S.Chekulaev
25/04/2000

Results of "MOLNIYA" modules Assembly in IHEP.

Specially for HEC modules assembly clean house was built in IHEP.

Humidity and dust content was controlled:

- **Typical dust level was about 70 – 100 particles (equal or more that 1 mkm.) / per liter in the morning time and one risen up 30% during working day;**

- **Average humidity was 33.4%, with min.value= 23% and max.value= 52%.**

Four rear HEC modules were assembled in IHEP during 24.02. - 12.04.00.

Stage of the assembly procedure:

- **Input material control;**
- **Module assembly;**
- **Long HV test.**

Main steps of assembly procedures :

- **Check and clean copper plate;**
- **Assembly of the gap structure on the working table;**
- **Test of the gap structure under electrode (2.5 kV)**
- **Cleaning of the gap structure components and moving on the assembly table;**
- **Test of current gap under electrode (2.5 kV);**
- **Test of current gap under copper plate (2.5 kV).**

Leakage current at the end of long HV test:

- **CR27 – 135 nAmps;**
- **CR28 – 130 nAmps;**
- **CR29 – 120 nAmps;**
- **CR30 – 163 nAmps.**

Time schedule :

- **CR27 24.02 – 15.03 (14 working days)**
- **CR29 18.03 – 24.03 (5 working days)**
- **CR28 27.03 - 30.03 (3,5 working days)**
- **CR30 04.04 - 12.04 (7 working days)**

The modules will be sent to CERN between 25.04 – 27.04.

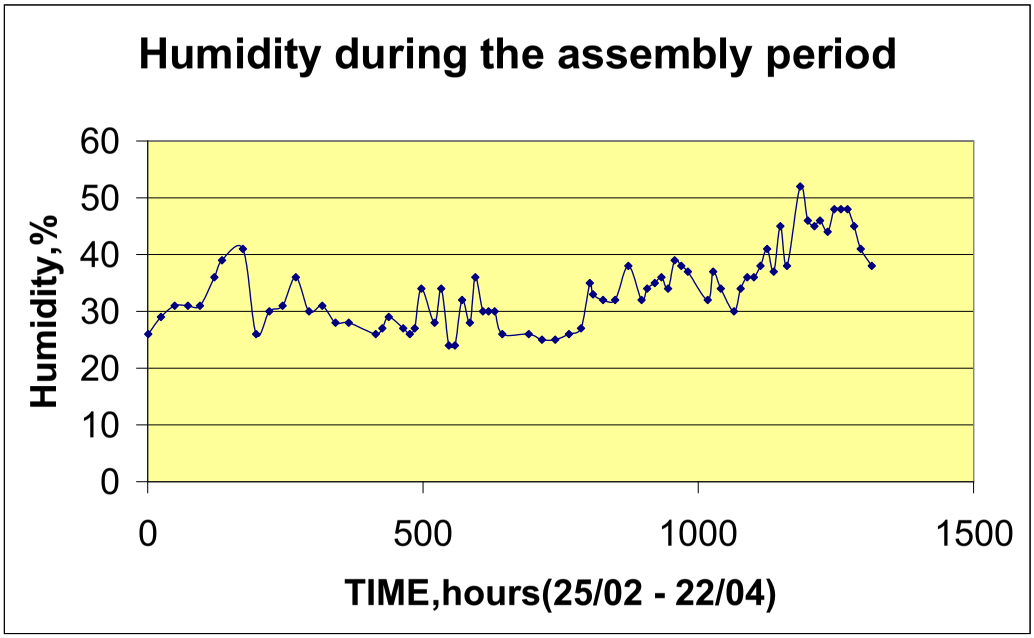
New ISTC project

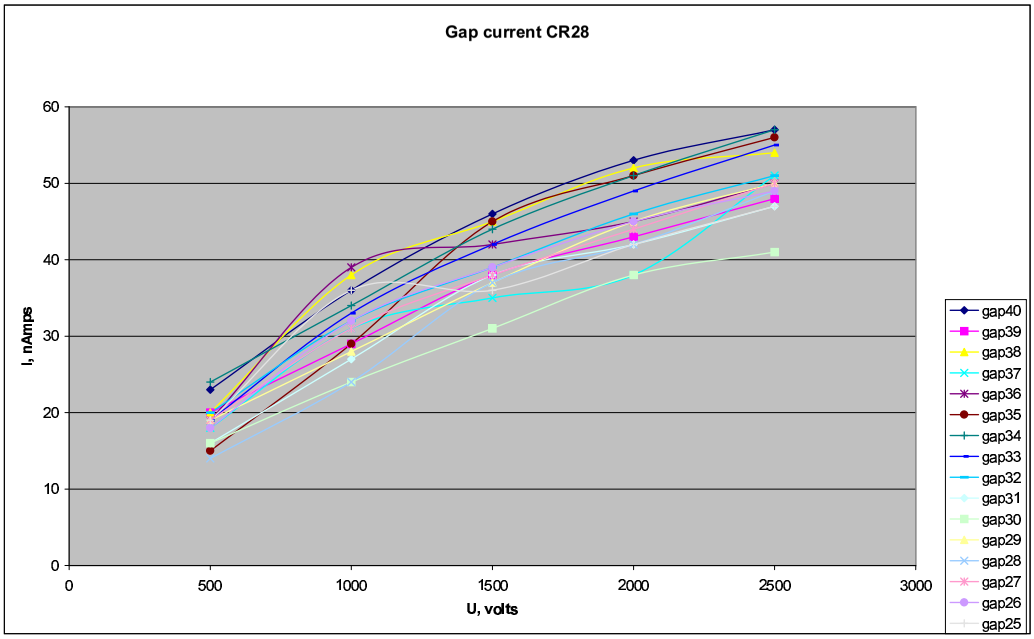
In framework of the new ISTC project 7 rear HEC modules will be produced by "Molniya" plant.

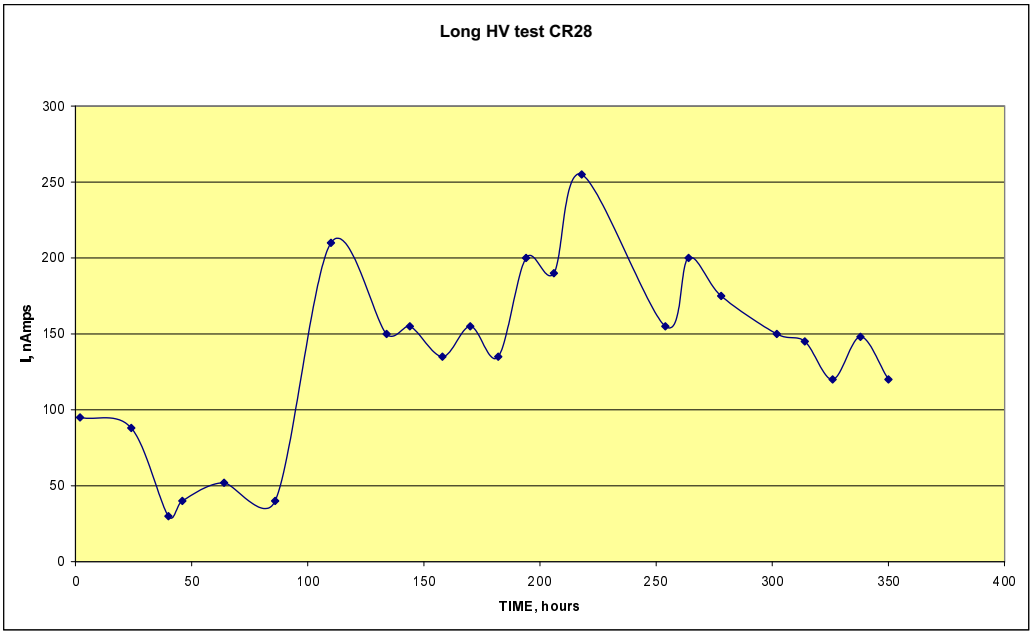
Preliminary time schedule of the Project according to Work Plan is:

- **2 modules should be produced in the 4-th Quarter of 2000;**
- **2 modules – in the 1-st Quarter of 2001;**
- **2 modules – in the 2-nd Quarter of 2001;**
- **1 module – in the 3-d Quarter of 2001.**

If the Work Plan will be approved within 2 months the Project will be started on July.


Humidity during the assembly period
Humidity,%
60
50
40
30
20
10
0
0
500
1000
1500
TIME,hours(25/02 - 22/04)


Gap current CR28
I, nAmps
60
50
40
30
20
10
0
0
500
1000
1500
2000
2500
3000
U, volts
gap40
gap39
gap38
gap37
gap36
gap35
gap34
gap33
gap32
gap31
gap30
gap29
gap28
gap27
gap26
gap25


Long HV test CR28
I, nAmps
300
250
200
150
100
50
0
0
50
100
150
200
250
300
350
400
TIME, hours