Magnet 1A14 - 14 lbs Permanent Magnet

Here a sample of permanent magnet used to generate the proper magnetic field required for most of low and medium power magnetron tubes. This unit has a gap length of about 1.40 inches and a gap diameter of about 1.60 inches, corresponding to the type 4 of the figure below. The next table gives its characheristics.

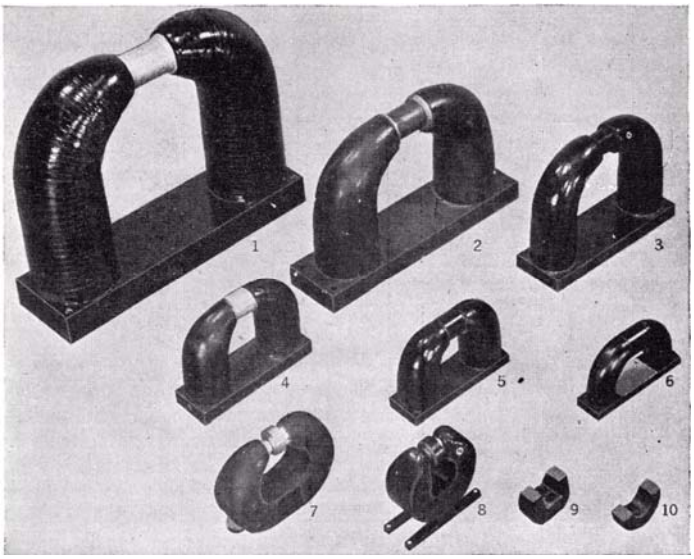

TABLE 13·1.—PERTINENT DATA ON THE MAGNETS SHOWN IN FIG. 13·7

Magnet No.*	Weight, lb.	Approximate B_g, gauss (stabilized 5%)	Gap length l_g, in.	Gap diam. d_g, in.	Remarks
1	250	3000	2.70	2.50	Iron base
2	100	2400	2.75	2.00	Iron base
3	42	3400	1.50	1.62	Iron base
4	14½	2500	1.40	1.62	Iron base
5	13½	2500	1.30	1.62	Iron base
6	6¾	1350	1.50	1.62	Iron base
7	13¾	4800	0.69	0.75	Alnico "C's" bolted together with iron spacer
8	8	4850	0.63	0.75	Alnico "C's" bolted together by aluminum base (no iron)
9	1¾	5000	0.28	→	Using iron pole pieces (5 oz) described in Fig. 13·6.
10	¾	3800	0.28		

* Additional data on magnet weight and flux density are given in Chap. 19.