## Qualified enclosed cable tray

## For nuclear power plants

## How to increase flexibility by reducing time and costs during cable installation

## Challenge

Connections between main cable ways and consumers are usually executed with cable conduits.

IEEE 384 or EMC-requirements need enclosed cable support systems.

Cable pulling has to be designed and configured.
Mistakes in calculation of size and quantity will result in blocked conduits incapable of further cable pulling or pulling back wrong cable.

The maximum usage of a conduit is $60 \%$ of space.


## Solution

Usage of cable tray in size $100 \times 110 \mathrm{~mm}$ with lid.
Fulfilling separation requirements according IEEE 384.
Divider strip can be installed to separate safety from non-safety cable.
Erection time approx. $3 \mathrm{~min} . / \mathrm{m}$.
Length of cable tray with lid 6 m .
Bends, T-pieces and other formed components belong to portfolio.
Cable can be laid instead of pulled.
Additional cable connections can be executed one after the other.


Example: cable support systems filled with cable left side cable tray $100 \times 110$ - right side conduit M63

## Customer benefits

- Simple installation
- 50 \% erection time of a conduit
- Easy to lay cable
- Double the length of a conduit with $60 \%$ less weight
- Requirements for separation according IEEE 384 fulfilled
- Parallel placement of safety and nonsafety cable via divider strip
- 1.5 up to 2 times more space for cable as a conduit DN 100
- No heat accumulation - Airflow via the bottom plate and side rails
- Preferred for laying fiber optic cable
- Usable for laying capillary pipes



## Technical information

- Cable tray in size $100 \times 110 \mathrm{~mm}$ with metal sheet thickness 1.5 mm .
- Metal sheet galvanized and hot dip galvanized in length 6000 mm .
- Extension with additional cable tray via connectors.
- Formed components like bends and t-pieces can be connected to the cable tray.
- Enclosed cable laying ensured with lids on all parts.
- Fastening through bottom plate or side rail.
- 1.5 up to 2 times more space for cable than conduit DN 100.
- No deadlocking of cable.
- Easy exchange of wrong laid cable.
- Identification of cableway with labels easy to fix to side rail or lid.
- Additional separation strip can be fastened to the bottom plate.
- Lid fastened via included lockers for non seismic requirements or stainless steel strap for seismic requirements.


Cable tray 100 mm width - 110 mm heigth - 1.5 mm thick with Lid and straight connector

## Key figures

## Light weight $5 \mathrm{~kg} / \mathrm{m}$

## Erection time approx. 3 min./ m

Separation requirements fulfilled

## 1.5 to 2 times more space

No damage by replacement in case of incorrectly pulled cables

