

环保型底置式直流电磁搅拌器

Environmental Protection Bottom Mounted Type Direct Current Electromagnetic Stirrer

适用范围 application scope:

环保型底置式直流电磁搅拌器广泛应用 于有色金属冶炼过程中的非接触式搅拌, 特别是对铝合金熔炼炉、保温炉、合金炉、 倾动炉、双室炉等应用更为方便,是一种 节能、高效、环保产品。



专利号: ZL201120283971.3 201110183284.9

environmental protection bottom mounted type direct current electromagnetic stirrer is widely used in the contactless stirring in the non-ferrous metal smelting process, especially for the aluminum alloy melting furnace, holding furnace, alloy furnace, tilting furnace and double chamber furnace, etc. It is an energy saving, high efficiency and environmental protection equipment.

技术特点 technical specifications:

- 采用计算机模拟设计, 磁路独特、磁场强度高, 透磁深度大。
- 采用高导磁、高饱和磁感应强度的电工纯铁材料,减少了磁滞损失,提高了磁场的稳定性。
- 采用先进的浸漆绝缘及固化处理技术,保护线圈不受粉尘侵蚀,绝缘性能好。
- 采用正反转交替、速度、时间任意可调,自动化程度高。
- 采用特殊的风道设计,强迫风冷,线圈散热快,温升低。
- 运行成本低, 耗电少, 节能、环保。
- 溶液搅拌强度灵活可调,涡流效果好,搅拌深度及范围大。
- 配有先进的远程控制系统,自动化程度高,具有手动和自动功能,操作简单方便。
- ◆ Adapting computer simulation design, this product has the features of unique magnetic circuit, high magnetic intensity and large magnetic penetration depth.
- ◆ Adapting electrical pure iron material with high permeability and high saturation magnetic induction intensity, reducing the hysteresis loss, and improving the stability of the magnetic field.
- ◆ The use of advanced varnished insulating and curing processing technology, protecting the coil will not be affected by dust erosion, the coil has a good insulation properties.
- ◆ With positive rotating and negative rotating alternatively, the speed and time can be arbitrary adjusted in a high degree of automation.
- ◆ Adapting special air duct design and forced air cooling, the coil heat release fast and with low temperature rise.
- Low operation cost, less power consumption, energy saving and environmental protection.
- ◆ Solution stirring intensity can be adjusted flexibly, the eddy current effect is good, stirring depth and scope is large.
- ♦ It is equipped with advanced remote control system, the automation degree is high, it has manual and automatic function, the operation is simple and convenient.



主要创新点 technical specifications:

- 一、直流电磁搅拌器感应线圈之间设置多层通风缝隙并通以冷却风,线圈两侧设有导风护罩,采 用两线圈中间进风对称冷却方式,线圈温升低,磁场衰减量小,进一步增大了对炉底和铝溶液的穿透 深度。
- 二、在两线圈中间磁轭上设有转动的空心轴,在转动的空心轴上端设置多个通风孔,外部设有固 定的导风环,冷却风经导风环,通过空心轴上端的通风孔进入到线圈内部,冷却阻力小,散热速度快。
- 三、直流线圈采用双层盘式绕制工艺及耐高温 180℃ 固化处理工艺,线圈适应能力强,工作稳定 可靠,安全性好。
 - 四、采用高性能导电环导电,设备工作稳定可靠,使用寿命长。
 - 五、具有先进的电路检测、故障诊断和远程控制系统,实现了设备的智能化控制。

There are multilayer ventilation slot between the induction coil of DC electromagnetic stirrer to pass cooling air, on both sides of the coil is provided with a wind guide cover, adapting two coils air inlet symmetrical cooling model, the coil temperature rise is low and magnetic field attenuation is small, further increased the penetration depth of furnace bottom and aluminum solution.

Rotating hollow shaft is provided on the magnetic yoke between two coils, there are many air vents on the top of hollow shaft, external has fixed wind guide ring, the cooling air go through wind guide ring and air vents into the inside of coil, the cooling resistance is small and heat release is fast.

The DC coil adopts a double layer disc winding process & 180 °C heat resistant and curing process, the coil has strongly adapt ability, stable & reliable operation and high safety.

Using the high performance conductive ring, the equipment works stable and reliable and has a long service life.

主要技术参数:

型号(Model)		JBDZ. 5Z	JBDZ. 10Z	JBDZ. 20Z	JBDZ. 30Z	JBDZ. 40Z	JBDZ. 50Z	JBDZ. 60Z
		搅拌器主机结构参数Stiner main structure parameters						
	A	3000	3200	3300	3400	3500	6800	6800
外形尺寸	В	1400	1600	1700	1800	1900	1800	1800
	С	1500	1550	1630	1630	1750	1630	1630
不锈钢宽度 (mm) ≥ D		1650	1965	2160	2160	2260	2160	2160
高度行程(mm)≤ E		350	350	450	450	450	450	450
搅拌电机功率(kW)		11	15	18.5 (22)	22	30	30/22 × 2	22 × 2
适用范围(t)		2-5	5-15	15-25	25-35	5-15	45-65	55-65
搅拌器总重量(kg)		3820	4260	4750	5200	5900	10400	11300
	感应器参数the sensor parameters							
功 率(kw)		6. 2	10.8	16	25. 7	30.8	41. 2	51.4
电 流(DCA)		20	30	40	50	60	80	100
电 压(DCV)		310	360	410	514	514	514	514
线圈工作温度℃≤		160						
磁场交变率(Hz)		0- 1.5						

(仅供参考)