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1999年8月，新加坡人力部、新加坡环境管理协会（EMAS），生产效率与标准委员会（PSB）连同一些保洁公司、业主与供应商，共同制定了“清洁行业转型计划”并执行至今。这一计划旨在提升新加坡清洁行业的生产效率、形象以及专业素养。

据人力部发言人透露，与国内其他服务行业相似的是，新加坡的清洁行业也受到了低生产效率的困扰，其生产力水平仅相当

于全国平均水平的1/5。造成这一局面的主要原因是行业内专业素养的缺失。人力部发言人表示，专业素养的缺失及其所造成的低生产效率会导致工作环境差、工资低，新加坡人对于这类工作毫无兴趣，最终又增加了对外国劳工的需求。

“清洁行业转型计划”的主要目标在于：

- 提升清洁行业生产力

清洁行业的专业素养 Professionalism in the Cleaning Industry

■ Bob Robinson Sr.

Robert Robinson is the president of Kaivac, Inc., manufacturers of the No-Touch Cleaning™ system. He is also president of Valley Supply, Hamilton, OH, a jansan distributorship. Robinson has also served as a board member of ISSA, the largest cleaning association in the world.

In August 1999, Singapore's Ministry of Manpower, along with the Environmental Management Association of Singapore (EMAS), the Productivity and Standards Board (PSB), cleaning service providers, and building owners and suppliers in the country, set up a program that is still in effect today. Referred to as the Cleaning Industry Transformation Plan, the goal of the program is to elevate the productivity, image, and professionalism of the country's cleaning industry.

According to a ministry spokesperson, the Singapore cleaning industry, similar to other domestic service industries in the country, is plagued by low productivity, with a productivity level only about one-fifth of the

national average. Much of this is because of a lack of professionalism in the industry. According to the spokesperson, the lack of professionalism and the resulting low productivity leads to poor work conditions and wages, a lack of interest by Singaporeans to take on these jobs, and consequent demands for more low-skilled foreign workers.

The key objectives of the Transformation Plan are to:

- ▶ Raise the productivity of the cleaning industry
- ▶ Improve workers' perception of the cleaning industry
- ▶ Promote the acquisition of skills and knowledge in the industry
- ▶ Encourage Singaporeans to consider cleaning as a viable job option

不是以价格作为首要标准的，而是以其产品质量和生产管理作为标准。除了卫生许可证之外，我们还要求供应商向我们提供 ISO 认证、设备安全认证等。在工具方面我们会选择“乐柏美”，尽管它的价格相当高，但质量却是一流的。

这里就有一个国产品牌与进口品牌的问题。我们可以把汽车作为一个例子来看，比如拿大众的帕萨特汽车和桑塔纳3000型汽车相比，尽管帕萨特在价格上要高出一块，但其舒适程度和安全性明显更好。清洁工具也是如此，高品质产品的价格相当于普通产品的10倍，但使用寿命却远远超过普通产品。另外，在使用中给客户的印象也会不同。作为业内知名的公司，我

们需要使用品牌产品，我们要让客户感到购买我们的服务所带来的价值不仅体现在服务本身，还体现在我们所使用的设备、工具都是一流的，这样才能让客户感到物有所值。

（金：您如何看待绿色化学剂？）

当前人人都在谈论环保，我感觉还没有一套成系列的完全绿色可降解的产品。现有的绿色清洁产品只局限于一两个品种，并且价格相当昂贵。我们希望化学剂生产商能给我们研发出更多的价格适中的产品供我们选择。如果暂时还无法形成这样的局面，我们会先选择一些低磷的、符合国家环保标准的产品。这样对于整体的环境质量都会有帮助，类似我们这样的企业也都能从中获益。

金：公司目前在全国主要的大城市都设立了分公司，请问对于今后在国内的大发展有怎样的规划？

关：我们下一步的意图是希望能在东北以大连为中心，以沈阳大连为一线；在西北以重庆为中心，建立两个新的发展基地。未来几年我们会大力在这两个地方发展。目前沿海的长三角和珠三角劳动力成本居高不下，已经超过了印度和越南，因此大量的外资企业开始向重庆、成都等内陆城市转移。这些地区不仅有人力资源的成本优势，还能享受许多国家优惠政策。因此我们在保持每年15%增长率的前提下，还要继续开发成都、重庆、大连等地的市场。

- 改善清洁行业工人的认知
- 提升行业技能与知识的习得
- 鼓励新加坡人从事清洁行业工作

然而这一计划的关键仍在于行业素养，因为如果清洁工人不能充分认识到他们自身的价值以及对社会的价值，他们就很难将自己视为专业人员。这不仅仅是新加坡的问题，事实上全世界的清洁工人通常都低估了自己的工作以及这一社会角色的重要性。

2007年5月，在美国拉斯维加斯举行的清洁行业研究学会(CIRI)的聚会上，迈克·贝里博士专门针对清洁行业的专业素养问题发表了演讲。迈克·贝里博士曾在美国环保署(EPA)工作，是公认的室内环境质量专家，曾撰写《保护建筑环境：为健康清洁》。作为行业领袖之一，迈克·贝里博士在他的演讲中把原因归结于清洁行业中科学性的缺乏，即采用科学的数据来证明清洁效果，继而可以证明清洁系统和清洁流程所带来的健康益处。

贝里博士指出，他曾经居住或造访过世界上的很多欠发达地区，并注意到了贫穷与不充分清洁之间的直接联系。这些国家想要提高经济水准的方法之一就是改善并重视清洁以及清洁工人的地位。

贝里博士表示：“人们的态度是由所在的环境塑造的，干净的环境给人们传递的信息就是：我们关心并希望你健康、顺利。”

事实上，贝里博士还相信，清洁是如此重要，以至于可以成为任何社会和国家走向成功的核心。贝里博士认为，从历史上来看，一个社会想要成功，就必须具备三种形式的“资本”：

1. 金融资本
2. 人力资本
3. 科技资本。

“而现在我们必须再加上一种形式的资本——环境资本”，贝里博士说道，“一个社会想要成功，就必须坚持创造清洁健康的室内环境”。

成为专业人士

为了帮助清洁工人意识到他们的工作不仅重要，还对保护室内环境承担了巨大的责任，贝里博士在他的书中提出了明确的方法，他相信这是有助于清洁工人和整个行业具备更多的专业素质。为了实现这一目标，我们必须理解并运用以下四个元素：

相信：要说明这一元素的最简单的方法就是我们必须相信我们的工作是很重要的。你有没有经历过这样一种情形：你和几个人在一起，有人是律师，有人是医生，有人是教授，而你介绍自己说是一名清洁工人？诚然，你的生活水平与其他人不同，但你是否想过，正是你的工作保证了律师、医生、和教授的健康，使他们可以正常工作，帮助别人？我们手中握着的正是这些人的健康和安宁。因此，我们必须开始相信我们的工作和职业所具有的价值。

了解：让我们再回过头来看律师、医生和教授，他们都花费了多年时间在大专院校学到了专业技能。然而很不幸的是，除了极少数几个国家以外，世界各地的学校都不会教授清洁的正确方法。如果我们想成为专业清洁人员，我们就必须了解正确的清洁技能和方法，并使用那些被评估为兼具艺术性与效果的清洁设备。这样的学习必须是持续的，因为各行各业的成功人士都总在不断学习。

实践：贝里博士指出：“如果没有时间，就永远不会有结果。”为了能让我们的实际行动更加专业（也可以帮助我们把自己视为专业人员），我们的实践需要有明确的目的、有价值、合乎道德、并且还要基于现有的知识。从本质来看，“实践”要素意味着我们必须把所获得的培训、知识和经验都化为实际行动，来保障那些居住在我们所清洁的环境中的人们的健康、安乐。

获得：好了，现在我们已经理解了“相信”、“了解”和“实践”三大元素，那么我们就很自然地要问：这些元素对我究竟意味着什么呢？“获得”元素就直接回答了这一问题。成了专业的清洁人员之后，我们就会获得更多的收

入。But key to the program is professionalism, for without cleaning workers fully recognizing their own worth and value to society-any society-it is hard for them to view themselves as professionals. This is a problem not just in Singapore; indeed, cleaning workers around the world often undervalue their work and the importance of their role in society.

This was a topic addressed directly at the May 2007 gathering of the Cleaning Industry Research Institute (CIRI), held in Las Vegas, NV, USA. At the meeting, Dr. Michael Berry, formerly with the U.S. Environmental Protection Agency and a recognized expert on indoor environmental quality; author of the book, *Protecting the Built Environment: Cleaning for Health*; and a leader in the janitor industry, said that one reason for this is the lack of science in our industry—using scientific data to prove cleaning effectiveness and, in so doing, the health benefits of cleaning systems and procedures.

Berry pointed out that he has lived in and visited impoverished areas of the world and has noticed a direct correlation between poverty and inadequate cleaning. And that one way these countries can begin lifting their economic standards is by improving and valuing cleaning and the role of cleaning workers. "People's attitudes are shaped by their environment," he says. "Clean facilities send a message to people that we care and that we want you to be healthy and do well."

If fact, he believes cleaning is so important that it is core to the success of any society or country. According to Berry, historically for a society to succeed it must have three forms of "capital":

1. Financial capital
2. People capital
3. Technological capital

"Now, we must add one

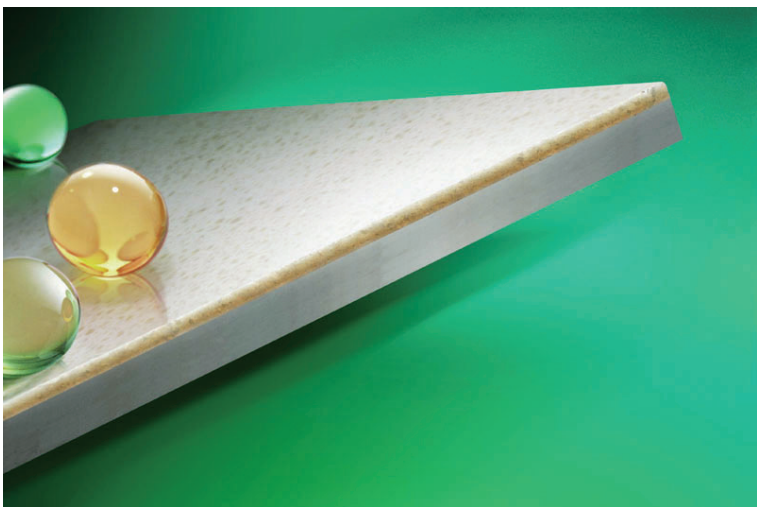
more form of capital: environmental capital," he says. "For a society to be successful, it must insist on a clean and healthy indoor environment."

Becoming Professionals

In his book, Berry sets out a clear and precise way for cleaning workers to realize not only that their work is important but also the awesome responsibility they have to protect the indoor environment. This, he believes, will help them and the industry take on a more professional character. To achieve this, we must understand and apply four components: BE, KNOW, DO, and HAVE.

BE: The easiest way to define this component is that we must BELIEVE that our work is important. Have you ever been among a group of people and one person says he or she is a lawyer, another a doctor, a third a professor, and then you say you are a cleaning worker? It just does not have the same ring as the others. However, did you know that your work helps keep that lawyer, that doctor, and that professor healthy so that they can perform their duties and help others? We hold in our hands the health and safety of these people, so we must begin to BELIEVE in the value of our work and our profession.

KNOW: Going back to our lawyer, doctor, and professor, these people spent years in colleges and universities to learn their skills. Unfortunately, however, except for a very few countries around the world, the proper way to do custodial work is not taught in schools, colleges, or universities. In order for us to become professionals we must KNOW sound techniques and proper cleaning methods and use cleaning equipment that has been evaluated and determined to be state-of-the-art and effective. And this learning is ongoing. Successful people in all industries are always continuing to learn.



入, 获得更大的工作满意度、获得成就感、还可以从我们的客户和社会获得更多对于我们个人和我们这个行业的认可。

DO: According to Berry, "Without action, there is never a result. For an action to be professionally accepted [and to help us view ourselves as professionals] it must have a real purpose, be of value, be ethical, and be based on current knowledge and intelligence." Essentially, the DO component means that we must put our training, knowledge, and experience into action to protect the

health and well-being of the people who occupy the facilities we clean.

HAVE: OK, so we understand the BE, KNOW, and DO components, but it is only natural for us to ask, "So what's in it for me?" The HAVE component addresses this directly. By becoming professionals in our cleaning crafts, we can HAVE increased incomes, HAVE more job satisfaction, HAVE a sense of accomplishment, and HAVE increased personal and industry recognition from our customers and society.

“清洁行业转型计划”是一次勇敢的尝试, 旨在为清洁行业注入全新的定义并使之更加专业化。不仅仅是新加坡需要这样的尝试, 美国、亚洲的其它地区, 以及全球数百个国家都需要。

“清洁行业转型计划”的初衷是要帮助清洁行业具备最佳方法, 实现技术现代化并运用技术, 这样不仅实现生产效率的可观提升, 还可以使清洁工作更有效率, 保障室内环境健康。这有助于实现清洁行业的转型, 使其从当前需要大量低技术劳工转变为需要更多具有高水平、高自主性, 收入更高的专业人员, 他们尊重自己的工作, 认识其中的价值以及清洁使命的价值。

The Cleaning Industry Transformation Plan is a bold attempt to redefine and professionalize the cleaning industry.

And this is something needed not only in Singapore but in the United States, other parts of Asia, and scores of countries around the globe.

The initiatives of the Transformation Plan are helping the cleaning industry embrace best practices, modernize, and leverage technology not only to achieve sizeable gains in productivity but also to perform its duties more effectively, keeping the indoor environment healthy. This is helping transform the industry from one that currently requires significant numbers of low-skilled workers to one that requires more highly skilled, motivated, and better-paid workers who respect and value their jobs and cleaning duties.

物业特殊保洁

——微晶石的护理

The Caring of Minicrystal

■ 香港金境洪(国际)化工贸易有限公司

在现代社会中新型建筑材料的更新换代将会而且只会越来越快, 作为物业保洁从业人员的我们若信息封闭则往往无暇顾及或甚至措手不及。微晶石作为一种新型建筑材料被人们所认识和接受只是短短两三年的事。由于国内物业清洁保养市场的信息来源渠道窄及对新事物的出现还有一个认识和研制的滞后过程; 使到现时国内物业保洁中对由于对微晶石缺乏正确的认识和没法得到有效的保养剂, 原本富丽堂皇的微晶石地面在人们的践踏下如鲜花缺乏滋润般日渐凋零, 也间接使到微晶石这种新兴的建筑材料背负着“难护理”甚至“无法护理”的恶名。

然而天然资源是有限的, 正如复合木地板取代原木地板一样, 微晶石等人造石材取代天然石材也是社会发展的必然趋势。更何况随着社会群体环保意识和对生活质量要求的提高, 微晶石这种新兴建筑物采用也只会越来越多。因此, 我们及时补上微晶石保养这一课则有非常的必要。

一、微晶石的认识

微晶石是用普通玻璃原料、或者废玻璃、或者金矿尾砂、或者锑矿尾砂、或者河道淤砂等所有含硅、铝、钙的原料做主要原料, 按基础玻璃组成的配比精确配制配合料, 在加热过程中进行控制晶化而制得的一种含有大量微晶体和玻璃体的复合固体材料。也称微晶玻璃、玉石晶、水晶晶、结晶化玻璃、微晶陶瓷等; 它集中了玻璃与陶瓷的特点。微晶石因为具有结构致密、高强、抗冻、不吸水、耐侵蚀, 外观上纹理清晰、色泽鲜艳、色差小和不易褪色等优

点, 已成为众多建筑装饰装修材料中的新型材料之一性能却超过它们。按照制造工艺分为复合微晶石(在瓷质砖上烧结一层3-5mm的微晶玻璃)和通体微晶石。

二、微晶石的保养误区

1. 微晶石不需要保养。微晶石密度高、强度大、光泽度高(92°以上), 即使在数月内不维护仍然会保持非常理想的效果, 因此给人一种不用保养的错觉。直至等到其表面出现道道的划痕和光辉不在时, 才追悔莫及。其实微晶石在制作时的原料虽然是采用了石英砂(SiO₂), 但由于在烧制时的高温高压完全打破了石英分子的排列结构, 改变了SiO₂分子物理的性能。使到微晶石的莫氏硬度接近于6左右, 低于自然界沙砾的硬度7。因此, 人们脚下的频繁践踏将会给微晶石造成致命性的伤害——伤痕累累。

2. 微晶石没有有效的保养方法。在我们的传统石材保养中, 一般采用晶硬粉、晶硬剂(有人也称晶面剂、玻化剂)进行日常的保养, 其实说的都是同一类东西, 就是抛光剂(粉或液)。其主要成分一般包括: 氧化铬(Cr₂O₃)、白刚玉(M1.0)、氧化铝(Al₂O₃)、草酸(COOH₂)。然后添加一些有润滑、光亮和抛光作用活性硅氧烷、高品质石蜡和化学合成树脂等。

为何晶硬粉、晶硬剂使用在微晶石市上效果不理想呢? 其实, 由于大理石主要的化学成分是碳酸钙(CaCO₃); 花岗石是以铝硅酸盐(氧化铝Al₂O₃和氧化硅)为主要成分的岩浆岩。而市售的晶硬粉、晶硬剂内含的抛光剂, 由于含有相同的成分(氧化铝Al₂O₃、