

IREDES Machine Maintenance Profile

Cross Supplier standardized format for Machine Maintenance information

Motivation

In order to enhance cost efficiency of mining operations, the optimization of all ongoing works in real time (or near real-time) is essential. This also includes a predictive scheduling of maintenance activities. Today no or only limited information about the maintenance status and health of mining equipment is electronically available to the maintenance staff and to process managers.

In order to enable an integration of maintenance relevant information from mining equipment into higher level IT systems, IREDES standardizes this information so machines of different manufacture deliver identical information formats for easy integration.

Purpose

The purpose of the IREDES MACHINE MAINTENANCE Profile is to provide:

- General information about a machine maintenance status applicable to all types of machines
- Equipment type specific status information in the respective Equipment Profile as an extension of the general profile

It is important that any IREDES profile does not specify systems the producers have to use. IREDES specifies the electronic interface between machines and IT systems so producers and mines are completely free in choosing their individual systems, as long as they provide IREDES interfaces.

Scope

The profile information consists of all machine maintenance related information which is of relevance to integrate the work of the machine into an optimized mine process. Parts of the profile will be (details subject to discussion):

- General maintenance information for all machine: Estimated time to next service (operation hours), machine health status: OK-WARNING-ALARM
- Drill Rig, LHD or other machines specific data as e.g.: Type of next service needed, op hours or load integrals left for service of specific components, Log of last errors occurred

These are examples subject to discussion by the working group. If the working group deems it more advantageous, the Maintenance profile may also be combined with the Machine Status profile.

Status

The MACHINE Maintenance data type definitions are released as part of a generic Application Profile and as entries into each Equipment profile. It is part of the discussions surrounding the IREDES. 2.0

Questions? Want to participate in creating the standard? Not an IREDES member yet? Get involved:

ccibis@iredes.org