

注射各向异性各类磁体磁性能

MAGNETIC CHARACTERISTICS OF INJECTION ANISOTROPIC MAGNET

材料(Material)	各向异性注射钕铁硼 Anisotropic injection NdFeB		钐钴磁体 SmCo Magnet			铁氧体 Ferrite	钕铁硼+钐铁氮 NdFeB+SmFeN
粘结剂(Binder)	PA12(PA6)		PA12(PA6)		PPS	PA12(PA6)	PA12
牌号(Grade)	ANI-12	ANI-15	YS-7	YS-9	YS-6(PPS)	AFI-2	ANI-18
剩余磁感应强度Br (mT) Residual Induction (kGs)	700-800	780-850	570-600	620-650	500-550	270-310	850-900
	7.0-8.0	7.8-8.5	5.7-6.0	6.2-6.5	5.0-5.5	2.7-3.1	8.5-9.0
矫顽力Hcb (kA/m) Coercive Force (kOe)	445-500	530-575	330-370	380-415	325-345	175-205	540-905
	5.6-6.3	6.7-7.2	4.1-4.6	4.8-5.2	4.1-4.3	2.2-2.6	6.8-11.4
内禀矫顽力Hcj (kA/m) Intrinsic Coercive Force (kOe)	915-995	1155-1235	675-875	675-875	675-875	205-245	915-995
	11.5-12.5	14.5-15.5	8.5-11.0	8.5-11.0	8.5-11.0	2.6-3.1	11.5-12.5
最大磁能 (BH)max (kJ/m3) Max. Energy Product (MGOe)	92-100	116-124	52-60	68-76	44-52	14.7-18.7	131-140
	11.5-12.5	14.5-15.5	6.5-7.5	8.5-9.5	5.5-6.5	1.8-2.3	16.5-17.5
密度ρ (g/cm3) Density	4.9-5.3	4.9-5.3	5.0-6.2	5.0-6.2	5.0-6.2	3.6-4.0	5.0-5.6
可逆透磁率μr (μH/M) Recoil Permeability	1.1	1.1	1.1	1.1	1.1	1.1	1.1
剩磁可逆温度系数 (%/°C) Temperature Coefficient of Br	-0.13	-0.13	-0.04	-0.04	-0.04	-0.19	-0.09
最大工作温度 Tw (°C) Max. Operating Temperature	100	120	120	120	180	120	120