

6 Referências Bibliográficas

ALMAKT, M. M., BALÁZS, G. L. e PILAKOUTAS, K. **Strengthening of RC Elements by CFRP Plates Local Failure**. 2nd Int. PhD Symposium in Civil Engineering, Budapest 1998.

AMERICAN CONCRETE INSTITUTE, ACI 440 F - 2000. **Guidelines for the Selection, Design and Installation of Fiber Reinforced Polymer (FRP) Systems for External Strengthening of Concrete Structures**. 97p., USA, 2000.

AMERICAN SOCIETY for TESTING and MATERIALS - ASTM - D3039/D3039, 2000 – **Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials**. USA.

ARAÚJO, A. C. N. **Estudo Experimental do Reforço à Flexão de Vigas de Concreto Armado Utilizando Compósitos com Tecidos de Fibras de Carbono**. Dissertação de Mestrado, 163p. Puc-Rio, Rio de Janeiro, 2002.

ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS – NBR 6118: **Projeto de Estruturas de Concreto – Procedimentos**. Rio de Janeiro, 2003.

ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS – NBR 7217: **Agregados – Determinação da Composição Granulométrica**. Rio de Janeiro, 1987.

ASSOCIAÇÃO BRASILEIRA DE NORMAS TÉCNICAS – NBR 9776: **Agregados – Determinação da Massa Específica de Agregados Miúdos por Meio do Frasco de Chapman**. Rio de Janeiro, 1987.

BEBER, A. J. e FILHO, A. C. **Transferência de Esforços na Interface Concreto/Compósito de CRFP**. Engenharia Estudo e Pesquisa, v.8, n.1, P.9-18. Rio de Janeiro: Ed. Interciência, 2005.

BEBER, A. J.; CAMPOS FILHO, A.; CAMPAGNOLO, J. L. **Reforço de Estruturas de Concreto com Tecidos de Fibras de Carbono**. XXIX Jornadas Sudamericanas Ingenieria Estructural. CD-ROM. Uruguay, 2000.

BIZINADAVYI, L.; Naele, K. W. **Transfer Lengths and Bond Strengths for Composites Bonded to Concrete**. Journal of Composites for Construction, November 1999. p. 153-159.

CHEN, J.F.; TENG, J.G. **Anchorage Strength Models for FRP and Steel Plates Bonded to Concrete.** Journal of Structural Engineering, 2001; 127 (7). p. 784-791.

EL-REFAIE, S.A.; ASHOUR, A.F. e GARRITY, S.W. **Sagging and Hogging Strengthening of Continuous Reinforced Concrete Beams Using Carbon Fiber-Reinforced Polymer Sheets.** ACI Structural Journal, July-August 2003, p. 446-453.

ERKI, M. A. e MÉIER, U. P. E. **Impact Loading of Concrete Beams Externally Strengthened with CFRP Laminates.** Journal of Composites for Construction, August 1999. P. 117-124.

ESCOBAR, C. J. **Reforço À Flexão de Vigas de Concreto Armado com Lâminas de CFRP Tensionadas.** Dissertação de Mestrado, 19-21p. UFPR, Paraná, 2003.

HAMAD, B. S.; SOUDKI, K. A., HARAJLI, M. H. e RTEIL, A. A. **Experimental and Analytical Evaluation of Bond Strength of Reinforcement in Fiber-Reinforced Polymer-Wrapped High-Strength Concrete Beams.** ACI Structural Journal, November-December 2004, p. 747-754.

JERROME, D. M, and ROSS, C. A. **Simulation of the Dynamic Response of Concrete Beams Externally Reinforced with Carbon-Fibre Reinforced Plastic.** Computer and Structures, v.64, n.5/6, P.1129-1153. 1997.

KHALIFA, A., ALKHRDAJI, T., NANNI, A. e LANSBURG, S. **Anchorage of Surface Mounted FRP Reinforcement.** Concrete International: Design and Construction, v.21, n.10, P.49-54. Oct. 1999.

MARTINS JUNIOR, J. N. J. **Resistência à Tração de um Sistema de Ancoragem Embutido em Concreto Sujeito a Carga de Impacto.** Dissertação de Mestrado, PUC-Rio, Rio de Janeiro, 2006.

MENEGHEL, J. M. **Análise Experimental da Aderência entre o Concreto e Compósitos com Tecido de Fibras de Carbono.** Dissertação de Mestrado, Puc-Rio, Rio de Janeiro, 2005.

MILLER, B. e NANNI, A. **Bond Between CFRP Sheets and Concrete.** *Proceeding, ASCE 5th Materials Congress*, Cincinnati, OH, 1999, p.240-247.

NAKABA, K.; KANAKUBO, T.; FURUTA, T. e YOSHIZAWA, H. **Bond Behavior Between Fiber-Reinforced Polymer Laminates and Concrete.** ACI Structural Journal, 2001; 98 (3). p.359-367.

RIBEIRO, P. T. P. **Uma Abordagem Sobre o Modo de Dimensionamento de Reforço do Concreto Armado com Elementos Compósitos de Carbono – Mitos e Verdades.** 47º Congresso do Instituto Brasileiro de Concreto – IBRACON, Olinda, 2005, p 249.

SILVA FILHO, J. J. **Reforço à Torção de Vigas de Concreto Armado com Compósitos de Fibras de Carbono.** Tese de Doutorado, Puc-Rio, Rio de Janeiro, 2007.

SOUTO, M. V. F. **Modelagem Numérica de Reforço Estrutural em Vigas de Concreto Armado.** Dissertação de Mestrado, 27p. PUC-Rio, Rio de Janeiro, 2003.

TANG, T.; SAADATMANESH, H. **Analytical and Experimental Studies of Fiber-Reinforced Polymer-Strengthened Concrete Beams Under Impact Loading.** ACI Structural Journal, January-February 2005, p. 139-148.

TANG, T.; SAADATMANESH, H. **Behavior of Concrete Beams Strengthened with Fiber-Reinforced Polymer Laminates Under Impact Loading.** Journal of Composites for Construction, August 2003. p. 209-218.

WHITE, T. W.; SOUDKI, K. A. e ERKI, M, A. **Response of RC Beams Strengthend with CFRP Laminates and Subjected to a High Rate of Loading.** Journal of Composites for Construction, August 2001. p. 153-162.

Anexo – Curvas Força *versus* Tempo

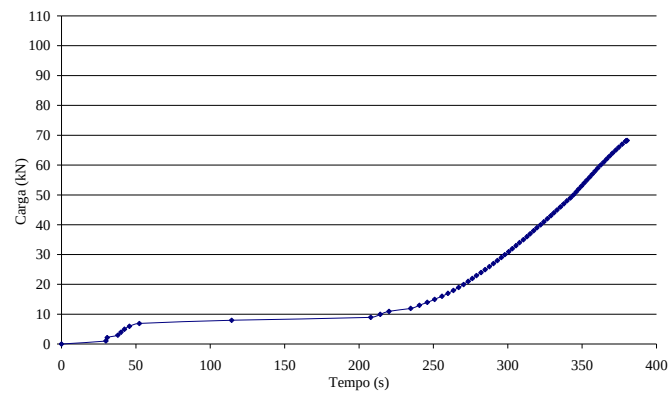


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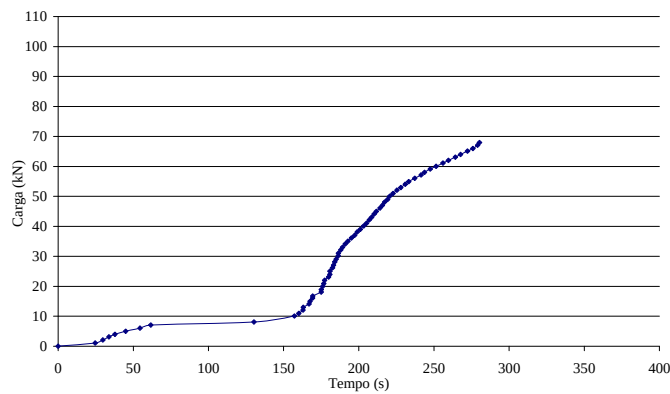


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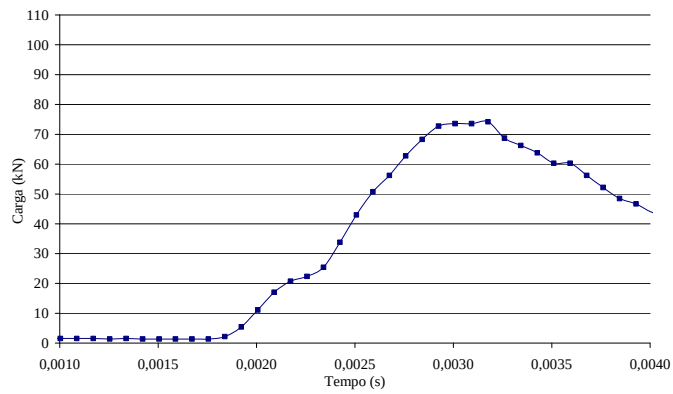


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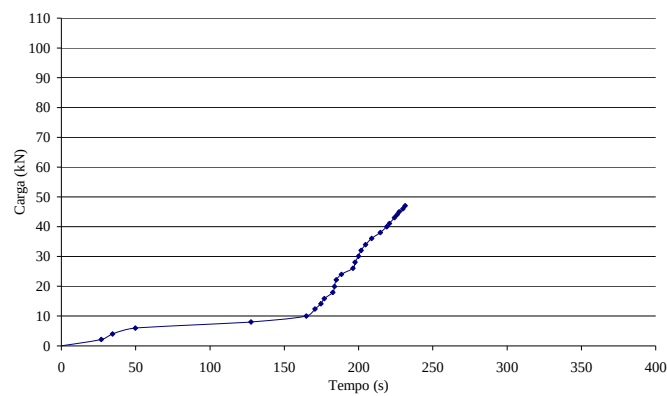


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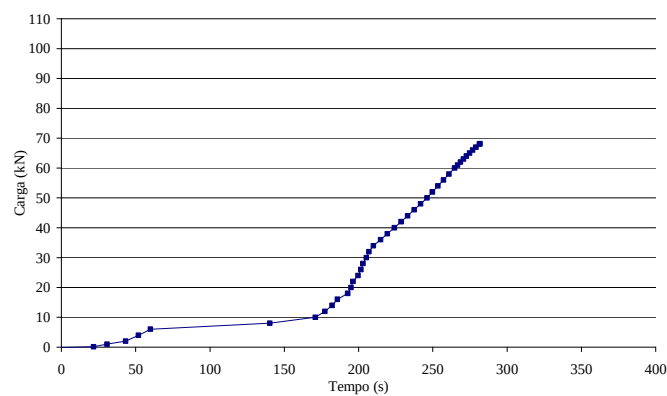


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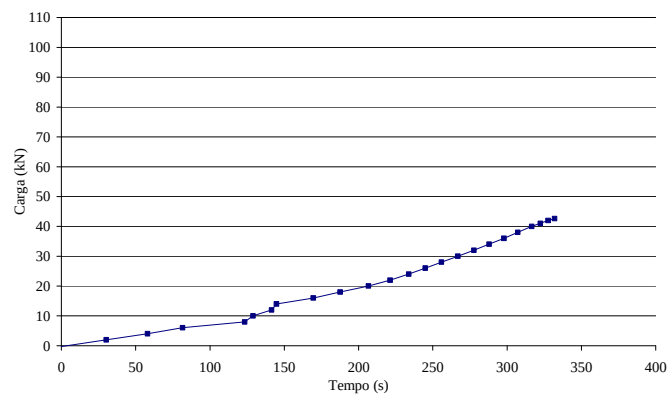


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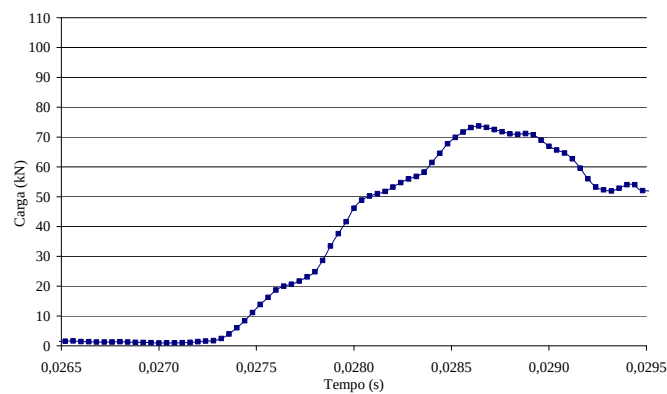


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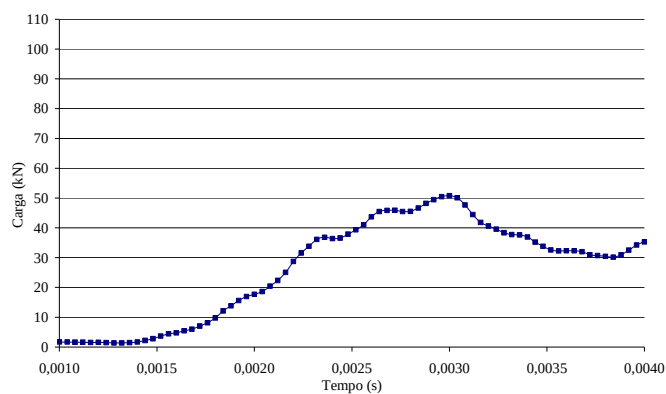


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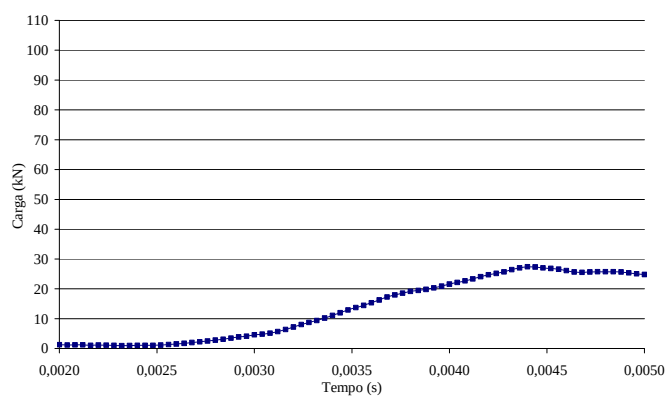


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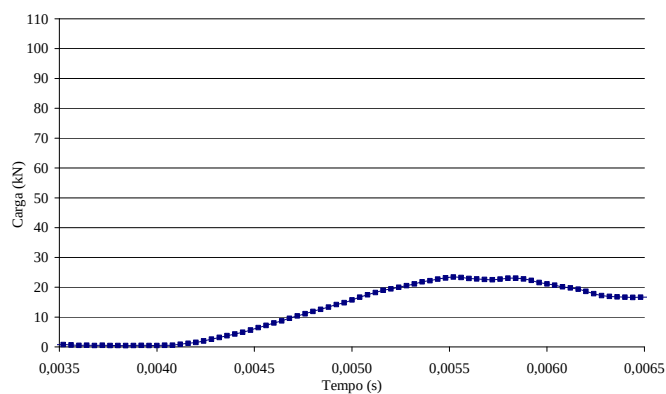


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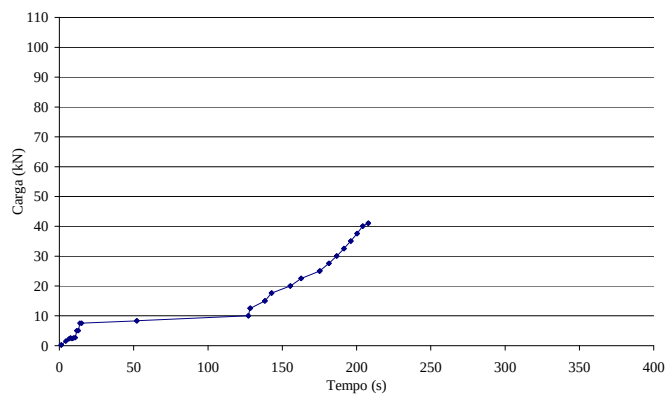


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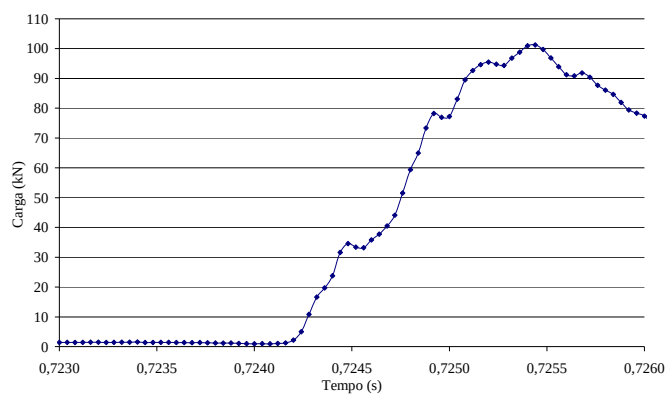


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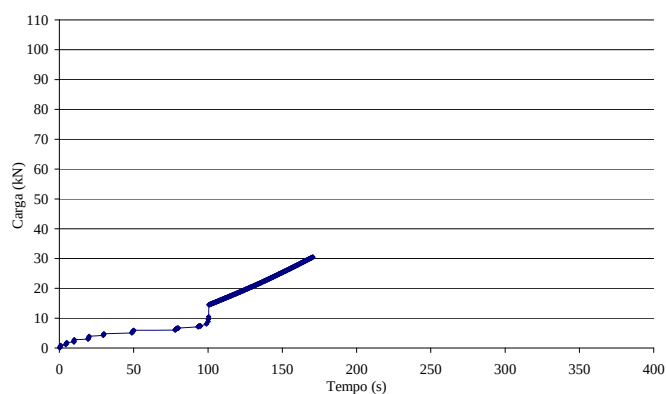


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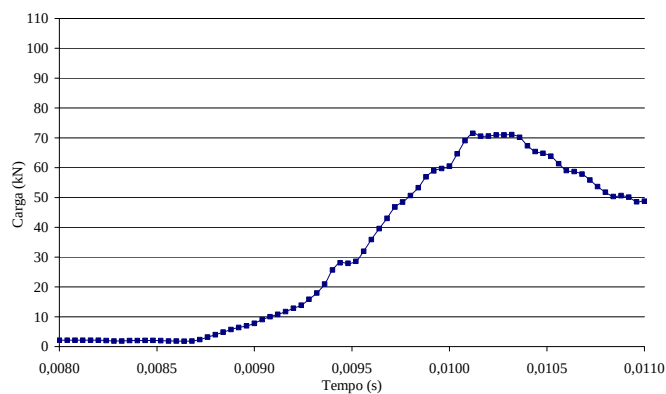


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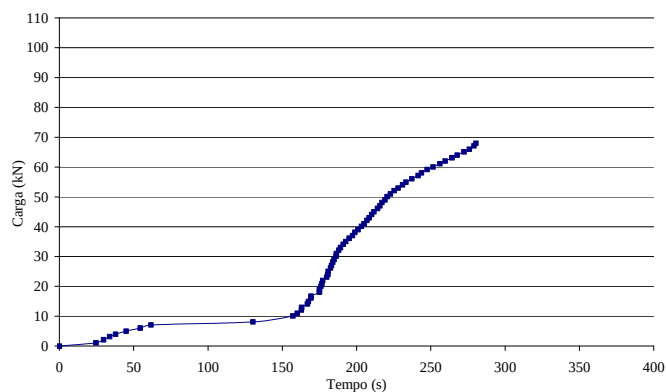


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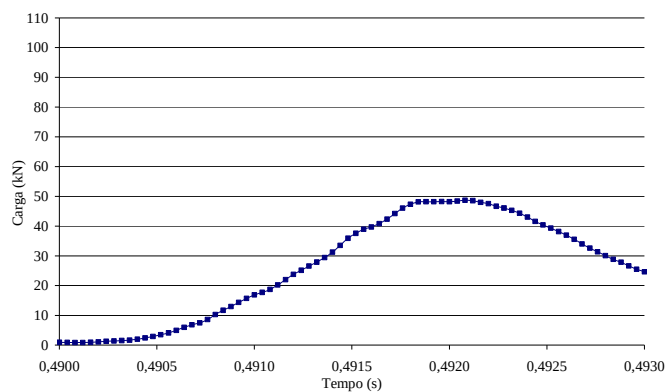


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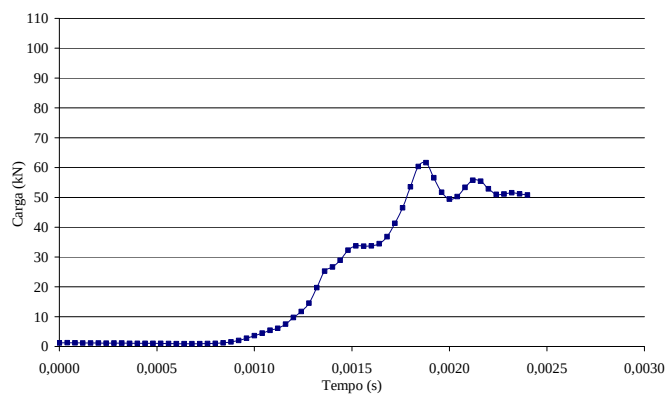


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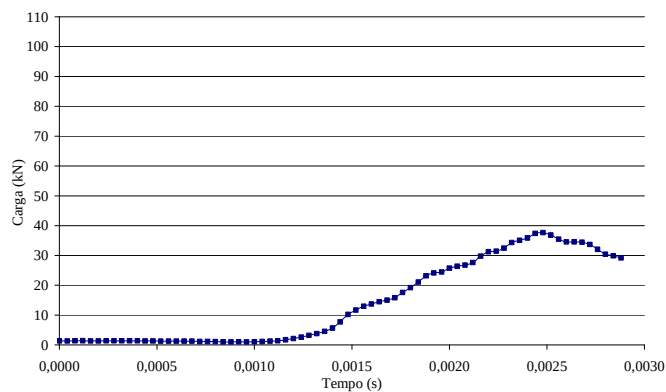


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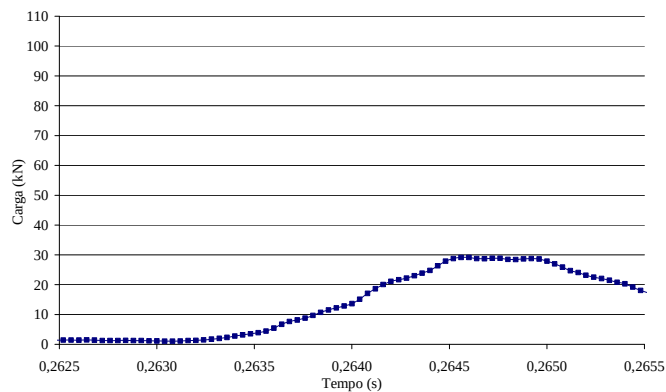


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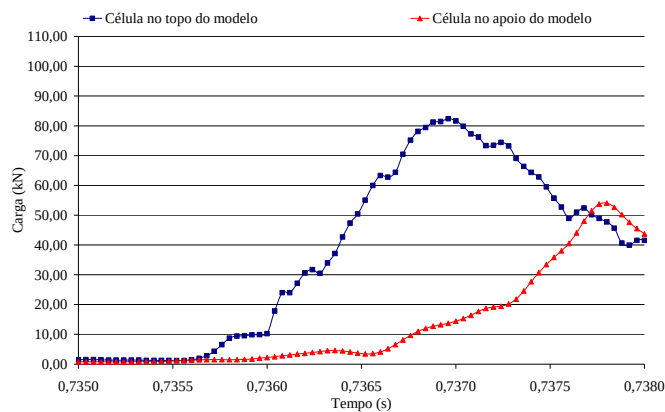


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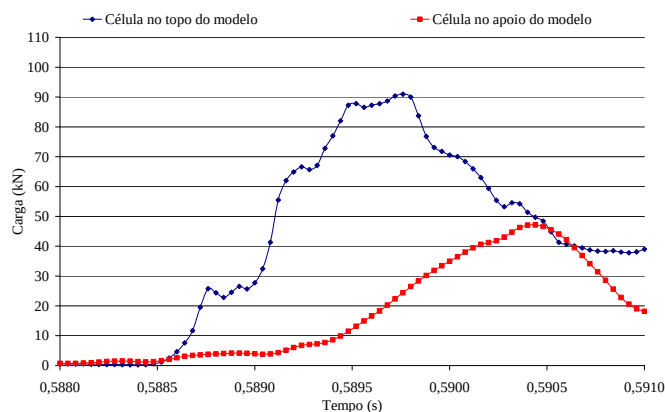


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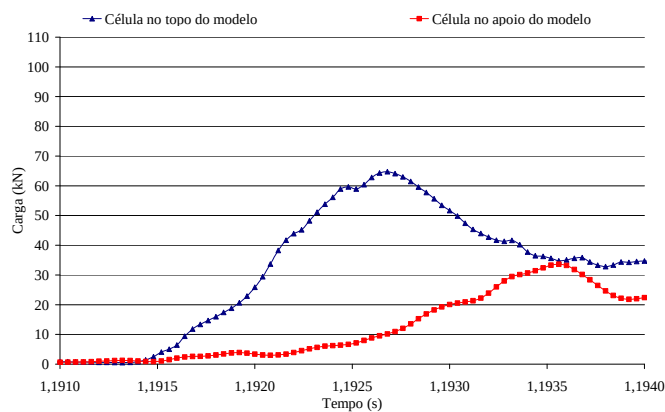


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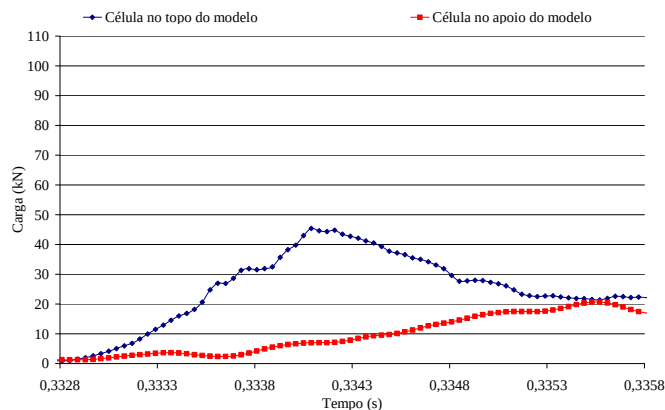


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