

IREDES CONTOUR Equipment Profile

Cross Supplier standardized formats for Tunnel Profile information

Motivation

Different equipment is able to deliver information about the cross section ("Profile" or "Contour") of a tunnel. This can be a drill rig using an on board scanner, separate laser scanners etc.

This information can be used e.g. by IT systems to show the three dimensional tunnel layout in a visualization software, like a "flight" through the tunnel as well as to check whether sufficient clearance is available to move big machinery etc.

To enable this information to be used by IT systems at minimized cost for interface development, IREDES standardizes this information so scanners or profilers of different manufacture all deliver identical information and thereby can be easily integrated into a mine's IT environment.

Purpose

The purpose of the IREDES CONTOUR Equipment Profile is to provide tunnel profile information defining the cross section of a tunnel at a given point along the tunnel line.

It is important that any IREDES profile does not specify systems the producers have to use. IREDES specifies the electronic interface between 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 an ordered list of node points forming a closed path. The coordinates of the last point should be equal to those of the first so that the path is closed.

The resolution is not fixed in the IREDES profile as this only depends on the angular resolutions of e.g. the laser scanner used.

Status

The CONTOUR data type definitions are released as part of the DRILL RIGS Equipment Profile. It is planned to extract them to an individual Equipment Profile within the next major release.

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

Get involved:
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