
IREDES Machine Status Profile

Cross Supplier standardized format for Machine Status 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. As most critical operations in mining are performed by mobile machines, today no or only limited information about the ongoing works and their status is available to the process managers.

In order to provide process relevant information from mobile machines to higher level IT systems, IREDES standardizes this information so machines of different manufacture deliver identical information and thereby can be easily integrated into a mine's IT environment.

Purpose

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

- generic information about a machine status applicable to all types of machines in the Machine Status Application Profile,
- equipment type specific status information in the respective Equipment Profile as an extension of the generic 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 provides IREDES interfaces.

Scope

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

- General Status: OFF-STANDBY-RUNNING-WARNING-STOPonFAILURE-MAINTENANCE
- Operation Mode and place: MANUAL-SEMIAUTO-AUTO // LOCAL-RADIOREMOTE-REMOTE
- Drill Rig specific like fan number, hole number, ...
- LHD specific like round number, loading point number, dump point number, load from load point, ...

These are examples subject to discussion by the working group.

Status

The MACHINE STATUS data type definitions are released as part of the generic Application Profile and as entries into each Equipment profile. The profile is currently subject to discussion. A release is planned for the 2nd half of 2018.

Questions? Want to share your opinion? Want to participate in creating the standard?

Not an IREDES member yet? Get involved:

info@iredes.org