Arnold Magnetics (Shenzhen) Limited
Arnold is a global leader in magnetic materials with manufacturing presence in Europe, North America, and Asia. We serve customers globally. At the culmination of over 30 years of research and development, our Arnold Shenzhen Group commits to providing you the best combination of design and properties with highest quality assurance. We are a full service manufacturer and offer a full range of technology support.

- Full range of injection molded magnets
- Magnetic assemblies and other assemblies
- Compression bonded magnets and sintered magnets
- Tooling design and manufacture
- Magnetic materials design, testing, verification and validation

- Full series of injection molded magnets
- Magnetic assemblies and other assemblies
- Compression bonded magnets and sintered magnets
- Tooling design and manufacture
- Magnetic materials design, testing, verification and validation
COMPANY ENVIRONMENT

- Relaxed and harmonious office working environment
- Cleanly and orderly workshop
- Skilled operators
阿诺德技术能力

- CAD, Solidworks, ProE, Magneto(2D)和Amperes(3D)设计软件，自行设计与制造热磁模具、夹具、磁性组件
- 磁材设计:
  a. 提供关于最佳磁性材料选择、粘结剂、镀层、聚合物、防腐等方面的优质服务
  b. 提供环境和老化测试：包括高压蒸汽、盐雾和热震性
  c. 磁场扫描：线性、旋转和三维扫描
- 产品检测:
  种类齐全的测试分析设备：三次元、影像分析仪、磁滞回线仪、流变仪、差示扫描量热仪、镀层测厚仪、及阿诺德自主设计的磁性扫描仪

AML TECHNICAL CAPABILITY

- CAD, Solidworks, ProE, Magneto(2D) and Amperes(3D) softwares to design and make tooling, fixtures and magnetic assemblies.
- Magnetic Design:
  a. Value-added service to select the most appropriate magnetic materials, adhesive, plating, polymer, corrosion protection, etc.
  b. Environmental and aging testing: Autoclave, Salt Spray and Thermal Shock
  c. Field scans: linear, rotational and 3D scan
- Inspection:
  Full range of analytical equipments: CMM, Image measurement, Hysteresisgraph, Rheometer, DSC, Plating Thickness and Magnetic Scanner.
Arnold's success is always intelligence and hard work put together with our faith and your belief.
# Arnold Bonded Plastiform® Magnet Materials

<table>
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<tr>
<th>Material</th>
<th>Magnetic Powder</th>
<th>Polymer</th>
<th>Density in g/cc</th>
<th>Residual Induction Br in Gauss</th>
<th>Coercivity Hc in Oersteds</th>
<th>Int. Coercivity Hci in Oersteds</th>
<th>Energy Product (BH)max in MGOe</th>
<th>Rev. Temp Coeff of Br %/°C</th>
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</table>

All values shown in this brochure are typical and will vary depending upon part geometry.
注塑磁特性

- 高强度的磁性和优良的力学性能
- 与烧结磁相比，注塑磁具有更好的抗裂性，使其便于组装
- 产品形状多变
- 磁体可完全充磁也可局部充磁或退磁
- 采用的粘结剂和磁体可以满足-40℃至180℃的应用温度
- 内嵌模压工艺可直接将磁粉料注塑到产品上，形成组装件而得以减少后续工艺和降低系统成本
- 成型件具有独特的尺寸、形状、磁性和力学性能

INJECTION MAGNETS FEATURES

- High magnetic output coupled with excellent physical strength
- Molded magnets are more chip resistant than sintered magnets making handing easier on production assembly lines.
- Production magnets can be either simple in shape or of complex geometry.
- Molded magnets can be wholly magnetized, partially magnetized or demagnetized.
- The binders and magnetic alloys utilized are capable of a wide range of application temperature from -40 ℃ to 180 ℃.
- Insert molding is the injection of magnet compound over, inside or against an existing component resulting in an assembly. This can eliminate secondary operating and reduce total system cost.
- Each finished good is unique in size, shape, magnetic and mechanical properties.
注塑成型磁材

· 按客户规格生产，以更好满足应用的磁性，力学及环境要求
· 粘结材料可用种类：尼龙6，尼龙12和PPS（聚苯硫醚）
· 磁性材料可用种类：铁氧体、钕铁硼、钐钴及它们的复合物
· 具有电磁屏蔽的软磁材料
· 多种磁化状态：径向、轴向、辐射、多极或局部充磁

INJECTION MOLDED MAGNETS

· Customer-made compounds that best meet the application’s magnetic, mechanical and
environmental requirements.
· Binders available: Nylon6, Nylon12 and PPS
· Magnetic materials available: Ferrite, NdFeB, SmCo, and the hybrid magnets
· Soft magnetic materials for electromagnetic shielding application.
· Diverse magnetizing direction: diametrically, axially, radially, multi-poles or locally magnetized
注塑磁产品应用领域

- 电机定子和转子
- 传感器磁体和组创建
- 磁性联结组合件
- 精密量具(仪表)
- 其他需要应用到家电、办公自动化设备、通讯、国防、航空、航海等领域

Markets Served

- Motor Stators and Rotors
- Sensor Magnets and Assemblies
- Coupling Assemblies
- Precision Gauges
- Other markets such as modern household appliances, office automation devices, communications devices, defense, aerospace, marine applications.
Magnetic Assemblies

- Ferrite, NdFeB, SmCo, Alnico (Sintered, Compression Bonded, Cast, Molded)
- Glued, Clipped, Potted and Insert Molded
- Coil Winding
- Selection and qualification of mechanical components from low cost regions
主要产品

- 打印复印机磁组设计和制造
- 打印复印机定影和固化组件
- 马达驱动耦合器设计和制造
- 高精密磁组套管
Products

- Magnetic Reprographic Rolls
- Reprographic Developer and Fuser
- Drive Coupling
- Precision Roller Sleeves
打印复印机磁辊

我们目前为多个客户提供各种不同设计和功能的磁辊，种类多达20多种，产品远销美国、欧洲多个国家，新加坡和台湾。磁辊上使用的磁性材料有:

- 烧结钕铁硼磁铁
- 挤压钕铁硼磁铁
- 挤压铁氧体磁铁

我们也使用了高精密的磁辊套管，材料有薄壁无缝不锈钢和铝合金，直径从Φ22-65mm，长度可达1米多长。套管的全跳动可达0.03mm。

由于我们所设计和制造的磁棍具有高性能和高精密性，在新打印机和复印机的开发阶段，我从事为客户的首先供应商。参与了解产品功能，并提供设计建议。这样对于我们后续品质的控制提供了良好的平台，从而赢得了客户信任。基于此，我们也赢得了与磁棍组联相关的业务，包括复印机定影组件和固化器组件的组装和测试。

另外，我们也为客户提供马达耦合器及转子定子的设计和制造。

Magnet Rollers

We provide our customers various magnet rollers with different design and function. There are more than 20 types of magnets sold to America, Europe, Singapore and Taiwan. Magnetic materials used on the rollers are as following.

- Sintered Nd–Fe–B Magnets
- Extruded Nd–Fe–B Magnet Strips
- Extruded Ferrite Magnet Strips

Meanwhile, high precision sleeves are sued on the rollers, with seamless stainless steel and aluminum, diameter from Φ22–65mm. Length can achieve more than 1 meter, and total runout gets up to 0.03mm.

By providing high magnetic properties and high precision with Arnold–made magnet rollers, we are always selected as priority supplier by our customers during development of new projects. Actively participating in the function design helps us to better understand the products and thus provide excellent quality. Base on this, customers trust us and offered us more business–related to magnet rollers, like developers and fusers.

Furthermore, we also provide design and building service for motor coupling, rotators and stators.
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