VEIKI-VNL ELECTRIC LARGE LABORATORIES LTD.

No. 6660 /VNL

Test report

Dielectric and mechanical type tests on solid core post insulator type C6-750 for rated voltage of 154 kV

March 2012

VEIKI-VNL
Villamos Nagylaboratóriumok Kft.
1158 Budapest, Vasgolyó u. 2-4.

VIZSGÁLÓ
NAT-1-1251/2011

503/0243

MSZT-503/0243-077

STL
applicant

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Subject:	Dielectric and mechanical tests on solid core post insulator type C6-750 for rated voltage of 154 kV
Kind of the test:	Type test
Client:	EMCO Industries Limited 119/ E-1, Hali Road, Gulberg-III, Lahore Pakistan
Reference and date of the order:	INSP/ 1211002, 14th of February 2011
Our reference number:	NFL-01/2011
Place and date of the test:	VEIKI-VNL Electric Large Laboratories Ltd. H-1158 Budapest. Vasgolyó u. 2-4. HUNGARY 20th and 29th March 2012
Tests were witnessed by:	-

Details of the tested object

Designation:	Solid core post insulator
Type:	C6-750
Manufacturer:	EMCO Industries Limited
Rated voltage (U_n):	154 kV
Highest voltage for equipment (U_m):	170 kV
Dry lightning impulse withstand voltage:	750 kV
Wet power frequency withstand voltage:	325 kV
Mechanical failing load – Bending (P_0):	6000 N
Maximum RIV level at test voltage of 88 kV:	200 μV

Applied Al tube:

Diameter:	30 mm
Length:	3 m

Number of the manufacturer's drawing for the identification of the test object:

Station Post Insulator (C6-750) Drawing No: EM-698M-2 REV.1

Requirements of manufacturer or purchaser:

Dry lightning-impulse withstand voltage:	750 kV_{peak}
Wet power-frequency withstand voltage:	325 kV_{rms}
Maximum RIV level at test voltage of 88 kV:	200 μV

The tests were carried out in accordance with the following standard(s):

IEC 60168:2001 Test on indoor and outdoor post insulators of ceramic material or glass for systems with nominal voltages greater than 1000 V

IEC 60273:1990 Characteristic of indoor and outdoor post insulators for systems with nominal voltages greater than 1000 V

IEC 60060-1:1989 High-voltage test techniques. Part 1: General definitions and test requirements

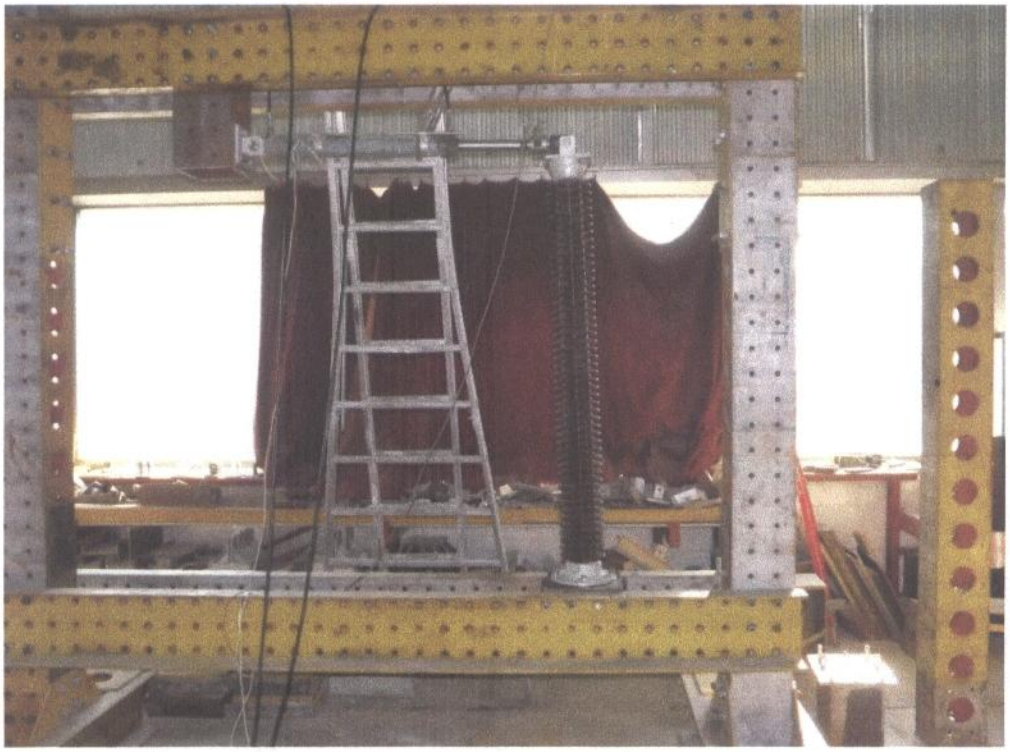
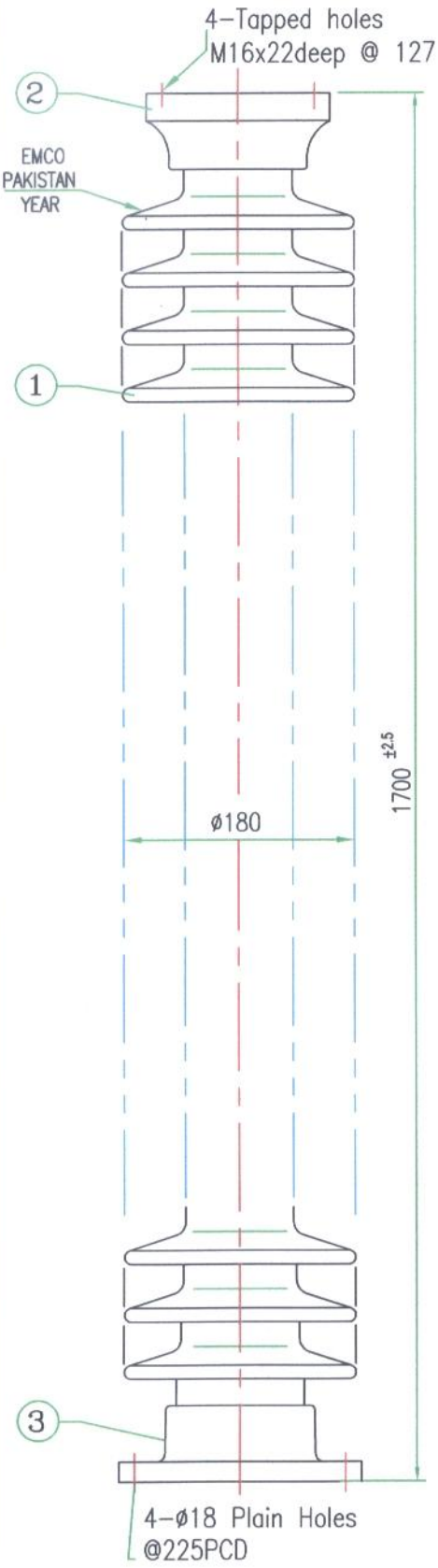


Photo 2
Test arrangement of the bending test

Photo 3
The insulator type C6-750 after the bending test

DRG. NO: EM-698M-2

REV.1



TECHNICAL DATA

Creepage distance	4250 mm
Mechanical Failing Load	
Bending (Po)	6000 N
Impulse withstand voltage	750 kV
Power frequency withstand Wet	325 kV

Note : –
Tolerance according to IEC Pub:60168
Clause:5.1,Otherwise specified.
Tapped holes threaded oversize 0.4mm to accommodate hot-dip galvanized cap screws.
Porcelain : Brown glazed
Ferrous Parts : Hot dip galvanized except female threads.

6660 /VNL 2012 MÁRC 30.

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Specification applied : IEC 60273

SR.NO	DESCRIPTION	DRG.NO:	MATERIAL	QTY.	REMARKS
5					
4					
3	Bottom Flange		Steel	1	
2	Top Cap		Steel	1	
1	Insulator	–	Porcelain	1	

REV.	DESCRIPTION	DATE	NAME	2009	DATE	NAME
1	PCD changed 225 instead of 200	25-3-10	Ashraf	DRWN.	20-09	Mubashir
				CHKD.	21-09	Ashraf
				APPD.	21-09	Rizwan Aslam

EMCO
LAHORE PAKISTAN

STATION POST INSULATOR
(C6-750)

SCALE
mm

CAT. NO:

1