

BALITHERM PPD

Future-oriented

BALITHERM PPD

未来风向标

Pulsed-plasma diffusion for efficient,
environmentally friendly coating of
large forming tool surfaces

脉冲等离子扩散成就高效、环保的大型成型模具表面涂层

Metal Forming



Take the lead – with BALITHERM PPD from Oerlikon Balzers

欧瑞康巴尔查斯BALITHERM PPD—引领风潮

Until now, hard chrome plating has been the standard method employed for treating large forming tool surfaces. But, there is a highly-efficient and environmentally-friendly alternative: Pulsed-Plasma Diffusion (PPD®) from Oerlikon Balzers. With this forward-looking technology, the tools used for the manufacture of car body skin parts, for

迄今为止，镀硬铬已然成为对大型成型模具进行表面处理的标准方法。但是，现在有一种高效且环保的选择：欧瑞康巴尔查斯的脉冲等离子扩散技术(PPD®)。例如，将拥有前瞻性科技的此技术用于生产车身覆盖件的模具上，在其整个服务期内只需处理

example, only need to be treated one single time over their entire service life, while with hard chrome plating, up to ten treatments are required. Moreover, no harmful chemicals are used. Opt for BALITHERM® PPD from Oerlikon Balzers and profit from powerful advantages, first and foremost in the automotive industry, but also in heavy industry.

一次，而镀硬铬，却需要高达十次之多。并且，此涂层不使用任何有害的化学物质。选择欧瑞康巴尔查斯BALITHERM® PPD涂层，使您受益于其强大优势，不仅是汽车工业的首选，同样也可用于重工业。

Diffusion process with easy maintenance

扩散工艺，易于维护

Creates hard, wear resistant forming surfaces

创造了坚硬、耐磨的成型表面

Surfaces treated with PPD® can still be modified and repaired

表面已经进行PPD®涂层的仍然可以修改和维修

Ecologically sound technology

生态无害技术

No poisonous gases or chemicals are used

不使用有毒气体和化学物质

High degree of automation

高度自动化

For increased efficiency and energy savings in the entire process cycle

在整个过程循环中可以提高效率、节约能源

Tool cleaning integrated in process

工艺过程中结合模具清洗

No elaborate preliminary bakeout of dirty or oily tools required

不需要对脏或油的模具进行繁杂的初步脱气处理

Considerably longer tool life through one-time PPD® surface treatment – good for the entire service life of the tool

通过一次PPD®表面处理可以获得相当长的模具寿命—延长模具整体使用寿命

Reduces tooling and production costs through significantly higher surface quality that requires notably less rework

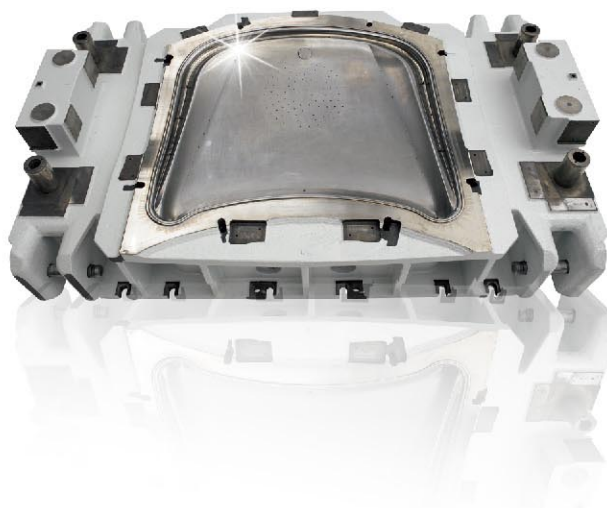
通过显著的提高表面质量，减少返工从而降低模具成本和生产成本

Decrease in machine downtimes and corrective maintenance costs through low-maintenance PPD® surfaces

低维护要求的PPD®表面，减少机器停工时间和维修保养成本

BALITHERM® PPD: Improved productivity and manufacturing process reliability as well as conservation of resources

BALITHERM® PPD: 提高生产力、制造工艺稳定性和保护资源

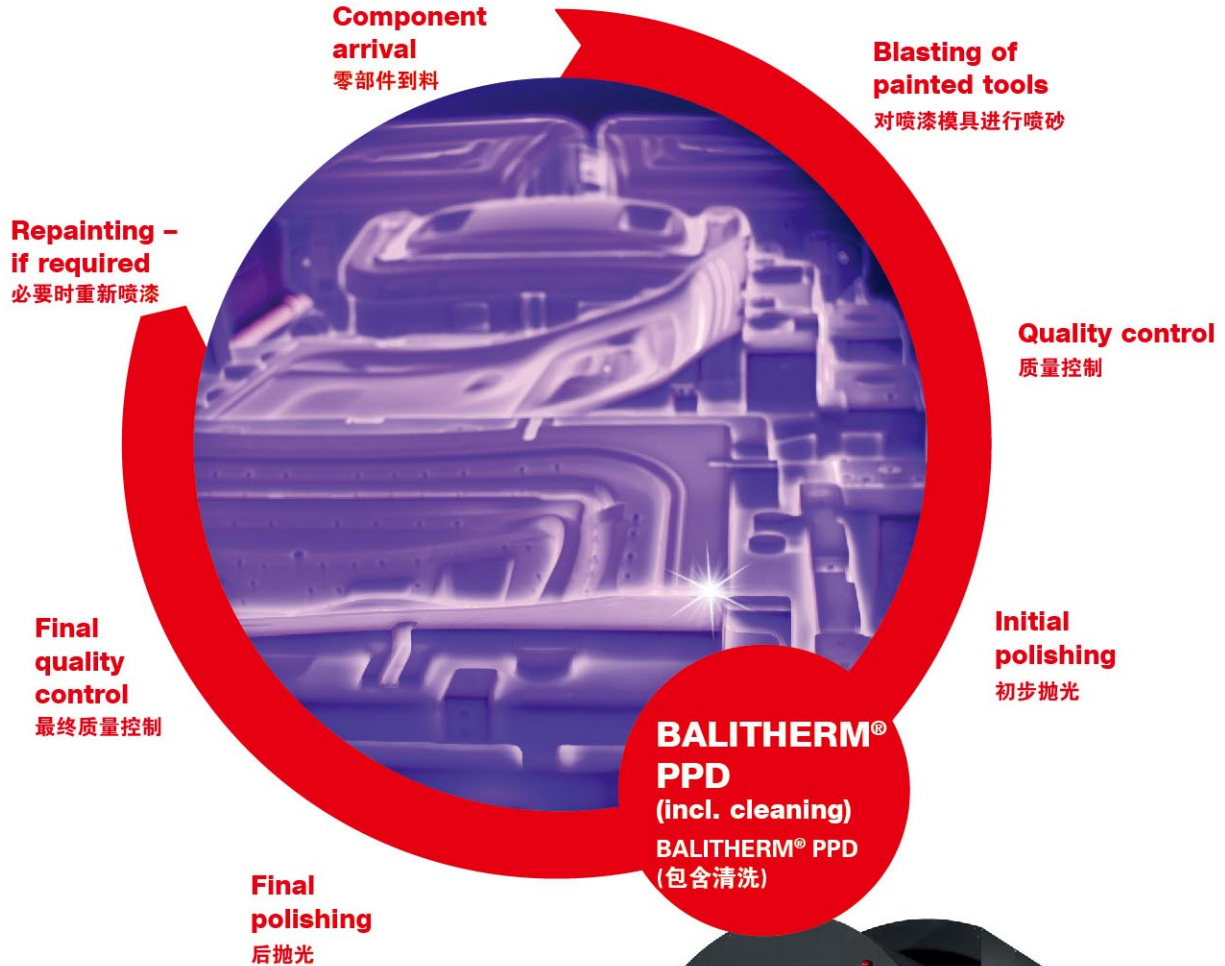


Step by step towards more efficiency: The BALITHERM PPD Service Process

一步步走向更高效：BALITHERM PPD 服务流程

Oerlikon Balzers offers you a decisive advantage:
In contrast to hard chrome plating, cleaning of the
欧瑞康巴尔查斯给您提供一种决定性的优势：相比于镀硬铬，零部件

component surfaces is already integrated into
the PPD® process.
清洗已整合入PPD®工艺流程。



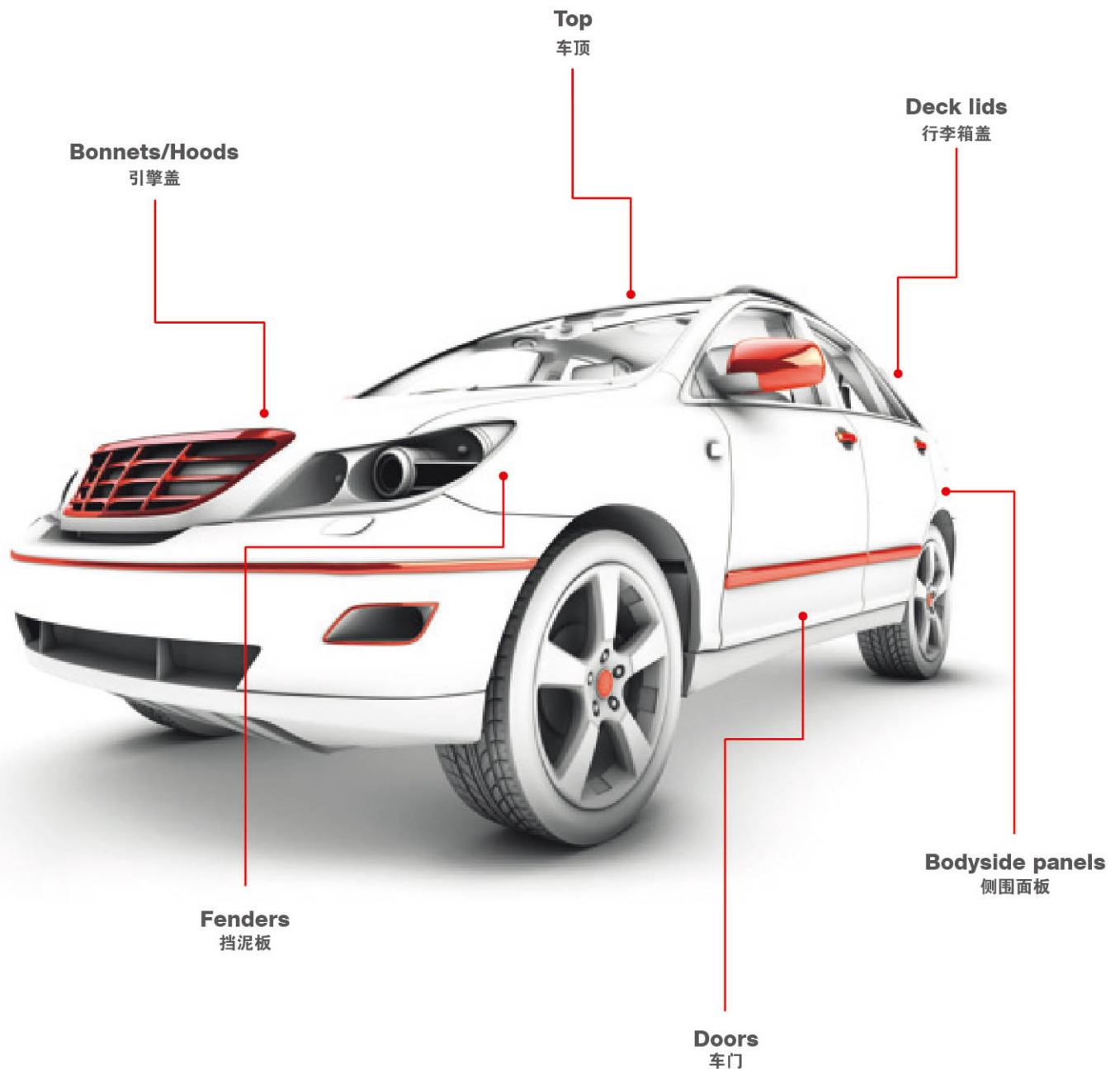
BALITHERM® PPD is applied using the INAURA coating system which has a loading capacity of 10 x 3 metres (32 x 9.5 ft.) and 40 tonnes. The fully automated PPD® process ensures a stable and controlled wear-protection coating. Thanks to the combination of hydrogen, nitrogen and electricity, PPD® operates entirely without the use of toxic gases and chemicals.

BALITHERM® PPD使用INAURA 涂层系统进行处理，该设备装载容量达到10×3米（32×9.5英尺），承重40吨。全自动化工艺保证了稳定、可控的耐磨涂层。鉴于PPD®工艺是结合了氢气、氮气和电流，所以此过程是完全不使用有任何毒气体和化学物质。



BALITHERM PPD treatment of stamping tools for car body panels

BALITHERM PPD对车身覆盖件冲压模具的处理



APPLICATION RECOMMENDATIONS 应用推荐

GOOD TO KNOW! 好消息!

In addition to BALITHERM® PPD, Oerlikon Balzers also offers plasma-enhanced diffusion processes for other applications:

BALITHERM® IONIT for heavy industry: e.g. large machine parts, windmill gearboxes, steel-forming rolls, construction machinery

BALITHERM® PRIMEFORM for plastics processing: e.g. large containers, automotive interiors and exteriors, household appliances

除了BALITHERM® PPD之外，欧瑞康巴尔查斯仍然可以提供等离子增强扩散工艺适用于其他应用：

BALITHERM® IONIT应用于重工业：譬如大型机械零部件、风车齿轮箱、钢模卷轴和建筑机械

BALITHERM® PRIMEFORM应用于塑料加工：譬如大型容器、汽车内外饰和家用电器

Maximise the productivity with BALITHERM PPD

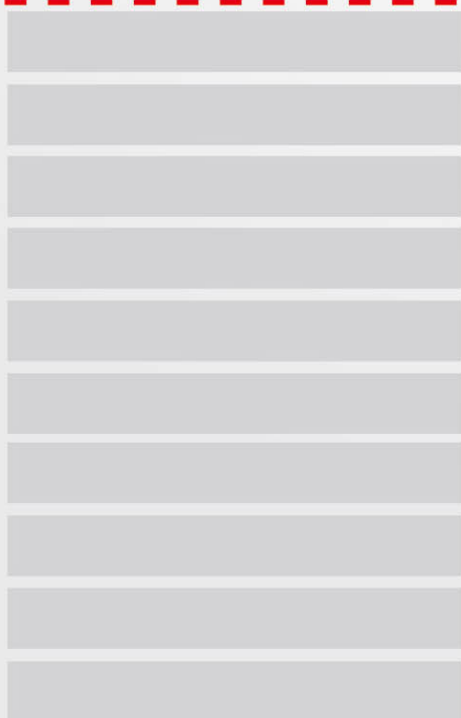
通过使用
BALITHERM PPD,
最大化的提高生产力



Surface treatments
for production
of 1 million skin parts

以生产100万件覆盖件所需要的模具表面处理:

Hard chrome plating:
up to 10 times
镀硬铬: 高达10次



BALITHERM PPD:
1x
BALITHERM PPD: 1次

Treat
only once
只需处理1次

Save up to **65%**
And help protect
the environment
减少65%的损耗
同时环保



Benefit from the efficient and environmentally friendly BALITHERM PPD Service

Contact us now!

体验高效、环保的BALITHERM PPD服务
即刻联系我们!

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