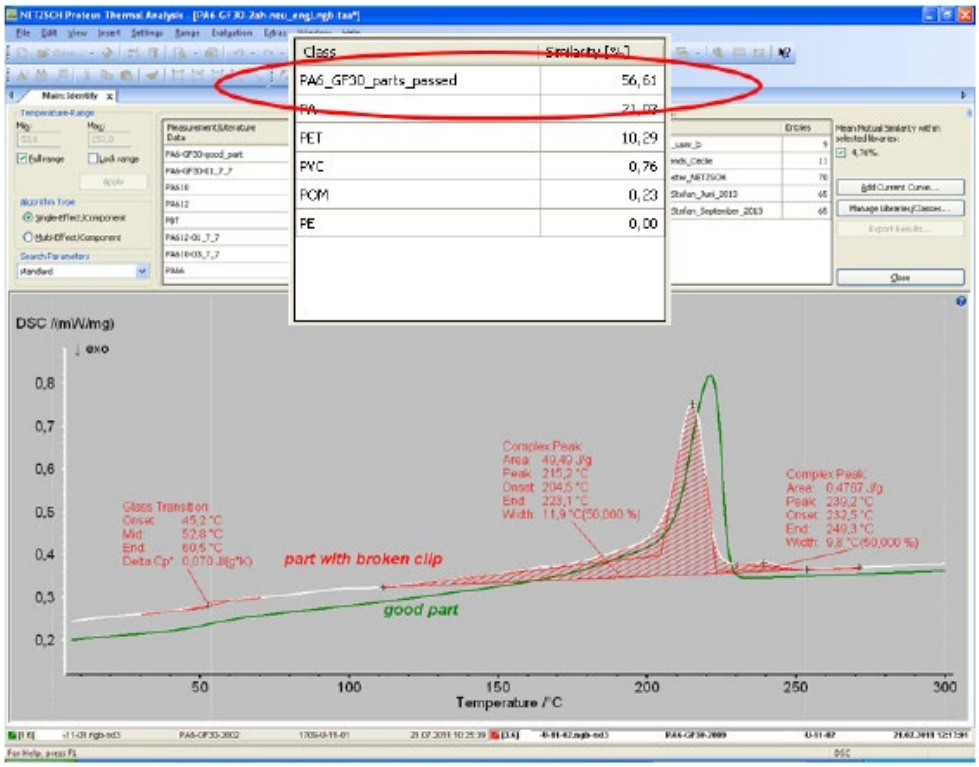
APPLICATION**SHEET**

Quality Control & Failure Analysis – *Identify* Software

A Rejected PA6 Part Analyzed by Means of *Identify*

The new *Identify* software which is an extension of the NETZSCH *Proteus*® software ...

- **... is** a unique DSC curve recognition and interpretation system providing results with a single click.
- ... is useful for material identification and quality control.
- ... is both easy to use and sophisticated
- ... includes a database with NETZSCH libraries for polymers as a basis as well as libraries that can be created by the user.
- **...** manages measurements, literature data and classes, incorporating the user's knowledge.



DSC measurement on a rejected PA6 part (with broken clip) analyzed by means of *Identify*

Identify is also highly beneficial in a quality control setting. The figure depicts the use of *Identify* to analyze a DSC measurement on a rejected PA6 part (with broken clip). The melting peak of the defective part is at a lower temperature than that of the good parts, and an additional small peak was detected at 239°C. The calculated similarity to the user class "PA6_GF30_parts_passed" was thus relatively low (only 56.61%).

It can be concluded that the bad part is not pure PA6, but most probably a blend of different PA types such as PA6 and PA66. This particular case is typical failure analysis, since the rejected part was already broken. It is clear, however, that routine quality control on both raw materials and final products using the DSC 214 *Polyma* with the *Identify* software as a standard tool can minimize product failures in the field.

NGB · AS-250-2013 · EN · 11/13 · Technical specifications are subject to change.

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