STRONG MAGNETS
Solution of Magnetic

# SmCo (sintered)

## Property Table

English Version
For reference only

- Remanence (Br), measure the strength of the magnetic field;
- Coercivity (Hcb / Hcj), the material's resistance to becoming demagnetized;
- Energy product (BHmax), the density of magnetic energy, which relates to the magnetic flux output per unit volume. Higher values indicate stronger magnets
- Curie temperature (Tc), the temperature at which the material loses its magnetism.

Updated on: May.20, 2014

**Sintered SmCo - Property Table - CGS unit**

| Grade | (min.) Remanence (Br) | (min.) Intrinsic Coercivity (Hcj) | (min.) Coercivity (Hcb) | Max Energy Product (BH)max | Max Working Temperature (Tw) | Curie Temperature (Tc) |
|---|---|---|---|---|---|---|
| | kGs | kOe | kOe | MGOe | ℃ | ℃ |
| SmCo16 | 8.3 | 18.0 | 8.0 | 16 | 250 | 750 |
| SmCo18 | 8.8 | 18.0 | 8.5 | 18 | 250 | 750 |
| SmCo20 | 9.2 | 18.0 | 8.7 | 20 | 250 | 750 |
| SmCo22 | 9.4 | 18.0 | 9.1 | 22 | 250 | 750 |
| SmCo24 | 9.8 | 18.0 | 9.1 | 24 | 300 | 750-820 |
| SmCo26 | 10.3 | 18.0 | 9.5 | 26 | 300 | 750-820 |
| SmCo28 | 10.5 | 18.5 | 9.7 | 28 | 300 | 750-820 |
| SmCo30 | 11.0 | 18.5 | 10.1 | 30 | 300 | 750-820 |
| SmCo26M | 10.3 | 15.0 | 9.5 | 26 | 300 | 750-820 |
| SmCo28M | 10.5 | 15.0 | 9.7 | 28 | 300 | 750-820 |
| SmCo30M | 11.0 | 15.0 | 10.1 | 30 | 300 | 750-820 |
| SmCo28L | 10.5 | 8.0 | 6.9 | 28 | 250 | 750-820 |
| SmCo30L | 11.0 | 8.0 | 6.9 | 30 | 250 | 750-820 |
| SmCo24H | 10.0 | 25.0 | 9.0 | 24 | 350 | 750-820 |
| SmCo26H | 10.3 | 25.0 | 9.5 | 26 | 350 | 750-820 |
| SmCo28H | 10.5 | 25.0 | 9.6 | 28 | 350 | 750-820 |
| SmCo30H | 10.8 | 25.0 | 10.1 | 30 | 350 | 750-820 |

*SmCo 16-22, Sm:Co=1:5; the rest grades Sm:Co=2:17
*for reference only

**Sintered SmCo - Property Table - SI unit**

| Grade | (min.) Remanence (Br) | (min.) Intrinsic Coercivity (Hcj) | (min.) Coercivity (Hcb) | Max Energy Product (BH)max | Max Working Temperature (Tw) | Curie Temperature (Tc) |
|---|---|---|---|---|---|---|
| | mT | kA/m | kA/m | $kJ/m^3$ | ℃ | ℃ |
| SmCo16 | 830 | 1430 | 640 | 128 | 250 | 750 |
| SmCo18 | 880 | 1430 | 680 | 144 | 250 | 750 |
| SmCo20 | 920 | 1430 | 700 | 160 | 250 | 750 |
| SmCo22 | 940 | 1450 | 730 | 176 | 250 | 750 |
| SmCo24 | 980 | 1450 | 730 | 192 | 300 | 750-820 |
| SmCo26 | 1030 | 1450 | 760 | 208 | 300 | 750-820 |
| SmCo28 | 1050 | 1450 | 780 | 224 | 300 | 750-820 |
| SmCo30 | 1100 | 1450 | 810 | 240 | 300 | 750-820 |
| SmCo26M | 1030 | 1100 | 760 | 208 | 300 | 750-820 |
| SmCo28M | 1050 | 1100 | 780 | 224 | 300 | 750-820 |
| SmCo30M | 1100 | 1100 | 810 | 240 | 300 | 750-820 |
| SmCo28L | 1050 | 700 | 550 | 224 | 250 | 750-820 |
| SmCo30L | 1100 | 700 | 550 | 240 | 250 | 750-820 |
| SmCo24H | 1000 | 2000 | 720 | 192 | 350 | 750-820 |
| SmCo26H | 1030 | 2000 | 760 | 208 | 350 | 750-820 |
| SmCo28H | 1050 | 2000 | 770 | 224 | 350 | 750-820 |
| SmCo30H | 1080 | 2000 | 810 | 240 | 350 | 750-820 |

*SmCo 16-22, Sm:Co=1:5; the rest grades Sm:Co=2:17
*for reference only