

## Analysis of Weld Line Influence on Strength of Nylon Parts

Karel Raz, Martin Zahalka, Zdenek Chval, Ludmila Kucerova

Regional Technological Institute, Faculty of Mechanical Engineering, University of West Bohemia. Univerzitni 8, 306 14 Plzen. Czech Republic. E-mail: kraz@rti.zcu.cz, martinza@rti.zcu.cz, zdchval@rti.zcu.cz, skal@kmm.zcu.cz

**Main aim of this article is description of weld line influence on mechanical properties of plastic parts. Special design of mold was created for this research. This mold is able to create specimens with and without weld lines. These specimens undergone tensile test according standard ASTM D638 with different results. Strength and strain results were compared for both types of specimens. Nylon PA6 without any internal reinforcement was used as reference material during testing. Both specimens were investigated also by microscope in order to see composition of weld line and plastic material. Microstructure showed geometry of weld line and also fracture surfaces indicated presence of plastic deformation**

**Keywords:** Weld Line, Strain, Tensile Test, Nylon

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