



Agricultural Journals

Research in

**AGRICULTURAL
ENGINEERING**

home **page** about **us** contact

us

Table of Contents

IN PRESS

RAE 2013

RAE 2012

RAE 2011

RAE 2010

RAE 2009

RAE 2008

RAE 2007

RAE 2006

RAE 2005

RAE 2004

RAE 2003

RAE Home

Editorial

Board

For Authors

- **Authors Declaration**
- **Instruction to Authors**
- **Guide for Authors**
- **Copyright Statement**
- **Submission**

For Reviewers

- **Guide for Reviewers**
- **Reviewers Login**

Subscription

Res. Agr. Eng.

**Vitázek I., Tirol J.:
Relation between
surface temperature
and dryer operation**

The most significant way of grains conservation is heat drying. This technological process is regarded as a part of the production process with such commodities as grain maize, grain sunflower, rape, and other oil plants. The paper presents partial results of a check measurement on MC 3180 dryer with descending vertical layer in drying grain maize. On the basis of the evaluation of the measured parameters of the drying medium and the analysis of thermovision camera screenshots together with applying the knowledge of the mechanics of wet air, insufficiencies in the dryer operation were revealed and specified. Significant differences in surface temperatures of the dryer casing were caused by its silting up, which had an unfavourable effect on the drying medium flow through the layer of the dried material. The analysis of the state of the drying medium was done using i-x diagram of