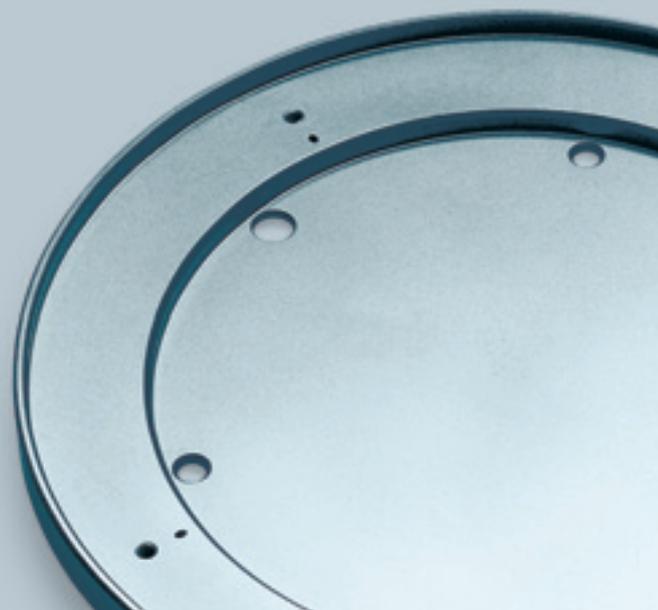
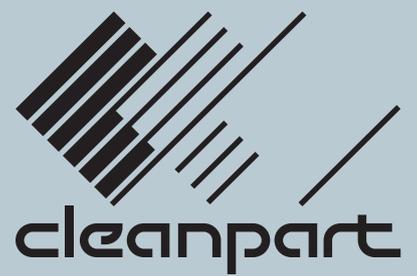


高技术洗涤、表面镀层与服务

high-tech cleaning, coating and service





能力优势

我们的企业一开始就与 IBM 进行了数十年的合作。实际上，cleanpart 当时相当于电路板、半导体和硬盘制造的后续加工工厂。如今，cleanpart 已经成为一家国际化企业，除了半导体技术这个核心行业外，它还越来越多地向光学、太阳能、医学以及汽车行业提供服务。我们的服务项目集中于以下几个重点：清洗和处理半导体工业生产设备，尤其是蒸发镀膜、PVD、CVD、等离子体腐蚀或者离子注入设备产出的部件，即来自高真空设备的近似圆片式部件和构件。此外，我们还采用火焰、光弧以及等离子体喷雾工艺为部件进行表面镀层，以实现具有特定功能的表面。最后，但不是仅有，我们还可以向您提供广泛的服务，包括零件管理、安装、性能检测，以及物流和贵金属回收等。为了能够保证做到最恰当接近客户、最高质量和足够的生产能力，我们在 Asperg、德累斯顿以及 Rousset（法国）的三个高度现代化工厂为客户进行加工。工厂拥有最现代化的技术装备，电脑过程管理，工作热情的高资质员工队伍。我们在美国这个重要市场上有三个场所和销售办事处。

AREAS OF EXPERTISE

The company's origin goes back to a decade-long cooperation with IBM, during which cleanpart was an extended workbench for the production areas for PCBs, semiconductors, and hard disks. cleanpart is now an internationally active company and, in addition to the core industry of semiconductors, increasingly supplies the optics, solar, medicine, and automotive sectors. We specialize in the following key activities: cleaning and refurbishment of components from production systems in the semiconductor industry, especially evaporation, PVD, CVD, plasma etching, or implantation equipment – i. e. near-wafer assembly parts and components from high-vacuum systems. A further speciality is thermal coating of components using flame, arc, and plasma-spray processes to achieve surfaces with specific functions. Our program is further enhanced by a comprehensive list of additional services, from parts management, assembly tasks, function tests, and logistics through to the recycling of precious metals. To ensure our accessibility to our customers as well as very high quality levels and redundancy, we have three highly modern facilities in Asperg, Dresden, and Rousset (France) with state-of-the-art machines, computerized process management systems and a highly motivated, highly qualified team of employees. We are represented in the important US market by three locations and sales offices.



加工领域

我们有下列加工中心：

半自动化清洗

- 化学方法
- 电解法
- (湿) 机械法
- 高温法
- 二氧化碳颗粒或者二氧化碳雪
- 等离子清洗法

因此我们能够移除所有类型的表层：金属、半金属、绝缘层、耐磨硬质层以及生物层，例如光阻剂和聚合物。

手工与机器人辅助镀层

采取火焰、光弧以及等离子体喷雾法制造功能表面。

铝的表面处理

我们为铝质部件做阳极氧化，或者用 Ceramaze® 做高性能表面精处理。

洁净室等级 100/ISO 5

在等级 100/ISO 5 的洁净室条件下作最后的净化和包装已经是我们的标准。

广泛的服务

为了让您能够专注您的核心业务，在您需要时，我们提供一整套的服务：

零部件管理

- 安装与拆卸
- 部件与表面测量
- 修理与检修
- 客户专用零部件的替换件及其加工
- 零件实时跟踪 / Web Access
- 生命周期管理
- 库存管理

物流管理

包装与物流方案，每周七天的即时服务。

贵金属回收

贵金属回收及客户补偿。

PRODUCTION AREAS

The following process centers are available:

Semi-automatic cleaning

- Chemical processes
- Electrolytic processes
- (Wet) mechanical processes
- Thermal processes
- CO₂ cleaning (pellets or snow)
- Plasma cleaning

These areas enable us to remove all kinds of coating: metal, semi-metal, insulation, and wear resistant and organic coatings, e.g. photoresist and polymers.

Manual and robot-aided coating

Flame, arc and plasma-spray processes to generate functional surfaces.

Surface treatment of aluminum

We anodize aluminum components or upgrade them with a Ceramaze® high-performance surface.

Class 100/ISO 5 cleanroom

Final cleaning and packaging under class 100/ISO 5 cleanroom conditions is standard with us.

COMPREHENSIVE SERVICES

We can offer a total service package that enables our customers to focus on their core business:

Parts management

- Assembly and disassembly
- Parts and surface measurement
- Repair and refurbishment
- Replacement parts and production of customer-specific part designs
- Real-time parts tracking / Web access
- Lifetime cycle management
- Stock management

Logistics management

Packaging and logistics solutions, as well as just-in-time service during a 7-day week.

Precious metal recycling

Recycling of precious metals and crediting to the customer.





分析

依托与实验室的合作，我们使用最现代化的表面分析技术提供最佳的流程技术监控，并为各种不同的情况提供支持。

过程技术的开发与优化

我们和您共同开发更稳定、更经济和更好的方案。我们渊博的专业知识以及对您的加工工艺的了解，一定会给您带来好处。



质量与环境

无论是我们的产品，还是过程技术，质量是我们最关心的事。为了掌握过程工艺的稳定性，我们应用最现代化的技术：部件的三维测量，粒子与导电性测量，光学检验以及表面分析。所有的欧洲工厂全部获得了 ISO 9001 和 ISO 14001 认证。厂房的设计、技术配置以及内部工序都完全符合“精确复制原则 (Copy Exact Principle)”。与客户的紧密接触使我们能够不断改进流程和工艺，满足新的要求。

成功案例

高端工业的许多一流企业都是我们的客户。我们愿意向您介绍我们的成功案例。

Analytical services

Cooperating with labs and using the most advanced surface and material analysis systems, we can offer optimized process control and assistance with a wide range of problems.

Process development and optimization

In cooperation with our customers, we develop solutions to get more consistent, economic, and better results. At the same time, you benefit from broad expertise and our knowledge of your production processes.

QUALITY AND ENVIRONMENT

We are committed to quality – not only in our products, but also in the processes. We use state-of-the-art equipment to make sure that processes are exactly reproducible: 3-D part measurement, particle and conductivity measurement, optical inspection, and surface analysis. All the European plants are certified according ISO 9001 and ISO 14001. The design of plants, the technical equipment and the internal processes strictly follow the “copy exact principle”. Intense contact with our customers helps us continuously to improve our processes and adapt them to new requirements.

OUR REFERENCES

Our customers include a range of first-class companies in high-end industry – we're happy to name you references.





欧洲工厂：

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电子邮箱：info@cleanpart.de, 网址：www.cleanpart.de

Dresden (德累斯顿)

cleanpart Dresden GmbH & Co. KG, Kunzer Marktweg 7,
01468 Moritzburg OT Boxdorf/ 德国
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电子邮箱：info@cleanpart.de, 网址：www.cleanpart.de

Rousset (鲁塞)

cleanpart France SAS, Avenue Villevieille ZI Rousset,
F-13790 Rousset/ 法国
电话：+33 (0) 4 42/29 16 75, 传真：+33 (0) 4 42/29 17 34
电子邮箱：info@cleanpart.fr, 网址：www.cleanpart.de



美国工厂：

California (加利福尼亚)

LSA-cleanpart, LLC, 1610-B Berryessa Road, San Jose, CA 95133
网址：www.LSA-cleanpart.com

Texas (德克萨斯)

LSA-cleanpart Texas, L.P., 631 International Parkway, Suite 200,
Richardson, TX 75081
网址：www.LSA-cleanpart.com





ikos dynamant®
technologies powered by cleanpart

Dynamant® ist eine Beschichtung auf Basis des diamantähnlichen Kohlenstoffs (DLC Schicht des Typs a - C : H). Sie wird mittels PACVD Technik auf verschiedenste Werkstoffe angebracht und lässt gezielt Veränderungen der Oberfläche zu, wenn es um Härte und Reduzierung von Reibbeiwerten geht. Aber auch andere Eigenschaften der Dynamant® Oberflächen ergeben interessante Perspektiven.

- sehr hohe Härte (3000 HV)
- hohe Elastizität
- hohe Schlagfestigkeit (90% elastische Rückfederung)
- sehr niedrige Trockenreibung ($\mu = 0,05-0,10$)
- keine Eigenrauigkeit
- interessante Korrosionseigenschaften
- hydrophobe oder -phile Oberflächencharakteristik einstellbar

Anwendungsbereiche

- Automobilteile (Düsenadeln, Federn, etc.)
- Werkzeuge (Feilen, Fräsen, Bohrer, etc.)
- Gleitende Komponenten wie Gleitlager, Getriebe, Ketten, Gelenke, Walzen, etc.

Verfahren

Einzelstücke bis Großserien (max. 1,100m)

Dimensionen von > 2m nach Absprache

Werkstoffe

- alle Stähle
- Aluminium (kein Zn in der Legierung)
- Mg, Cr, W, Ti, Ta, Mo, V, Zr, Nb, Si, Ge
- Keramik (Al_2O_3 , SiC, Si_3N_4 , ZrO_2) Industriekeramik
- Glas, Graphit, Diamant
- Kunststoffe (Polycarbonat, Epoxidharz, Polyamid, Polyimid)

Standard-Schichtdicken

2,5 μm für die Grundwerkstoffe Stahl und Keramik

8,0 μm für Leichtmetalle, wie Aluminium, Magnesium, Titan

höhere Schichtdicken auf Anfrage

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