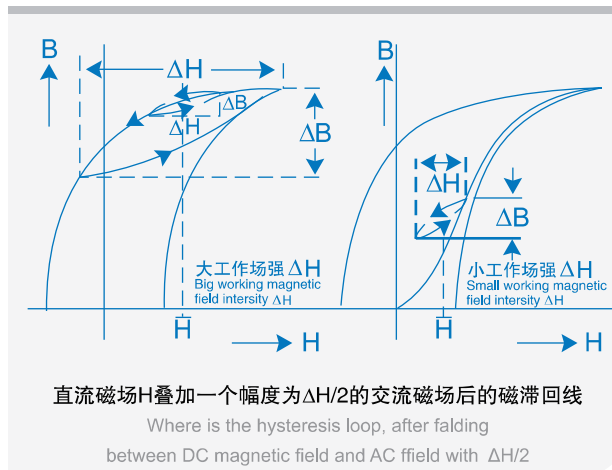## 静磁场影响——直流迭加
Static field effect-DC superposition

这里，正弦场叫工作场，直流场叫偏磁化场或偏置场。增量磁导随偏置场而改变。测直流迭加特性，就是在一定偏置下加工作场，测其增量磁导率，并与无直流场时的磁导率作比较。

由于交流磁场值大小不同，小回线有二种代表性的状态，如：

Where the sine field is called applied and field DC field called displacing field or bias field. The incremental permeability changes as displacing field. The measurement of DC superposition characteristic is to measure the incremental permeability in DC displacing field and to compare it to that measured without DC displacing field.

There are two typical small hysteresis loops for different alternate fields(shown in the following figures).

直流磁场H叠加一个幅度为ΔH/2的交流磁场后的磁滞回线

Where is the hysteresis loop, after falding between DC magnetic field and AC ffield with ΔH/2

从中可推知迭加特性与材料特性的关系。
由于许多电路中，往往存在直流电成份，这相当于加了一个直流偏置场，而它会影响增量磁导率的大小，所以迭加特性很重要。

From them one can know the relationship between the superposing characteristic and material property. The superposing characteristic is very important due to the existence of DC in many electric circuits.

居里温度
Curie temperature

居里温度是磁性材料从铁磁性(亚铁磁性)到顺磁性的转变温度，或称磁性消失温度。表示方式有多种。宝磁材料标准中规定的确定居里温度的方法如下图：

随温度升高，磁导率下降到最大值的80%，20%时，这二点联线，延长到与温度轴的交点，即为居里温度。

Curie temperature is the transition temperature of magnetic materials from ferromagnetism to paramag-netism. There are several methods to determine Curie temperature. The method used by Baosteel magnetics Co., Ltd. Is shown as the following figure.

As temperature increases, one can find the two points with theperme-ability Falling down to 80% μimax and 20% μimax respectively.Connecting the two points and extrapolating the line to T axis, the point of intersection is Curie temperature.