

Württembergische Allplastik GmbH

Johannes-Kepler-Straße 12

71083 Herrenberg

Prüfbericht / Test Report

Items tested: Various (detectable) quick fasteners from Württembergische Allplastik GmbH

Scope of the order: Examination validated by measurement of the samples presented to ascertain detectability by metal detectors and the examination of the homogeneity of the samples

## 1. Examination validated by measurement

The submitted quick fasteners of Württembergischen Allplastik GmbH were checked to ascertain their detectability.

### 1.1 Examination parameters

- Amplitude signal of metal detector system
- Phase signal of metal detector system
- Vektorsignal (Betrag und Winkel)

## 2. Results of the examination

Each quick fastener was assigned an equivalent metal ball, i.e. this ball roughly corresponds to the behaviour that the respective quick fasteners generate in a metal detector (300 KHz) without product compensation. A high product effect caused, for instance, by high inherent conductivity of the foodstuff can change detection considerably.

The examination measurements show that the quick fasteners submitted generate signals with relatively large amplitudes in the metal detector used. The equivalent metal balls, the signals of which correspond to the examined plastic samples, have a diameter of around **5.5 mm to 7.0mm** non-ferrous metal (brass).

The cable ties presented also do not exhibit any variations **when checking homogeneity**.

Deggendorf, 17.07.2012

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Managing Director