

6

Referências Bibliográficas

- 1 Petrobras. Plano Estratégico da Petrobras 2015. Disponível em: <<http://www.petrobras.com.br>>. Acesso em: 18 de maio de 2005.
- 2 BATISTA, G. Z. et al. Estudo da Correlação Microestrutura-Propriedades Mecânicas de Aço da Classe API X80. 58º Congresso Anual da ABM. 21 a 24 de Julho de 2003. Rio de Janeiro.
- 3 KALWA C.; HILLENBRAND, H. G. Production and Service Behaviour of High Strength Large Diameter Pipe. International Conference on Application and Evaluation of High Grade Linepipes in Hostile Environments. November 8-9, 2002, Yokohama, Japan.
- 4 GRAY, J. M.; FAZAKERLEY, W. J. Technical Challenges and Metallurgical Aspects of High Strength Linepipe. Annual Conference of Metallurgists, 37. p. 1-31. August 16-19, 1998.
- 5 HULKA, K. High Strength Large Diameter Pipe Plate – From Standard Production to X80/X100. Niobium Information, CBMM/NPC, n.13/97. p.1-42. 1997. Düsseldorf (Germany).
- 6 KATSUMATA, M. et al. T. Materials Transactions, JIM, vol.32, n.8, p 715-728, 1991.
- 7 SAGE, A. M. Physical Metallurgy of High-Strength, Low-Alloy Line-Pipe and Pipe-Fitting Steels. The Metals Society, Vol. 10, p. 224-233, June 1983. London.
- 8 IRANI, J. J. et al. In: Strong Tough Structural Steels, 110. The Iron and Steel Institute. 1967, London.
- 9 GEORGE, T. J.; BASHFORD, G. and MACDONALD, J. K.: J. Aust. Inst. Met., 16, 36. 1971.
- 10 MATSUBARA, H.; SAKAI, B. and ITAOKA, T. In: Materials Engineering in the Arctic, (ed. M. B. Ives), 190; 1976, American Society for Metals. Metals Park, Ohio.
- 11 LUTON, M. J.; DORVEL, R. and PETKOVIC, R. A.: Metall. Trans., 11A, 411. 1980.
- 12 WHITE, M. J. and OWEN, W. S.: Metall. Trans., 11A, 597. 1980.

- 13 SAGE, A. M.: *Met. Technol.*, 8, 94. 1981.
- 14 BUFALINI, P. and APRILE, A. In: *Sheet Rolling*, Vol. 2, 945; 1980, Iron and Steel Institute of Japan. Tokyo.
- 15 OUCHI, C.; TSUKADA, K. and TANAKA, J. In: *Proc. Conf. Vanadium in High Strength Steel*, Chicago, III. 1979, Vanitec, 37.
- 16 *Specification for Line Pipe*, API Specification 5L. American Petroleum Institute, March. 2004.
- 17 HULKA, K. *Metallurgical Concept and Full-Scale Testing of High Toughness, H₂S Resistant 0.03%C-0.10%Nb Steel*. Niobium Technical Report. CBMM.
- 18 GLADMAN, T.; DULIEU, D. and McIVOR, I. D. *Microalloying 75*, p. 32-55. Union Carbide Corporation, 1977. New York.
- 19 BAUMGARDT, H.; BOER, H. and HEISTERKAMP, F. In: *Niobium*, ed. H Stuart, p. 883-915, TMS of AIME. 1984. Warrendale (PA).
- 20 Confab. *Processo de Fabricação SAW Longitudinal (U-O-E)*. Disponível em: <<http://www.tenaris.com>>. Acesso em: 23 de maio de 2005.
- 21 BAUSCHINGER, J.: *Ziviling*. 27, 289. 1881.
- 22 OROWAN, E. In: *Internal Strain and Fatigue in Metal*, (ed. G. M. Rassweiler and W. L. Grabe), 59. 1959, Amsterdam, Elsevier.
- 23 WILSON, D. V.: *Acta Metall.*, 13, 807. 1965
- 24 BOTT, I. S. et al. *High-Strength Steel Development for Pipelines: A Brazilian Perspective*. *Metallurgical and Materials Transactions*. vol. 36A, p 443-454. February. 2005.
- 25 HRIVNAK, I.; MATSUDA, F. and IKEUCHI, K.: *Trans. JWRI*, vol. 21, pp. 9-32. 1992.
- 26 LI, Y. et al: *Iron Steel Inst. Jpn. Int.*, vol. 41 (1), pp. 46-55. 2001.
- 27 NAGAE, M. et al: *NKK Rev.*, vol. 66, pp.17-24. 1992.
- 28 MANOHAR, P. A. and CHANDRA, T.: *Iron Steel Inst. Jpn. Int.*, vol. 38, pp. 766-74. 1998.
- 29 FAIRCHILD, D. P. et al: *Welding J.*, vol. 70, pp. 321s-329s. 1991.
- 30 DAVIS, C. L. and KING, J. E.: *Mater. Sci. Technol.*, vol. 9, pp. 8-15. 1993.

- 31 KONDO, J. et al. The State of The Art of High Strength Induction Bent Pipe. NKK Corporation. Eighth Symposium on Line Pipe Research. PRCI. September, 1993.
- 32 Protubo. Foto do processo de curvamento. Disponível em: <<http://www.metalica.com.br>>. Acesso em: 23 de maio de 2005.
- 33 WILLIAMS, D. N. Investigation of the Properties of Induction Hot Bends. Batelle Columbus Division. Seventh Symposium on Line Pipe Research. PRCI. October, 1986.
- 34 GROENEVELD, T. P. Evaluation of Modern X70 & X80 Line Pipe Steels. Report nº 201, to PRCI from Batelle. April, 1992.
- 35 Cojafex Pipe Bender, Sales Brochure from Cojafex B. V. Pipebending Division, Inkamaf B. V., 9243 View Avenue N. W., Seattle, Washington 98111 U.S.A., (206) 782-5161.
- 36 BEHRENS, D.; HILLENBRAND, H. G. and SPETH, W. Inductive Bends in Grade GRS 550TM/V (X80). Europipe. 1994.
- 37 BATISTA, G. Z. et al. Effect of the MA Constituent Content on the Mechanical Properties of Nb-Cr and Nb-Cr-Mo of API X80 Steel. International Conference on Thermomechanical Processing: Mechanics, Microstructure & Control. Sheffield. Jun, 2002.
- 38 BATISTA, G. Z. et al. Soldabilidade a Arco Submerso de Aços API X80. 58º Congresso Anual da ABM. 21 a 24 de Julho de 2003. Rio de Janeiro
- 39 DIXON, B.; Hakansson. K. Welding Journal. 74 (1995) 122s. P. Deb, K. D. Challenger. A. E. Therrien. Metall. Trans. 18A. 1987.
- 40 Standard Test Methods and Definitions for Mechanical Testing of Steel Products. ASTM A 370. American Society for Testing and Materials. 2003.
- 41 IKAWA, H.; OSHIGE, H.; TANOUE, T. Effect of Martensite-Austenite Constituent on HAZ Toughness of a High Strength Steel. IIW. DOC IX – 1156-80.
- 42 BISS, V.; CRYDERMAN, L. Metallurgical Transactions, 2. 2267-76. August, 1971.
- 43 Submarine Pipeline Systems. Offshore Standard DNV-OS-F101. Det Norske Veritas. January, 2000.
- 44 NAGAE, M. et al. Development of X100 UOE Line Pipe, NKK Review, n. 66, p. 17-24. 1992.