Service
DEHN – Safety worldwide.

DEHN + SÖHNE is a worldwide provider of devices and services in the field of lightning and surge protection. Permanent market presence, cost-effectiveness, product quality and delivery reliability are the roots of our success. Highest possible local presence is a basic requirement for the development of innovative products and services which are adapted to market needs. Our customers benefit worldwide from our spirit of innovation, flexibility and ability to make quick decisions. “DEHN - SAFETY IS OUR CONCERN” applies to both our devices and services.

Our long experience in designing lightning protection systems ranges from simple office buildings and parts of installations to complex industrial plants such as photovoltaic systems, biogas plants, petrochemical plants and power plants.

Are you interested?
You will find your local contact at www.dehn.de/service.

Service for isolated air-termination systems
(in accordance with IEC 62305).

We manage the complete design process including drawings, installation details, bill of materials, specification texts, design descriptions, and material offers.

The following information is required for designing:
1. The class of LPS selected for the structure
2. Earth-termination system of the structure
3. Photos
4. Drawings (if any)
5. For systems in hazardous areas: hazardous area zone plans

You will receive the following:
1. A design offer
2. Preparation of the lightning protection general drawings (CAD)
3. Preparation of the detailed installation drawings of the air-termination systems (CAD)
4. Calculation of the separation distances in accordance with IEC 62305
5. Bill of material (material offer if required)
6. Description of the lightning protection concept
7. On-site inspection (upon consultation)

Some references:
- Fraunhofer Institut
- AVA Justizvollzugsanstalt in Luxemburg
- News agency REUTER AG Frankfurt
- Solar plant (Philipp Elektrotechnik, Solarpark Pohlendorf)

DESIGN EXAMPLE

Example biogas plant
Example photovoltaic system
Example petrochemical plant
Example office building
Description of the protection areas
Example

Design example...
Installation detail

Schematic diagram:

1. HV conductor III (part no. 819-022)
2. Concrete base (part no. 102-216)
3. Flat washer (part no. 102-006)
4. Tripod support (part no. 102-200)
5. Distance Holder for HV conductor (part no. 106-812)
6. Distance holder (part no. 106-175)
7. Solid mount conductor (part no. 840-018)
8. HV terminal (part no. 390-099)
9. Roof conductor holder (part no. 235-015)
10. Adapter (part no. 283-028)

Figure similar. Note installation instructions.

Design example...
Installation detail

Figure similar note installation instructions

Example
design example...
Design example...
Calculation of separation distance

Date: 03.03.2010

Customer/Orderer:
Customer No.: 00000 DEHN + SÖHNE
Name: DEHN + SÖHNE GmbH + Co.KG
Street: Hans-Dehn-Straße 1
Country/POC/Place: D-69212 Neumarkt i.d.OPf., Stadt:

Project:
Project No.: SA 0079
Project name:
Street:
Country/POC/Place:

Design/lightning protection system Installer:
Company: DEHN + SÖHNE GmbH + Co.KG.
Name: DEHN + SÖHNE GmbH + Co.KG.
Street: Hans-Dehn-Straße 1
Country/POC/Place: D-69212 Neumarkt
Phone No.:

Details for calculation:
Selected class of LPS: III
Current intensity: 100 kA
kV - Insulation coefficient km: 1
Potential level: 6 m

Bill of materials

Partlist 1
SA 0079 Design example

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Notes:
The amount of copper conductors is only for protective purposes.
The length here to avoid up to complete cold.
The equilateral spacing of LPS conductors are as follows:

TOTAL:

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