

VISIT TO I.C.A.R. (Monza) 10.9.1970

A. Messina

KM capacitors (25 nF 80 kV)

A series of 90 capacitors, numbered 191 - 280, were ready for acceptance tests. They had already been checked 1 minute at 120 kV d.c. and their capacity value and loss factor had been measured.

6 capacitors were chosen for further tests (see Tn - 161). During the tests at 120 kV d.c. the bushings of two of them (No 254 and No 198) were destroyed by external discharge. The fault seems determined by an error in the conditions of the test. The two capacitors were not damaged by the discharge, because their capacity value and their loss factor were the same before and after the test.

Two more capacitors were added for testing (No 277 and No 194). The conditions of the test were modified and no further troubles occurred.

In any case it has been agreed to investigate more accurately the reasons of the fault and to check the possible internal damages on the two capacitors. It has been agreed that, on the next visit, at the end of September, for the following delivery, the question will be discussed again.

TEST RESULT

No of capacitor	Capacity (nF)		Loss factor 100x1 gd		Ringing frequency (Mc/s)
	before test	after test	before test	after test	
265	23495	23503	0,14	0,14	1,92
254 K.O.	23338	23338	0,14	0,14	2
224	24407	24407	0,15	0,14	2
231	23665	23666	0,15	0,14	1,96
198 K.O.	23731	23735	0,14	0,14	1,96
278	23412	23422	0,14	0,14	2
277	23268	23278	0,14	0,15	
194	23713	23723	0,14	0,14	