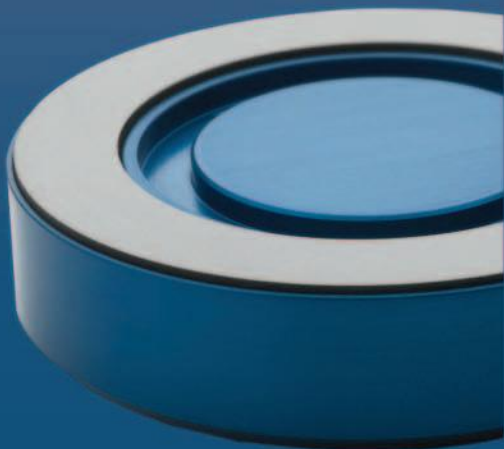


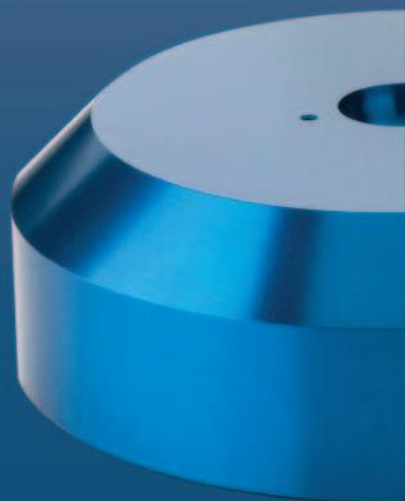
POROUS MEDIA[®] AIR BEARING

多孔材质气浮轴承方案 SOLUTIONS

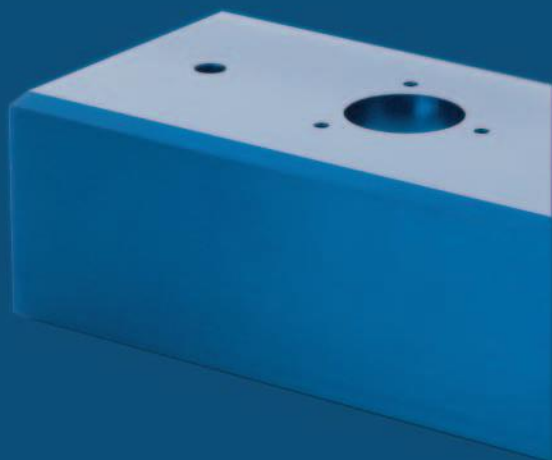
VACUUM PRELOADED
真空预压



FLAT ROUND
圆形平板



FLAT RECTANGULAR
方形平板



AIR BUSHINGS
气浮轴套



**A COMPLETE LINE
OF VACUUM
PRELOADED
POROUS MEDIA®
AIR BEARINGS**

真空预压多孔材质气浮轴承产品全系列

New Way vacuum preloaded air bearings use a combination of air pressure and vacuum, New Way VPL air bearings hold themselves down while simultaneously lifting themselves from a guide surface. By adjusting the vacuum and the pressure separately, the fly height and stiffness of these vacuum preloaded air bearings can be optimized.

New Way真空预压气浮轴承结合使用气压及真空，从导轨上浮起并同时吸附在导轨面上。可通过分别对真空及压力进行调节达到优化真空预压气浮轴承的浮动高度及刚性的效果。



90mm



75mm



50mm

EASY APPLICATION

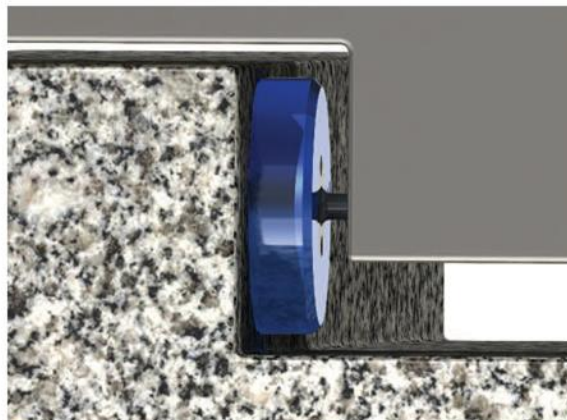
New Way makes air bearing components easy for anyone to apply. Flexure mounts provide bi-directional stiffness, a low pivot point, and infinitesimal angular adjustment for New Way VPL air bearings.

应用简单

New Way使气浮轴承的应用变的十分简单。柔性安装支架带来双向刚性，低支点，及对New Way真空预压气浮轴承的极小的角度调整。



75mm Vacuum Preloaded Air Bearing shown with Flexure Mount
带柔性安装支架的75mm真空预压气浮轴承



90mm vacuum Preloaded Air Bearing Application 3-D Model
90mm真空预压气浮轴承应用3-D模式



**NEW WAY POROUS MEDIA®
TECHNOLOGY OFFERS YOU
SIGNIFICANT ADVANTAGES**
New Way多孔材质技术带给你的显著优势

VACUUM PRELOADED AIR BEARINGS
真空预压气浮轴承

FEATURES 特点	BENEFITS 优势
Standard component 标准配件	Anyone can use 操作十分简单
Vacuum preload 真空预压	Allows for preload without a counter-surface 允许预压且无需计数面
Vacuum preload 真空预压	Deterministic - only one guide surface 绝对单一导轨面
Vacuum preload 真空预压	No additional mass during acceleration or deceleration 加速或减速过程中无外加质量
Porous carbon media 多孔碳材质	Lower air consumption 耗气量低
Porous carbon media 多孔碳材质	Eliminates damage to the guide surface 避免对导轨面的损害
Non-contact 无接触	Zero friction and no stiction for infinite resolution and repeatability 零摩擦无静摩擦力保证无限分辨率及重复性
Non-contact 无接触	Zero wear, for consistent machine characteristics 零磨损, 保证机器性能
Non-contact 无接触	Smooth, silent motion without vibration 平滑安静无振动
Non-contact 无接触	10x the speed 速度加快10倍
Non-contact without moving parts 无需移动部件, 零接触	High, consistent acceleration 持续高加速
No lubrication 无需润滑	Virtually maintenance free 无需保养
High air film stiffness 高气膜刚性	Reduced probability of contact 降低接触可能性
High air film stiffness 高气膜刚性	High natural frequency 固有频率高
High air film stiffness 高气膜刚性	High damping for faster settling time 高阻尼保证气隙建立速度快
High air film stiffness 高气膜刚性	High precision positioning 定位精度高
Flexure mount 柔性安装支架	Easy to apply, adjust, achieve parallelism 应用简单, 易调试, 平衡性好
Flexure mount 柔性安装支架	Provides directional stiffness without hysteresis 及时有效提供多方位刚性

APPLICATIONS 应用

- Wafer Positioning 晶圆定位
- Wafer Probing (High Speed) 晶圆探测(高速)
- Wafer Bumping (High Speed) 晶圆凸点技术(高速)
- AOI 自动光学检测
- Precision Alignment 精确校对
- Depth of Field Adjustment 成像景深调节
- Squaring Adjustment 垂直度调节
- Testing and Repair 测试及修复

MARKETS 市场

- Semiconductor 半导体
- Test and Measurement 测试及测量
- Optics 光学
- Lithography 平版印刷

VACUUM PRELOADED AIR BUSHING PRODUCT LINE
真空预压气浮轴套产品系列

PRODUCT LINE COMPARISON: VACUUM PRELOADED AIR BEARINGS							
产品系列比较: 真空预压气浮轴承							
Size (diameter)	Part # (select for load/lift curve & drawing)	Ideal Load N (lbs) @ .41 MPa (60psi)	Stiffness N/micron (lbs/in) @ 0.41 MPa (60psi)	Flow NLPM (SCFH) @ .41 MPa (60psi)	Flexure Mount Size	Bearing Height mm (in)	Bearing Weight grams (oz.)
尺寸(直径)	部件编号(为装载或提升曲线图画而选择)	额定负荷	刚性	气流量	柔性安装支架尺寸	轴承高度	轴承重量
50mm	S205001	45 (10)	13 (0.075)	1.06 (2.25)	0.375*	22 (0.866)	73 (0.16)
75mm	S207501	110 (25)	29 (0.165)	1.38 (2.92)	0.375*	22 (0.866)	203 (0.464)
90mm	S209001	150 (34)	43 (0.25)	1.48 (3.15)	0.375*	22 (0.866)	306 (0.69)

*40 Thread or 80 Thread
40mm螺纹或者80mm螺纹

**A COMPLETE LINE
OF FLAT ROUND
POROUS MEDIA®
AIR BEARINGS**

圆形平板多孔材质气浮轴承全系列



200mm



150mm



125mm



100mm



80mm



65mm



50mm



40mm



25mm

New Way flat round air bearings can be readily used to create custom air stages. These bearings are appropriate for highly-loaded applications and are the easiest type of air bearings to integrate into prototype designs as they can be readily replaced or changed. The standard product line shown is available off the shelf. New Way can also work with you to engineer a custom flat, round air bearing to your specification.

New Way圆形平板气浮轴承可便捷的用来定制气浮平台。这些轴承非常适合高负载应用，并且是最容易融入原始设计的产品。因为他们很容易进行替换或更改。如左图所示的标准产品有现货供应。New Way可根据你的特殊需要设计出一款圆形平板气浮轴承。

EASY APPLICATION

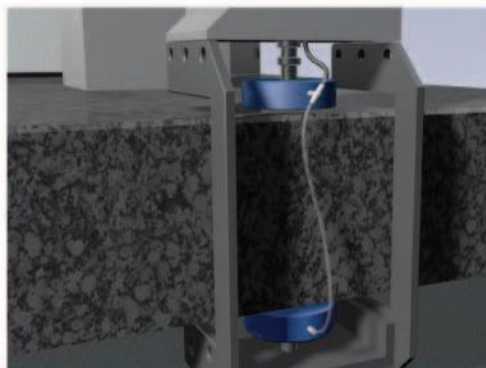
New Way makes air bearing components easy for anyone to apply. A gimbaled mount allows for great flexibility in tolerance and the threaded ball studs make alignment simple.

应用简单

New Way使气浮轴承部件的应用变得十分简单。装有万向接头的底座使公差更具有灵活性，带螺纹的球扣使校准更简单。



25mm Flat Round Air Bearing shown with Round-End Ball Mounting Screw
带圆底球头固定螺钉的25mm圆形平板气浮轴承



65mm Flat Round Air Bearing Application
3-D Model

65mm圆形平板气浮轴承应用3-D模式



Photograph courtesy of IBS Precision Engineering B.V., Eindhoven, the Netherlands

FLAT AIR BEARINGS

平板气浮轴承

NEW WAY POROUS MEDIA®
TECHNOLOGY OFFERS YOU
SIGNIFICANT ADVANTAGES
New Way多孔材质技术给你带来显著优势

FEATURES 特点	BENEFITS 优势
Standard component 标准配件	Anyone can use 操作十分简单
Porous carbon media 多孔碳材质	Eliminates damage to the guide surface 避免损伤导轨面
Non-contact 无接触	Zero friction and no stiction for infinite resolution and repeatability 零摩擦无静摩擦力保证无限分辨率及重复性
Non-contact 无接触	Zero wear, for consistent machine characteristics 零磨损保证机器性能
Non-contact 无接触	Smooth, silent motion without vibration 平滑安静无震动
Non-contact 无接触	10x the speed 速度加快10倍
Non-contact without moving parts 零接触 无需移动部件	High, consistent acceleration 持续高加速
No lubrication 无需润滑剂	Virtually maintenance free 无需保养
High air film stiffness 高气膜刚性	Reduced probability of contact 降低接触可能性
High air film stiffness 高气膜刚性	High natural frequency 固有频率高
High air film stiffness 高气膜刚性	High damping for faster settling time 高阻尼保证更快的气隙建立速度
High air film stiffness 高气膜刚性	High precision positioning 定位精确度高
Porous carbon media 多孔碳材质	Lower air consumption 耗气量低
Gimbaled mount 装有万向接头的底座	Easy to apply, adjust, achieve parallelism 容易应用及调试

APPLICATIONS 应用

- ▶ Coordinate Measuring Machines 坐标测量仪
- ▶ Photomask Repair 光掩膜修复
- ▶ Wafer Thickness Inspection 晶圆厚度检测
- ▶ Wafer Inspection 晶圆检测仪
- ▶ High Speed Applications 高速应用
- ▶ Memory Repair 存储器修复
- ▶ Scanning Machines 扫描仪
- ▶ Fast Tool Servos 高速伺服机床
- ▶ Dry Machining of Metals 金属加工
- ▶ Diamond Turning Machines 金刚石车床
- ▶ Material Testing Machines 材质测试仪器
- ▶ Tensile Strength Testing 拉力测试
- ▶ Stages 运送平台

MARKETS 市场

- ▶ Metrology 计量学
- ▶ Semiconductor 半导体
- ▶ Flat Panel Display 平板显示器
- ▶ Solar 太阳能
- ▶ Medical 医药
- ▶ Machine Tools 机床

FLAT ROUND AIR BEARING PRODUCT LINE 圆形平板气浮轴承产品系列

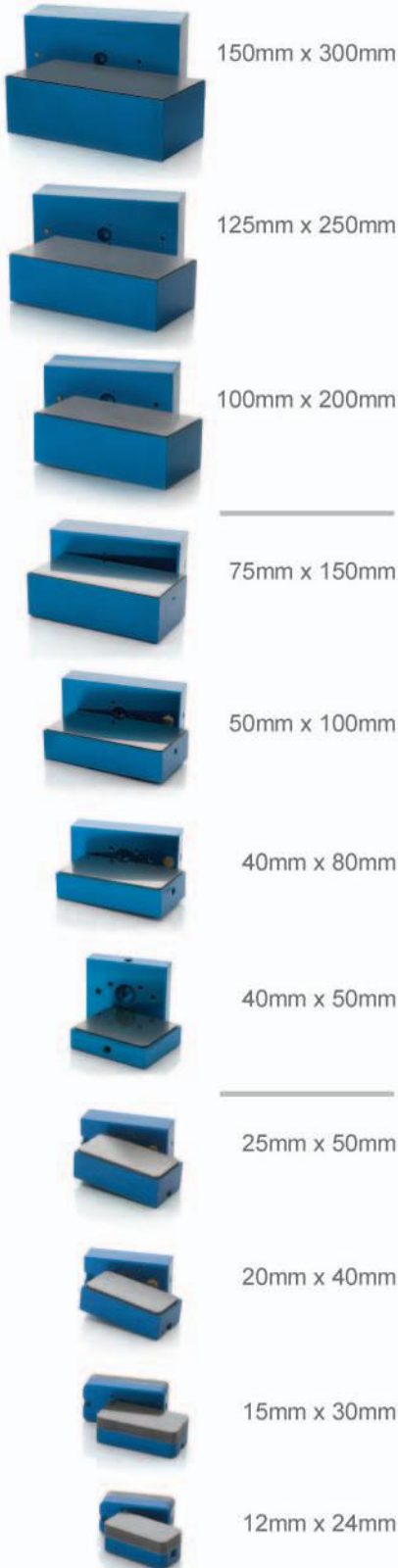
COMPARISON: FLAT ROUND AIR BEARINGS

比较：圆形平板气浮轴承

Size (diameter)	Part #	Ideal Load N (lbs) @ .41 MPa (60psi)	Stiffness N/micron (lbs/u in) @ 0.41 MPa (60psi)	Flow NLPM (SCFH) @ .41 MPa (60psi)	Ball Socket Size	Bearing Height) mm in	Bearing Weight grams (oz.)
尺寸 (直径)	产品编号	额定负载	刚性	气流量	球头槽尺寸	轴承高度	轴承重量
25mm	S102501	80 (18)	18 (0.10)	0.53 (1.2)	13mm	13 (0.52)	14 (0.5)
40mm	S104001	222 (50)	28 (0.16)	0.74 (1.6)	13mm	13 (0.52)	35 (1.2)
50mm	S105001	355 (80)	58 (0.33)	1.1 (2.3)	13mm	13 (0.52)	62 (2.1)
65mm	S106501	666 (150)	87 (0.50)	1.4 (2.9)	13mm	20 (0.79)	151 (5.3)
80mm	S108001	1110 (250)	114 (0.65)	2.3 (4.9)	13mm	20 (0.79)	235 (8.2)
100mm	S1010001	1776 (400)	175 (1.0)	2.6 (5.6)	20mm	25 (0.98)	440 (15.5)
125mm	S1012501	2775 (625)	254 (1.5)	2.6 (5.6)	20mm	35 (1.38)	1033 (36.4)
150mm	S1015001	4444 (1000)	350 (2.0)	2.9 (6.1)	25mm	50 (1.97)	2092 (73.7)
200mm	S1020001	7770 (1750)	700 (4.0)	3.8 (8.1)	25mm	70 (2.76)	4773 (168)

A COMPLETE LINE OF FLAT RECTANGULAR POROUS MEDIA® AIR BEARINGS

方形平板多孔材质气浮轴承全系列



New Way flat rectangular air bearings can be readily used to create custom air stages. These bearings are appropriate for highly-loaded applications and are the easiest type of air bearings to integrate into prototype designs as they can be readily replaced or changed. The standard product line shown is available off-the-shelf. New Way can also work with you to engineer a custom flat, rectangular air bearing to your specification.

New Way方形平板气浮轴承可便捷的用来定制气浮平台。这些轴承非常适合高负载应用，并且是最容易融入原始设计的产品。因为他们很容易进行替换或更改。如左图所示的标准产品有现货供应。New Way可根据你的特殊需要设计出一款方形平板气浮轴承。

EASY APPLICATION

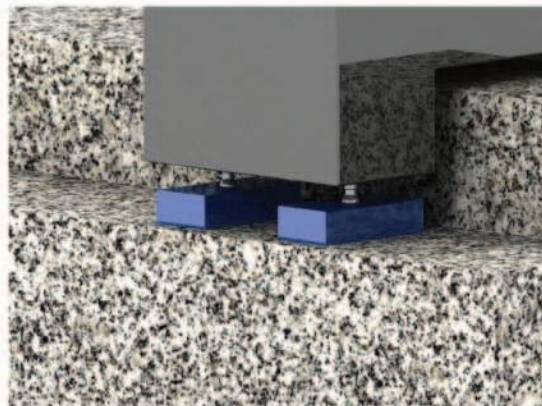
New Way makes air bearing components easy for anyone to apply. A gimballed mount allows for great flexibility in tolerance and the threaded ball studs make alignment simple.

应用简单

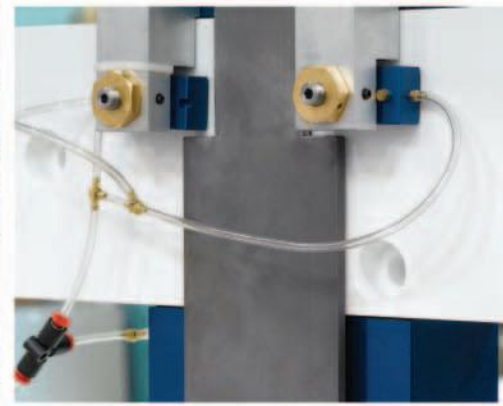
New Way使气浮轴承部件的应用变得十分简单。装有万向接头的底座使公差更具有灵活性，带螺纹的球扣使校准更简单。



40mm x 80mm Flat Rectangular Air Bearing shown with round-End Ball Mounting Screw
带圆底球头固定螺钉的40mmx80mm方形平板气浮轴承



50mm x 100mm Flat Rectangular Air Bearing Application 3-D Model
50mm x 100mm方形平板气浮轴承应用3-D模式



New Way Flat Rectangular Air Bearings provide frictionless linear motion in environments of all kinds.
New Way方形平板气浮轴承为各种环境提供无摩擦直线运动

FLAT AIR BEARINGS

平板气浮轴承

NEW WAY POROUS MEDIA® TECHNOLOGY OFFERS YOU SIGNIFICANT ADVANTAGES

New Way多孔材质技术给你带来显著优势

FEATURES 特点	BENEFITS 优势
Standard component 标准配件	Anyone can use 操作十分简单
Rectangular configuration 长方形结构	Maximizes bearing surface area for given guideway width 既定的宽度上, 保证最大接触面
Porous carbon media 多孔碳材质	Eliminates damage to the guide surface 避免损伤导轨面
Non-contact 无接触	Zero friction and no stiction for infinite resolution and repeatability 零摩擦无静摩擦力保证无限分辨率及重复性
Non-contact 无接触	Zero wear, for consistent machine characteristics 零磨损保证机器性能
Non-contact 无接触	Smooth, silent motion without vibration 平滑安静无震动
Non-contact 无接触	10x the speed 速度加快10倍
Non-contact without moving parts 零接触 无需移动部件	High, consistent acceleration 持续高加速
No lubrication 无需润滑剂	Virtually maintenance free 无需保养
High air film stiffness 高气膜刚性	Reduced probability of contact 降低接触可能性
High air film stiffness 高气膜刚性	High natural frequency 固有频率高
High air film stiffness 高气膜刚性	High damping for faster settling time 高阻尼保证更快的气隙建立速度
High air film stiffness 高气膜刚性	High precision positioning 定位精确度高
Porous carbon media 多孔碳材质	Lower air consumption 耗气量低
Gimbaled mount 装有万向接头的底座	Easy to apply, adjust, achieve parallelism 容易应用及调试

APPLICATIONS 应用

- ▶ Coordinate Measuring Machines 坐标测量仪
- ▶ Diamond Turning Machines 金刚石车床
- ▶ Dry Machining of Metals 金属加工
- ▶ Fast Tool Servos 高速伺服机床
- ▶ High Speed Applications 高速应用
- ▶ Material Testing Machines 材质测试仪
- ▶ Scanning Machines 扫描仪
- ▶ Specialty Gauging 特殊测量
- ▶ Stages 运送平台
- ▶ Vision Machines 机器视觉

MARKETS 市场

- ▶ Metrology 计量学
- ▶ Semiconductor 半导体
- ▶ Flat Panel Display 平板显示器
- ▶ Solar 太阳能
- ▶ Medical 医药
- ▶ Machine Tools 机床

FLAT RECTANGULAR AIR BEARING PRODUCT LINE 方形平板气浮轴承产品系列

FLAT RECTANGULAR AIR BEARING 产品系列技术参数: 方形平板气浮轴承							
Size 尺寸	Part # 部件编码	Ideal Load N (lbs) @ .41 MPa (60Psi) 额定负载	Stiffness N/micron (lbs/u in) @ 0.41 MPa (60psi) 刚性	Flow NLPM (SCFH) @ .41 MPa (60psi) 气流量	Ball Socket Size 球头槽尺寸	Bearing Height mm (in) 轴承高度	Bearing Weight grams (oz.) 轴承重量
12mm x 24mm	S121201	36 (8)	5 (0.03)	0.1 (0.4)	6mm	10 (0.39)	6 (0.2)
15mm x 30mm	S121501	62 (14)	7 (0.04)	0.4 (1.0)	6mm	10 (0.39)	8 (0.3)
20mm x 40mm	S122001	111 (25)	14 (0.08)	.7 (1.5)	6mm	13 (0.52)	26 (0.9)
25mm x 50mm	S122501	187 (42)	22 (0.13)	.9 (2.0)	6mm	17 (0.67)	48 (1.7)
40mm x 50mm	S124001	356 (80)	35 (0.20)	1.3 (2.7)	13mm	13 (0.52)	56 (2.0)
40mm x 80mm	S124002	623 (140)	58 (0.33)	1.8 (4.0)	13mm	20 (0.79)	145 (5.1)
50mm x 100mm	S125001	1112 (250)	110 (0.63)	2.1 (4.5)	13mm	25 (0.98)	295 (10.4)
75mm x 150mm	S127501	2580 (580)	150 (0.85)	1.6 (3.5)	25mm	50 (1.97)	1411 (49.8)
100mm x 200mm	S1210001	4893 (1100)	665 (3.77)	1.8 (4.0)	25mm	70 (2.76)	3628 (128.0)
125mm x 250mm	S1212501	7784 (1750)	1009 (5.72)	3.0 (6.5)	25mm	85 (3.35)	4597 (162.2)
150mm x 300mm	S1215001	11121 (2500)	1645 (9.33)	4.2 (9.0)	25mm	100 (3.94)	6693 (236.1)

A COMPLETE LINE OF POROUS MEDIA® METRIC AND ENGLISH AIR BUSHINGS

多孔材质公制及英制气浮轴套产品全系列



New Way air bushings run on standard precision steel shafting and are directly interchangeable with most rolling-element bushings. Once the swap-out is complete, these flexible components provide all the advantages of frictionless motion—supporting linear or rotary applications.

New Way空气轴套应用于标准精度钢轴，并且可以直接与多数滚动原理的轴套互换。一旦更换完成，这些部件将带给你无摩擦运动的所有好处——支持直线及旋转应用。

EASY APPLICATION

New Way makes air bushing components easy for anyone to apply. Mounting blocks, O-rings and precision shafts are manufactured to industry standard sizes and finishes for optimal performance.

应用简单

New Way使气浮轴承部件的应用变得十分简单。安装块，O型圈，精确轴，都是按照标准工业尺寸制造完成。



75mm Metric Air Bushing with matching stock Mounting block
带相匹配安装块的公制75mm空气轴套

FEATURES 特点	BENEFITS 优势
Standard component 标准配件	Anyone can use 操作十分简单
Cylindrical configuration 圆柱形结构	Allows for frictionless linear or rotary motion 允许无摩擦直线或旋转运动
Cylindrical configuration 圆柱形结构	Hoop stiffness provides for relatively small cross sections (small space) 横截面积小(节省空间)
Porous carbon media 多孔碳材质	Eliminates damage to the shaft 避免对轴的损伤
Non-contact 无接触	Zero friction and no stiction for infinite resolution and repeatability 零摩擦无静摩擦力保证无限分辨率及重复性
Non-contact 无接触	Smooth, silent motion without vibration 平滑安静无震动
Non-contact 无接触	10x the speed 速度加快10倍
Non-contact without moving parts 零接触 无需移动部件	High, consistent acceleration 持续高加速
No lubrication 无需润滑	Virtually maintenance free 无需保养
High air film stiffness 高气膜刚性	Reduced probability of contact 降低接触可能性
High air film stiffness 高气膜刚性	High natural frequency 固有频率高
High air film stiffness 高气膜刚性	High damping for faster settling time 高阻尼保证气隙速度快
High air film stiffness 高气膜刚性	High precision positioning 定位精度高
Porous carbon media 多孔碳材质	Lower air consumption 耗气量低
Mounting blocks /precision shafts /end mounts 安装块/精确轴/支座	Easy to apply, cost-effective and available 易应用，经济又实惠
O-Rings O型圈	Allow bushings some self-alignment capability(can also be potted in place) 允许轴衬某些自我校准能力(可放置于密封容器中)

AIR BUSHINGS 气浮轴套

**NEW WAY POROUS MEDIA®
TECHNOLOGY OFFERS YOU
SIGNIFICANT ADVANTAGES**
New Way多孔材质技术给你带来显著优势



0.75" English Air Bushing Application 3-D Model
0.75英寸空气轴套应用3-D模式



Photo courtesy of Kuzma d.o.o., Preddvor, Slovenia

APPLICATIONS 应用

- n Crystal Pulling 晶体提拉
- n Dusty or Dirty Environments 多尘及恶劣的环境
- n Fast Tool Servos 高速伺服机床
- n Friction Testing 摩擦测试
- n Positioning Stages 定位平台
- n Rotary Tables 旋转台
- n Spindles 主轴
- n Tone Arms 调音臂
- n Voice Coil Actuators 音圈电机

MARKETS 市场

- n Solar 太阳能
- n Semiconductor 半导体
- n Machine Tools 机床
- n Food Processing 食品加工

AIR BUSHING PRODUCT LINE 气浮轴套产品系列

PRODUCT LINE SPECIFICATIONS: AIR BUSHINGS – METRIC

产品系列技术参数：气浮轴套-公制

Bushing I.D. (mm) 轴套内径	Part Number 部件编号	Max. Load (N) 最大负荷	Normal Stiffness (N/um) 垂直刚度	Max. Moment (N-m) 最大力矩	Pitch Stiffness (N-m/mil rad) 纵向刚度	Bore Dia +.0051 -.0000 孔径	Bushing O.D. mm 轴套外径	Bushing Length mm 轴套长度	Mounting Hole Dia. +.127/- .000 安装孔直径	Air Consumption Range(NLPM) 耗气量范围	Min. Housing Length mm 最小外罩长度	Weight (grams) 重量	Nominal Shaft Dia. mm 中间轴称直径	Shaft Tolerance (g6)µm 最小轴公差
13	S301301	44	11	0.8	2.1	13	23.7	51	24.181	2.2-3.1	31.750	31	13	-5, -17
20	S302001	133	23	1.1	2.8	20	31.8	51	32.258	3.5-4.8	31.750	57	20	-7, -20
25	S302502	187	34	1.9	5.3	25	38.9	57	39.497	4.5-5.9	34.925	85	25	-7, -20
40	S304002	645	72	3.1	11.0	40	59.6	76	60.325	7.1-9.3	47.600	204	40	-9, -25
50	S305002	934	110	5.2	23.0	50	74.1	89	74.803	9.0-11.9	70.612	482	50	-9, -25
75	S307502	1245	159	7.1	31.0	75	99.5	89	100.000	13.2-17.5	70.612	623	75	-9, -25

PRODUCT LINE SPECIFICATIONS: AIR BUSHINGS – ENGLISH

产品系列技术参数：空气轴套-英制

Bushing I.D. (mm) 轴套内径	Part Number 部件编号	Max. Load (lbs) 最大负荷	Normal Stiffness (lbs-in) 垂直刚度	Max. Moment (lbs-in) 最大力矩	Pitch Stiffness (lbs-in/rad) 纵向刚度	Bore Dia +.0002 -.0000 孔径	Bearing O.D. 轴套外径	Bearing Length mm 轴套长度	Mounting Hole Dia. +.005/- .000 安装孔直径	Air Consumption Range(SCFH) 耗气量范围	Min. Housing Length 最小外罩长度	Weight (oz.) 重量	Nominal Shaft Dia. in 中间轴称直径	Shaft Tolerance (g6)in 最小轴公差
0.25 I.D.	S300601	2.75	10,000	0.125	195	0.2502	0.623	1.250	0.635	2.25-3.30	0.812	0.3	0.2495	-0.0002, -0.0006
0.50 I.D.	S301201	10	60,000	7.5	18,750	0.5008	0.932	2.000	0.952	4.75-6.60	1.250	1.1	0.5000	-0.0002, -0.0007
0.75 I.D.	S301901	30	130,000	10.0	25,000	0.7508	1.250	2.000	1.270	7.00-9.60	1.250	2.0	0.7500	-0.0003, -0.0008
1.00 I.D.	S302501	42	190,000	17.0	47,400	1.0008	1.532	2.250	1.555	9.50-12.60	1.375	3.0	1.0000	-0.0003, -0.0008
1.50 I.D.	S303801	145	410,000	28.0	100,875	1.5008	2.346	3.000	2.375	14.00-19.20	1.874	7.2	1.5000	-0.0004, -0.0010
2.00 I.D.	S305001	210	630,000	46.0	201,750	2.0008	2.918	3.500	2.945	19.00-25.20	2.780	17.0	2.0000	-0.0004, -0.0011
3.00 I.D.	S307501	280	910,000	63.0	275,110	3.0008	3.917	3.500	3.937	28.00-37.80	2.780	22.0	3.0000	-0.0004, -0.0011

CUSTOM SPHERICAL AIR BEARINGS

定制球面气浮轴承



For Aerospace and Defense applications and more

专为航空航天，防御应用及其他更多领域

New Way Air Bearings® manufactures custom spherical air bearings ideal for use in aerospace and defense applications. These components support a sphere on a thin layer of air, providing all the benefits of frictionless motion. These non-contact bearings provide for infinite resolution, nanometer error motions, high speed, high stiffness, zero wear, and smooth, silent operation without vibration. Further, no lubrication is required. New Way Porous Media Technology™ distributes air pressure uniformly across the entire bearing surface through millions of sub-micron sized holes, while simultaneously restricting and damping the air flow. A vacuum pre-load can also be added. The result is a whole new level of accuracy and control.

NWE WAY气浮轴承专为航空航天及防御应用设计制造球面气流轴承。这些部件使球体浮于薄薄气膜上并且保证了无摩擦运动。这些非接触轴承解决了许多问题，如纳米级的运动误差，速度快，刚性高，无磨损，平滑，操作安静无震动，还有无需润滑。NEW WAY多孔介质技术通过上百万亚微米级的孔使气流均匀缓慢穿过整个轴承表面。

ZERO-G SATELLITE TESTING • ATTITUDE CONTROL TESTING • MULTI-DIRECTIONAL CONTROL • FLIGHT SIMULATORS
LASER DEFLECTION • SCANNERS • POLHODE EFFECT STUDIES • PRECISION SPINDLES • AND MORE

零重力卫星测试，飞行姿态控制测试，多方位控制测试，飞行仿真器，激光偏转，扫描仪，本体极迹效应的研究，高精度主轴及其他更多方面



2.5" diameter spherical air bearing
10" diameter spherical bearing surface
2.5英寸直径球面气浮轴承
10英寸直径球面轴承表面



Spherical Air Bearing with vacuum pre-load
2.0" diameter sphere
真空预压球面气浮轴承
2.0英寸直径的球体



2.0" diameter spherical air bearing
(Custom shape housings available)
2.0英寸直径球面气浮轴承
外罩形状可定制

NEWWAY®
air bearings China distributor

DESIGNED-TO-ORDER SPHERICAL AIR BEARING PRODUCT LINE

定制球面气浮轴承产品系列

PRELIMINARY PRODUCT LINE SPECIFICATIONS: SPHERICAL AIR BEARINGS - CONCAVE CONFIGURATION

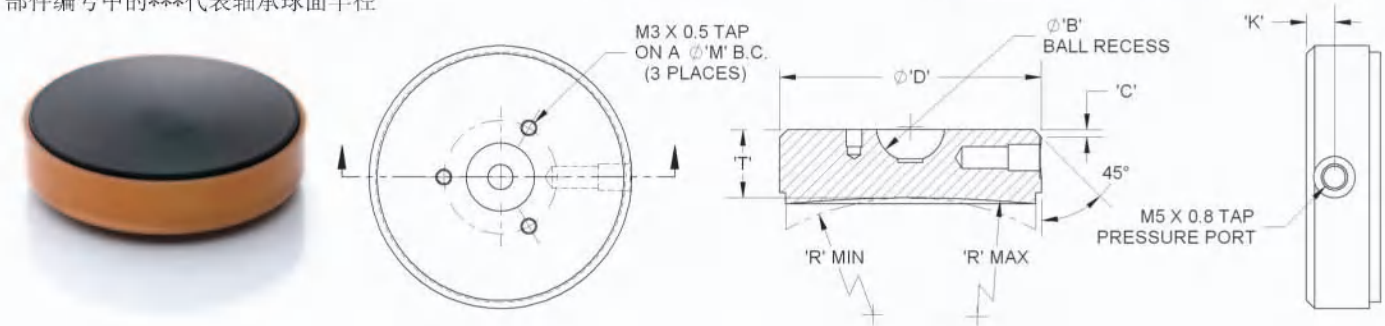
初级产品系列规格：球面气浮轴承-凹面结构

Part Number	'D'	'T'	'R'		'B'	'C'	'K'	'M'	'N'	Load at 5 μ m fly height	Stiffness	Flow	Bearing Weight
			Min*	Max*									
	mm	mm	mm	mm	mm	mm	mm	mm	mm	N	N/ μ m	SLPM	GM
S3625R***	25	13	25	125	13	1.50	6.6	NA	NA	49	18	1.04	14
S3640R***	40	13	40	200	13	1.50	5.3	21.59	3	178	28	1.79	35
S3650R***	50	13	50	250	13	1.50	5.3	21.59	3	289	58	2.00	62
S3665R***	65	20	65	325	13	4.60	12.3	21.59	3	489	87	2.20	151
S3680R***	80	20	80	400	13	4.60	12.3	21.59	3	801	114	4.80	235
S36100R***	100	25	100	500	20	6.35	15.9	31.75	3	1290	175	4.30	440
S36125R***	125	35	125	625	20	6.35	25.9	31.75	3	2046	254	7.60	1033
S36150R***	150	50	150	750	25	16.00	41.5	38.10	3	3692	350	5.10	2092
S36200R***	200	70	200	1000	25	31.75	60.7	38.10	3	6672	700	4.80	4906

NOTE: *** IN PART NUMBER IS BEARING RADIUS
部件编号中的***代表轴承球面半径

*RECOMMENDED

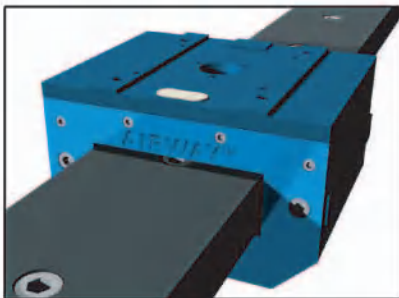
ALL PERFORMANCE DATA @0.41 MPA INPUT PRESSURE



AirWay™ 气轨

Air Bearing Linear Motion Guide System

气浮轴承直线运动导轨系统



ZERO FRICTION 零摩擦
ZERO WEAR 零磨损
SMOOTH AND SILENT
MOTION 运动平滑安静
HIGH SPEED 速度快

HIGH ACCELERATION 加速快
NO LUBRICATION 免润滑
LESS UNWANTED
MOTION 无用运动少
PRECISION POSITIONING 定位精确

New Way Air Bearings is a linear motion guide system designed specifically for precision linear motion applications. This new AirWay™ System will provide all of the benefits of New Way Porous Media™ that make this technology optimal for the critical needs of the semiconductor market, the flat panel display market, and other markets with critical precision requirements.

气浮轴承是为精密直线运动而专门研制的一款直线运动导轨系统。这种新型气轨系统具备New way多孔材质的所有优势。对于像半导体市场，平板显示器市场这样对精密有严格要求的市场来讲，这种技术无疑是最佳选择。

Already, proof-of-concept prototypes show the AirWay™ to be a zero friction, zero wear, high speed, high precision, crash resistant, lubricant-free air bearing system. And it works the way you're used to working with a conventional rolling element bearing. As we continue to identify specific field application requirements, New Way is further refining what should be a comprehensive AirWay™ System line.

方案论证原始设计已经证明了这种气轨是一款零摩擦，零磨损，高速度，高精度，抗冲击，免润滑的气浮轴承系统。并且它的工作方式和您惯用的传统滚动原理的轴承是一样的。随着我们不断认识特殊领域的应用需求，New Way将不断完善，成为一款综合全面的气轨系统。

Preliminary Specifications: 75mm Version

初级规格: 75mm版

	Guide 导轨	Truck 滑块
Material 材质	Black Anodized Aluminum 黑色阳极氧化铝	Blue Anodized Aluminum 蓝色阳极氧化铝
Mass 质量	5.5 KG. Per Meter of Length 5.5KG.每米	1.3 KG 1.3公斤

Performance: 75mm Version

性能: 75mm版

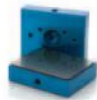
Input Pressure 输入压力			Input Flow 输入气流量	Load Capacity 负载能力	
(KPA)	(BAR)	(PSI)	(SLPM)	Vertical 垂直的 (N)	Horizontal 水平的 (N)
300	3	43.5	6.6	355	236
400	4	58.0	10.0	472	315
500	5	72.5	13.3	590	394
600	6	87.0	17.0	709	473

Input Pressure 输入压力			Input Flow 输入气流量	Maximum Moment Force 最大力矩		
(KPA)	(BAR)	(PSI)	(SLPM)	Pitch 俯仰 (NM)	Roll 侧倾 (NM)	Yaw 偏摆 (NM)
400	4	58.0	10.0	2.8	2.8	3.9

COMPLETE NEW WAY POROUS MEDIA® AIR BEARING PRODUCT LINE NEW WAY多孔材质气浮轴承产品全系列



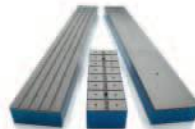
Flat Round
Air Bearings
圆形平板气浮轴承



Flat Rectangular
Air Bearings
方形平板气浮轴承



Vacuum Preloaded
Air Bearings
真空预压气浮轴承



Conveyor
Air Bearings
传输式气浮轴承



Radial
Air Bearings
方形弧面气浮轴承



Air Bushings
气浮轴套



Air Slides
气浮导轨



New Way Air Bearings
products are manufactured
using ISO 9001:2008
certified processes

NEWWAY®
air bearings China distributor

Frictionless Motion®

苏州钧信自动控制有限公司

电话: 0512-8207 9388 传真: 0512-8207 9333 网址: www.servodynamics.com.cn

