kaszonyi, Ján Socha, Daniel Kacír	153
	3rd SECTION - Modeling and simulating of strip rolling processes	158 - 289
301	Modeling of complicated production processes – new possibilities for optimisation of rolling technologies B. Mašek, H. Jirková, A. Ronešová, Š. Jeníček, J. Malina.	159
302	Controlled cooling simulation of steel strip Jaroslav Horský, Miroslav Raudenský, Jiří Kvapil,	163
303	Crown and flatness simulator WinRollSim: online and offline applications for hot strip rolling Eugene Nikitenko, Karol Hala	171
304	Hot flow stress model for plain C steels under finishing mill conditions Kevin Banks	181
305	A monitor for thermo-mechanical rolling of steel plate Paul McGahan, Jan Knobloch	189
306	Structural and mechanical properties of laboratory rolled steels high- alloyed with Mn and Al Ivo Schindler, Eva Mazancová, Eugeniusz Hadasik, Dariusz Kuc, Grzegorz Niewielski, Petr Kawulok, Stanislav Rusz, Miroslav Legerski	195
307	Influence of plastic deformation and finish rolling temperature in properties HSLA steel rolling in dual phase area $\alpha + \gamma$ Ján Sas, Andrea Kováčová, Imrich Pokorný, Lenka Nemethová, Mária Molnárová	203
308	Possibility of deformation behaviour research of steel strip on a universal torsion plastometer Jozef Bořuta, Tomáš Kubina, Petr Unucka, Aleš Bořuta	207
309	Structural development of TRIP steel after controlled thermo- mechanical processing Tibor Kvačkaj, Mária Molnárová, Rudolf, Mišičko, Martin Fujda, Michal Kvačkaj, Jana Bidulská, Július Bacsó, Róbert Kočiško, Miloslav Lupták	214
310	Improvement of low temperature toughness of HSLA steel Vladislav Jurko, Ján Semeňák, Ladislav Čecho, Marta Gorelová	221

311	Influence of transformation on hot coil collapse in C-Mn steels Alison Tuling, Kevin Banks, Barrie Mintz	227
312	Change of mechanical properties of thermo mechanically treated plates ARMOX depending on the technology used cutting Ondrej Híreš, Stanislav Bačík	234
313	EBSD method utilization to cold rolled IF steel sheet texture development study Lucia Hrabčáková, Alica Mašlejová, Martin Černík, Jaroslav Duška	240
314	Model for mechanical properties prediction of hot rolled steels Alena Peterčáková, Ján Semeňák, Ivan Kohútek	247
315	Elimination of hot cracks during the hot rolling of 79NiFeMo5 alloy with support of material-technological modelling B. Mašek, H. Jirková, A. Ronešová, J. Malina, L. Kučerová	253
316	Impact of cooling rate from austenite temperature on the structure and properties of Nb-Ti microalloyed steel Rudolf Mišičko, Peter Tatarko, Ondrej Milkovič, Miloš Matvia, Sandra Fedáková	259
317	Reasons for the origination of transverse corner cracks on continuously cast slabs and their impact on steel strips defects Rudolf Mišičko, Sandra Fedáková, Marek Vojtko, Dagmar Fedáková	268
318	Mechanism of oxide sliver type imperfection formation Pavol Záhumenský, Ľuboš Juhar, Peter Stoľar, Daniel Schön	276
319	Fourier transform infrared spectroscopy as an increasingly additional method for metallographic investigation Mária Gabaniová	284
4th SECTION - Measurement and control system strip rolling processes		290 - 330
401	Continues strip measurement with impact to production quality Pavel Švidrnoch	291
402	Prediction of metallurgical quality of strips as a component of the hot strip mill process control system Pavel Šimeček, Daniel Hajduk	297
403	Production of high quality strip using DANIELI-CQE™: Experience through implementation Ananya Mukhopadhyay, Andrea Polo	308
404	Utilization of camera inspection systems for quality control in production Ján Jadlovský, Jozef Marcin	317
405	A development of device for tension distribution measuring in metal belt Jiří Čáp	325
ABSTRACTS Czech Version of Abstracts of Papers written in English		331
LIST OF AUTHORS		350
NOTES		353