科技创新　完美服务　品质达优

Vertical Ring High Gradient Magnetic Separator

高梯度立环磁选机

湖南科美达电气股份有限公司
HUNAN KEMEIDA ELECTRIC CO.,LTD.

公司地址：中国湖南省岳阳市科美达路 8 号
Add: 8 Kemeida Road,Yueyang, Hunan, China
邮编 (P.C): 414000
电话 (Tel): +86-730-8721001　8721888
传真 (Fax): +86-730-8722555
http: //www.kemeid.com
E–mail: kmd@kemeid.com

科美达电气
KEMEIDA ELECTRIC

Hunan Kemeida Electric Co., Ltd　Xiong Danyu　Mobile: 0086-137 8608 4085　Email: bearblack@163.com　www.china-electromagnetic-stirrer.com

KEMEIDA

VERTICAL RING HIGH GRADIENT MAGNETIC SEPARATOR

Contents 目 录

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

COMPANY PROFILE 企业简介

湖南科美达电气股份有限公司创始于1997年。十五年来，科美达公司秉承“科技创新、完美服务、品质达优”的企业宗旨，打造了业内知名的“科美达”品牌。2011年，科美达公司实现销售收入2.5亿，稳居国内电磁制造行业前茅。

公司主要从事工业磁力设备的研发、制造、销售，产品包括电磁搅拌成套设备、磁力起重设备及磁选设备三大类1000多个系列品种，主导产品有计算机电磁搅拌系统、电磁铁、除铁器、磁选机、冶金机械设备、工业自动化控制设备、电磁卷筒、夹钳吊具及环保设备等，广泛应用于冶金、机械、电力等行业，并远销至东南亚、日本及欧美等三十多个国家和地区。

目前，科美达公司是两项国家火炬计划项目承担单位，全国重点高新技术企业、湖南省软件企业、湖南省制造业信息化示范单位、省级企业技术中心、岳阳市电磁工程技术研究中心。公司拥有27项专利、2项软件著作权，产品通过欧盟CE认证，磁选产品取得煤安认证。公司研发生产的“多模式磁场电磁搅拌器”和“有色金属冶炼电磁搅拌器”等产品，具有国内领先水平。

公司拥有规模庞大、实力雄厚的产品研发团队，具备较强的产品研发能力和技术保障，公司形成“规划一代、研发一代、生产一代、完善一代”的技术研发模式，产品和技术不断推陈出新。

作为湖南省重点上市扶持企业、岳阳市委、市政府的“四三六”重点工程单位，湖南科美达电气股份有限公司将全心为客户服务，通过不懈努力，将公司打造成为国内工业磁力设备一流企业。

Hunan Kemeida Electric Company was established in 1997. We upheld our enterprise tenet “by innovative technology, we offer our customers the best quality products and perfect after sale service.”
In the past fifteen years, through our hard efforts, we have built the famous brand “Kemeida “. In 2011 our annual sales income is 42,000,000 USD, it is ranked forefront in domestic electromagnetic industry.

Our company engaged in R&D, manufacturing, sales of industrial electromagnetic equipments. We have three categories of products (complete EMS equipments, lifting electromagnets, magnetic separation equipments) with 1000 serials. The main products are: EMS, Electromagnets, Magnetic Separator, Metallurgy machinery, automatic Industry control equipments, Cable reel, Tong grabs & Environment protection equipments, etc. these equipments are widely applied in metallurgy, machinery, power industries, and they have been exported to more than 30 countries in Southeast Asia, Europe and US.

At present, we are undertaking unit of the National Torch Plan, National Key New & High Tech Enterprise, Software Enterprise of Hunan Province, Information Model Enterprise of Hunan Province and Provincial Enterprise Technology Center, Electromagnetic Engineering Technology Research Center of Yueyang city. Our company has successively obtained 27 national patents, 2 software copyrights, products have been certified by CE, and magnetic separators passed the MA certification.
The products, “Multi-mode field EMS” and “Non-ferrous metal smelting EMS “of our company are in leading domestic level.

We pose a powerful R&D team; we have formed the R&D mode, “planning one generation of products, researching one generation of products, producing& improving one generation of products, “thus new products have been produced and technology have been upgraded each year.

By the supports of Hunan Provincial Government and our hard effort, we will build Kemeida as a first grade industrial electromagnetic equipments enterprise in China.

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

Vertical Ring High Gradient Magnetic Separator

高梯度立环磁选机

概述

概述 General

高梯度立环磁选机是目前国内外性能最好、技术最先进的强磁选设备，该机从根本上解决了平环强磁选机和平环高梯度磁介质容易堵塞这一世界性技术难题，它具有富集比大、对给矿粒度、浓度和品位波动适应性强、工作可靠、操作维护方便等优点，该机分选弱磁性矿石实现了精矿品位高和回收率高的双高优点。

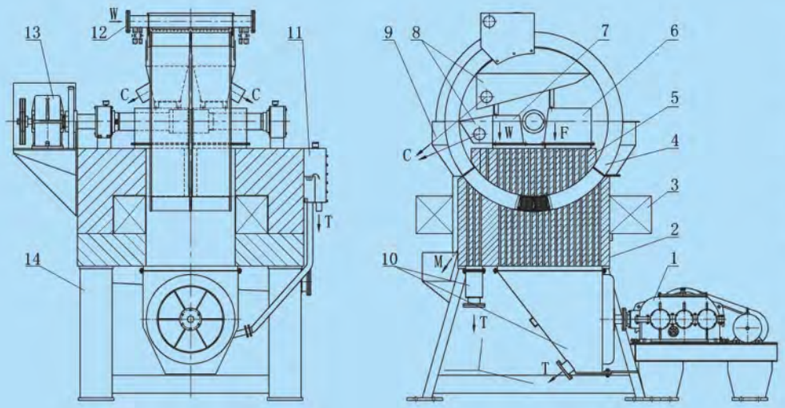
Vertical ring high gradient magnetic separator is the strongest magnetic equipment with the best performance, state–of–the–art technology at home and abroad. This equipment fundamentally solved the blocking problem of horizontal ring magnetic separator & high gradient magnetic medium, with advantages of high concentration ratio, strong adaptability to feeding ore granularity, density and grade fluctuation, reliable operation, easy maintenance, etc. Achieving concentrate ore with high grade and high recovery rate by picking weak magnetic ore.

KEMEIDA

工作原理
Working Principle

磁选机主要包括滚轮、介质盒、上铁芯组件、下铁芯组件、励磁线圈、进矿斗、精矿斗、中矿斗、尾矿斗、精矿冲洗装置和脉动发生装置。

Magnetic separator consists of idler wheel, medium box, assembly part of up &lower iron cores, excitation coils, ore feeding hopper, concentrate hopper, middling hopper, tailing hopper, concentrate flushing device and pulsation generator.



1.高频振动机构
2.下铁轭
3.励磁线圈
4.转环
5.上铁轭
6.给矿斗
7.漂洗水斗
8.精矿斗
9.中矿斗
10.尾矿斗
11.液位箱
12.精矿冲洗装置
13.转环驱动机构
14.机架　F—给矿
W—清水　C—精矿
M—中矿　T—尾矿

1.High frequency vibrating mechanism 2.Bottom iron yoke 3.Excitation coils 4.Rortary ring 5.Upper iron yoke 6.Feeding ore hopper 7.Water rinsing hopper 8.Concentrate hopper 9.Middlings hopper 10.Tailings hopper 11.Liquid level box 12. Concentrate flushing device 13.Rotary ring driving mechanism 14. Rack
F–Ore feeding W––Water C––Concentrate M–Middlings T––Tailings

转环（4）内装有导磁不锈钢棒介质盒或不锈钢网磁介质堆。选矿时，转环（4）作顺时针旋转，矿浆从给矿斗（6）给入，沿上铁轭（5）缝隙流经转环内圆周，磁介质在磁场中被磁化，表面形成高梯度磁场，矿浆中磁性颗粒被吸着在磁介质表面，转环（4）转动时将其带至顶部无磁场区，被精矿冲洗装置（12）的冲洗水冲入精矿斗中，非磁性颗粒经内圆周流至外圆周沿下铁轭（2）缝隙流入尾矿斗（10）中排出。

Magnet conductivity stainless steel bar medium box or stainless steel mesh magnet medium pile is installed with Rotary ring(4).When mineral selecting, rotary ring(4)rotates clockwise, and ore slurry will be fed from feeding hopper(6),then flowing through the circle in rotary ring along gap of upper iron yoke(5),the magnetic medium was magnetized in magnetic field, forming high gradient magnetic field in surface, magnetic particles in ore slurry are attached to the surface of magnetic medium, rotary ring(4)takes it to the top of nonmagnetic field area, and then washed into concentrate hopper by flushing water of concentrate flusher(12),nonmagnetic particles via inner annulus to outer annulus flow into tailings hopper(10) along gap of bottom iron yoke(2)and then discharged.

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

设备特点 Features

主要特点 Main Features

☆转环立式旋转、反冲精矿。高梯度磁选机采用转环立式旋转方式，对于每一组磁介质而言，冲洗精矿的方向与给矿方向相反，粗颗粒不必穿过磁介质堆便可冲洗出来，从而有效地防止了磁介质堵塞。

High gradient magnetic separator adopts vertical ring rotation, reverse flushing the ore.Vertical ring high gradient magnetic separators adopt the vertical ring rotation type, for each group of magnetic medium, the direction of reverse flushing is opposite to the feeding direction, and the coarse particles can be flushed out by water without passing through the magnetic medium pile. Thereby it effectively avoids magnetic mediums blocking.

☆设置矿浆脉动机构，驱动矿浆产生脉动流体力。在脉动流体力的作用下，矿浆中的矿粒始终处于松散状态，可提高磁性精矿的质量。

Using ore slurry pulsing mechanism to drive ore slurry to generate pulsating hydro-force. Under the action of pulsating hydro-force, the mineral granules in the slurry are always scattered, which improves the quality of magnetic concentrate.

☆平环高梯度磁选机对给矿粒度要求比较严格，我们研究的独特磁系结构及优化组合的磁介质，使磁选机给矿粒度上限达到2.0毫米，简化了现场分级作业，具有更为广泛的适应性。

Horizontal ring magnetic separator has strict requirements to the feeding particle granularity. We designed the unique magnetic system structure &optimized combination of magnetic medium which raises the upper limit of mineral grain size up to 2.0mm, simplifies the mineral grading work and increased adaptability of separator.

☆高磁场强度，背景磁场最高可达1.3T，介质盒表面最高可达2.6T。

High magnetic field strength, the background magnetic field is up to 1.3T, the surface magnetic field of medium box is up to 2.6T.

☆特殊的介质盒设计，磁场在高密度及无序的棒介质结构产生高梯度磁场，根据磁场对物料吸附力的公式：

$F=K\times X\times B\times \Delta H\times V$，说明高梯度磁场更易于吸附磁性矿。

（F:吸力　K吸力常数　X比磁化系数　B磁场强度　ΔH磁场强度梯度　V物料体积）

Due to the special design of the medium box, magnetic field can generate high gradient magnetic field within high density and disorderly bars medium structure.
According to attractive force formula of magnetic field to material $F=K\times X\times B\times \Delta H\times V$, which illustrates high gradient magnetic field makes it easier to attract paramagnetic mine.
F:attractive force; K: coefficient; X: specific susceptibility; B: flux density; ΔH: gradient; V: materials' volume.

☆出线盒简单美观，方便与现场接口对接。

Outlet box is simple, beautiful and easy connection to the site interface.

☆具有自动预警功能，当冷却水压力不足或冷却水出水温度过高时均会声光报警提示，同时自动切断电源，最大限度延长线圈使用寿命。

With automatic precaution function. When the cooling water pressure is insufficient or the cooling water outlet temperature is too high, the system will give sound and light to alarm, meanwhile it will automatic cut off power supply, thus service life is extended.extended.

☆工艺参数调节方便，磁场可调，转环转速可调，脉冲箱行程、频率可调，最大程度的确定最适合工艺参数。

Technical parameters, like magnetic field, ring rotating speed, pulse box stroke & pulse box frequency all are adjustable, thus it is easy for user to finalize the optimum technical parameters.

☆电气控制柜采用风冷,更可靠、更安全。

The electrical control cabinet adopts air cooling method, which is more reliable and safer.

Application Range 适用范围

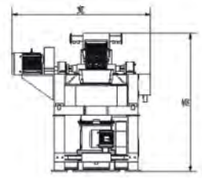
适用范围 Application Range

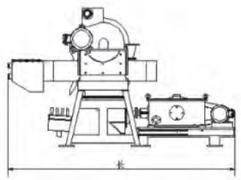
弱磁性矿物的选矿，例如：赤铁矿、褐铁矿、菱铁矿、钛铁矿、黑钨矿、钽铌矿等。

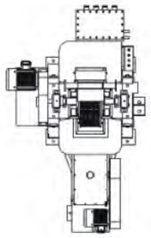
Beneficiation of weak magnetic minerals, such as: hematite, limonite, siderite, chromite, titanic iron ore, scheelite, wolframite, manganese, tantalum-niobium ores and etc.

非金属矿除铁、提纯，例如：石英、长石、霞石、萤石、硅线石、锂辉、高岭土等。

For purifying（iron and titanium removal）nonmetallic minerals,suchas quartz，feldspar，nepheline，fluorite，sillimanite，spodumene，kaolin，etc.







型号说明 Model Designation

CHDL - XXX □ - □

M表示带脉动箱，无字母表示不带脉动箱。
M- Means with pulsating box, without letter means no pulsating box.

T表示磁场强度为1.0T，T2表示磁场强度为1.2T，无字母表示磁场强度为0.8T。
T- Means magnetic field intensity is 1.0T, T2-meansr magnetic field intensity is 1.2T, without letter means magnetic field intensity is 0.8T

三位数字表示滚筒直径（cm）。
Three figures show the drum diameter.

高梯度立环磁选机。
Vertical ring high gradient magnetic separator.

Hunan Kemeida Electric Co., Ltd　Xiong Danyu　Mobile: 0086-137 8608 4085　Email: bearblack@163.com　www.china-electromagnetic-stirrer.com

Vertical Ring High Gradient Magnetic Separator
高梯度立环磁选机
主要技术参数
Main Technical Parameters
KEMEIDA

(中磁机)主要技术参数
(Medium Magnetic Separator)Main Technical Parameters

机　型 Model	CHDL-50-M	CHDL-75-M	CHDL-100-M	CHDL-125-M	CHDL-150-M	CHDL-175-M	CHDL-200-M	CHDL-250-M	CHDL-300-M
转环外径（mm） Outer Dia. Of ring(mm)	500	750	1000	1250	1500	1750	2000	2500	3000
转环转速（r/min） Rotate speed of ring (r/min)	0.3~3	0.3 ~ 3	0.5 ~ 4	0.5 ~ 4	0.5 ~ 4	1 ~ 4	1 ~ 4	1 ~ 4	1 ~ 4
给矿粒度(mm),(-200目%) Feeding size(mm)(-200 mesh %)	1	1	1.2(30 ~ 100)	1.2(30 ~ 100)	1.2(30 ~ 100)	1.2(30 ~ 100)	1.2(30 ~ 100)	1.2(30 ~ 100)	1.2(30 ~ 100)
给矿浓度（%） Feeding density(%)	10~40	10 ~ 40	10 ~ 40	10 ~ 40	10 ~ 40	10 ~ 40	10 ~ 40	10 ~ 40	10 ~ 40
矿浆通过能力（m^3/h） Throughout capacity of ore slurry(m^3/h)	0.25~0.5	0.5 ~ 1.0	12.5 ~ 20	20 ~ 50	50 ~ 100	75 ~ 150	100 ~ 200	200 ~ 400	350 ~ 650
干矿处理量（t/h） Handling capacity of dry ore(t/h)	0.03~0.125	0.06 ~ 0.25	4 ~ 7	10 ~ 18	20 ~ 30	30 ~ 50	50 ~ 80	100 ~ 150	150 ~ 250
额定背景场强（T） Rated background field strength(T)	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
额定激磁电流（A） Rated excitation current(A)	1200	1100	650	850	950	1200	1200	1400	1400
额定激磁电压（V） Rated excitation voltage(V)	8.3	12	26.5	23	28	31	35	45	62
额定激磁功率（kW） Rated excitation power(kW)	10	13	17	19	27	37	40	63	87
转环电动机功率（kW） Power of ring motor(kW)	0.37	0.55	1.1	1.5	3	4	5.5	11	18.5
脉动电动机功率（kW） Power of pulse motor(kW)	0.37	0.75	2.2	2.2	4	4	7.5	11	18.5
脉动冲程（mm） Pulsionstroke(mm)	0~40	0 ~ 40	0 ~ 30	0 ~ 20	0 ~ 30	0 ~ 30	0 ~ 30	0 ~ 30	0 ~ 30
脉动冲次（次/分） Times of stroke(times per min.)	0~400	0 ~ 400	0 ~ 300	0 ~ 300	0 ~ 300	0 ~ 300	0 ~ 300	0 ~ 300	0 ~ 300
供水压力（MPa） Water supply pressure(MPa)	0.1~0.2	0.1 ~ 0.2	0.2 ~ 0.3	0.15 ~ 0.3	0.2 ~ 0.3	0.2 ~ 0.3	0.2 ~ 0.3	0.2 ~ 0.4	0.2 ~ 0.4
耗水量（m^3/h） Water consumption(m^3/h)	0.75~1.5	1.5 ~ 2.5	10 ~ 20	30 ~ 45	60 ~ 90	80 ~ 120	100 ~ 150	200 ~ 300	350 ~ 530
冷却水水量（m^3/h） Cooling water flowrate(m^3/h)	1.5~2	1.5 ~ 2	2 ~ 2.5	2.5 ~ 3	3 ~ 4	4 ~ 5	5 ~ 6	6 ~ 7	8 ~ 10
主机重量（t） Separator weight(t)	1.7	3	6	14	20	35	50	105	175
最大部件重量（t） Max. unit weight(t)	0.3	0.6	2.22	4	5	11	14	15	16
外形尺寸(长×宽×高,mm) Overall dim.(L×M×W)	1800×1400×1320	2000×1360×1680	2700×2000×2400	3200×2340×2700	3600×2900×3200	3900×3300×3800	4200×3550×4200	5800×5000×5400	6600×5300×6400

注：1.选型原则:以矿浆通过能力为标准。
2.非金属矿按干矿处理量选型时,干矿处理量为上表标准的1/2。
3.因产品技术改进，以上参数若有改变恕不另行通知，如需确认请与本公司联系。

Note:1. Model selection principle: according to the handling capacity of ore slurry.
2. Model selection principle for dry nonmetallic minerals: handling capacity of dry ore should be half one of the above table.
3.Moreover, due to Kemeida is constantly striving to improve its high-quality products, the parameter in this catalogue is subject to change without notice.

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

Vertical Ring High Gradient Magnetic Separator
高梯度立环磁选机
主要技术参数
Main Technical Parameters
KEMEIDA

(强磁机)主要技术参数
(Strong Magnetic Separator)Main Technical Parameters

机 型 Model	CHDL-50T(T3)	CHDL-75T(T3)	CHDL-100T(T3)	CHDL-125T(T3)	CHDL-150T(T3)	CHDL-175T(T3)	CHDL-200T(T3)	CHDL-250T(T3)	CHDL-300T(T3)
转环外径（mm） Outer Dia. Of ring(mm)	500	750	1000	1250	1500	1750	2000	2500	3000
转环转速（r/min） Rotate speed of ring (r/min)	0.3～3	0.3～3	0.5～4	0.5～4	0.5～4	1～4	1～4	1～4	1～4
给矿粒度(mm),(-200目%) Feeding size(mm)(-200 mesh %)	1	1	1.2(30～100)	1.2(30～100)	1.2(30～100)	1.2(30～100)	1.2(30～100)	1.2(30～100)	1.2(30～100)
给矿浓度（%） Feeding density(%)	10～40	10～40	10～40	10～40	10～40	10～40	10～40	10～40	10～40
矿浆通过能力（m^3/h） Throughout capacity of ore slurry(m^3/h)	0.25～0.5	0.5～1.0	12.5～20	20～50	50～100	75～150	100～200	200～400	350～650
干矿处理量（t/h） Handling capacity of dry ore(t/h)	0.03～0.125	0.06～0.25	4～7	10～18	20～30	30～50	50～80	100～150	150～250
额定背景场强（T） Rated background field strength(T)	1(1.3)	1(1.3)	1(1.3)	1(1.3)	1(1.3)	1(1.3)	1(1.3)	1(1.3)	1(1.3)
额定激磁电流（A） Rated excitation current(A)	1200	1200	1200	1400	1400	1400	1400	1400	1400
额定激磁电压（V） Rated excitation voltage(V)	13.4(20.3)	20.3(25)	26.5(37.8)	28.5(40)	34.7(44.3)	38.2(51.5)	39.2(56.2)	56(78)	80(93)
额定激磁功率（kW） Rated excitation power(kW)	16(24.4)	24.4(30)	31.8(45.4)	40(56)	46.8(62)	53.5(72)	55(78.7)	78.4(109.2)	112(130.2)
转环电动机功率（kW） Power of ring motor(kW)	1.1	1.1	1.5	3	4	7.5	11	15	18.5
脉动电动机功率（kW） Power of pulse motor(kW)	0.37	0.75	2.2	2.2	4	4	7.5	11	18.5
脉动冲程（mm） Pulsionstroke(mm)	0～40	0～40	0～30	0～20	0～30	0～30	0～30	0～30	0～30
脉动冲次（次/分） Times of stroke(times per min.)	0～400	0～400	0～300	0～300	0～300	0～300	0～300	0～300	0～300
供水压力（MPa） Water supply pressure(MPa)	0.1～0.2	0.1～0.2	0.2～0.3	0.15～0.3	0.2～0.3	0.2～0.3	0.2～0.3	0.2～0.4	0.2～0.4
耗水量（m^3/h） Water consumption(m^3/h)	0.75～1.5	1.5～2.5	10～20	30～45	60～90	80～120	100～150	200～300	350～530
冷却水水量（m^3/h） Cooling water flowrate(m^3/h)	1.5～2	1.5～2	2～2.5	2.5～3	3～4	4～5	5～6	6～7	8～10
主机重量（t） Separator weight(t)	2.1	3.6	6.8	16	25.5(26.8)	41.3(42.6)	55(57)	113(118)	188(196)
最大部件重量（t） Max. unit weight(t)	0.5	0.9	2.5	6	5.8(7.6)	9(11.5)	20(21.5)	19.5(22)	21(22)
外形尺寸(长×宽×高,mm) Overall dim.(L×M×W)	1400×2000×1600	1500×2000×2100	2100×2600×2800	2600×2950×3150	2950×3550×3600	3600×3370×4100	4200×3700×4630	5650×5150×5900	6450×5500×6550

注: 1.选型原则:以矿浆通过能力为标准.

2.非金属矿按干矿处理量选型时,干矿处理量为上表标准的1/2.

3.根据选矿效果,非金属选矿建议不配脉动箱,如客户需要,可配脉动箱部件.

4.技术参数主机重量、最大部件重量、外形尺寸栏为不带脉动箱磁选机参数.

5.因产品技术改进，以上参数若有改变恕不另行通知，如需确认请与本公司联系。

Note: 1. Model selection principle: according to the handling capacity of ore slurry.

2. Model selection principle for dry nonmetallic minerals: handling capacity of dry ore should be half one of the above table.

3. According to the separation effect, we don't recommend pulsating box to nonmetallic minerals selection, if needed, parts of pulsating box can be supplied.

4. In the technical parameters table, the separator weight, max.unit weight and overall diameter are parameters for separator with no pulsation box.

5.Moreover, due to Kemeida is constantly striving to improve its high-quality products, the parameter in this catalogue is subject to change without notice.

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

配套设备 Optional Equipment for Separator
KYTS系列圆筒筛 KYTS Series Trommel Screen

配套设备 Optional Equipment for Separator
KYTS系列圆筒筛 KYTS Series Drum Screen

使用范围 Application Range

当矿浆进入到如磁选机等对入料粒度有要求的设备之前，需要用圆筒筛先将粗细粒度的物料分离后，再进入磁选机中。它不仅可作高梯度立环磁选机的除渣设备，也可用于冶金、矿山、化工磨料等需要除渣的行业。

Since the magnetic separator is a kind of separator which has requirements for materials' particle sizes, ore slurry should be first separated by drum screen before entering the separator. Drum screen not only can be used as slag removal equipment for vertical ring high gradient magnetic separator, but also be used in metallurgy, mining, chemical abrasive and other industries which need slag removal equipment.

性能特点 Technical Features:

①低速平稳转动，可靠性高，维修率低，整机寿命长。不易堵塞，适于潮湿物料的筛分。②筛网面积大，交替接触物料，筛网的整体寿命长。③噪音低，全封闭无粉尘污染。④筛网可更换，适合生产多种粒级成品。

①It rotates steady with low speed, featured high liability, low maintenance rate and long service life. It is not easy to block, especially it is suitable for separating damp materials

②The area of screen is big enough, it can touch materials alternately thus the service life has been prolonged.

③The screen features low noise, totally sealed structures and no dust contamination.

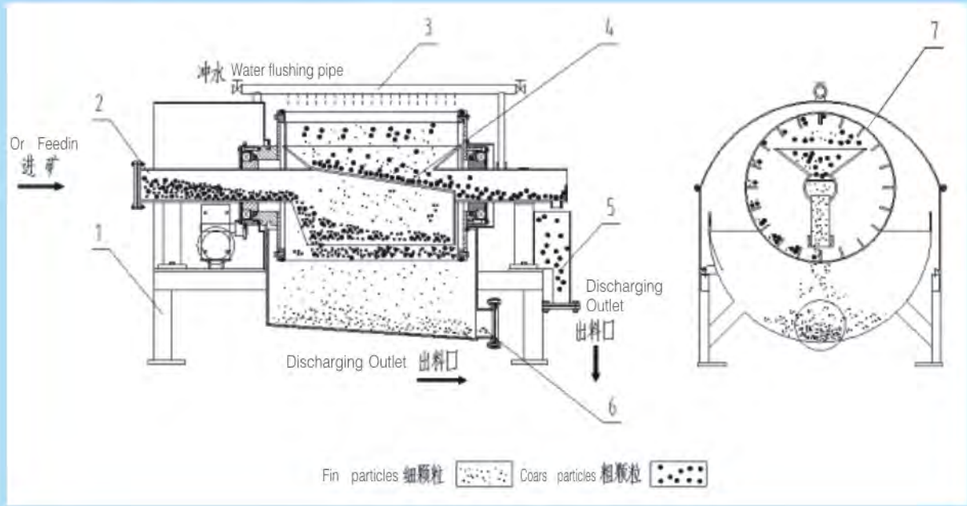
④The screen can be separated with different sizes thus it can be adapted to variable particle sizes products.

结构及工作原理 Structure & Working Principle

工作时，圆筒筛在传动机构的驱动下旋转，矿浆从进矿管的左下部分给入到筛网的圆周上，细粒矿物和水穿过筛网落入接矿斗，沿细颗粒出料管道自流至CHDL磁选机分选，粗粒部分被提渣板提至顶部被冲洗水冲入收渣斗排走。

The trommel screen will rotate under the force of driving mechanism, ore slurry from the lower left part can be poured to the trommel screen circle, fine particle ores and water will fall to the ore bucket through screen, and then they will flow to the CHDL magnetic separator by fine particle pipes for separation. The coarse particles will be transmitted to top by slag carrying plate and coarse particles will be flushed into the recycling hopper at last.

结构及工作原理
Structure & Working Principle



圆筒筛结构原理图 Structure principle diagram of trommel screen

1.台架	1. Rack
2.进矿管	2.Material feeding pipe
3.冲水管	3.Water flushing pipe
4. 不锈钢筛网	4.SS screen
5.粗颗粒出料口	5.Coarse particles discharging outlet
6. 细颗粒出料口	6.Fine particles discharging outlet 7.SS screen
7. 不锈钢筛网	

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

KEMEIDA

CHDL Vertical Ring Pulsating High Gradient Magnetic Separator

CHDL立环脉动高梯度磁选机

配套设备
KYTS系列圆筒筛 KYTS Series Trommel Screen

规格型号 Specification

圆筒筛规格型号及技术参数表
Specification & Technical parameters for drum screen

型号Model / 参数Parameter	KYTS—8010	KYTS—1210	KYTS—1415	KYTS—2019	KYTS—2529
圆筒直径×长度（mm）Drum Dia.(mm)	Φ800×1000	Φ1200×1000	Φ1420×1500	Φ2000×1950	Φ2500×2950
除渣粒度（mm）*Particle granularity(mm)	2.0	2.0	2.0	2.0	2.0
给矿浓度（%）Pulp density(%)	≤50	≤50	≤50	≤50	≤50
最大处理能力（t/h）Max.processing capacity(t/h)	15	45	75	150	300
最大给矿体积（m3/h）Max.feeding volume(m3/h)	50	100	200	400	800
传动功率（kW）Transmission power(kW)	1.5	1.5	2.2	4.0	7.5
耗水量（m3/h）Water consumption(m3/h)	1~2	3~5	5~10	10~20	20~30
机重（t）Weight(t)	1.35	2.2	4.2	6.9	10.5
外形尺寸（长×宽×高）mm Overall dimension(L×W×H)	2400×1300×1500	3000×1450×1700	3500×1600×2250	4200×2200×2700	5500×2750×3050
根据给矿浓度、粒度及所处流程位置，可配CHDL磁选机型号 According to mine density, granularity &process position to select the right CHDL separator	CHDL—75 CHDL—100 CHDL—125	CHDL—125 CHDL—150	CHDL—150 CHDL—175 CHDL—200	CHDL—200 CHDL—250	CHDL—200 CHDL—250 CHDL—300

*筛网规格可根据用户要求订做。
Screen size can be customized by requirements of users.

Lab
实验室

实验室 Lab

我公司模拟现场选矿工艺，自主研发了一条全自动化选矿流水线，包括破碎、球磨、分级、磁选、浮洗，可供客户做成套试验。配置了化验室，能够快速、准确对实验结果进行分析。试验过程中以最大限度模拟实际生产过程，提高试验数据可信度，为实际生产设备选型、选矿工艺流程的设计提供基础,合理数据。

By stimulating the real beneficiation process, we design an automatic beneficiation line which consists of crushing equipment, ball grinding machine, grading, mangetic separation, flotation. Complete experiments can be done in this Lab for customers. Also by the test Lab, the test result can be analyzed instantly & accurately. In order to enhance the credibility of the data, and offer the reasonable data for actual equipment model selection & technical process, the actual production process is maximally simulated during the test process in the lab.

金属矿磁选实验室
Magnetic separation Lab for metallic mineral

全景 Full view

球磨机 Ball Grinding Machine

KEMEIDA

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

实验室 Lab

全自动化非金属矿流水线

全景 Full view

2级立环脉动高梯度磁选机
High gradient vertical ring magnetic separator with 2 levels

全景 Full view

湿式筒式调磁磁选机
Wet drum type adjustable magnetic separator

浮选设备
Flotation equipment

化验室
Lab

加工装配现场
On-site Processing & Erection

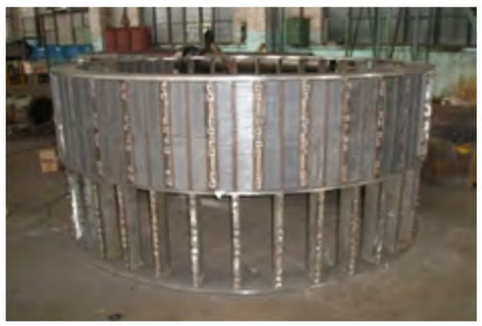
加工装配现场 On-site Processing & Erection

CHDL-150T3装配
Erection of CHDL-150T3

CHDL-300T3装配
Erection of CHDL-300T3

线圈制作
Coil making

CHDL-50T3装配
Erection of CHDL-50T3



转环装配
Erection of the ring

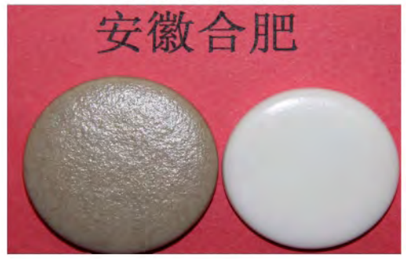
下铁芯加工
Making of the lower iron core

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

长石除铁效果对比图
Comparison chart of feldspar (before & after iron separation)

Yingshan of Hubei Province

Anhui of Hefei Province



Anyang of Henan Province

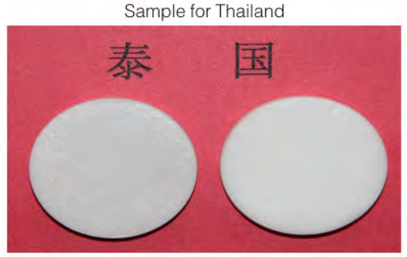
Longyan of Fujian Province

Yichun of Jiangxi province

Foshan of Guangdong Province

Linxiang of Hunan Province

Sample for Thailand



高梯度立环磁选机应用现场
On-site application of vertical ring high gradient magnetic separator

高梯度立环磁选机应用现场
On-site application of vertical ring high gradient magnetic separator

湖北英山长石除铁
Iron removal of feldspar in Yingshan

广东英德石英除铁
Iron removal of quartz in Yingde

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com

KEMEIDA

CHDL Vertical Ring Pulsating High Gradient Magnetic Separator

CHDL立环脉动高梯度磁选机

高梯度立环磁选机应用现场

On-site application of vertical ring high gradient magnetic separator

湖南临湘长石除铁
Iron removal of feldspar in Linxiang city

云南昆明铁矿
Iron mind in Kunming, Yunnan

广西南宁铁矿
Iron mine in Nanning Guangxi

广东河源长石除铁
Iron remove of feldspar in Heyuan Guangzhou

湖南茶陵铁矿
Iron mine in Chaling,Hunan

Hunan Kemeida Electric Co., Ltd Xiong Danyu Mobile: 0086-137 8608 4085 Email: bearblack@163.com www.china-electromagnetic-stirrer.com