PC 高科铺面剂 High Tech Pavement Creator



铺面剂 (PC) - 针对于建立更环保的路面系统,本产品可以快速将已有砂石道路固化为耐磨的硬层路面,非常适用于采矿业!

Pavement Creator (PC) - is focused on creating a more environmentally friendly roading system, this product is ideal for converting an existing gravel road into a solid layer of pavement. This is well suited to the mining industry!



PC 为粉末状产品,可以快速将已有砂石道路固化为耐磨的硬层路面!

PC 为吸湿性水泥产品, 粘合表层材料(75 到 100 毫米)形成坚固耐磨的路面, 而且还具有自我修复特性。这种特殊凝固技术可以快速修建道路, 降低维护费用。

PC 在未封闭道路上具有长效抑制粉尘的效果,有效期可长达一年!

PC comes in powder form and is ideal for quickly converting an existing gravel road into a solid layer of pavement!

PC is a 'Hygroscopic Soil Cement' which binds the top surface layer (75 to 100mm) creating a hard wearing solid road with self-healing properties. This specialised binding technique is suitable left as an un-sealed road that dramatically reduces ongoing road maintenance costs.

PC also acts as a long term dust suppression system on an unsealed road, lasting up to 12 months!

PC 高科铺面剂 High Tech Pavement Creator

特性和优点 PC Features and Benefits PC

- 自动修复、快速凝固、将粉尘降低至 PM10 标准
- 可以用于多种土壤类型,保障道路安全以及良好行驶条件
- 吸湿性而且强度大,用作路面改性剂,保证路面具有较高的含水量,当出现粉尘后可以再次添加使用
- Self-healing, Fast-setting, Reduces dust to PM10 Standards.
- Can be used on many soil types, Provides safer roads and driving conditions.
- Hygroscopic and strong, used as a pavement modifier, keeps the road moisture content high, can be topped up when dust appears.

为什么使用 PC? Why Use PC?

在土壤或者集料中施用后,PC 将会粘合土壤或者集料颗粒物。PC 的主要优点是非液压型凝固水泥,相容于有机材料。此外还具有吸湿性,能够比市面上其它已知粉尘抑制产品更为长期的将水分吸收到路面中。PC 中含有防水介质,从而可以形成耐久而且防水的柔性路面基质。一旦固化,则 PC 会形成坚固的、耐磨的未封闭路面。

Once applied to the soil or aggregate, the PC forms bonds between the soil or aggregate particles. The key advantage of PC is that it is a non-hydraulic setting cement which is compatible with organic materials. It is also hygroscopic and able to draw moisture into the road pavement for longer than all other known dust suppressants on the market. PC contains waterproofing agents to create a durable and water resistant matrix of flexible pavement. Once cured, PC produces a strong, wear resistant unsealed pavement.

碳减排和节约 Carbon Reduction & Savings



- 高科建筑产品针对传统施工方法提供了见效快、效果强、持久作用的替代方案,从而起到降低碳排放的作用,我方产品可以稳固现有的碎石、砂子、粘土以及有机土壤。
- 高科建筑产品的主要优点是让在集料运输、废物材料清理或者沥青乳液加热过程中使用的燃料的能量支出成本变得非常之低,而这些正是道路施工过程中碳排放最大的来源。
- 高科建筑产品可以大幅缩短施工时间,并且降低道路施工成本与材料成本,缩短维护周期,并且显著降低碎石以及 其它高昂替代材料的损耗量。
- 高科建筑产品通过将柏油、混凝土、水泥、石灰、沥青或者沥青乳液的使用量降至最低程度,从而进一步减少碳排放量。
- High Tech products reduce carbon emissions by providing a faster, stronger longer lasting alternative to conventional construction methods. Our range can stabilise the existing gravel, sand, clay and organic soils.
- The main benefits of High Tech products is that there is very little energy expenditure on fuel used in transportation of aggregates, removal of waste material or heating of bitumen emulsion which are the causes of the largest carbon emissions in the road construction process.
- High Tech can substantially decrease construction time and lower the cost of road construction and materials, reduce maintenance cycles and significantly reduce the loss of gravel and other expensive replacement aggregates.
- High Tech further reduces Carbon by minimising the use of asphalt, concrete, cement, lime, bitumen or bitumen emulsion.



业界解决方案:

INDUSTRY SOLUTIONS:

使用与用途

Uses & Application

矿山道路 Mine roads

当地机构委员会 Local body council

奶牛场 Dairy

停车场 Car parks

运输道路 Haul roads

未封闭道路 Unsealed roads

林业公路 Forestry roads

粉尘控制 Dust control

跑道 Runways

私人车道 Driveways

葡萄园 Vineyards

施工现场 Construction sites

自行车道 Cycle ways 苗圃 **Nurseries**





案例研究 CASE STUDIES

城市道路 – 运料道路 – 公路 Urban Roads - Haul Roads - Land roads

Road Class 道路等级	HT Product 高科产品	Job Description 項目名称	Country 国家	Customer 客户	Year o Applicat 使用年
Urban Street 城市道路	PC	Unsealed Road 未封闭道路	Solomon Islands 所罗门群岛	Solomon Island Government MID-TSDP 所罗门群岛政府	2013
Haul Road 运输公路	PC	Logging Mine Road 伐木矿山道路	New Zealand 新西兰	Kiwi Forest - Private Company 私人公司	2014
Land Road 等级公路	PC	Sugar Cane - Unsealed 甘蔗农场道路-未封闭	Fiji Islands 斐济群岛	Fuji Sugar Cane Authority 斐济甘蔗管理局	201

*根据申请可提供全部案例研究 *Full case studies Available on request.



极佳性能 EXCEPTIONAL PERFORMANCE

每平方米使用 4-12 千克的情况下, PC 可以在六个月的时间内抑制粉 尘,此外还可以对道路起到长期稳 固的功效

Used at 4-12 kgs per sqm PC will suppress dust for six months plus provide long term road stabilisation.

PC 耐久 PC LASTS LONGER

- 具有确保拥挤交通以及自我修复的功能
- 便干维护
- 应对繁重的交通负荷
- 可以设计为柔性路面
- Has the ability to be left heavily trafficked and self-healing
- Easily maintained
- Copes with heavy traffic lading
- Can be designed as a flexible pavement

使用方便 EASY <u>TO USE</u>



- 可以采用碾压或者平地机方法施 田
- 节约集料、降低维护成本 起到粉尘抑制剂的作用
- Can be applied using the Milled or Grader Method.
- Saves aggregate, reduces maintenance costs.
- Acts as a dust suppressant.

吸湿

Draws Moisture

本产品可以在 6-12 个月的时间内保持吸湿性,确保集料含水量处于极佳状态,从而可以继续对材料进行压实作业。

The product remains hygroscopic for 6-12 months keeping the aggregate moisture levels perfect allowing the material to continue to compact.





附加信息 EXTRA INFORMATION

- 粉末产品 PC
- 生产限制:无。可在全球无限量的快速生产 PC
- 主要材料: PC 是一种"主打"材料, 无需混合或者回收利用。
- 副产品:PC 不属于超滤液、副产品、超规格或者级外产品。
- 固化: PC 采用化学固化方式。
- 固化时间:关于最初固化时间,详情参见使用手册。最终凝固时间为28天,此过程中强度不断增加。
- 低温天气:将明显延长固化时间。不可用于摄氏10度以下的环境。
- 冰冻: PC 不会受到温度的影响。
- 正常使用寿命:不完全与维护有关。在 12-24 个月或者更长时间的推平或者碾压过程后才需进行首次涂层维护。
- 维护:可以采用更多数量的相同产品进行修复。比如:孔洞充填以及集料覆盖。
- 土壤类型:任何类型。 最好采用非塑性材料,以及分选好的,分布均匀的颗粒材料与细料。
- 降雨/冰雹:一旦使用而且固化之后, PC 不再具有水溶性。
- 灰水稀释:几乎可以采用包括灰水在内的任何水来稀释 HSB。
- 海水稀释:可以采用海水稀释 PC。
- 性能因素:使用速度、土壤类型、稀释、压实、交通、渗透、气候以及其它因素。
- 统一代码:适用于 PC 的通用国际关税代码为 2519.90.00。
- Powdered Products PC
- · Production Limits: None. PC can be manufactured rapidly in unlimited volumes worldwide.
- Prime Material: PC is a "Prime" material, not blended or recycled.
- By-Products: PC is not an ultra-filtrate, by-product, off-spec or off-grade.
- Curing: PC does cure chemically.
- Cure Time: Initial cure time, see application manuals. Final set 28 days with incremental
- strength gain.
- Cold Weather: will significantly increase cure time. Not to be applied below 10c.
- Freezing: PC is unaffected by temperature.
- Normal Life Span: Indefinitely with maintenance. Graded or Milled 12-24+ months prior to first maintenance coat.
- Maintenance: can be repaired using more of the same product e.g.; Pothole filling and
- aggregate overlays.
- Soil Type: Any. Best with non-plastic materials with a well graded grain size distribution and fines.
- Rain / Precipitation: Once applied and cured, PC is no longer water soluble.
- Grey Water Dilution: PC can be diluted with almost any water including grey water.
- Sea Water Dilution: PC can be diluted with sea salt water.
- Performance Factors: Application rate, soil type, dilution, compaction, traffic, penetration, climate & others.
- Harmonized Code: The common International Tariff Code for PC is: 2519.90.00.

PC



High Tech

Construction Products
Offices in China &
New Zealand
info@htcp.co.nz

www.htcp.co.nz