



烧结铝镍钴的磁性能

Magnetic and Physical Properties of Sintered Alnico Magnet

| 序号<br>NO. | 牌号<br>Grades | 美国标准<br>Equivalent<br>MMPA Class | 剩磁<br>Remanence |       | 矫顽力<br>Coercive Force |      | 矫顽力<br>Coercive Force |       | 最大磁能积<br>Maximum Energy Product |           | 密度<br>Density     | 可逆温度系数<br>Reversible<br>Temp.<br>Coefficient | 居里温度<br>Curie Temp. | 最高工作温度<br>Temp.<br>Coefficient | 备注<br>Remark        |
|-----------|--------------|----------------------------------|-----------------|-------|-----------------------|------|-----------------------|-------|---------------------------------|-----------|-------------------|--|---------------------|--------------------------------|---------------------|
|           |              |                                  | Br              |       | Hcj                   |      | Hcb                   |       | (BH)max                         |           |                   |  |                     |                                |                     |
|           |              |                                  | mT              | Gs    | KA/m                  | Oe   | KA/m                  | Oe    | KJ/m <sup>3</sup>               | MGOe      | g/cm <sup>3</sup> | α (Br)<br>%/°C                               | TC<br>°C            | TW<br>°C                       |                     |
| 1         | SLN8         | Alnico3                          | 520             | 5200  | 43                    | 540  | 40                    | 500   | 8-10                            | 1.0-1.25  | 6.8               | -0.02  | 760                 | 450                            | 各向同性<br>Isotropic   |
| 2         | SLNG12       | Alnico2                          | 700             | 7000  | 43                    | 540  | 40                    | 500   | 12-14                           | 1.5-1.75  | 7.0               | -0.014                                       | 810                 | 450                            |                     |
| 3         | SLNGT18      | Alnico8                          | 600             | 6000  | 107                   | 1350 | 95                    | 1200  | 18-22                           | 2.25-2.75 | 7.2               | -0.02  | 850                 | 550                            |                     |
| 4         | SLNGT28      | Alnico6                          | 1000            | 10000 | 57                    | 710  | 56                    | 700   | 28-30                           | 3.5-3.8   | 7.2               | -0.02  | 850                 | 525                            | 各向异性<br>Anisotropic |
| 5         | SLNG34       | Alnico5                          | 1100            | 11000 | 51                    | 640  | 50                    | 630   | 34-38                           | 3.5-4.15  | 7.2               | -0.016                                       | 890                 | 525                            |                     |
| 6         | SLNGT31      | Alnico8                          | 780             | 7800  | 106                   | 1130 | 104                   | 1300  | 33-36                           | 3.9-4.5   | 7.2               | -0.02  | 850                 | 550                            |                     |
| 7         | SLNGT38      |                                  | 800             | 8000  | 126                   | 1580 | 123                   | 1550  | 38-42                           | 4.75-5.3  | 7.2               | -0.02  | 850                 | 550                            |                     |
| 8         | SLNGT42      | 880                              | 8800            | 122   | 1530                  | 120  | 1500                  | 42-48 | 5.3-6.0                         | 7.25      | -0.02             | 850  | 550                 |                                |                     |
| 9         | SLNGT33J     | Alnico8HC                        | 680             | 6800  | 151                   | 1885 | 140                   | 1750  | 33~36                           | 4.1-4.5   | 7.2               | -0.02  | 850                 | 550                            |                     |
| 10        | SLNGT40J     |                                  | 800             | 8000  | 156                   | 1950 | 144                   | 1800  | 43~47                           | 5.4~5.9   | 7.2               | -0.02  | 850                 | 550                            |                     |

铸造铝镍钴的磁性能

Magnetic and Physical Properties of Cast Alnico Magnet

| 序号<br>NO. | 牌号<br>Grades | 美国标准<br>Equivalent<br>MMPA Class | 剩磁<br>Remanence |       | 矫顽力<br>Coercive Force |      | 最大磁能积<br>Maximum Energy Product |      | 密度<br>Density     | 可逆温度系数<br>Reversible<br>Temp.<br>Coefficient | 可逆温度系数<br>Reversible<br>Temp.<br>Coefficient | 居里温度<br>Curie Temp. | 最高工作温度<br>Temp.<br>Coefficient | 备注<br>Remark        |
|-----------|--------------|----------------------------------|-----------------|-------|-----------------------|------|---------------------------------|------|-------------------|--|--|---------------------|--------------------------------|---------------------|
|           |              |                                  | Br              |       | Hcb                   |      | BH(max)                         |      |                   |  |  |                     |                                |                     |
|           |              |                                  | mT              | Gs    | KA/m                  | oe   | KJ/m <sup>3</sup>               | MGOe | g/cm <sup>3</sup> | a(Br)<br>%/°C                                | a(Hc)<br>%/°C                                | TC<br>°C            | TW<br>°C                       |                     |
| 1         | LN9          | ALNICO3                          | 680             | 6800  | 30                    | 380  | 9                               | 1.13 | 6.9               | -0.03  | -0.02  | 810                 | 450                            | 各向同性<br>Isotropic   |
| 2         | LN10         |                                  | 600             | 6000  | 40                    | 500  | 10                              | 1.2  |                   |  |  |                     |                                |                     |
| 3         | LNG12        | ALNICO2                          | 720             | 7200  | 45                    | 500  | 12.4                            | 1.55 | 7.2               | -0.025                                       | +0.02  | 860                 | 550                            |                     |
| 4         | LNG13        |                                  | 700             | 7000  | 48                    | 600  | 12.8                            | 1.6  |                   |  |  |                     |                                |                     |
| 5         | LNGT18       | ALNICO8                          | 580             | 5800  | 100                   | 1250 | 18                              | 2.2  | 7.3               | -0.02  | +0.02  | 850                 | 525                            | 各向异性<br>Anisotropic |
| 6         | LNG37        | ALNICO5                          | 1200            | 12000 | 48                    | 600  | 37                              | 4.65 |                   |  |  |                     |                                |                     |
| 7         | LNG40        |                                  | 1250            | 12500 | 48                    | 600  | 40                              | 5    |                   |  |  |                     |                                |                     |
| 8         | LNG44        |                                  | 1250            | 12500 | 52                    | 650  | 44                              | 5.5  |                   |  |  |                     |                                |                     |
| 9         | LNG52        | ALNICO5DG                        | 1300            | 13000 | 56                    | 700  | 52                              | 6.5  |                   |  |  |                     |                                |                     |
| 10        | LNG60        | ALNICO5-7                        | 1350            | 13500 | 59                    | 740  | 60                              | 7.5  |                   |  |  |                     |                                |                     |
| 11        | LNGT28       | ALNICO6                          | 1000            | 10000 | 57.6                  | 720  | 28                              | 3.5  |                   |  |  |                     |                                |                     |
| 12        | LNGT36J      | ALNICO8HC                        | 700             | 7000  | 140                   | 1750 | 36                              | 4.5  | -0.025            | +0.02  | 860  | 550                 |                                |                     |
| 13        | LNGT32       | ALNICO8                          | 800             | 8000  | 100                   | 1250 | 32                              | 4    |                   |  |  |                     |                                |                     |
| 14        | LNGT38       |                                  | 800             | 8000  | 110                   | 1380 | 38                              | 4.75 |                   |  |  |                     |                                |                     |
| 15        | LNGT40       |                                  | 820             | 8200  | 110                   | 1380 | 40                              | 5    |                   |  |  |                     |                                |                     |
| 16        | LNGT60       | ALNICO9                          | 950             | 9500  | 110                   | 1380 | 60                              | 7.5  |                   |  |  |                     |                                |                     |
| 17        | LNGT72       |                                  | 1050            | 10500 | 112                   | 1400 | 72                              | 9    |                   |  |  |                     |                                |                     |