

12 Použitá literatura

- [1] VALIEV, R., Z. Some Trends in SPD Processing for Fabrication of Bulk Nanostructured Materials, *Mat. Sci. Forum*, 503-504, 2006, 3.
- [2] LOWE, Terry, C.; VALIEV, R., Z. (ed.). *Investigations and applications of severe plastic deformation*. Springer Science & Business Media, 2012.
- [3] RUSZ, S., et al. Processing of low Carbon steel by dual rolls equal channel extrusion. In: *IOP Conference Series: Materials Science and Engineering*. IOP Publishing, 2014. p. 012061.
- [4] VALIEV, R. Nanostructuring of metals by severe plastic deformation for advanced properties. *Nature materials*, 2004, 3.8: 511.
- [5] AZUSHIMA, A. et al. Severe plastic deformation (SPD) processes for metals. *CIRP Annals*, 2008, 57.2: 716-735.
- [6] VALIEV, R., Z.; ISLAMGALIEV, I., V.; ALEXANDROV, I.V. Bulk Nanostructured Materials from Severe Plastic Deformation, *Prog. Mater. Sci.*, 45, 2000, 103. Series: *Materials Science and Engineering*. IOP Publishing, 2014. p. 012061.
- [7] ZRNÍK, J., et al. Příprava ultrajemnozrnných a nanokrystalických kovových materiálů extrémní plastickou deformaci a jejich vlastnosti. *Evropská strategie výrobních procesů, červen*, 2007.
- [8] RUSZ, S. *Využití vícenásobné plastické deformace pro dosažení velmi jemnozrnné struktury*. Ostrava: VŠB - Technická univerzita Ostrava, 2006. ISBN 80-248-1160-X.
- [9] HALL, E. O. The deformation and ageing of mild steel: III discussion of results. *Proceedings of the Physical Society. Section B*, 1951, 64.9: 747.
- [10] PETCH, N. J. The cleavage strength of polycrystals. *J. of the Iron and Steel Inst.*, 1953, 174: 25-28.
- [11] CORDERO, Z. C.; KNIGHT, B. E.; SCHUH, C. A. Six decades of the Hall-Petch effect—a survey of grain-size strengthening studies on pure metals. *International Materials Reviews*, 2016, 61.8: 495-512.
- [12] MORRIS, J. W. *The influence of grain size on the mechanical properties of steel*. Lawrence Berkeley National Lab.(LBNL), Berkeley, CA (United States), 2001.
- [13] LEHTO, P., et al. Influence of grain size distribution on the Hall-Petch relationship of welded structural steel. *Materials Science and Engineering: A*, 2014, 592: 28-39.
- [14] ESTRIN, Yu; VINOGRADOV, A. Extreme grain refinement by severe plastic deformation: a wealth of challenging science. *Acta materialia*, 2013, 61.3: 782-817.
- [15] SAITO, Y., et al. Improvement in the r-value of aluminum strip by a continuous shear deformation process. *Scripta Materialia*, 2000, 42.12: 1139-1144.
- [16] RAAB, G. J., et al. Continuous processing of ultrafine grained Al by ECAP-Conform. *Materials Science and Engineering: A*, 2004, 382.1-2: 30-34.
- [17] LEE, J.C.; SEOK, H.-K.; SUH, J.-Y. Microstructural evolutions of the Al strip prepared by cold rolling and continuous equal channel angular pressing. *Acta Materialia*, 2002, 50.16: 4005-4019.
- [18] ERLIEN, T., et al. Continuous Severe Plastic Deformation of Al-Mg-Si Alloys.
- [19] IVANOV, A. M., et al. Microstructure and Strength of Welded Joints of Steel after Equal-Channel Angular Pressing. In: *Materials Science Forum*. Trans Tech Publications, 2011. p. 921-924.
- [20] SEIDEL, T. U.; REYNOLDS, Anthony P. Visualization of the material flow in AA2195 friction-stir welds using a marker insert technique. *Metallurgical and materials transactions A*, 2001, 32.11: 2879-2884.
- [21] SU, J.-Q., et al. Microstructural investigation of friction stir welded 7050-T651 aluminium. *Acta materialia*, 2003, 51.3: 713-729.
- [22] KHORRAMI, M. Sarkari; KAZEMINEZHAD, M.; KOKABI, A. H. Mechanical properties of severely plastic deformed aluminum sheets joined by friction stir welding. *Materials Science and Engineering: A*, 2012, 543: 243-248.
- [23] FUJII, Hidetoshi, et al. Friction stir welding of carbon steels. *Materials Science and Engineering: A*, 2006, 429.1-2: 50-57.

- [24] KHODABAKHSHI, F.; KAZEMINEZHAD, M.; KOKABI, A. H. Mechanical properties and microstructure of resistance spot welded severely deformed low carbon steel. *Materials Science and Engineering: A*, 2011, 529: 237-245.
- [25] KHODABAKHSHI, F.; KAZEMINEZHAD, M.; KOKABI, A. H. Resistance spot welding of ultra-fine grained steel sheets produced by constrained groove pressing: optimization and characterization. *Materials Characterization*, 2012, 69: 71-83.
- [26] OCHODEK, VL.; BOXAN,P. Weldability of carbon steel processed by multiple plastic deformation. In. *Archives of Materials Science and Engineering*. Vol.69, Issue 2, 2014, pp.88-93.
- [27] OCHODEK, VL.; HORAK, P. Plasma welding of high carbon steel after SPD process. In *Metal 2015*, 24th International Conference on Metallurgy and Materials, June 3rd-5th 2015, Hotel Voroněž I, Brno, Czech Republic, pp. 804-809.
- [28] DEUTSCHER EISENHUTTENLEUTE, Verein. Werkstoff-Handbuch Stahl und Eisen. Stahleisen, 1927.
- [29] REUMONT, G. A. Die Schweißeignung hochfester Feinkornbaustähle-ihre Ermittlung und Bedeutung. Schweissen von hochfesten Stählen und Aluinum.DVS-Berichte 1971, Nr.22
- [30] ISO 581:1980: Weldability. Definition. General information.
- [31] ČSN 05 1310 (051310) Zváranie. Skúšanie zvariteľnosti ocelí. Základné ustanovenia.
- [32] ČSN 05 0000 (050000) Zváranie. Zváranie kovov. Základné pojmy.
- [33] ČSN 05 1309 (051309) Zváranie. Zvariteľnosť kovov a jej hodnotenie. Všeobecné ustanovenia.
- [34] DIN 8528: Pt 1: Weldability of metallic materials, concepts.
- [35] ČSN EN 1011-2 (052210) Svařování - Doporučení pro svařování kovových materiálů - Část 2: Obloukové svařování feritických ocelí.
- [36] KOSTIN, V. A. MATHEMATICAL FORMULATION OF CARBON EQUIVALENT AS A CRITERION FOR EVALUATION OF STEEL WELDABILITY. 2012
- [37] LUNDIN, C. D. Carbon equivalence and weldability of microalloyed steels, Lundin, CD 1991.
- [38] KASUYA, T.; YURIOKA, N. Carbon equivalent and multiplying factor for hardenability of steel. WELDING JOURNAL-NEW YORK-, 1993, 72: 263-s.
- [39] TALAŞ, Şükrü. The assessment of carbon equivalent formulas in predicting the properties of steel weld metals. *Materials & Design (1980-2015)*, 2010, 31.5: 2649-2653.
- [40] GANEV, Nikolaj. Difrakční analýza mechanických napětí. Vyd. 1. Praha: České vysoké učení technické, 1995. ISBN 80-010-1366-9.
- [41] KRAUS, Ivo; GANEV, Nikolaj. Residual stress and stress gradients. In: *Industrial applications of X-ray diffraction*. CRC Press, 1999. p. 811-830.
- [42] KRAUS, Ivo; TROFIMOV, Valerij Vasiljevič. *Rentgenová tenzometrie*. Academia, 1988.
- [43] WITHERS, Philip J.; BHADESHIA, H. K. D. H. Residual stress. Part 1-measurement techniques. *Materials science and Technology*, 2001, 17.4: 355-365.
- [44] WITHERS, Philip J.; BHADESHIA, H. K. D. H. Residual stress. Part 2-Nature and origins. *Materials science and technology*, 2001, 17.4: 366-375.
- [45] KANDIL, F. A., et al. A review of residual stress measurement methods. *A Guide to Technique Selection, NPL, Report MATC (A)*, 2001, 4.
- [46] WITHERS, P. J., et al. Recent advances in residual stress measurement. *International Journal of Pressure Vessels and Piping*, 2008, 85.3: 118-127.
- [47] LU, Jian (ed.). *Handbook of measurement of residual stresses*. Fairmont Press, 1996.
- [48] SCHAJER, Gary S. Advances in hole-drilling residual stress measurements. *Experimental mechanics*, 2010, 50.2: 159-168.
- [49] GAUTHIER, J.; KRAUSE, T. W.; ATHERTON, D. L. Measurement of residual stress in steel using the magnetic Barkhausen noise technique. *NDT & E International*, 1998, 31.1: 23-31.
- [50] TITTO, K. Use of Barkhausen effect in testing for residual stresses and material defects: Non-Destructive Testing—Australia, Vol. 26, No. 2, pp. 36–41 (Mar./Apr. 1989). *NDT & E International*, 1991, 24.1: 41.

- [51] VENGRINOVICH,V.L.,TSUKERMAN,V.L. Stress and Texture Measurement Using Barkhausen Noise and Angular Scanning of Driving Magnetic Field. In 6th WCNDT 2004-World Conference on NDT, Montreal, 2004, pp.175-182.
- [52] WOHLFAHRT, H.: Report on the experimental Round Robin tests on residual stress, Technical University Braunschweig, 2006.
- [53] VLK, M., HOUFEK, L., HLAVOŇ, P., KREJČI, P., KOTEK, V., KLEMENT, J. Experimentální mechanika, Brno, 2003.
- [54] YELBAY, H. Ilker, CAM, Ibrahim; GÜR, C. Hakan. Non-destructive determination of residual stress state in steel weldments by Magnetic Barkhausen Noise technique. *NDT & E International*, 2010, 43.1: 29-33.
- [55] MASUBUCHI, Koichi. *Analysis of welded structures: residual stresses, distortion, and their consequences*. Elsevier, 2013.
- [56] RADAJ, D. *Welding Residual Stresses and Distortion - Calculation and Measurement*, DVS-Verlag, Düsseldorf, 2003, 397 s., ISBN 3-87155-791
- [57] RADAJ, Dieter. *Heat effects of welding: temperature field, residual stress, distortion*. Springer Science & Business Media, 2012.
- [58] PILIPENKO, A.: Computer Simulation of Residual Stress and Distortions of Thick Plates in Multi-electrode Submerged arc Welding - Their mitigation Techniques, Dissertation Thesis, Department of Machine Design and Materials Technology Norwegian University of Science and Technology N-7491 Trondheim, Norway, July 2001, 222 s.
- [59] OCHODEK, VI; KLIMPEL, A. Application of Barkhausen Noise to Calibration Advance FEM Simulation Welding and Heat Treatment. In: *5th International Conference on Barkhausen Noise and Micromagnetic Testing*. 2005. p. 2-3.
- [60] KOU, S. Welding metallurgy. *New Jersey, USA*, 2003, 431-446.
- [61] JMatPro the Materials Property Simulation Package, Sente Software Ltd., Guildford, United Kingdom, 1999–2018.
- [62] Oyal Metal: CK55. Oyal Metal [online]. 2011 [cit. 2014-04-24]. Available : <http://www.oyalmetal.com/tabolar/366-ck55.html>.
- [63] BEARB. VON P. SEYFFARTH, B. MEYER, A. SCHARFF., bearb. von P. Seyffarth, B. Meyer, A. Scharff. *Großer Atlas Schweiss-ZTU-Schaubilder*. Düsseldorf: Dt. Verl. für Schweißtechnik, DVS-Verl, 1992. ISBN 3871551279.
- [64] KIRÁLY.F. Diagramy rozpadu austenitu vývojových československých konstrukčních ocelí a zvarových kovov. VUZ Bratislava, leden 1980.
- [65] FERJUTZ, K.; DAVIS, R. ASM handbook: volume 6: welding, brazing, and soldering. *ASM International, Materials Park, OH*, 1993.
- [66] RUSZ, S., et al. Development of geometry of forming tools for extrusion of strip sheet by SPD process. In: *IOP Conference Series: Materials Science and Engineering*. IOP Publishing, 2017. p. 012061.
- [67] RUSZ, S., et al. Processing of low Carbon steel by dual rolls equal channel extrusion. In: *IOP Conference Series: Materials Science and Engineering*. IOP Publishing, 2014. p. 012061.
- [68] KEDROŇ, J., *Vývoj nových nekonvenčních tvářecích technologií: disertační práce*. Ostrava: VŠB – Technická univerzita Ostrava, Fakulta Strojní, Katedra mechanické technologie, 2016, 152 s. Školitel: Rusz, S.
- [69] KARLSSON, L. *Thermal stresses in welding*. In: Thermal stresses, Vol. 1 (Ed.: R.B. Hetnarski), pp. 299-389. Amsterdam: North-Holland 1986.
- [70] BUCHMAYR, B.; KIRKALDY, J. S. Modeling of the temperature field, transformation behavior, hardness and mechanical response of low alloy steels during cooling from the austenite region. *Journal of heat treating*, 1990, 8.2: 127-136.
- [71] BATE, S. K.; CHARLES, R.; WARREN, A. Finite element analysis of a single bead-on-plate specimen using SYSWELD. *International Journal of Pressure Vessels and Piping*, 2009, 86.1: 73-78.
- [72] LINDGREN, Lars-Erik. Finite element modeling and simulation of welding part 1: increased complexity. *Journal of thermal stresses*, 2001, 24.2: 141-192.

- [73] LINDGREN, Lars-Erik. Finite element modeling and simulation of welding. Part 3: efficiency and integration. *Journal of thermal stresses*, 2001, 24.4: 305-334.
- [74] LINDGREN, Lars-Erik. Finite element modeling and simulation of welding. Part 2: improved material modeling. *Journal of thermal stresses*, 2001, 24.3: 195-231.
- [75] SIMON, Flaviu B., et al. Optimization strategies for welding high-alloy steel sheets. *Schweißen und Wärmebehandlung*, 2013, 189.
- [76] ROMERO-HDZ, Jesus; TOLEDO-RAMIREZ, Gengis; SAHA, Baidya. Deformation and residual stress based multi-objective Genetic Algorithm (GA) for welding sequence optimization. In: *Proceedings of the Mexican international conference on artificial intelligence, Cancun, Mexico*. 2016. p. 233-243.
- [77] NAGEL, Falk, et al. Optimization strategies for laser welding high alloy steel sheets. *Physics Procedia*, 2014, 56: 1242-1251.
- [78] BÉZI, Zoltán; SZÁVAI, Szabolcs. SIMULATION AND VALIDATION OF WELDED JOINTS OF HIGH STRENGTH STEEL SHEETS. *Young*, 2014, 2.156: 4.
- [79] WANG, Xiaolong; WANG, Aimin. Finite element analysis of clamping form in wire and arc additive manufacturing. In: *Modeling, Simulation, and Applied Optimization (ICMSAO), 2017 7th International Conference on*. IEEE, 2017. p. 1-5.
- [80] TSUTSUMI, Seiichiro; FINCATO, Riccardo; SAHA, Baidya. Influence of welding sequence on residual stress and deformation pattern using conventional and LTT wires.
- [81] HU, Zeqi; QIN, Xunpeng; SHAO, Tan. Welding Thermal Simulation and Metallurgical Characteristics Analysis in WAAM for 5CrNiMo Hot Forging Die Remanufacturing. *Procedia Engineering*, 2017, 207: 2203-2208.
- [82] СУДНИК, Владислав Александрович; ЕРОФЕЕВ, Владимир Александрович; МАСЛЕННИКОВ, Александр Васильевич. Методика определения характеристик эквивалентного источника теплоты для выполнения расчётов деформаций при сварке. *Известия Тульского государственного университета. Технические науки*, 2015, 6-2.
- [83] Simufact.Welding, Ver. 2020. Hamburg,
- [84] DONG, P.: Residual stresses and distortion in welded structures - What we know today and beyond, IIW/IIS Doc.XII-X/XIII/XV-RSDP-89-03, Based on keynote lecture presented at the 6th International conference of trends in welding research, April 2002, Georgia, USA
- [85] DIVIŠ, V. Numerické analýzy MKP v oblasti technologie svařování, Disertační práce, Vysoké učení technické v Brně, 2007, 93 s.
- [86] JUNEK, L. Výpočet zbytkových napětí při svařování a tepelném zpracování, Disertační práce, Vojenská akademie v Brně, 1997.
- [87] SLOVÁČEK, M. Numerické simulace svařování výpočet a hodnocení distorzi a zbytkových napětí, Disertační práce, Univerzita Obrany, 2005.
- [88] JARÝ, M. Výpočtové modelování procesu svařování a tepelného zpracování oceli s využitím elasto-viskoplastického modelu materiálu. Brno: Vysoké učení technické v Brně, Fakulta strojního inženýrství, 2013. 130 s. Vedoucí disertační práce Ing. Lubomír Junek, Ph.D.
- [89] JUNEK, L.; OVKODEK, V.; LAMAC, Z. Influence of welding technology on residual stresses distribution. In 4th International Seminar on Numerical Analysis of Weldability Location: SCHLOSS SEGGAU, AUSTRIA Date: SEP , 1997 , MATHEMATICAL MODELLING OF WELD PHENOMENA 4 Book Series: MATERIALS MODELLING SERIES Pages: 576-583 Published: 1998.
- [90] JUNEK, L.; SLOVACEK, M.; MAGULA, V.; OCHODEK, VI. Residual stress simulation incorporating weld HAZ microstructure. ASME, *Pressure Vessels and Piping Division*, Vol. 393, 1999, pp. 179-184.
- [91] JUNEK, L.; OCHODEK, VI.; SLOVACEK, M. The effect of repair welding residual stress on steam generator lifetime. In ASME, *Pressure Vessels and Piping Division*, Volume 373, 1998, pp. 377-386.
- [92] OCHODEK, VI.; RUSZ, S. Methodology for measuring residual stress in steels with UFG structure. In: ODF1, VŠB TU Ostrava, Ostravice, November 2012.
- [93] OCHODEK, VI. Residual Stress Evaluation in Spirally Welded Pipes for Gas Pipelines. In: *6th International Conference on Barkhausen Noise and Micromagnetic Testing*. 2007.

- [94] BAYRAMOGLU, S., et al. Characterization of ultra-fine grained steel samples produced by high pressure torsion via magnetic Barkhausen noise analysis. *Materials Science and Engineering: A*, 2010, 527.4-5: 927-933.
- [95] DENG, Yu, et al. The effects of the structure characteristics on Magnetic Barkhausen noise in commercial steels. *Journal of Magnetism and Magnetic Materials*, 2018, 451: 276-282.
- [96] SIMUFACT ENGINEERING GmbH. Simufact Welding 7.2, 2017.
- [97] KAZEMI, Komeil; GOLDAK, John A. Numerical simulation of laser full penetration welding. *Computational Materials Science*, 2009, 44.3: 841-849.
- [98] SOKOLOV, Mikhail, et al. Laser welding of structural steels: Influence of the edge roughness level. *Optics & Laser Technology*, 2012, 44.7: 2064-2071.
- [99] SOKOLOV, Mikhail, et al. Laser welding and weld hardness analysis of thick section S355 structural steel. *Materials & Design*, 2011, 32.10: 5127-5131.
- [100] WU, C. S.; WANG, H. G.; ZHANG, Y. M. A new heat source model for keyhole plasma arc welding in FEM analysis of the temperature profile. *WELDING JOURNAL-NEW YORK-*, 2006, 85.12: 284.
- [101] YILBAS, B. S.; ARIF, A. F. M.; ALEEM, BJ Abdul. Laser welding of low carbon steel and thermal stress analysis. *Optics & Laser Technology*, 2010, 42.5: 760-768.
- [102] KUMAR, K. Suresh. Analytical modeling of temperature distribution, peak temperature, cooling rate and thermal cycles in a solid work piece welded by laser welding process. *Procedia Materials Science*, 2014, 6: 821-834.
- [103] GOLDAK, John A.; AKHLAGHI, Mehdi. Computer simulation of welding processes. *Computational Welding Mechanics*, 2005, 16-69.
- [104] GOLDAK, John; CHAKRAVARTI, Aditya; BIBBY, Malcolm. A new finite element model for welding heat sources. *Metallurgical transactions B*, 1984, 15.2: 299-305.
- [105] GOLDAK, John, et al. Computer modeling of heat flow in welds. *Metallurgical transactions B*, 1986, 17.3: 587-600.
- [106] NGUYEN, N. T., et al. Analytical Approximate Solution for Double Ellipsoidal Heat Source in Finite Thick Plate. *Welding Journal*, 2004, 83.3: 82.
- [107] KAMALA, V.; GOLDAK, J. A. Error due to two-dimensional approximation in heat transfer analysis of welds. *WELDING JOURNAL-NEW YORK-*, 1993, 72: 440-s.
- [108] ZACHARIA, T., et al. Modeling of fundamental phenomena in welds. *Modelling and Simulation in Materials Science and Engineering*, 1995, 3.2: 265.
- [109] HEINZE, Christoph; SCHWENK, Christopher; RETHMEIER, Michael. Effect of heat source configuration on the result quality of numerical calculation of welding-induced distortion. *Simulation Modelling Practice and Theory*, 2012, 20.1: 112-123.
- [110] HACKMAIR, C.; WERNER, E.; PÖNISCH, M. Application of welding simulation for chassis components within the development of manufacturing methods. *Computational materials science*, 2003, 28.3-4: 540-547.
- [111] JOSHI, Suraj, et al. Characterization of material properties and heat source parameters in welding simulation of two overlapping beads on a substrate plate. *Computational Materials Science*, 2013, 69: 559-565.
- [112] GONCALVES, C. V., et al. Estimation of heat source and thermal efficiency in GTAW process by using inverse techniques. *Journal of Materials Processing Technology*, 2006, 172.1: 42-51.
- [113] BATE, S. K.; CHARLES, R.; WARREN, A. Finite element analysis of a single bead-on-plate specimen using SYSWELD. *International Journal of Pressure Vessels and Piping*, 2009, 86.1: 73-78.
- [114] LINDGREN, Lars-Erik. Finite element modeling and simulation of welding part 1: increased complexity. *Journal of thermal stresses*, 2001, 24.2: 141-192.
- [115] LINDGREN, Lars-Erik. Finite element modeling and simulation of welding. Part 3: efficiency and integration. *Journal of thermal stresses*, 2001, 24.4: 305-334.
- [116] LINDGREN, Lars-Erik. Finite element modeling and simulation of welding. Part 2: improved material modeling. *Journal of thermal stresses*, 2001, 24.3: 195-231.

- [117] SIMON, Flaviu B., et al. Optimization strategies for welding high-alloy steel sheets. *Schweißen und Wärmebehandlung*, 2013, 189.
- [118] ROMERO-HDZ, Jesus; TOLEDO-RAMIREZ, Gengis; SAHA, Baidya. Deformation and residual stress based multi-objective Genetic Algorithm (GA) for welding sequence optimization. In: *Proceedings of the Mexican international conference on artificial intelligence, Cancun, Mexico*. 2016. p. 233-243.
- [119] NAGEL, Falk, et al. Optimization strategies for laser welding high alloy steel sheets. *Physics Procedia*, 2014, 56: 1242-1251.
- [120] BÉZI, Zoltán; SZÁVAI, Szabolcs. SIMULATION AND VALIDATION OF WELDED JOINTS OF HIGH STRENGTH STEEL SHEETS. *Young*, 2014, 2.156: 4.
- [121] WANG, Xiaolong; WANG, Aimin. Finite element analysis of clamping form in wire and arc additive manufacturing. In: *Modeling, Simulation, and Applied Optimization (ICMSAO), 2017 7th International Conference on*. IEEE, 2017. p. 1-5.
- [122] TSUTSUMI, Seiichiro; FINCATO, Riccardo; SAHA, Baidya. Influence of welding sequence on residual stress and deformation pattern using conventional and LTT wires.
- [123] HU, Zeqi; QIN, Xunpeng; SHAO, Tan. Welding Thermal Simulation and Metallurgical Characteristics Analysis in WAAM for 5CrNiMo Hot Forging Die Remanufacturing. *Procedia Engineering*, 2017, 207: 2203-2208.
- [124] СУДНИК, Владислав Александрович; ЕРОФЕЕВ, Владимир Александрович; МАСЛЕННИКОВ, Александр Васильевич. Методика определения характеристик эквивалентного источника теплоты для выполнения расчётов деформаций при сварке. *Известия Тульского государственного университета. Технические науки*, 2015, 6-2.
- [125] LU, Jian (ed.). *Handbook of measurement of residual stresses*. Fairmont Press, 1996.
- [126] LEGGATT, R. H. Residual stresses in welded structures. *International Journal of Pressure Vessels and Piping*, 2008, 85.3: 144-151.
- [127] DENG, Dean; MURAKAWA, Hidekazu. Numerical simulation of temperature field and residual stress in multi-pass welds in stainless steel pipe and comparison with experimental measurements. *Computational materials science*, 2006, 37.3: 269-277.
- [128] FÜRBACHER, I. Lexikon technických materiálů: se zahraničními ekvivalenty: oceli: litin: neželezné kovy: aktuální stav únor 2018, Praha: Verlag Dashöfer, c.2018, CD-ROM

13 Vlastní publikace k tématu disertační práce

- [1] OCHODEK, VI.; BOXAN,P. Numerical simulation of welding high carbon steel after SPD process. In *Metal 2016*, 24th International Conference on Metallurgy and Materials, May 25th - 27th 2016, Brno, Czech Republic, Brno, Hotel Voroněž I, Brno, Czech Republic.
- [2] OCHODEK, VI.; HORAK, P. Plasma welding of high carbon steel after SPD process. In *Metal 2015*, 24th International Conference on Metallurgy and Materials, June 3rd-5th 2015, Hotel Voroněž I, Brno, Czech Republic, pp. 804-809.
- [3] OCHODEK, VI.; BOXAN,P. Weldability of carbon steel processed by multiple plastic deformation. In *Archives of Materials Science and Engineering*. Vol.69, Issue 2, 2014, pp.88-93.
- [4] RUSZ, S.; OCHODEK, V.; ČÍŽEK, L.; MICHENKA, V.; DONIČ, T.; SALAJKA, M.; TYLŠAR, S.; KEDROŇ, J. Influence of severe plastic deformation on mechanical properties of low carbon steel. In *Metal 2013*, 22nd International Conference on Metallurgy and Materials, May 15-17 2015, Hotel Voroněž I, Brno, Czech Republic, pp. 311-316.
- [5] MRKVICA, I.; OCHODEK, VI.; JANOS, M.; SYSEL,P. Tension in surface layer of workpiece by different tool's geometry. In *Advanced Materials Research*. Volume 602-604, 2013, pp. 1689-1692.
- [6] NESLUSAN,M.; ROSIPAL, M.; KOLARIK, K.; OCHODEK, VI. Application of Barkhausen noise for analysis of surface integrity after hard turning. In *Manufacturing Technology*, Vol.12, June 2012, pp. 60-65.