



无锡塞姆高科金属陶瓷有限公司

Wuxi Ceramic-Metal High Precision Technology Co.,Ltd.

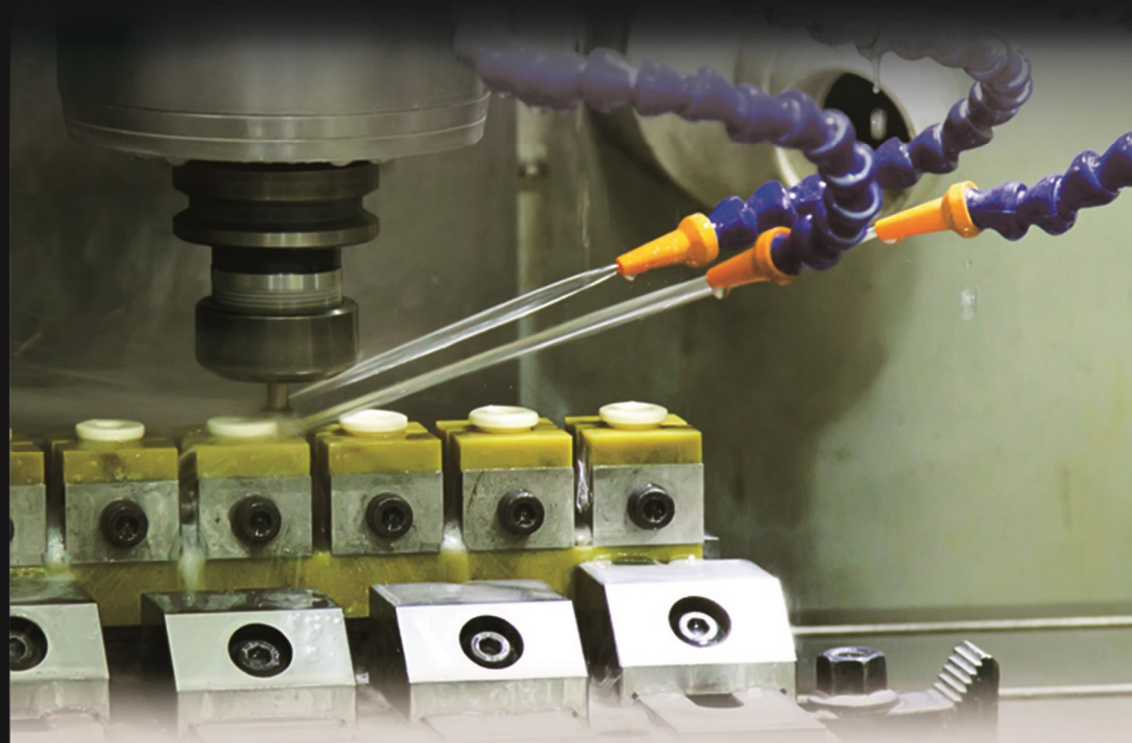
地址：中国江苏省无锡市锡山经济开发区芙蓉中三路 99 号祥云 2 座

电话：(0510) 68559666

传真：(0510) 68557999

Email : backoffice@cm-hightec.com

Internet: www.cm-hightec.com

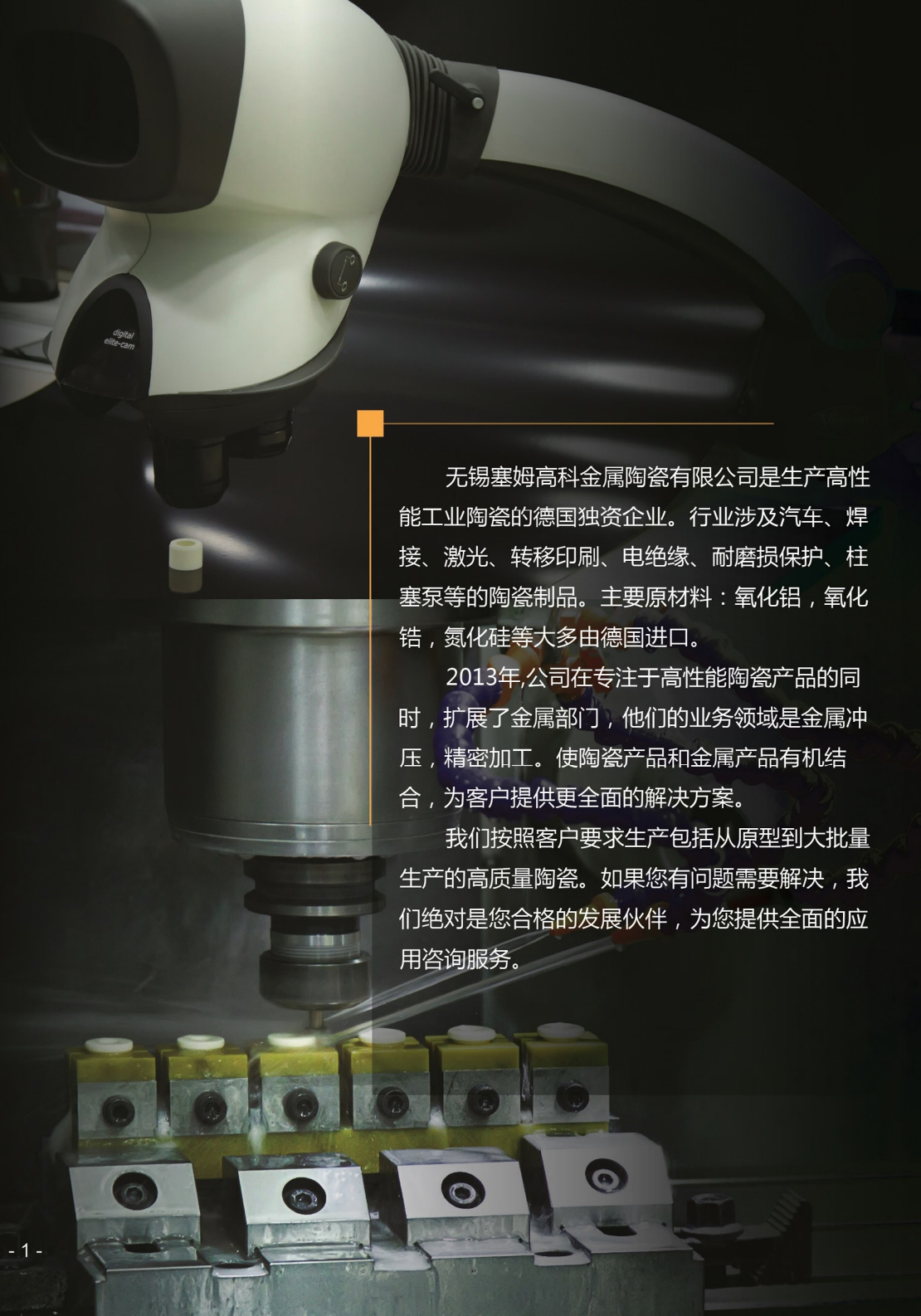


CM High Tec

Ceramic - Metal High Precision Technology

无锡塞姆高科金属陶瓷有限公司

Wuxi Ceramic-Metal High Precision Technology Co.,Ltd.



无锡塞姆高科金属陶瓷有限公司是生产高性能工业陶瓷的德国独资企业。行业涉及汽车、焊接、激光、转移印刷、电绝缘、耐磨损保护、柱塞泵等的陶瓷制品。主要原材料：氧化铝，氧化锆，氮化硅等大多由德国进口。

2013年,公司在专注于高性能陶瓷产品的同时,扩展了金属部门,他们的业务领域是金属冲压,精密加工。使陶瓷产品和金属产品有机结合,为客户提供更全面的解决方案。

我们按照客户要求生产包括从原型到大批量生产的高质量陶瓷。如果您有问题需要解决,我们绝对是您合格的发展伙伴,为您提供全面的应用咨询服务。

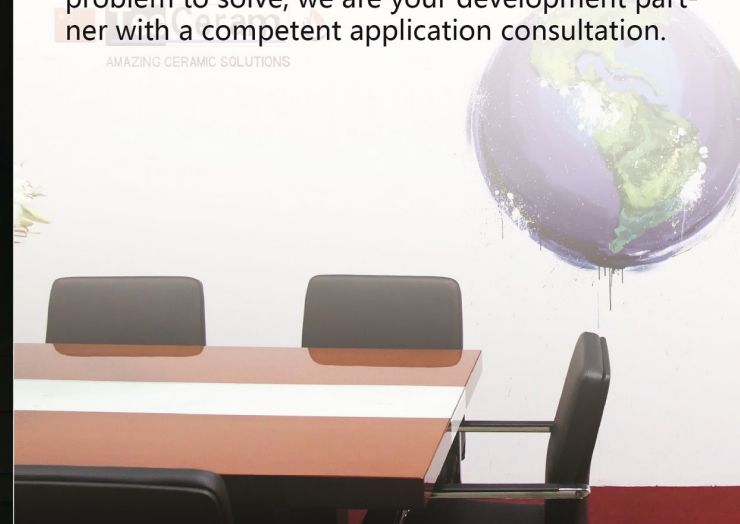
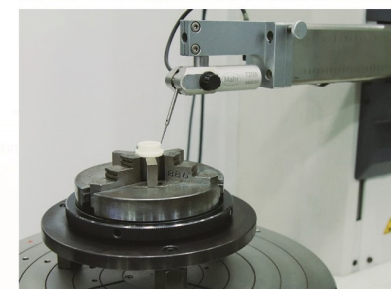


Wuxi Ceramic-Metal High Precision Technology Co., Ltd is a manufacturer of high-performance Ceramics for industrial applications. We are a German company in China in order to supply ceramic product for customer, such as automotive, welding, laser, transfer-printing, electro-insulation, wear protection, pumps etc.

In 2013, we developed " CM-Hightec " department, focus on metal stamping and precision machining.

We produce high-quality ceramics from prototype to large serial production according to our customer' s requirements. Where you have a problem to solve, we are your development partner with a competent application consultation.

AMAZING CERAMIC SOLUTIONS





- **氧化铝：**氧化铝是最硬的和最广泛使用的陶瓷材料。它被用于要求高耐磨，良好的耐腐蚀性以及耐压的地方。由于它的绝缘性能，经常被用于电子产品。塞姆高科氧化铝材料有不同的纯度和粒径，从而形成了不同的表面特征——从非常精细到标准。
- **氧化锆：**塞姆高科氧化锆应用在需要机械强度的地方。高冲击阻力，挠曲强度和硬度使其理想的使用于坚韧和粗糙的地方。它的低导热性使其是用于高压机械零件热绝缘的理想材质。由于它的热膨胀系数接近钢铁，氧化锆是现有设计中金属机械配件的理想替代品。塞姆高科蓝色氧化锆是我们不断研发的成果。它是目前市场上最坚韧的陶瓷材料。
- **增韧氧化铝：**塞姆高科增韧氧化铝是一种复合陶瓷材料，结合了氧化铝和氧化锆的优势。氧化铝保证了相对低的成本，好的电性和医药性能，以及硬度和耐磨性。氧化锆则加提升了它的抗压和抗冲击性能。因此，当常规氧化铝无法满足机械性能要求时，这种材质会是完美的选择。
- **氮化硅：**氮化硅比其他陶瓷有更好的抗热震性。结合高强度，低热膨胀，良好的耐腐蚀和断裂韧性，氮化硅常用于航天航空或汽车工业上的用途。其他用途如燃烧器喷嘴，熔融金属加工等。

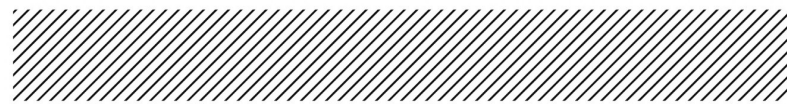
CM-Hightec Alumina is a very hard and the most widely used of the ceramic materials. It is applied, where a high wear resistance, good corrosion resistance and mechanical strength are necessary. Due to its strong electric and dielectric properties it is often applied for high voltage applications and electronic products. CM-Hightec's Alumina materials differ in purity and grain size, resulting in different properties - from very fine to standard.

CM-Hightec Zirconia is applied where mechanical strength is required. A high impact resistance, flexural strength and hardness make it ideal for tough and rugged usage. The very low thermal conductivity makes it an ideal material for thermal insulation of high stressed mechanical parts. Due to its thermal expansion coefficient close to steel, it is ideal for replacing metal machine parts in existing designs. Our blue CM-Hightec Cerazur is the result of constant research and development. It is the toughest ceramic material on the market today.

CM-Hightec ZTA is a composite ceramic material, which combines the advantages of Alumina and Zirconia. The Alumina guarantees the low price, good electrical and chemical properties as well as its hardness and wear resistance. The Zirconia toughens the material which results in a higher strength and impact resistance. Thus it is the ideal material for applications, where the mechanical load is not suitable for conventional Alumina ceramics.

CM-Hightec Silicon Nitride has an excellent thermal shock resistance. In combination with high strength, toughness, wear resistance, and good corrosion resistance, Silicon Nitride is often used in aerospace or automotive applications. Other applications are burner nozzles, molten metal processing, welding devices, machine parts, etc.





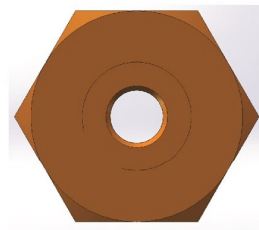
汽车行业应用

随着精密电阻焊的开始应用，在工件上准确定位螺母一直是个难题，CM-HIGHTEC的蓝色陶瓷定位销完美的解决了这个难题，本身是全陶瓷整体绝缘材质，但其同时具有非常好的韧性，使用过程中不易断裂。同时具有非常好的耐磨性，对比KCF材料只有8到10μ厚的绝缘层，使用寿命极大提升，一般是KCF材质的10倍以上。

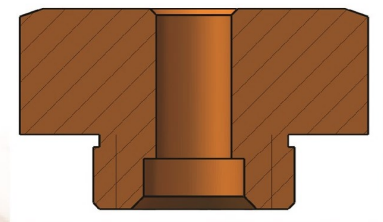
Since the beginning of precision resistance welding, the exact positioning of the nut on the work piece had been a problem. The cerazur pin of CM-HIGHTEC is the perfect solution. it is integral insulation, and have a good toughness and wear-resistance. Compared with KCF, the service life is 10 times longer than KCF.

Cerazur welding pin	Cerazur			CM-N141	
	1	5	10	15	25
M4	665	632	599	480	426
M5	700	665	630	506	448
M6	735	698	662	531	470
M8	770	732	693	557	493
M10	840	798	756	607	538
M12	910	856	819	658	582

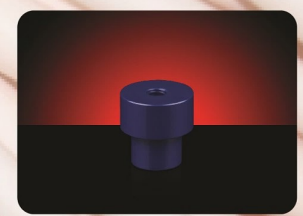
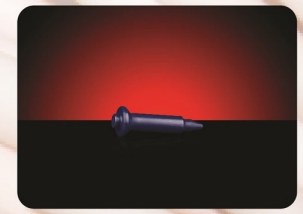
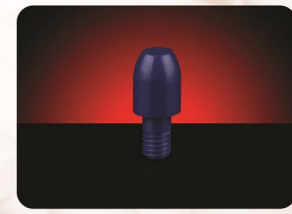
价格有效期至2018.12.31 此价格为人民币价格



电极1



电极2



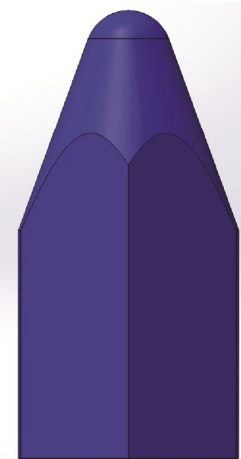


圆柱形										
	φ8mm	φ8.1-10mm	φ10.1-12mm	φ12.1-15mm	φ15.1-20mm	φ20.1-25mm	φ25.1-30mm	φ30.1-35mm	φ35.1-40mm	>40mm
length up to 26mm	975	1024	1073	1121	1170	1219	1268	1365	1463	on request
up to 28mm	1024	1073	1121	1170	1219	1316	1365	1463	1706	on request
up to 29mm	1073	1121	1170	1268	1316	1414	1463	1706	1950	on request
up to 37mm	1121	1170	1268	1316	1463	1609	1706	1950	2096	on request
up to 42mm	1170	1219	1414	1511	1609	1706	1804	2145	2243	on request
up to 49mm	1365	1463	1511	1658	1755	1804	2096	2340	2389	on request
up to 63mm	1560	1609	1658	1755	1950	2145	2340	2438	2486	on request
up to 68mm	1755	1755	1755	1999	2194	2340	2438	2486	2779	on request
up to 74mm	1901	1950	2096	2243	2389	2486	2633	2828	3071	on request
>74mm	on request									

价格有效期至2018.12.31 此价格为人民币价格

菱形										
	φ8mm	φ8.1-10mm	φ10.1-12mm	φ12.1-15mm	φ15.1-20mm	φ20.1-25mm	φ25.1-30mm	φ30.1-35mm	φ35.1-40mm	>40mm
length up to 26mm	1121	1170	1219	1268	1316	1365	1463	1560	1658	on request
up to 28mm	1170	1219	1268	1316	1414	1463	1560	1658	1901	on request
up to 29mm	1219	1268	1316	1414	1463	1560	1658	1901	2145	on request
up to 37mm	1268	1316	1414	1560	1706	1853	1950	2194	2340	on request
up to 42mm	1365	1414	1560	1755	1853	1950	2048	2340	2535	on request
up to 49mm	1560	1609	1658	1901	1999	2145	2389	2633	2730	on request
up to 63mm	1755	1804	1853	2048	2194	2438	2730	2828	2876	on request
up to 68mm	1901	1950	1999	2194	2438	2633	2828	2925	3169	on request
up to 74mm	2048	2145	2243	2486	2633	2828	3023	3218	3510	on request
>74mm	on request									

价格有效期至2018.12.31 此价格为人民币价格

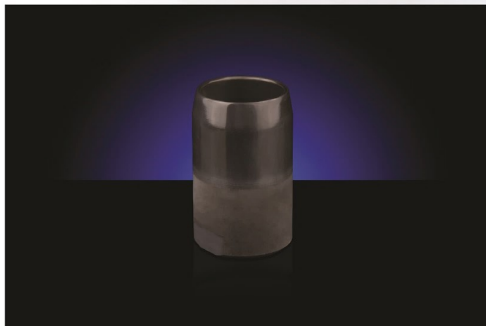


Location pin

随着汽车生产行业精度要求的不断提高，很多汽车生产厂家使用陶瓷定位销来取代传统的金属定位销，我司的蓝色陶瓷定位销在保证精准定位的同时，使定位销的寿命至少提高20倍，极大的节省了时间和成本。

Location pin

Since the demand of precision developing in car industry, much more car manufactory choose ceramic pin to take place steel pins. Our cerazur location pin have a service life at least 20 times longer than steel pin.



CM High Tec
Ceramic - Metal High Precision Technology

焊接喷嘴是MAG焊接的一种技术突破，因为它们解决了焊渣飞溅和粘结问题！耐高温和高抗热震性是Volcera的杰出性能，高硬度和高强度相结合的特性，使得 Volcera成为该应用领域的理想材料。

Welding Nozzles for MAG welding are a technology breakthrough as they solved the hot metal spattering and sticking problem! High temperature and thermal shock resistance are the outstanding properties of Volcera. In combination with an extreme hardness and a high strength, Volcera is the ideal material for this application.

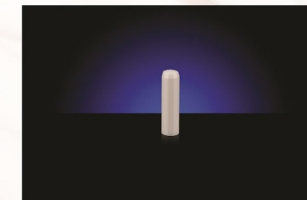
ALIGNMENT PIN PRICE LIST										
φD(m6)	φ2	φ2.5	φ3	φ4	φ5	φ6	φ8	φ10	φ12	φ14
4	36.45									
5	36.98	37.28								
6	37.50	37.80	38.33							
8	38.48	38.93	39.60	40.35						
10	39.45	40.05	40.88	41.85	43.35					
12	40.43	41.10	42.15	43.35	45.08	47.48				
14	41.40	42.23	43.43	44.78	46.88	49.65				
16	42.45	43.35	44.70	46.28	48.60	51.83	56.25			
18	43.43	44.48	45.98	47.70	50.40	54.00	58.95			
20	44.40	45.53	47.25	49.20	52.20	56.10	61.65	66.30		
24		47.78	49.80	52.13	55.73	60.45	67.05	72.68	83.33	
28			52.35	55.05	59.25	64.80	72.53	79.05	91.50	101.63
30			53.55	56.55	60.98	66.98	75.23	82.20	95.55	107.25
32				58.05	62.78	69.08	77.93	85.43	99.68	112.05
36				60.98	66.30	73.43	83.33	91.73	107.78	121.80
40				63.90	69.83	77.78	88.80	98.10	115.95	131.48
45					74.25	83.18	95.55	106.05	126.08	143.63
50					78.68	88.58	102.38	114.00	136.28	155.70
55						93.98	109.13	121.95	146.48	167.85
60						99.38	115.95	129.90	156.68	180.00
70							129.53	145.80	177.00	204.23
80							143.10	161.70	197.33	228.45
90								177.68	217.73	252.68
100								193.58	238.05	276.98
120									278.78	325.43

length (mm)

价格有效期至2018.12.31 此价格为人民币价格

BENEFITS OF CERAMIC CYLINDRICAL PINS OF ZIRCONIA

Ceramic Cylindrical Pins of zirconia have the advantage of thermal and electrical insulation. This material gives the additional value of extreme hardness and solidity compared to conventional materials such as hardened steel. The excellent wear resistance offers multiple applications. A good notch impact strength allows an assembly and disassembly by pressing or punching. Mass production enables us to ensure best quality at fair prices. Therefore many standard dimensions are available from stock. Beside cylindrical pins there are notched pins and taper pins in use.



alignment pin 1



alignment pin 2

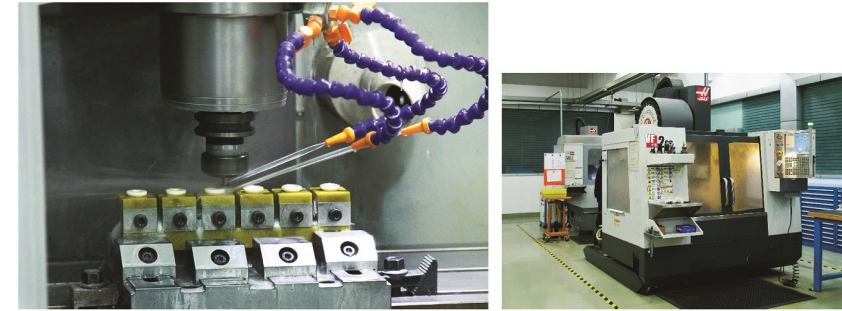


Silicon Nitride shose for heattreatment

陶瓷泵是在化工业应用上具有耐酸性，在生物医学方面的惰性（医药业），在食品业上不需要润滑油，它具有高精密度和使用寿命长的特征。塞姆高科提供范围广泛的泵：液体配注，定量给料，灌装等等。除了定制化的解决方案，我们已开发出了优化的高性价比的高精度标准陶瓷泵。

Ceramic pumps are acid-resistant (chemical industry), they are biomedically inert (medicine, pharmacy), they do not require oil lubrication (food industry), they have a high precision and a long life.

CM-HIGHTEC offers a wide range of products for fluid dispensing, dosing and filling. Besides customized solutions, we have developed high-accuracy standard pumps which give the customer an optimum price-performance ratio.

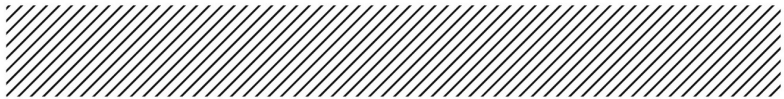


我们的优势：

- 智能的产品设计
- 优良的高纯度原料
- 先进稳定的生产工艺及不间断的流程控制
- 高精密金刚石加工
- 经验丰富的中德管理，受过良好教育的高素质员工，从模具制造到产品成型、烧结、加工等整个内部生产工艺，这些特色就是成功产品解决方案的保证。

Our advantage:

- an intelligent product-design
- excellent high-purity raw materials
- a sophisticated and stable production process with constant process control
- high-precision diamond-machining
- The fusion of an experienced German and Chinese management, well educated skillful staff and the whole production process in house, from tool-making via shaping to sintering and machining are a surety for successful product solutions.



检测设备



我公司拥有精密的检测设备，精密检测产品尺寸。专业的检测人员，确保我们的产品完全符合客户的要求

1.智泰光学影像测量仪

可以检测产品线性尺寸和形位尺寸，分辨率达到0.001微米

2.Taylor hobson 轮廓仪

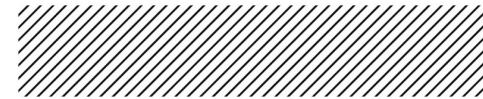
可以检测产品粗糙度，波纹度等，分辨率最小可达3纳米。

3.Mahr MMQ400 圆柱度仪

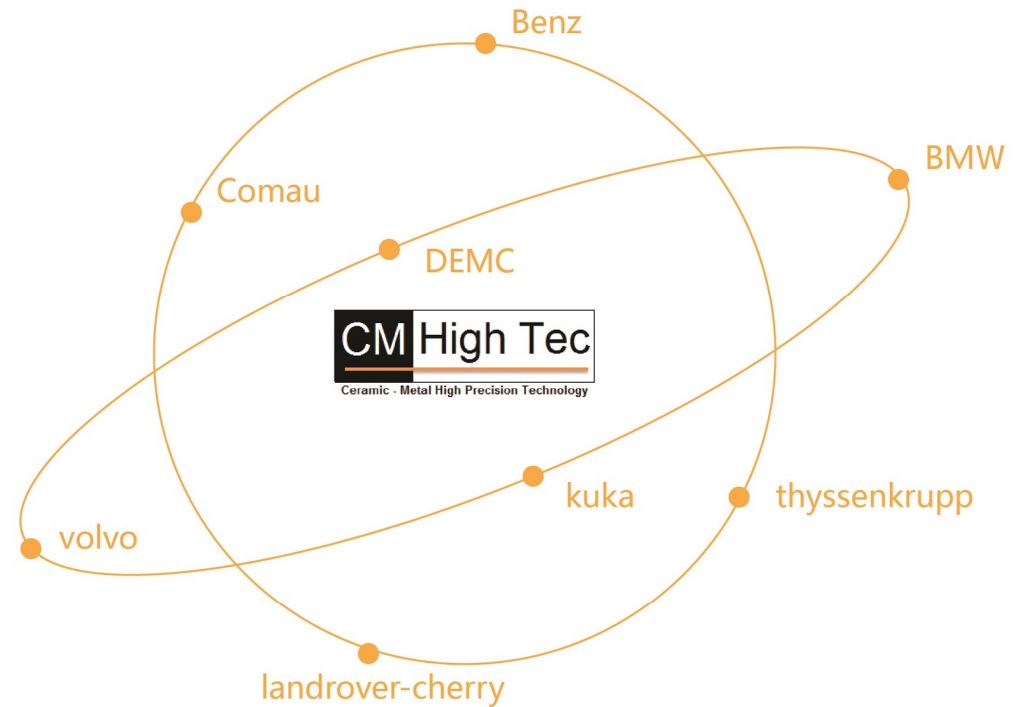
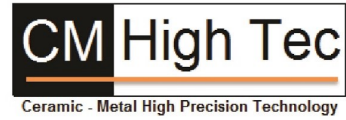
可以检测产品直线度，平面度，圆柱度，平行度，跳动度，同轴度等。

4.奥豪斯电子密度仪

主要用于测量产品密度，分辨率可达0.001克



我们的客户



KUKA

DEMCO GROUP



Mercedes-Benz



ThyssenKrupp

