

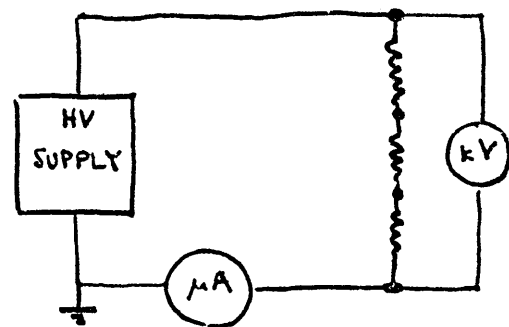
MEASUREMENT OF ALLEN-BRADLEY RESISTORSOF OSF DIVIDER

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The divider consists of 120 resistors, grouped into 15 elements of 8 resistors each. Each resistor is 1.5 M Ω , 1 W; rated voltage 1 kV; resistance tolerance $\pm 5\%$; voltage coefficient $(\Delta R/R)/\Delta V = -0.015\% / V$ max.

The resistors have been immersed in oil for ~ 18 months.

The measuring circuit is shown in the figure.

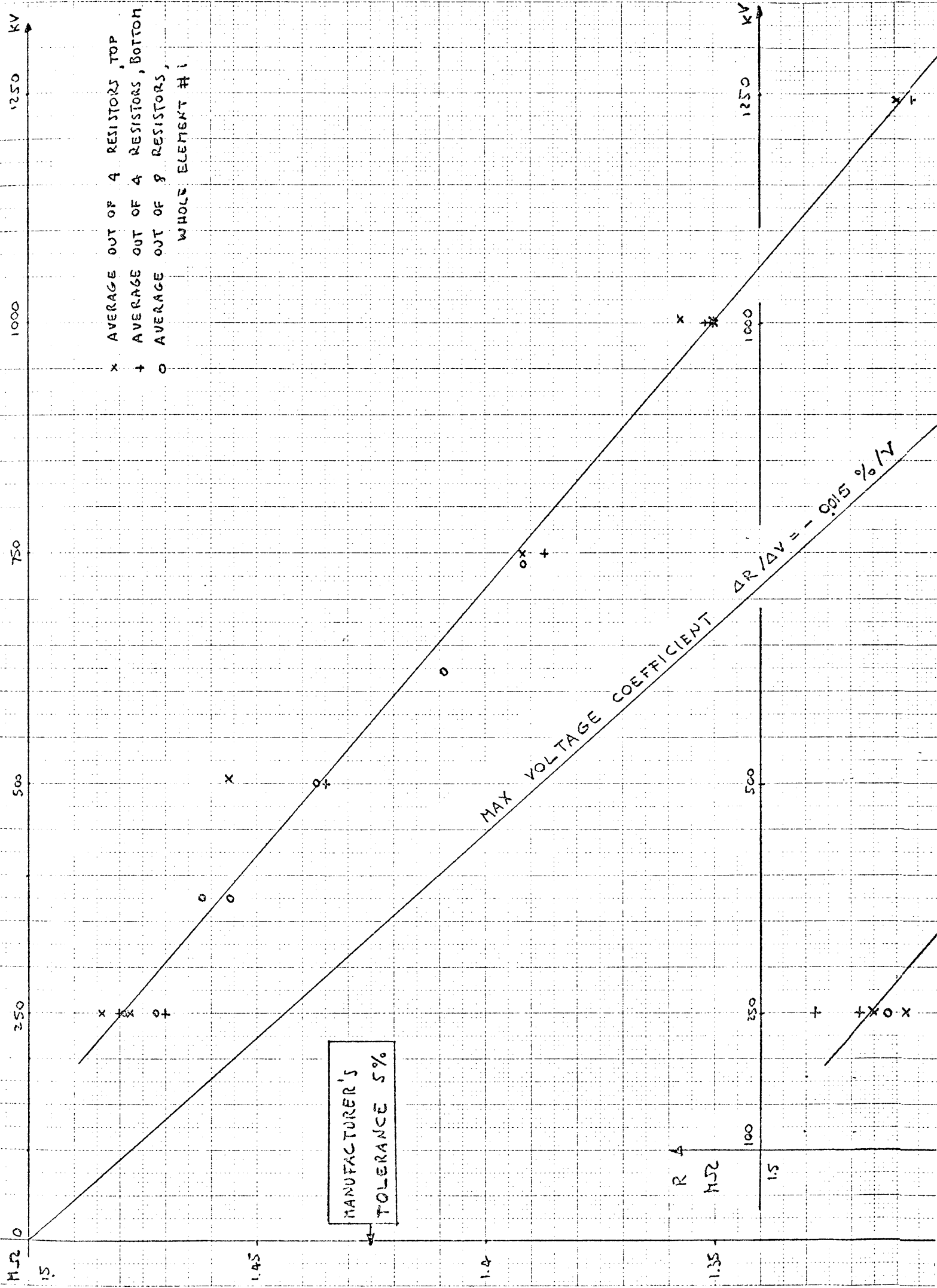


Two kind of measuring procedures were followed.

- 1) On elements # 1 and # 2 (from top of divider) the resistors were measured in 2 groups of 4 in series and in 1 group of 8 in series. See Fig. 1 for results.
- 2) On elements # 1 to # 6 the resistors were measured in 1 group of 8 resistors in series. See Fig. 2 for results.

It can be concluded that all resistors groups on the average still meet the manufacturer's specification after immersion in oil.

- x AVERAGE OUT OF 4 RESISTORS, TOP
- + AVERAGE OUT OF 4 RESISTORS, BOTTOM
- o AVERAGE OUT OF 8 RESISTORS,
- WHOLE ELEMENT #1



FROM TOP #1

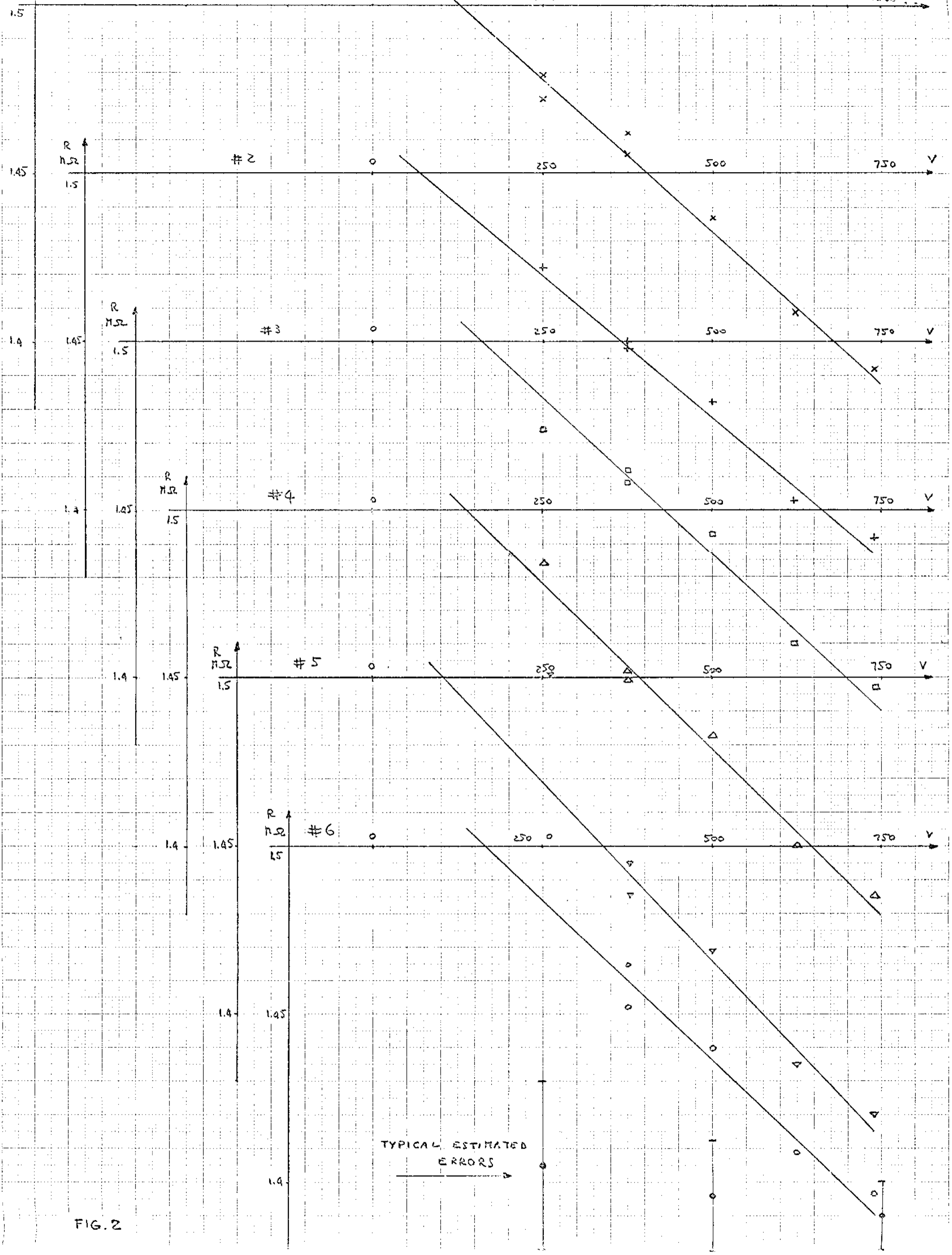


FIG. 2