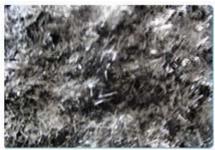


Anisotropic NdFeB Powders







HDDR reaction furnace once only available for laboratory application is for sale now

It is known that there will be no existing equipments available at the starting stage no matter what type the technology and industry it is. Giving full play to the powerful comprehensive capability of research teams in continuous researching and developing, we have finally developed a set of advanced production equipments on our own, which are suitable for our unique techniques. In order to promote domestic universities and research organizations of different types to further carry out their fundamental research in terms with HDDR, we are willing to sell our HDDR reaction furnace (once only for lab application), it is an equipment featuring with combination of our unique techniques in HDDR and adjustable flexibility for requirements from different customers, so it is a universal model.

Bidding for investment and cooperation

The expiration of the patent for NdFeB basic ingredients in the meantime marks the advent of a new era. The permanent material, sensitive in structure, is exploitable in finding new technology to further improve its property and application range. Based on the aforesaid concept, our anisotropic NdFeB powder and isotropic NdFeB fine powder have been thereby developed. Although the market for them seems niche market, i.e. professional and narrow in application, they are indispensably, advanced for a world - wide scope, the demands for them will be certainly on rise increasingly. The techniques for these two magnetic powders are coming from long experience and mature top specialty, with a high guarding line-threshold from being plagiarized by any other factories. Currently, we find ourselves in a good position to expand our production scale, thus we are sincerely inviting all influenced investors, especially those capable of forming into line guilds, to join us in way of investment for stock shareholders, and we will make our company more powerful and prosperous together to finalize a win-win achievement for mutual benefits

HDDR Anisotropic Powders

The HDDR process is proven to be a simple and effective method for producing highly anisotropic and coercive NdFeB-based powders with energy densities in excess of 40MGOe. For the last 10 years, the HDDR process has received various kinds of modifications made by a batch of institutes and companies, with the purpose of optimizing the magnetic properties of HDDR powders. Among them, we has succeeded in developing its own unique HDDR processing route. At present, two standard grades of anisotropic HDDR powders have been produced, with another low coercivity grade as an option. All of these grades have the same composition without Dy and Co additions, exhibiting similar remanence and energy density. However, by carefully controlling process variables, the coercivity can be varied from 9kOe to 14kOe for the different grade of the powders. Table 1 summarized the magnetic properties of the three grades of the HDDR powders

The data measured by VSM were corrected by a demagnetizing factor of 0.20

Characteristics for anisotropic NdFeB magnetic powder

Mark	HcJ(kOe)	Br(kGs)	(BH) max. (MGOe)
ZQP40-9	8.5-10	13.0-13.5	40-42
ZQP40-11	10.5-12	13.0-13.5	40-42
ZQP40-13	12.5-14	13.0-13.5	40-42

Whether compression-molded or injection-molded, the HDDR powders can be used to produce anisotropic bonded magnets which are suitable for a wide variety of applications where higher performance than isotropic bonded magnets is required. The magnetic properties of the HDDR powders are somewhat affected by the particle size. In order to obtain the highest Br in the associated anisotropic bonded magnets, it is recommended that the particle sizes are widely distributed in a range from 50 to 150µm which is roughly the same as that of the original grain sizes of 2:14:1 phase in the staring alloy ingots. Currently we ships the products in the form of coarse lumps which will be pulverized on the consumer side.

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