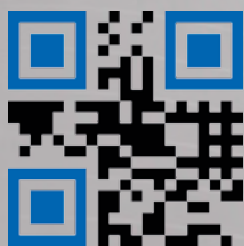




KREISEL

环境技术 始于**1912**



产品样本总册
Main catalogue

KREISEL GmbH & Co. KG



德国 KREISEL公司致力于全球粉体工程装置的设计制造。KREISEL公司的技术、服务人员，都是粉体领域的专业人士。

我们依据实际工况为您量身打造的输送系统，涵盖最上游的原料料仓，到气力输送，以及除尘装置。根据您的性能参数和技术要求，我们提供成套装置和关键部件的一揽子服务，包括装置设计、设备设计、设备制造、物流运输以及安装服务。我们的服务团队会在您指定的装置地点完成所有部件的安装，包含最终的开车，以及我们的质量认证：德国制造 – 百年经验。

KREISEL GmbH & Co. KG is an internationally plant manufacturer. The technical employees of the KREISEL company are experts in the special field of handling bulk material.

Customized conveying systems, from the storage silo to the pneumatic conveyance up to the dust removal plant, are you will receive first-hand knowledge from us. According to your performance characteristics and the technical requirements, we plan, design, manufacture and deliver the plant components. Our service team assembles the components at the place of destination, including the final commissioning and the seal of quality Made in Germany with more than 100 years of experience.



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德国粉体工业协会董事会员
Member of



KREISEL 气力输送系统 KREISEL Pneumatic conveyance

KREISEL公司的气力输送系统, 适用于所有粉体物料的输送。输送距离可达1000米以上, 可实现>150t/h的输送能力。每套输送装置都可以按照业主的具体要求, 进行能耗优化设计。所有喂料部件, 如旋转卸料阀、仓泵、喷射输送机以及螺旋泵, 都在我们自己的德国工厂生产。除尘点的漏气捕集由KREISEL除尘系统来实现。

KREISEL pneumatic conveying systems are best adepte for conveying every kinds of bulk materials. Conveyor distances over 1,000 meter and conveying rates more than 150 t/h can be realized. Every conveying system will be customised for the special kinds of customer requirements and with an optimum energetic efficiency level. As loading or feed-in components are usable: rotary valve, pressure vessel, jet conveyor or screw conveyor comes from the KREISEL manufacturing. The deposit at the point of reception will be realised by KREISEL filtration systems.



旋转卸料阀
Rotary valve

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KREISEL 圆顶阀®
KREISEL DOME VALVE®

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输送管线
Conveying line

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脉冲式仓顶布袋除尘器
Jet bag filter

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料仓
Container

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插板阀
Slide gate

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气垫
Air Slide

粉体装车装置
Loading equipment

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我们可以提供各种形式的粉体物料输送解决方案。

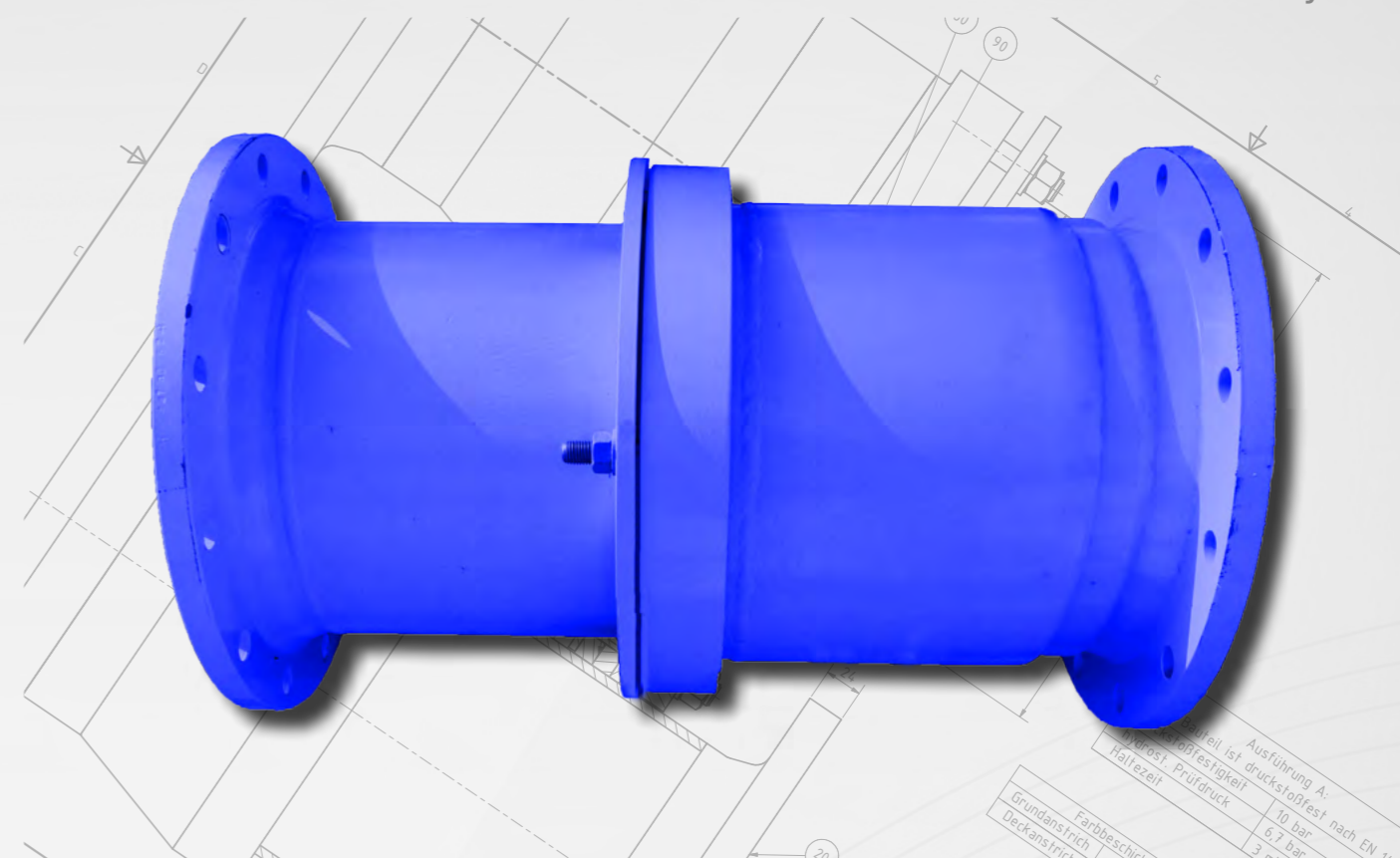
对于不同高度的弯曲的输送线路就需要气力输送来实现，粉体物料在封闭的管道（尘密）中运动。输送管道可任意实现水平或垂直布置。一套完整的输送装置由以下几个装置部件组成：

- 空气压缩装置（也可采用氮气或其它气体作为输送介质）
- 喂料装置（物料在此位置进入带压输送管道）
- 输送管道系统
- 物料收集点



Is it the object to transport bulk material from any point to another one, we have any transport options. If there is a winding way of transportation with different height, there it has to using "pneumatic conveying". The bulk material will conveyed in closed pipes (dustproof). The Horizontal and the vertical parts of the conveying pipe can be arranged arbitrarily. A pneumatic conveying plant is composed by:

- Compressed air generation (using of nitrogen or other gases are possible)
- Infiltration area (at this point the bulk material will fall into the pressured conveying pipe)
- System of conveying pipes
- Point of material reception



输送管线膨胀节

由于环境温度或物料温度的影响，输送管道的长度会发生变化。绝大部分情况下，可采用弯管作为解决方案。如果无法实现弯管设计，可以采用输送管线膨胀节作为应对措施。所有膨胀节都是针对粉体气力输送进行的特殊设计。

Conveying line compensator

Influence of temperature affected by ambient or affected by the bulk material lead up to length variations at the conveying pipes. In a moderate amount there will be equalized with tube turns. But appropriate to use is the installation of line compensators. They are custructed especially for the conveying of bulk material pneumatically.



防磨损弯头

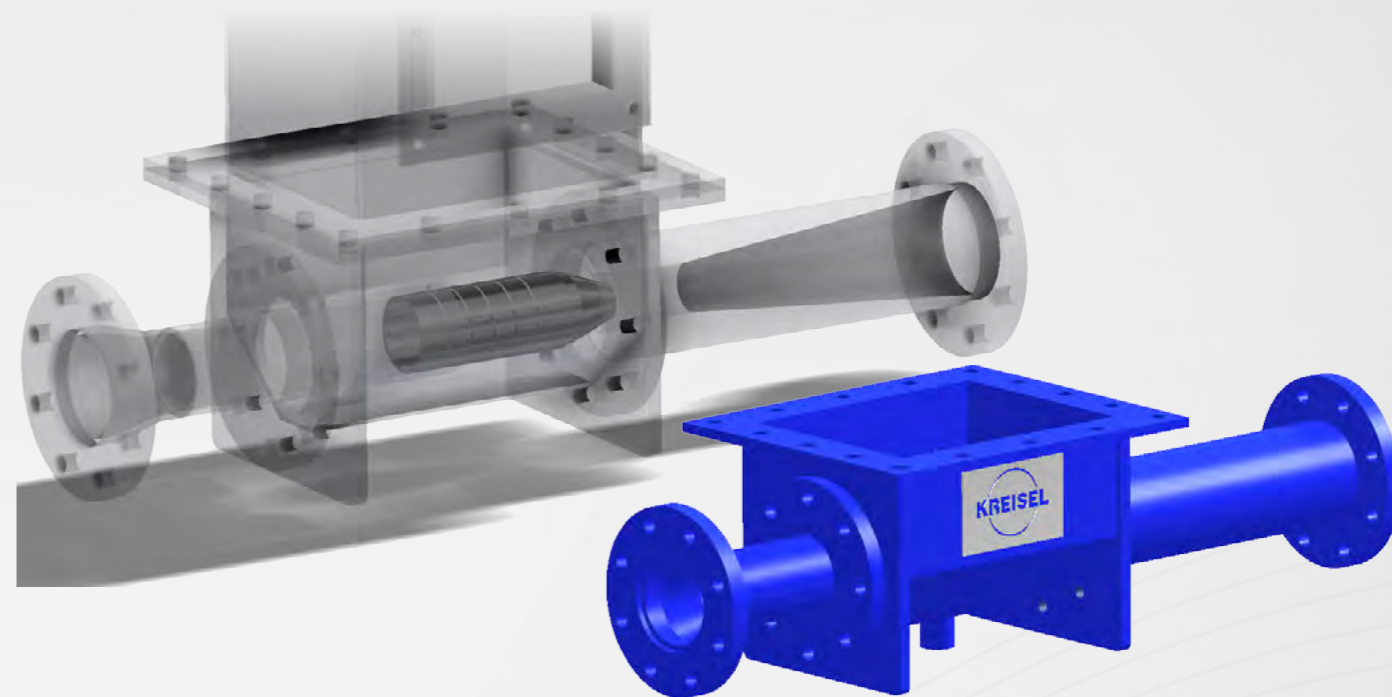
针对磨损性物料，例如飞灰或砂石，需要特别关注输送管道弯头处所采用的衬里。

针对磨损物料的工况，KREISEL公司会为您提供采用箱体式纹路的弯管来解决磨损问题，箱体式纹路焊接在背部（物料流动侧）。

如果输送管道内部产生了磨损，物料就会流入新产生的空隙中，并逐步聚集。与此同时，自发形成了新的磨损防护。物料自身之间会直接产生摩擦，物料后的空隙则不会再产生新的磨损。

Wear protected tube turn

For abrasive bulk materials like fly ash, broken stones or gravel we have to pay attention especially at the redirecting along the inside of the pipeline. In this case of application KREISEL offer the box-like profiled tube turn as the wear protected solution. If the inside of the tube is abrading, the bulk material will gutting into the box-like profile and accumulate there. From this moment on is rubbing bulk material on bulk material and the box-like profile behind is saved against attrition.

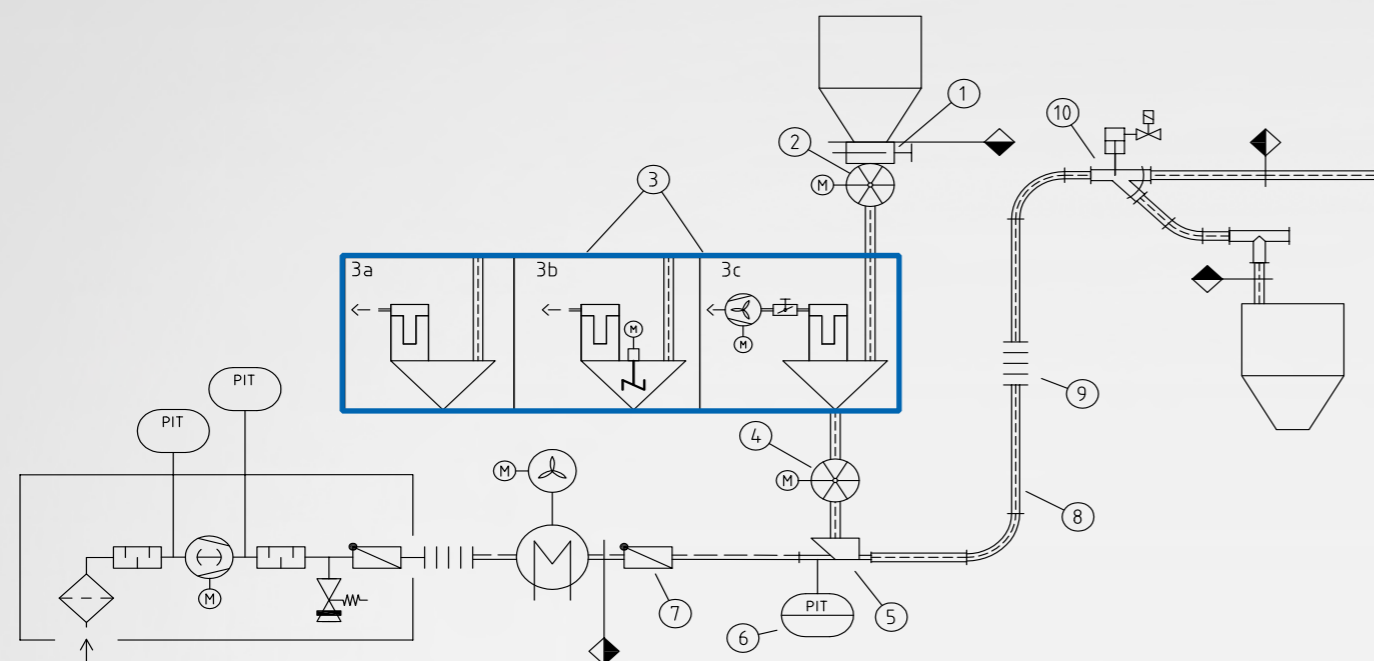


喷射输送机

喷射输送机是气力输送管道的喂料部件。它的工作原理等同于喷水泵。粉体物料从上方落入喷射区。在喷嘴前部，物料进入输送气流并被带入到扩散器中。由于喷射效应，入料位置会形成负压。由于该效应就不需要额外的喂料器。喷嘴式喷射输送机拥有众多优势，连续式操作、无需使用动态易损件，同时使系统可以适用于高温物料。

Jet conveyor

The Jet conveyor is a loading component into a pneumatic conveying line. He is working according the principle of a water-jet-pump. The bulk material is falling from the top into the jet area. Ahead the injector the material will be caught by the conveying air and transported to the diffuser. Affected by the injection there develop a negative pressure into the inlet area. This effect obviates another dosing component. The benefits of the jet conveyor are the continuous running, the prevention for moveable, itself worn components and as the result, the application for bulk materials with high temperatures.



模块化系统可实现：

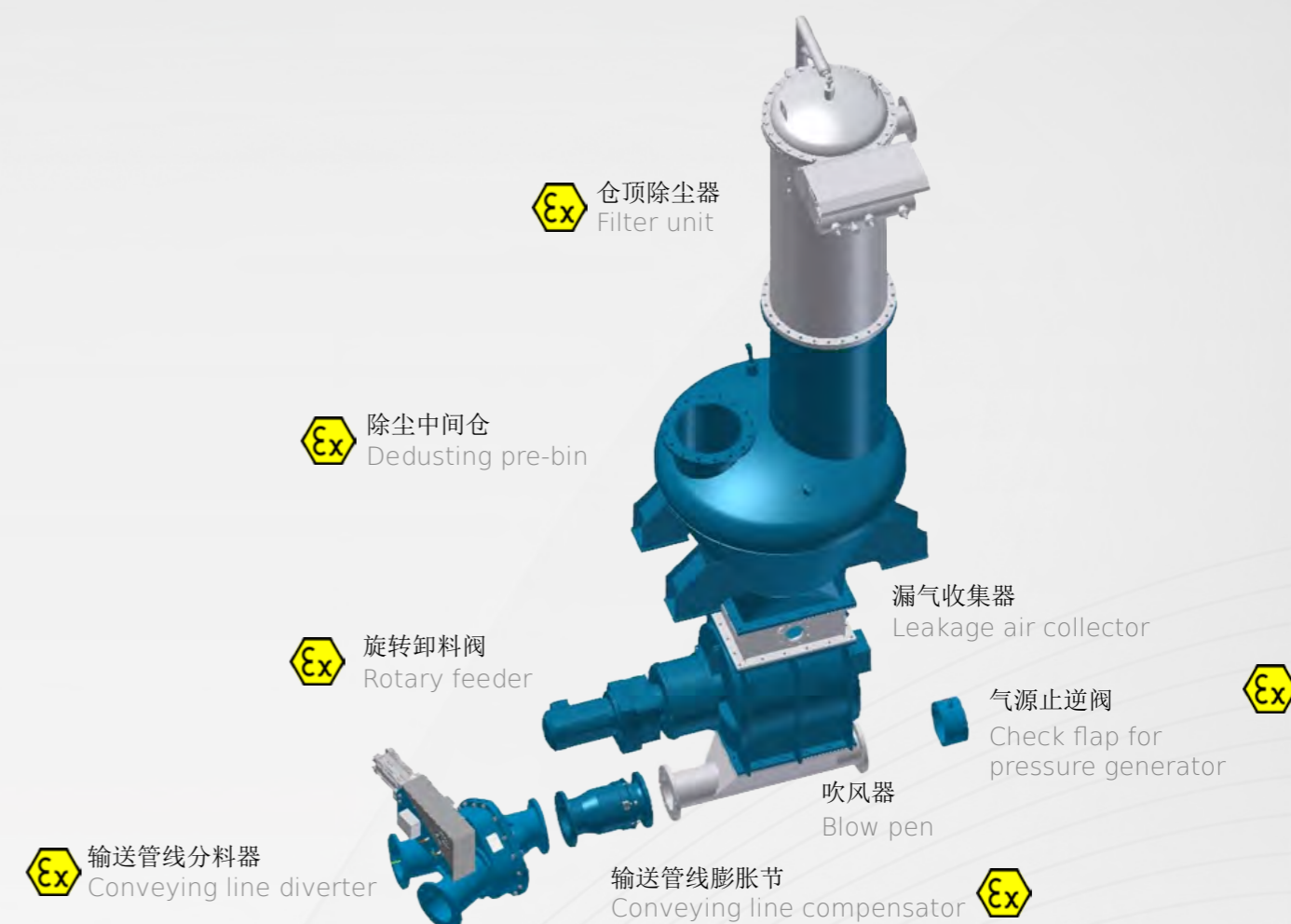
- 安全生产
- KREISEL公司在为客户准备方案期间，就能向用户提交重要的防爆认证文件
- 使KREISEL公司的客户，更加轻松的满足99/92/EG和2009/104/EG以及于2016年4月20日生效的2014/34/EG的防爆设计规范

该模块化系统，除了纯粹的气力输送外，还能实现粉煤定量给料的功能，例如为锅炉烧嘴供煤。视应用工况而定，气力输送系统还可以配备精确定量给煤（如图）。可在连续生产的工况下，实现粉煤流量的在线称重测量与校正。

The modular system allows ...

- a safe operation
- us to support our customers even during the bidding phase with all necessary details for the explosion protection document
- our customers a simple fulfillment of the directive 99/92/EC and 2009/104/EC and from the 20.04.2016 of the 2014/34/EC

The modular system includes not only the pneumatic conveying of pulverized coal; it also has the possibility for a burner feeding, for example. Depending on the application, the pneumatic conveying is equipped with a metering device upstream. Here the pulverized coal mass flow is measured by a "Loss in Weight" system which will be auto calibrated during the operation process.



KREISEL工程公司按照客户对于粉煤输送装置的具体需求，研发出了模块化系统。该系统可实现针对装置安全性，以及与客户现有装置匹配性的全面评估。第三方可通过检测点对装置整体及它的内部连接点进行检测和评估。KREISEL提供的部件，无论作为单体设备还是系统组件，都可应用于防爆区域，并通过指定机构的样品抽样/评估检测。

KREISEL Engineering has developed a modular system for the design of customized pulverized coal conveying plants. This system allows a general certification on the system- safety and integration into the customer facilities. By a notified body the systems and their interfaces were investigated and rated. The illustrated KREISEL components were approved as single units and as an assembly group for use in hazardous explosion areas and released by an EC Type Examination from the notified body.



KREISEL精确給料系统，被设计用于给锅炉烧嘴的燃料給料，例如褐煤粉、烟煤粉或石油焦等。为了满足输送系统給料稳定性的高要求，**KREISEL**公司专门研发出了DosFeed精确給料系统。该系统的研发过程，关注重点在于简洁的系统构架，系统的长使用寿命，以及高精度的給料精度。

备料系统起始于料仓旋转阀。该设备属于保护系统的范畴，满足94/9/EG (ATEX) 的防火设计及抗爆要求标准。旋转阀器将物料输送至位于称重传感器上的校准罐中。校准罐用于将燃料均匀的输送入下游的旋转卸料阀中。根据物料额定质量流的要求，旋转卸料阀的转速进行相应调整。

The KREISEL metering system was designed for metering fuels such as pulverised coal, lignite or petcoke into burners. The KREISEL DosFeed metering system was designed to comply with the high requirements on metered and low-pulsation conveying. The main focus during development involved a simple constructive design, long service life and high metering accuracy.

The point of intersection to the dosing system is the drain rotary valve behind the silo. Normally the valve is manufactured as an explosion proof system according 94/9/EG (ATEX), flameproof and pressure shock resistant. The rotary valve feeds the bulk material to a calibration device with tank. The rotary valve feeds the bulk material to a calibration device with tank. In correlation the mass flow will regulated the speed of rotation from the dosing rotary valve.

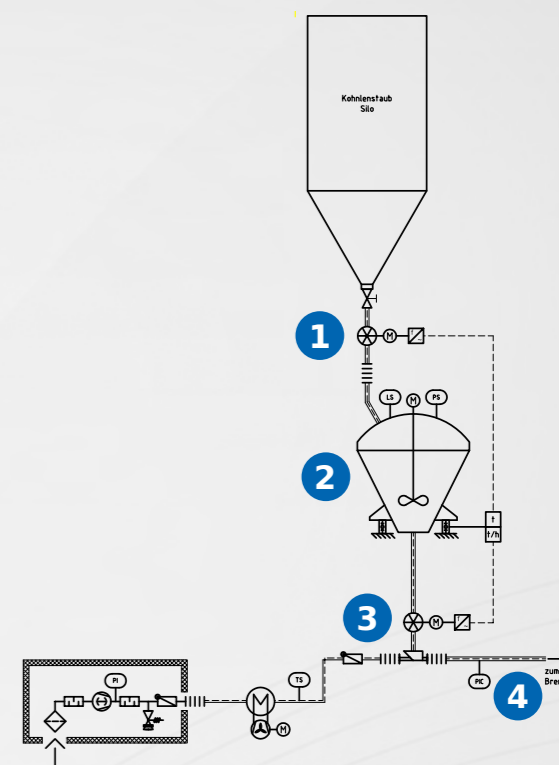
DosFeed系统包括下面主要部件

- 料仓卸料旋阀 (1)
- 带称重单元校准仓 (2)
- 给气力输送管路喂料的旋转阀 (3)
- 输送管路 (4)

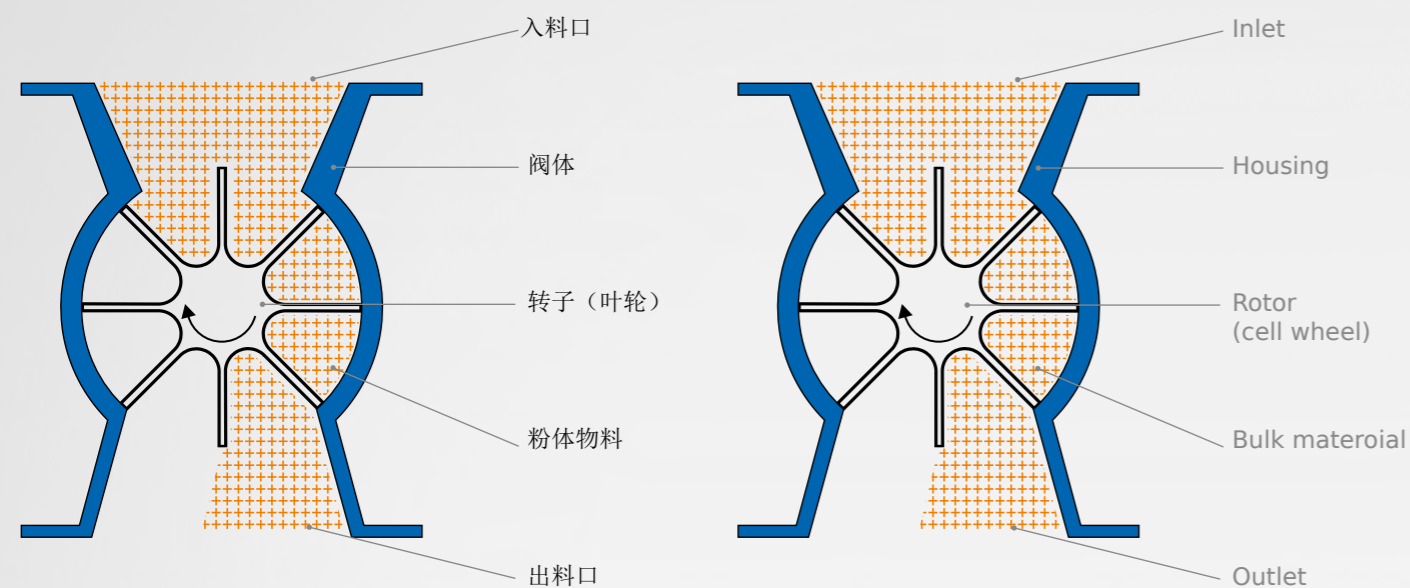
The DosFeed comprises the following main components:

- Silo discharge rotary feeder (1)
- Calibration bin, on measurement cells (2)
- Rotary feeder (3) feeding the pneumatic conveying line (4)

在整个校准过程中，燃料的喂入与校准仓互相分离。备料系统继续运转。通过测定的单位时间内产生的质量下降，可以得到实际的输送流量，并与额定输送流量进行对比。如果差值超过了允许的范围值，控制系统中的旋转阀转速曲线会进行修正。



During the calibration there will be stopped the fuel feed into the calibration tank. The dosing system still works active again. The measurement of the mass flow gives a normative-actual comparison of the conveying capacity. If there will be measured a divergence out of the acceptance level, takes place a characteristic adjustment of the rotation speed at the rotary valve.

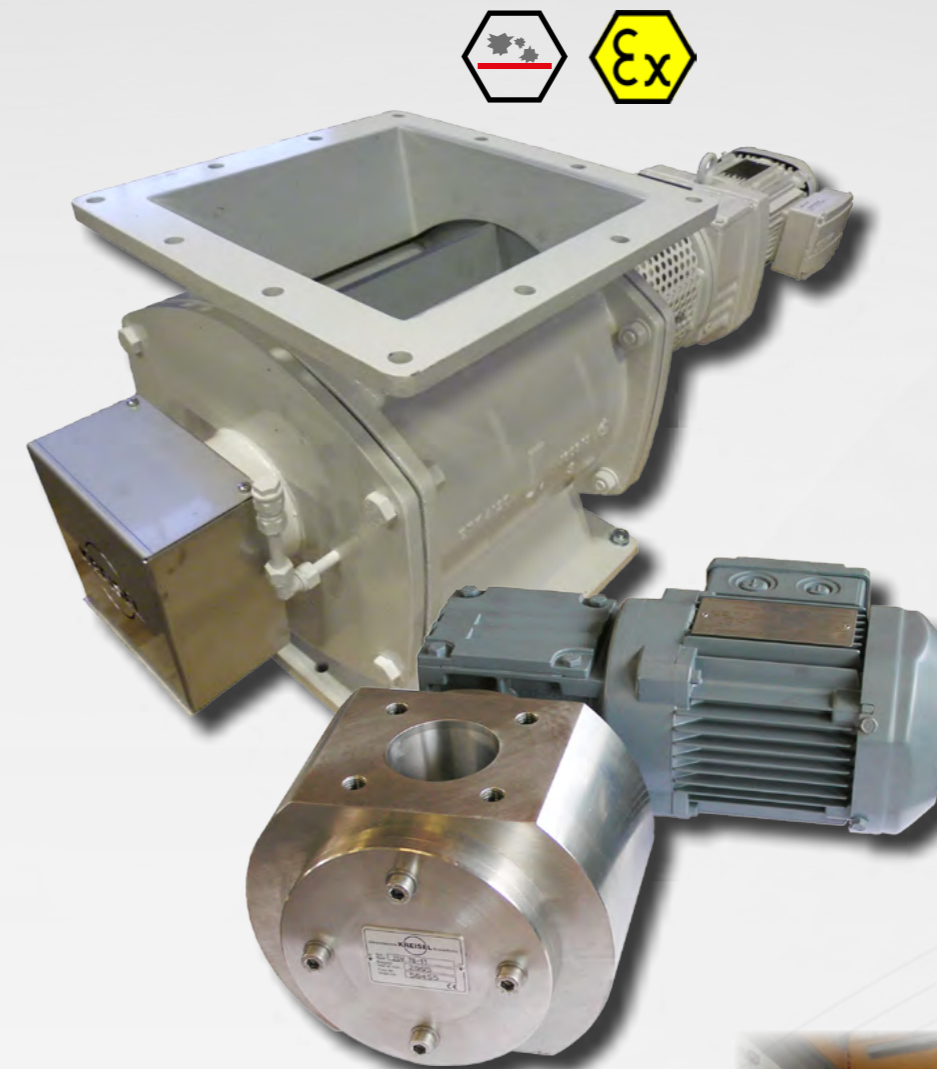


旋转卸料阀用于各种料仓、装置上下游工艺以及输送系统，可实现清空物料，或根据体积完成粉体物料的备料。旋转卸料阀的工作原理基于在阀体中配有一定叶片数量的转子进行旋转运动，旋转中的转子将粉体物料从入料的位置带入到叶片腔体中，通过转子的自转运动，粉体物料被运往出料位置，并最终通过物料本身的重力离开旋转叶片，落入装置的下游工段。

由此实现连续的体积流输送。叶片的空间和转子的转速决定了物料的输送量。入料口和出料口的压差，由于转子和阀体间的极小间隙，能够得以维持。

The rotating rotor takes up bulk material under the inlet opening and filling his cells. By the rotational movement the bulk material have been conveyed to the outlet. Due to the gravitational force the material fall out at the followed plant area. Thus arised a continuous volumetrically conveying. The output is depend from the volume of the cells and the rotation speed of the rotor. Gas flow due to difference pressure between inlet and outlet will minimized due to closely clearance between rotor an housing.

This results in a volumetrically continuous conveyance. The conveying capacity defines the contents of the rotary cells and the rotor speed. The direction of flow and counter-flow of the conveyor system with particular differences in pressure are effectively separated from each other by means of the small tolerance between casing and rotor.



- 极具性价比的价格
favorable base price
- 焊接结构或铸造结构
welding construction or cast constructed
- 特殊工况非标设计
special designed according to customer requirements
- 丰富的ATEX认证抗爆产品
wide range of ATEX certified valves

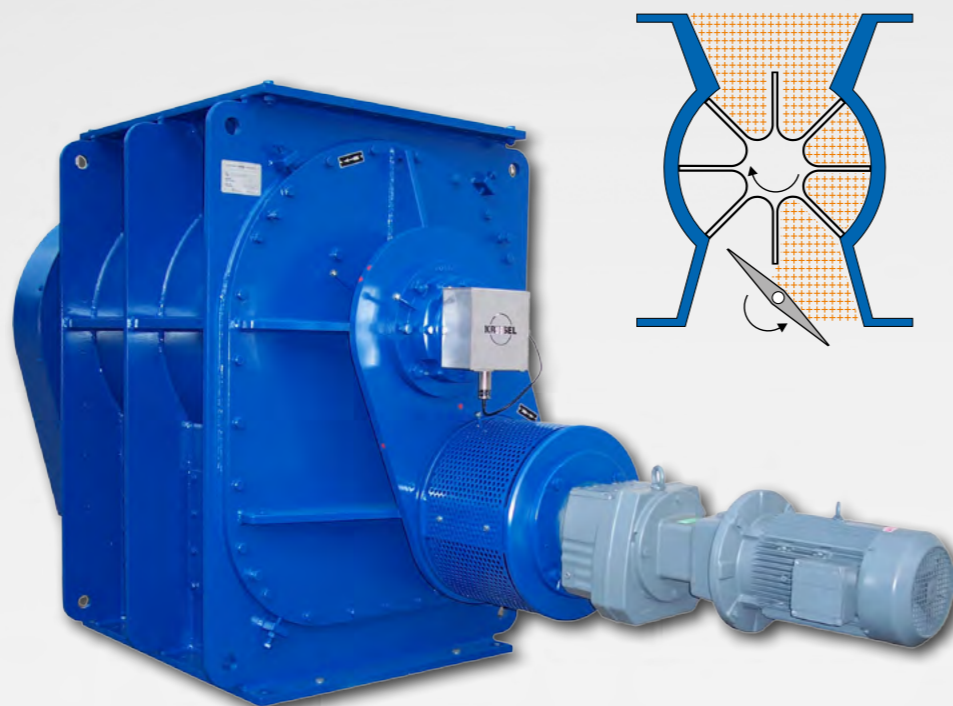
- 根据EU标准94/9/EG，通过ATEX认证，安全抗爆防火
- 高温旋转卸料阀
- 抗磨旋转卸料阀
- 高压旋转卸料阀
- 加热或冷却的旋转卸料阀
- 非标设计
- pressure-shock resistant and flame penetration proofed up to 10 bar with certificate according to EU directive 94/9/EG
- High temperature rotary valves
- Wear-resistant rotary Valves
- High-pressure gate valves
- Heatable or cooled rotary Valves
- special-designs



KREISEL自清式旋转卸料阀 KREISEL Self-cleaning rotary valves



- 转子直径最高可达2400mm
frame sized up to rotor-
diameter 2400mm
- 以实际工况为基础的防磨损
方案
individual concepts of
wear protecting
- 特殊应用非标设计
special designs for special
applications



KREISEL自清式旋转卸料阀，可从料仓中，将难流动、高水分、膏状粘性物料以稳定的体积流送入下游装置单元或输送系统。已实现的最大输送量为750t/h，在多年众多化工应用领域中积累了丰富的业绩。

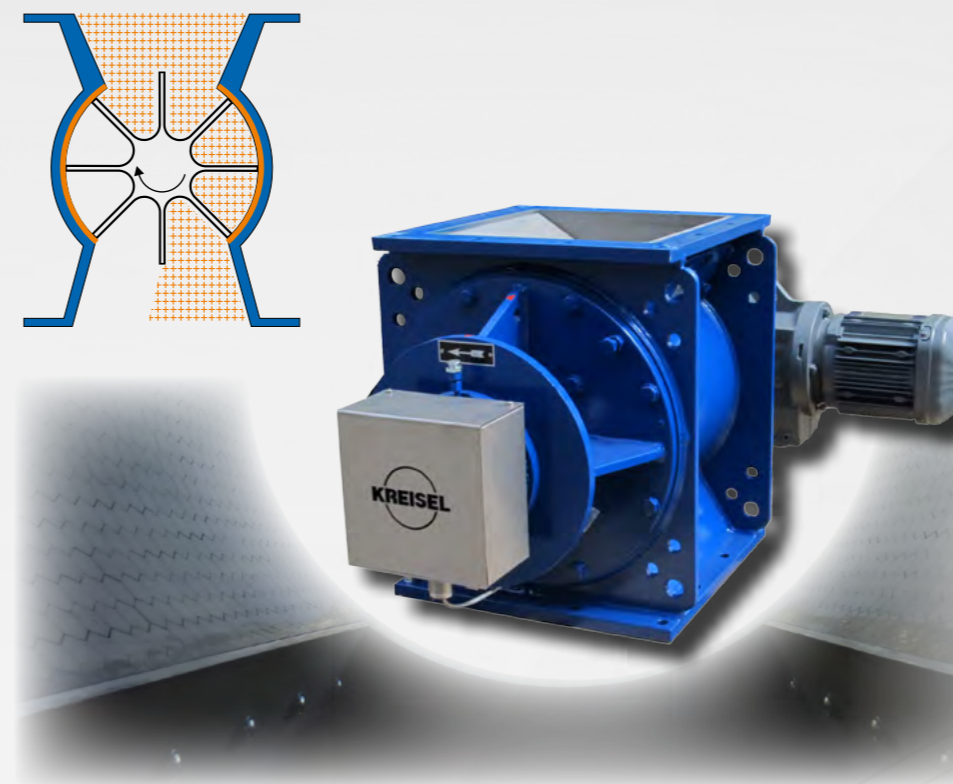
自清式旋转卸料阀可实现高达10bar的抗爆能力，并取得了认证证书。该阀门安全可靠，能阻止火焰扩散，并通过了ATEX认证。

自清式旋转下料器可以轻松适应各种工况。还可以针对物料特性采用多种抗磨损的设计。

Selfcleaning-rotary-valves are used to discharge of bulk materials who are bad fluent, humid, pasty and sticky - with constant volume flow rate or to volumetrically dosing out of containers in the following plant. Different design sizes for flow rates up to 750 t/h, are proved in many process plants of different industries. KREISEL selfcleaning rotary valves, manufactured explosion pressure resistant, are certificated for an explosion surge up to 10 bar. Flame arrest manufactured the valves are perfect applicable as a protection system, certificated according ATEX. Selfcleaning rotary valves will customized design accordingly the especially conditions of use. According the special features of the bulk material will customized the wear protection concept.



KREISEL陶瓷旋转卸料阀 KREISEL Ceramic rotary valves



- 最新技术
newest state of the art
- 可以轻松替代螺旋泵
for exchange of
screw-pumps
- 无需维护即可实现超长设
备寿命
longest lifetime without
maintenance
- 低能耗
low energy consumption

陶瓷材质旋转卸料阀展示了KREISEL公司的最新技术水平。

采用陶瓷部件作为高强防磨损衬里，可以提高传统旋转卸料阀抗磨损性数倍。因实际需求而异，有众多的防磨损保护系统以供选择。陶瓷的莫氏硬度高达8.5-9（以钻石为例，众所周知，钻石具备最高的防磨损等级：莫氏硬度10），可以提供可实现的最高防磨损等级。另外一个优势是侧面开口的检查口。借助该检查口，操作人员可以在不拆卸设备的前提下，完成对端板和阀体的磨损程度进行检测。

KREISEL Ceramic Rotary Feeders are the latest state of the art rotary feeders. Their highly wear-resistant lining with ceramic elements reduces the wear to conventional rotary feeders by a multiple. Depending on requirement profile different wear protection systems (Wear Protect A-F) are available. Ceramic places with a Mohs hardness of 8.5 - 9.0 (for comparison: Diamond has the highest known hardness of a naturally occurring mineral with Mohs 10) the optimum wear protection. Further advantages are the lateral inspection openings. By the inspection openings the wear condition between rotor side disks and housing can be checked in built-in state of the rotary feeder.

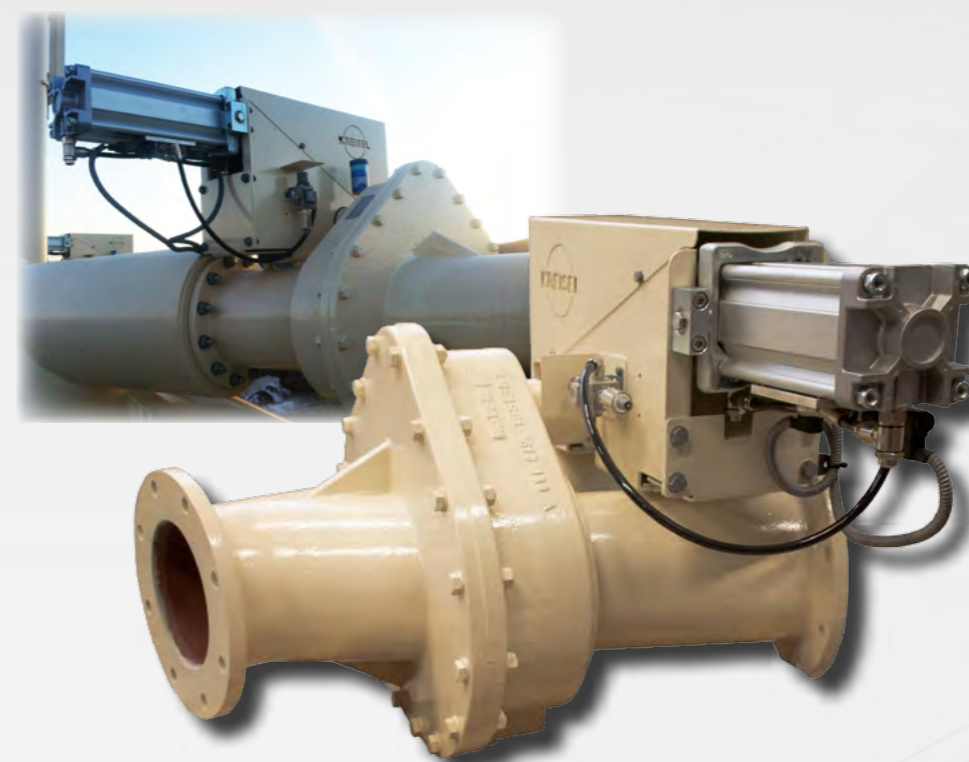


- 高压设计
high pressure design
- 实现工艺环境无任何泄漏
seals process spaces
free of leakage air
- 根据顾客需求定制设计
special model according
customer requirement

KREISEL的圆顶阀属于切断阀的其中一种。它可以用于压差高达16 bar的工况。优势在于，阀门在打开状态下，截面面积100%可以得到有效利用。圆顶阀也可用于气力输送系统的管道转向，配置方式为Y形管与2台圆顶阀组合。即使在大压差的工况下，该配置也可以防止气体泄漏。其主要应用在仓泵式气力输送系统。

在该系统中，圆顶阀用于入料和/或出料阀门。得益于流体截面100%的可利用率，位于粉体物料流中的部件可以避免物料架桥以及磨损。

The KREISEL DOM VALVE® is an shut-off valve. It is used at high differential pressures up to 16 bar. The benefits arise from the cross-section being available to 100% in the opening condition. It is useable at the pneumatic conveying as a conveying line diverter. In this case there will fitted a Y-pipe with two KREISEL DOM VALVES®. Even so they have been seals against high differential pressures. The field of main application is the pressure vessel conveying. In this case the KREISEL dom valve work as an running-in and/or running-out valve. The 100% opened cross section protects of bridging and wear because of disruptive elements in the material stream.



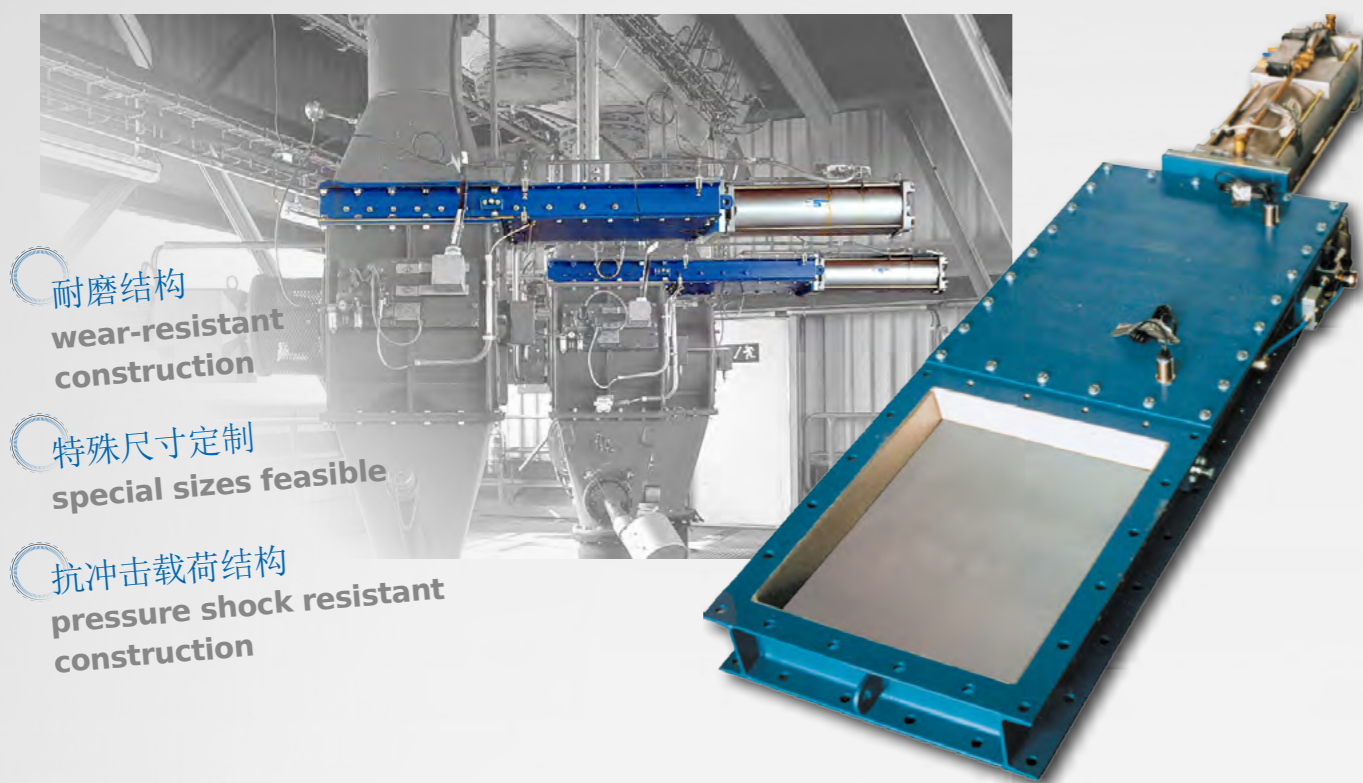
- 电动、气动和手动操作
operated elektronical,
pneumatically and
manually
- ATEX认证
ATEX certificated
- 耐磨铸造结构
wear protected
casting construction

如果气力输送系统同时服务于两个或多个收料点，例如为料仓或反应器送料，则需采用输送管路分料器。

管路分料器除了结构紧凑外，其所产生的压降也极低。分料器的设计理念为，主流体流动方向上的进口和出口位于为同轴。输送管道分料器采用阀芯作为锁气密封。分料器的设计结构保证了堆积物料不会堵塞分料器。

If using a pneumatic conveying system either two or more receiving points, such as silos or reactors are feeded, the Conveying line diverter can be used. In addition to the compact design, the crossover is characterized by its low pressure drop. The diverter is designed so that the main flow direction of the inlet and the outlet is in the same axis. The seal is realized by a valve disk. The structural design ensures that caking cannot lead to blocking of the diverter.

KREISEL插板阀 KREISEL Slide gate



- 耐磨结构
wear-resistant construction
- 特殊尺寸定制
special sizes feasible
- 抗冲击载荷结构
pressure shock resistant construction

在粉体工程中，插板阀用于储罐和料仓的下方，作为切断、备料和安全部件。由KREISEL公司研发的系列产品，大幅拓展了该阀门的应用领域，并使插板阀能应用于更严苛的工况，例如所能承受的最高温达600℃。KREISEL插板阀的具体设计，严格立足于装置技术的要求及粉体物料的特性。

KREISEL插板阀为平面阀门，截面为四方形。KREISEL公司采用型钢框架、配备收纳仓的阀芯、密封系统和驱动，完整的设计使设备具有优良的抗磨损性。型钢框架在入料和出料端都采用法兰连接的形式。根据相关要求，阀芯的驱动，可采用可调节式驱动、气压缸、液压缸、减速电机或手动轮的方式。

Slide gates are used as locking, metering and safety components below dosing and in process engineering systems of the bulk material technology. Our slide gate series (engineered at Kreisel) is made for extreme and complicated operating conditions. The specific design of the KREISEL slide gates is based on the system-specific operating conditions and bulk material properties.

KREISEL slide gates are designed as knife gate valves with rectangular or rounded cross-section. KREISEL produces a wear-resistant construction from profile steel frame, sliding plate with bearing, sealing system and drive unit. The profile steel frame is designed as flange on the inlet and outlet side. According to the requirements, the sliding plate can be moved by means of actuating drive, pneumatic or hydraulic cylinder, gear motor or hand wheel.

KREISEL双层翻版阀 KREISEL Double pendelum gate



- 物料卸料时不漏风
product loading free of leakage air
- 磨损特性最小化
minimal wear behavior
- 维护简便
easy maintenance
- 寿命长
long service life

双层翻版阀，用于关闭带压腔室的同时，排出粉状且具有流动性的物料。KREISEL公司提供的双层翻版阀特别适用于基础材料业和化工行业中极具磨损性的物料：矿石、钾盐、水泥、陶瓷、煤炭。

双层翻版阀的工作原理为，在一个固定的机壳内，两个上下布置的摆动叶门轮换打开与关闭。驱动方式可采用例如减速电机。通过驱动可控制两个叶门的轮换开、关。当一个叶门通过开、关动作进行物料输送时，另外一个叶门可在不同的压力条件下将装置密封，防止泄露空气。驱动方式可以采用电机、液压、配重或气动等方式。

Double flap gates are used to seal vacuum chambers with simultaneous discharging of dust-based and flowing material. KREISEL double flap gates are particularly suitable for discharging of highly abrasive bulk materials at the basic industry as well as the chemical industry: minerals, nature stone, ash, cement, ceramics and coal.

The operating principle of the flap gate valve is that two flap gates in a fixed housing open and close alternately. The mechanical system is driven by a gear motor. By means of the gear unit, the reciprocal opening and closing is controlled. In each case, a flap seals the system against false air inflow at diverse pressure ratios, even as the other opened flap is channelled the materials. Drivetrains have been realizing motorized, hydraulically, counterweighted or pneumatically.

KREISEL三通阀

KREISEL Two-way-distributor



耐磨防护结构
wear protected
construction

耐冲击压力设计
pressure shock
resistant design

电动、气动或手动控制
operated electrically,
pneumatically or manually



KREISEL公司的三通分料阀，在常压工况下采用垂直布置的方式作为物料的分料器。KREISEL公司的三通分料阀设计，严格立足于装置技术的实际工况以及物料特性。根据实际需要，分料阀可借助可调节驱动方式，如气缸、液压缸、减速电机或手动轮进行操作。两个出料槽的角度可进行适配。设备的最大尺寸规格可达2000 x 2000 mm。

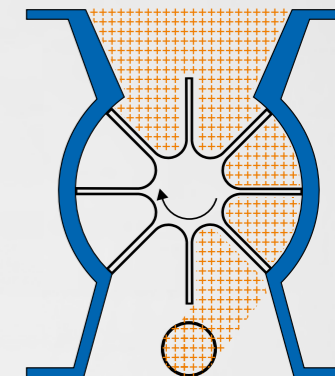
KREISEL two-way distributors are used as control components below (located under) containers, as well as in process engineering systems of the bulk material technology.

The design of the KREISEL two-way distributors is based on the system-specific operating conditions and bulk material properties. Depending on the practical requirements of the bulk material flow direction, the distributor can be operated by means of actuating drive, pneumatic or hydraulic cylinder, gear motor or hand wheel.

Design size ranged up to cross section 2000mm can be manufactured.

KREISEL 直吹式旋转卸料阀

KREISEL Blow-trough rotary valves

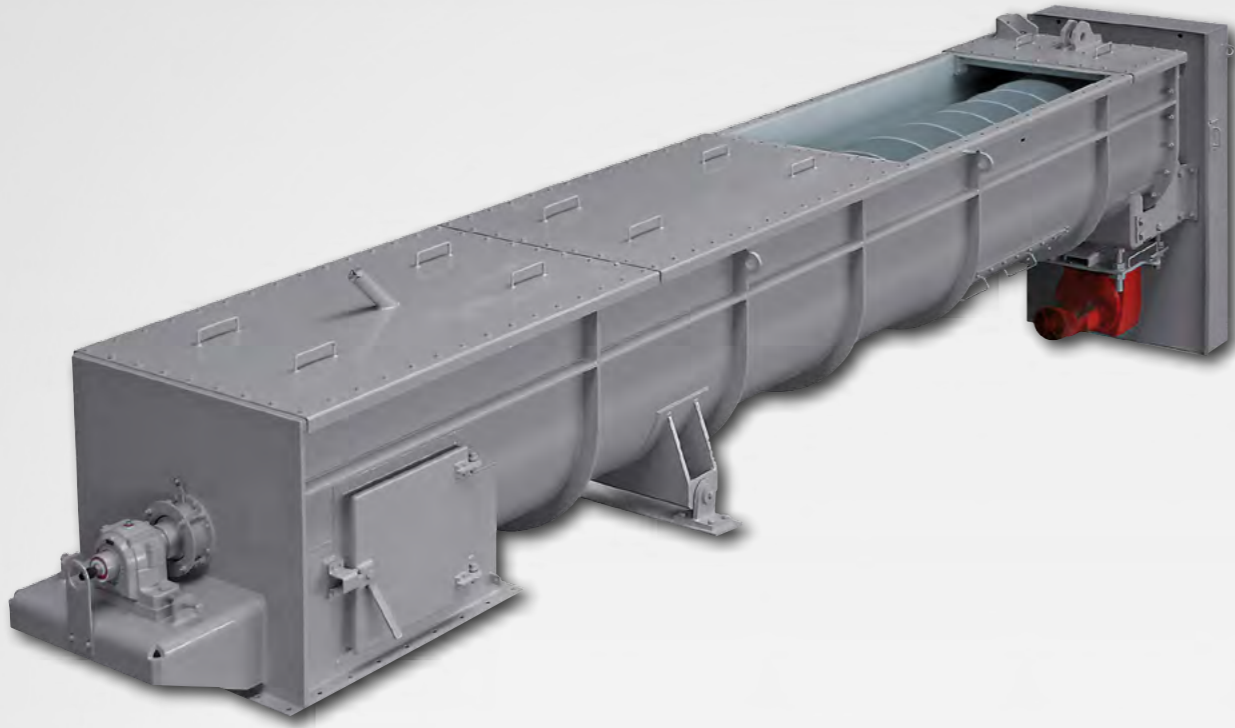


Durchblas-Zellenradschleuse
Blow-through rotary valves

直吹式旋转阀可用于气力输送系统的物料給料。它的叶轮将物料送入内嵌在旋转下料阀出口端的输送管道中。物流直接流经叶轮，并进入到下游的输送管道中。流动性不好的物料，会被从叶轮中直接吹出。

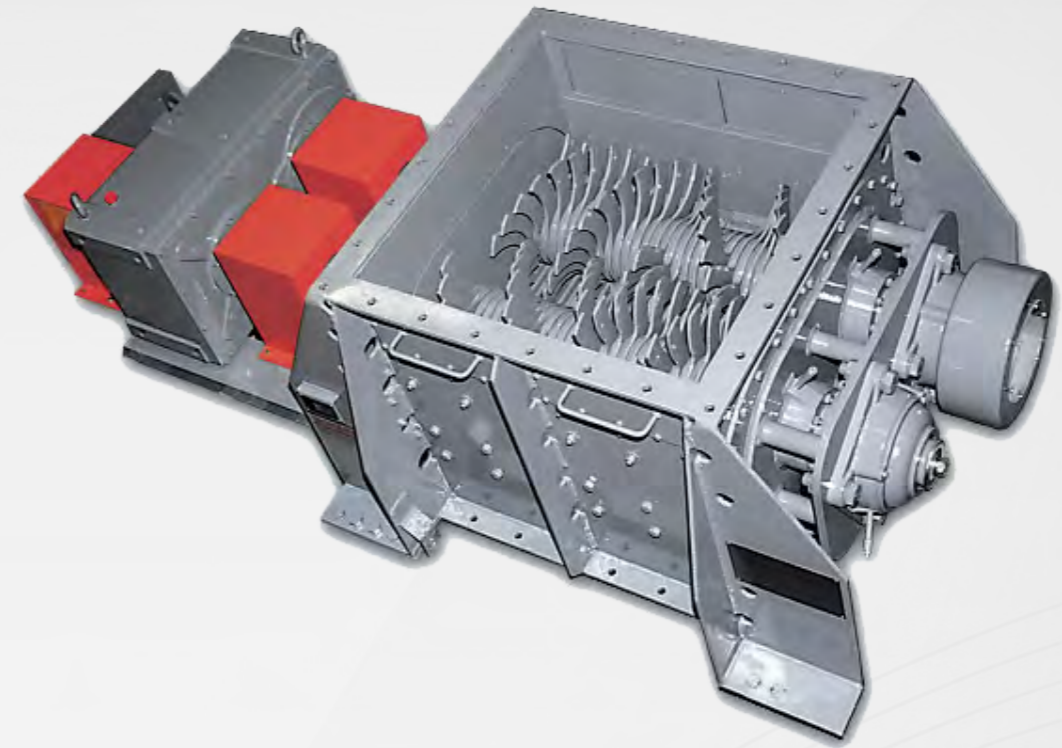
Blow-trough rotary valves are used to convey bulk material in a pneumatic conveyance plant. The cells convey the product into a feed pipe. At this stage it is taken away by an air flow and blown into the conveyor pipe.

In this area, the delivery of accessories such as leakage air collectors and air-blow spouts is possible.



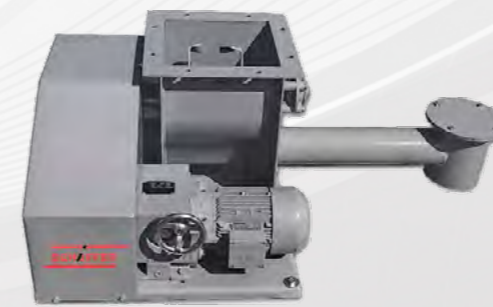
管式和壳式螺旋输送机用于大流量输送，或者用于有高度差的输送。它的应用常见于各种输送和生产装置。换热螺旋输送机还可以同时加热或冷却物料。活化螺旋输送机用于大流量物料以及难流动的物料的卸料。因为机壳内有众多螺旋纹路互相紧靠着布置，该部件可以达到非常出色的疏松效果。加湿螺旋输送机用于将极细、易扬尘、甚至对环境有危害的物料加湿，例如燃烧装置的灰处理。

Tubular screw feeders and trough screw feeders are used for high flow rates and also to bridge differences in height. They can be employed in just about any kind of production plant. Screw heat exchangers not only convey the product but also heat/cool it in the process. Screw activators are used to discharge large amounts of bulk material with difficult or poor flow properties. Because several screw spirals are installed next to each other in a housing, the activation effect is excellent. Moistening screw feeders are used for moistening of very fine, dusty and possibly polluting bulk material, e.g. for ash-handling.

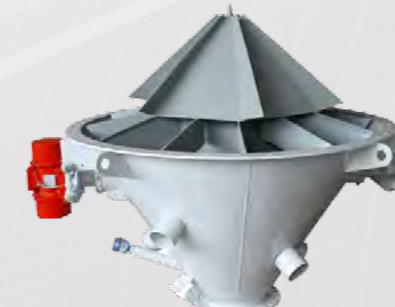


团聚物破碎机是连续工作模式运行的设备，用于将“结块”的物料或团聚物等打散，但不适用于破碎类似岩石的坚固物料。物料流量、结块物料的比例以及最大粒度决定了破碎机的尺寸规格，反过来也同时决定了出口物料的尺寸。

Agglomerate crushers are continuous-mode units designed to break up and crush agglomerated bulk materials; however, they are not suitable for compacted and rock-like hardenings. The volume flow rate, the percentage of agglomerates and the maximum particle size dictate not only the size of the agglomerate crusher but also the end particle size.



精确喂料系统
Precision dosing system



料仓振动疏松给料机
Vibration spout



粉体装车系统
Loading equipment

模块化设计改造
Modification of
modular design

用于粉尘-废蒸汽混合物的
除尘器
filter for dust and water
vapor exhaust gases

ATEX认证10 bar抗冲击压力或
泄压系统
ATEX design pressure
resistant to 10 bar or with
explosion pressure venting



为了净化废气和烟气，以及气力输送系统的物料分离，KREISEL公司专门设计和制造除尘装置。旋风分离器和脉冲式布袋除尘器可广泛应用于众多输送装置的不同领域。从实际应用情况以及布置空间出发，脉冲式布袋除尘器既可以用于集中除尘，又可以作为仓顶除尘器。得益于模块式设计，除尘器每小时可最高处理200,000立方的除尘气。在水泥、煤炭、碎石、造船、制糖业和陶瓷业，来自全球的装置建造商都对KREISEL公司高度成熟的技术方案给予极高的信任。

KREISEL designed and manufactured industrial dedusting components to clean exhaust and waste-air as well as separate products from pneumatic conveying systems. Cyclone separators and JET bag filter are be used in different conveying systems with various scope of application. Depending on the application and available space JET bag filters would be realized with hopper or top mounted. Due to KREISEL modular design the filter could be used to clean 200,000 cbm/hr waste air. In the cement and coal industry as well as stone quarries, shipbuilding, sugar and ceramic industry plant manufacturer's worldwide trust in the established and proven equipment and solutions be KREISEL.



KREISEL脉冲布袋除尘器，采用全自动反吹扫空气系统，应用于各类除尘装置。适用于各种干法除尘的工业用途，将粉尘与气体分离。

通常主要采用合成纤维作为滤芯材料。



KREISEL JET-bag filter are designed as dedusting equipment with fully automatic air pulse cleaning. They are be used at all branches of industry to separate dry dust from exhaust and process gases.

The filter bags are mainly made of synthetic fiber.



KREISEL旋风分离器以其简单的构造和高度的操作安全性受到众多青睐。可应用于各种工业领域。旋风分离器主要由配备了旋转入料和探入管对称回旋式上部件，锥型下部件，粉尘漏斗以及用于连接粉尘卸料装置的法兰接口组成。

为了保证旋风分离器针对外界空气的气密性，我们在出料口配备了**KREISEL**旋转下料阀。该系统可保持连续运转。

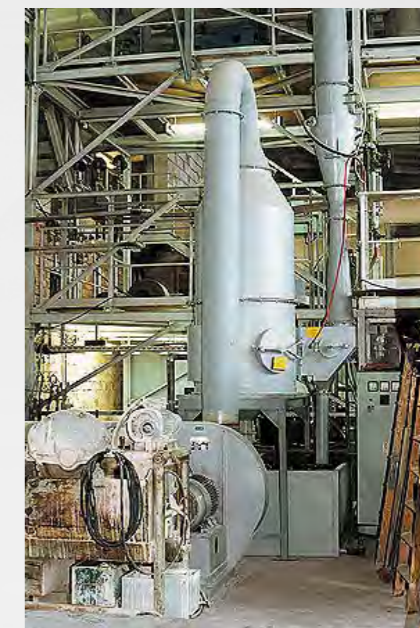
KREISEL cyclone separators are characterised by clear structure and great reliability. In principle, they are suitable for use in all branches of industry. The cyclone separator consists of a rotationally symmetrical upper part with inlet helix and immersion pipe, the conical bottom part, dust hopper and connecting flange to link the devices for dust discharging. The cleaned exhaust air is discharged at the exhaust exit.

In order to hermetically seal cyclone separators against inflowing false air, we equip the material discharge with KREISEL rotary valves. These feeders guarantee continuous dust discharge.



公司的中央真空吸尘装置，可在各种会产生粉尘的工业领域，用于装置清洁。**KREISEL**公司的中央真空吸尘装置将气力输送装置的诀窍，与工业除尘紧密的联系在一起。通过相应的设计以及坚持使用本装置，特别在ATEX区内，可降低相应风险，相关区域保持清洁。带有粉尘的气体经过**KREISEL**中央真空吸尘系统清洁后，可再次排入大气。

The centrally installed KREISEL dust vacuuming systems are used for the dust-free cleaning in all industry sectors with dust development. KREISEL dust vacuuming systems combine the know-how of pneumatic conveying systems und the industrial dust removal. If the plant is designed accordingly and operated consistently, the risk can be minimized, especially in ATEX zones, and areas with justifiable stress for the operator can be kept clean. The dusty suction air is cleaned centrally by means of KREISEL filtration systems and blown out - clean - into the environment.



KREISEL湿法除尘系统可以实现极高的除尘效果。该技术用于含极细颗粒的废蒸汽的除尘。

KREISEL wet dedusting systems reach (achieve) very high separation rates. They are used to separate finest types of dust.



KREISEL的仓泵可在最低的输送速度下，实现最大的输送气和物料的输送。

KREISEL pressure vessels allow maximum charging of the transport gas with the conveyed material at lowest transport speeds.

KREISEL压力气体输送意味着

- 和缓的物料输送过程
- 更低的管道磨损
- 输送系统的高在线率
- 能耗极低
- 更低的维护成本

生产产品范围

- 单仓泵系统
- 双仓泵系统
- 双层仓泵系统

优势

KREISEL拥有经过德国莱茵认证的焊接加工车间，可按照AD 2000的HP0标准生产压力容器。

KREISEL pressurized gas transport means

- Gentle transport of the conveyed material
- Low pipe wear
- High availability of the conveyor system
- Minimal energy requirements
- Low wear

Manufacturing range

- SingleFeed (Single pressure vessel systems)
- TwinFeed (Twin pressure vessel systems)
- DoubleFeed (Two-storey pressure vessel systems)

Expertise

KREISEL is a TÜV-approved manufacturer of technical welded products for container construction in accordance with AD 2000 Leaflet HP0.





辐射式余热回收器属于换热器，专门应用于玻璃和陶瓷业。余热回收器可以收集生产过程中的废热，并将它们返回到循环流程中。特别研发的辐射式余热回收器可以制取适宜的高温燃烧空气并降低燃料消耗。热量回收器包含一个由高温废气通吹的内管。冷空气流过内管和同心夹套形成的环形腔。该制造方式保证了非常理想的换热过程，并在最大程度上，避免由热量和机械过载导致的安全风险。**KREISEL**换热器，除了在众多玻璃工业和陶瓷工业得到广泛的应用，在能源应用领域也得以广泛推广。

Radiation recuperators were especially engineered as heat exchangers for the glass and ceramics industries. Recuperators absorb waste heat from production and return it to the process in the circuit. The especially-developed radiation recuperators generate optimal combustion air temperatures and reduce fuel consumption significantly. The recuperator consists of an inner pipe, which is flown through by hot exhaust gas. The cold air flows in a circumferential gap between the inner pipe and a concentrically arranged air jacket. This type of design guarantees optimum heat transfer as well as maximum safety (protection) against thermal and mechanical overload. KREISEL recuperators are used in many companies of both the glass and ceramics industries and industries characterised by energy-intensive heating.





为了保持持续创新，在不断改善产品的同时，还能为难处理的粉体物料提供尽可能优秀的解决方案，我们于2013年，在KREISEL公司的厂区建成了一套测试装置。我们的测试中心拥有装配了各种测量手段的气力输送系统的核心部件，以及其他用于输送、给料和除尘的装置。KREISEL保证以学术研究的态度和水平，在该装置上进行极端条件的测试。

粉体物料测试实验室使测试中心的功能更加完善，并使其在输送装置测试和投产前完成测试和优化。

With the objective of continuous further improvement of our products on the one hand, and the progress towards optimal solutions for tricky bulk material on the other hand, a test plant was put into operation on the premises of the KREISEL GmbH & Co.KG in 2013. The technical centre involves the main components of pneumatic conveyor systems with measuring devices, as well as other components for conveying, dosing and dedusting. We at KREISEL emphasize the high quality standard of our research work and guarantee, for external test trial with this system, a binding academic standard. A testing laboratory for bulk solids completes the technical centre, and allows you to test and optimize your conveyor options before designing and commissioning the conveyor system.

气力输送

- 2x160米，分别为DN 80和DN 100的输送管道
- 1 bar的输送压力，最大输送能力达900 m³/h，理论起始速度为 50 m/s。
- 沿着管道布置了24个压力传感器
详尽的工艺数据收集
- 水平/垂直布置的玻璃管道，能实现目视检查
- 能够确认优化设计、压力损失、磨损和能耗
- 测定以粉体物料为基础的压力损失评估值，
用于装置放大评估

除尘器测试站

- KREISEL管式除尘器和具备在线清扫功能的紧凑板式除尘器
- 除尘总面积达到45 m²，面积可在极限值内调节
- 评测分离效率、压力损失以及能耗和压力空气消耗
- 优化设备寿命周期内的成本
- 根据具体应用工况，确定设计参数

部件测试

- 旋转卸料阀、螺旋输送机、KREISEL圆顶阀、截止阀等
- 高抗磨损的KREISEL陶瓷旋转卸料阀
- 不带料/带料情况下，测定旋转卸料阀的漏气参数

粉体物料分析（可选项）

- 水含量
- RRSB表格物料颗粒粒度分布
- 堆密度、真密度和流态密度
- 静安息角、料仓参数和微观颗粒粒度确认



带称重单元的料仓
Storage container at load cell



通过玻璃管路进行视觉控制
Test station for filters



通过玻璃管路进行视觉控制
Glasmade pipes for optical control



从我们自己的装置，到第三方装置，无论国内国外，从成套装置，到装置部件，KREISEL为您提供现场服务

安装服务

- 按照固定价格或以实际支出费用进行计算
- 安装指导

装置服务

- 测量
- 除尘器技术改造
- 保养
- 调校和更换易损件
(例如旋转卸料阀的易损件)
- 除尘器布袋更换
- 为我们的装置或第三方装置进行维护
- 以最高的质量标准提供备件和易损件

KREISEL provides installation, assembly and after-sales services for KREISEL and third-party systems, for overall systems and system components, in Germany and abroad.

Installation services

- Assembling as fix price or based on confirmed day reports
- Supervising

Maintenance services

- Different measurements
- Control of bag filters
- Maintenance
- Readjusting and change of wear parts (e.g. wearing bar on rotary valves)
- Change of filter bags
- Repair or refitting of own and third party equipment
- Delivery of spare and wear parts in original equipment quality

KREISEL公司按照自己的图纸或者客户的图纸，进行金属材料的加工，并完成成套焊接组装加工。

能力和技术特点

- 6个生产车间，共5200m²
- 零部件单重最高达32 t
- CNC等离子切割装置HiFocus(配备标注系统，加工范围3m x 12m，激光切割的非合金钢板厚度最高达35mm，合金钢板厚度最高达30 mm。)
- TRUMABEND 320 数控折弯机，压力高达320 t，使用特殊工具可以加工厚板的边长最长达4米
- 3台型材弯曲机，参数请向我们询问
- 四辊板材折弯机，额定长度3m，标准板材的额定厚度14mm(超过该值请向我们询问)
- 2台动平衡机，转子质量最高达1000 kg，最大直径2500 mm。

焊接技术

- MIG/MAG, WIG, E-Hand, 螺柱焊机，众多旋转焊机

表面处理/防腐

- 钢丸喷砂装置：车间 长x宽x高：12m x 6m x 3,5m
- 不锈钢专用玻璃珍珠喷砂：车间 长x宽x高：5m x 4m x 3m
- DL-Airmix喷漆间：车间 长x宽x高12 m x 6 m x 4.5 m

KREISEL公司

- 拥有DIN EN ISO 9001:2008质量管理体系资质
- 拥有依据DIN 18 800 第7页焊接资质
- 拥有按照AD 2000 HP0生产压力容器资质

加工服务

- 采用最现代化的工艺设备切割板材，板材和型材塑形
- 加工普通钢材、不锈钢、抗磨损材料以及特殊材料

机械加工

- 数控镗铣床：X轴 10m，Y轴 3.5m，Z轴 1.5m，工作台面积5x2.5m，转床 3x2.5m
- 数控闭环控制车床：中心距 4 m，中心高度 1.75 m，滑床周长1.28m
- 2台镗床，长x宽x高：0.8m x 1m x 1m
- 其他多种镗铣床





联邦高速A15, 6号出口 Roggosen
Auf Bundesstraße B97 in Richtung Bad Muskau/
Görlitz fahren, Bei B97 rechts abbiegen in Richtung
Görlitz, Geradeaus auf Gablenzer Hauptstraße,
Weiter auf Muskauer Straße/L48
Weiter auf B115, Weiter auf Gewister-Scholl-Straße/
S123 → bei Mühlenstraße links abbiegen

联邦高速A4, 90号出口 Bautzen-Ost
Auf B156 in Richtung Weißwasser fahren, Bei S157
rechts abbiegen in Richtung Bad Muskau / Görlitz,
Bei S126 rechts abbiegen, Bei Görlitzer Straße/B115
links abbiegen (Kreisverkehr 3. Ausfahrt)
Bei Geschwister-Scholl-Straße/S123 links abbiegen,
Weiter auf Gewister-Scholl-Straße/S123 → bei
Mühlenstraße rechts abbiegen

附近机场 airport

柏林机场
143 km, über A15 und A13

德累斯顿机场
111 km, über A4 und B156

弗罗茨瓦夫
211 km, über A4/E40 und B115

airport Berlin - Schönefeld
143 km, over A15 and A13

airport Dresden - Klotzsche
111 km, over A4 and B156

airport Wroclaw
211 km, over A4/E40 and B115

船运码头 (物流) cargo port (shipping)

德累斯顿Binnenhafen (易北河)
131 km

汉堡港 (易北河, 德国北海)
449 km

inland port Dresden (Elbe)
131 km

cargo port Hamburg (Elbe, Nordsee)
449 km





1912

Wilhelm Kreisel于8月12日在Keula成立了装配和自热焊接公司。公司的第一个项目生产了气体除尘器。

1919

公司由家庭手工企业转变为工业型小型企业。公司成立的名称为KREISEL兄弟机械制造与铸铁车间

1932

尽管处于经济危机的艰难时代，公司成长为拥有80名员工的企业

1945

在二战结束后的几年中，公司为22个国家的水泥业和型煤/煤化工工厂提供了约200套装置

1956

公司的经营形式变为国家参股的企业

1972

公司国有化，并归属于克劳施威茨VEB 除尘技术和德累斯顿VEB 气体及冷冻技术集团

1992

公司从国有企业再次变成拥有85名员工的私有企业： KREISEL GmbH & Co. KG

2007

KREISEL投资了一个全新的加工车间，并完成了新产品拓展投资计划，并建立了全新的物流链。

2009

11月举行了950m²的新加工车间以及大型数控镗铣床的揭幕仪式。

2012

KREISEL于8月12日庆祝公司成立100周年。

2013

收购了位于Thierhaupten的Schaeffer Verfahrenstechnik GmbH

2014

荣获“德国中型企业奖”

1912

On August 12, Wilhelm Kreisel founded a metalworking and autogenously welding company in Keula. The first product they manufactured were air filters.

1919

The family business company became a small industrial company. The company was renamed Gebrüder Kreisel Maschinenfabrik und Eisengießerei.

1932

In spite of the difficult years of global economic crisis, the number of employees increased up to 80.

1945

In the years after the Second World War, approx. 200 machines for the cement industry and turf briquette factories were delivered to over 22 countries.

1956

The company operated as a limited partnership with state participation.

1972

The company was subject to compulsory nationalisation constraint and allocated to VEB Kombinat Luft- und Kältetechnik Dresden as VEB Entstaubungstechnik Krauschwitz.

1992

Reprivatisation of the company converted it from a state-owned company to KREISEL GmbH & Co. KG with 85 employees.

2007

KREISEL commissioned a new manufacturing facility and other investment projects to expand the product range. New logistics connections were built.

2009

The new manufacturing facility with a surface area of 950 m² and a large travelling column milling machine were officially opened in November.

2012

On August 12th, KREISEL will celebrate its 100th anniversary.

2013

Acquisition of the Schäffer VT

2014

„Deutscher Mittelstandspreis“ nominated

联系方式

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