

Storing and handling wood chips. One day course focusing on mechanisms and risks associated with de-composition

Lecture 1: Background

The presentation is a short resume over the research during the late 1900 and the early 2000's. The aim is to bring the course participants up-to-date with the knowledge base and give everyone a common base for the day.

Lecture 2: Short introduction to the mechanisms

The presentation is a summary real data and of the mechanisms occurring in a pile of chips. The aim is to give the participants a simplified but scientifically based understanding intuitive feeling for what happens.

Lecture 3: A simplified quantitative model

The presentation introduces a very simplified way to estimate quantitatively what may happen plus some experimental values from lab tests. The aim is to present a logical connection between real-life data and laboratory tests/data.

Lunch break

Lecture 4: The mechanisms behind auto-ignition

The presentation explains how it is possible that auto-ignition may be triggered already below 100 °C. The aim is to make the participants aware of the importance of continuous monitoring of the storage.

Lecture 5: The customer, the fuel quality and the dynamics of storing

The presentation presents some types of energy plants and outlines their specific demands on fuel quality. The aim is to make participants understand the connection between the customer demands and the de-composition.

Lecture 6: Conclusions

The presentation summarises the above so as to provide a simple guideline for storing. The aim is to compare this guideline – as based on simplified science – to the internal recommendations issued by the company.

Open discussion session, questions-and-answers