

## ANNUAL MAINTENANCE PROTOCOL

LIGHTNING PROTECTION SYSTEM (LPS) USING THE  
DINNTECO LIGHTNING ARRESTER AND ELECTROMAGNETIC SHIELD **DDCE PLUS**

According to UNE-EN-IEC 62305

<b>AS-BUILT INSTALLATION DATA</b>	
Name of the protected structure	
Name of installer	
Date of installation	
Name of customer	
Type of protected structure	
Serial No. of DDCE installed	

<b>DESIGN OF CURRENT INSTALLATION</b>		
Has any new structure been built in the surroundings of the structure protected by the DDCE(s)?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
If so. Is it necessary to change the design of the LPS taking into account the new structure(s)?	YES <input type="checkbox"/>	NO <input type="checkbox"/>

In this case make a sketch design of the NEW LPS to be installed:

Nº	MAINTENANCE CONCEPT	RESULT	REFERENCE VALUE	CORRECTIONS CARRIED OUT
1	Check for deterioration and corrosion of the DDCE lightning arrester (ensure there is continuity between the upper and lower hemispheres, conductors and connections down to earth.	CORRECT <input type="checkbox"/> INCORRECT <input type="checkbox"/>	Absence of corrosion in the DDCE, conductors and connections down to earth. Perfect insulation between the upper and lower hemispheres of the DDCE.	
2	Check that the DDCE is located at least 2 metres above any element, installation or structure within its protective radius of coverage.	CORRECT <input type="checkbox"/> INCORRECT <input type="checkbox"/>	The DDCE(s) must be located at least 2 m above any element, installation or structure within the radius of coverage of 100/50/25 m (in the case of an isolated structure), or within the radius of coverage of the installation being protected (based on a survey).	
3	Check for corrosion on the earthing electrodes.	CORRECT <input type="checkbox"/> INCORRECT <input type="checkbox"/>	Any corrosion must not be such as to be likely to modify the functionality of the earthing electrodes.	
4	Measure the value of earth resistance of the installation as built.	R=	R < 10 Ohms	
5	Verify the status of connections, equipotential bonding connections and supports.	CORRECT <input type="checkbox"/> INCORRECT <input type="checkbox"/>	Check that the connections and supports are in good condition and fit for purpose. Check that equipotential bonding of the LPS has been carried out with the metal parts of the protected structure(s) and that there is continuity between them.	
6	Electrical conductors			
6.1	Check for corrosion or breakage of brackets or staples on the electrical cables.	CORRECT <input type="checkbox"/> INCORRECT <input type="checkbox"/>	Check for corrosion or breakage of brackets or staples on the electrical cables.	

Nº	MAINTENANCE CONCEPT	RESULT	REFERENCE VALUE	CORRECTIONS CARRIED OUT
6.2	Check the electrical continuity and resistance between the earth connection and the DDCE lightning arrester. Take corrective measures or change the cable if there is no electrical continuity or if the cable resistance is greater than 0 ohms from the point of connection of the lightning arrester to the direct earth connection.	CORRECT <input type="checkbox"/>  INCORREC <input type="checkbox"/>	Electrical continuity between the DDCE lightning arrester and the direct earth connection must be guaranteed.	
6.3	Check for corrosion of the electrical cable connections/lightning arrester and earth cable/connection.	CORRECT <input type="checkbox"/>  INCORRECT <input type="checkbox"/>	Any corrosion must not be such as to be likely to modify the mechanical and electrical functionality of the DDCE, electrical cables and earth connection.	
7	Mast			
7.1	Check the mechanical strength of the brackets or supports by which the DDCE lightning arrester is fixed to the mast. Change or improve if necessary.	CORRECT <input type="checkbox"/>  INCORRECT <input type="checkbox"/>	The mast and brackets must be designed to withstand a sustained wind of up to 250 km/h.	
7.2	Check the brackets and supports for corrosion for cleaning and painting.	CORRECT <input type="checkbox"/>  INCORRECT <input type="checkbox"/>	Any corrosion must not be such as to be likely to modify the mechanical and electrical functionality of the mast, brackets and supports.	

FINAL DATA	
Name of Installer	
Date of verification	
INSTALLER'S AGREEMENT	CUSTOMER'S AGREEMENT
<p>I certify that the maintenance has been realized in agreement to the OFFICIAL MANUAL OF INSTRUCTIONS OF THE DDCE</p> <p><b>*Signed.</b> <b>Mr.</b></p>	<p><b>*Signed.:</b> <b>Mr.</b></p>

(\*INSTALLER'S / CUSTOMERS Signature and company stamp.