

# Weighing records

### **KS 98** application

Acquisition of measurement data in a refuse incineration plant with 3 furnaces

Weight measurement Tare function Data acquisition with date and time Handling of max. 500 data sets Offline data transfer to a notebook

**Excel-compatible data export** 

#### **KEY WORDS**

## Refuse incineration, weighing applications, offline data acquisition

#### DESCRIPTION

A clamshell grab takes up a load of refuse, which is weighed continuously. The operator decides which of the three furnaces is to be charged, and presses one of the keys 1, 2 or 3 to assign the load to the relevant furnace.

Every load is weighed and the data is stored together with furnace number, date, and time for the period of one week. The weekly data are then transferred to a notebook by means of a simple Windowsbased program, and are made available for subsequent evaluation e.g. with MS Excel®.

#### IMPLEMENTATION

On the main display screen, the operator can see the currently measured weight, the recorded weight, and the number of the previously charged furnace. In addition, the operator can start a recalibration procedure from this screen at any time, which adjusts the empty (tare) weight to 0 tons. By pressing one of 3 keys, the present weight of the refuse in the clamshell is assigned to a particular furnace, provided the weight is more than 200 kg and does not change (<20 kg during 1s).

As soon as the clamshell has been emptied (weight <200 kg) the multi-function unit is ready for the next operation. Another screen shows the sum totals of refuse per furnace since the last reset.

During furnace assignment, all data (furnace no., weight, date, time) are stored in a ring buffer in two cascaded trend function blocks per furnace. Every block stores up to 100 values.

A conventional Windows program reads the trend data of up to 8 trend curves, each with max. 5 cascaded trend blocks (500 values). The data can be displayed as line graphics and as text lists, and can also be exported as Excel-compatible files.

#### **CONFIGURATION**

A special configuration screen enables the detection limits for a stable weight (e.g. <20 kg change during 1s), and the minimum weight for the initialization status (e.g. >200 kg) at the end of the charging procedure. Furthermore, the operator can call the trend displays in order to view the stored data.

#### UNLIMITED VERSATILITY

The flexible configurability of the KS 98 enables the above application to be extended with pre-configured library functions such as password protection, timer, programmer, etc., or even "homemade" partial Engineerings. With additional operating screens, for example 6-line text display, trend display, and bargraphs, the projecting engineer is able to increase the plant's operational functions.

Moreover, by means of a user-specific menu structure, the transparency of the process data can be adapted precisely to individual requirements.



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