



解决方案

意大利制造的清洗与喷涂设备

编辑人员



Tecnofirma公司一直致力于扩大公司的规模并且加强公司的技术创新。这主要归功于人力与技术资源方面的巨大投资，包括成立达尔梦迪(北京)机械设备有限公司，从而向巨大的亚洲市场介绍意大利的最佳技术产品。

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国际方面：过去数年内，在Tecnofirma公司所能感受到的气氛就是：Tecnofirma公司在表面处理领域已成为意大利的领先者。Tecnofirma公司不但聘用外籍员工，拓展其他地区的市场，而且在远东地区成立了新的生产和销售公司。与不同地区的市场与技术人员进行交流，通常会丰富公司的运营经验，并且促进新技术和管理体系的发展与进步。

周围的世界如同互联网一样在迅速移动，若停滞不前，就会落后。因此，Tecnofirma公司已决定不再捷足先登，要在工业洗涤和喷涂行业（无论是在意大利国内还是中国）成为领头羊。Tecnofirma公司已在北京顺义区成立了达尔梦迪(北京)机械设备有限公司，至此，TT集团已开始将意大利的高新引入技术引入巨大的亚洲市场。

“北京分公司不仅能够满足中国当地公司对表面处理的需求，同时也能满足非东亚国家跨国公司的需求。”——总经理Francesco Goi说到，“一旦完成企业成立的官方程序，达尔梦迪公司就会开发巨大的市场，并且已经准备建立分公司，并设有办公室和工厂、销售部门和售后服务部门。达尔梦迪公司根据Tecnofirma公司的专门技术生产各种产品，且在60多年里，Tecnofirma公司已根据订单的特定要求向客户们提供了诸多标准产品和定制产品”。



sede Diamond all'interno
del Mahoua Park

生产范围包括市场所需不同类型的解决方案：带有固定喷射器的洗涤设备，浸渍设备、喷淋设备、高压去毛刺、液体和粉末喷涂、对电流泳、紫外线和红外线加热。除此之外，在过去几年里，Tecnofirma公司还为铝型材喷涂和电动机浸渍研发了很多先进设备。所研发的新设备已成功应用在很多领域，而且范围越来越广，从汽车行业到压缩机，从农业机械到家具，还有家用电器、电子用品、铁路、公交车、卡车、铸造厂、电镀设备、照明、纺织机械、小型金属零件、泵、阀门和水龙头等。

达尔梦迪(北京)机械设备有限公司

公司坐落在北京顺义区茂华工场工业园区内。会议室内摆有两面国旗，非常显眼，一面是中国国旗，另一面是意大利国旗。在过去两年内，达尔梦迪已在中国之外的其他国家建立了若干工厂。并且客户明细已制成列表以供参考，例如，美国铝业公司、Automotive Lighting公司、阿托斯公司、马瑞利公司、中力公司和尤梯尔公司。但是，从零起步，如何应对中国市场？

“我们并不是从零起步，实际上，我们是在过去数年内完成很多订单之后来应对市场的。”——达尔梦迪公司总经理Pavel Schimchonak说到，“我在Tecnofirma公司工



MADE IN ITALY WASHING AND PAINTING

International: this is the atmosphere that over the last few years you breathe at Tecnofirma, Italian leader company in the industry of surface treatments. From the employment of foreign personnel in the staff, to the widening of markets to new continents, to the creation of a new productive and sale unit in Far East. The dialogue with new and different realities always enriches the heritage of experience and boosts the development and the progress of new technologies and organizational systems.

The world surrounding us has started travelling almost as fast as the web, those that stop soon become outdated. It is for this reason that Tecnofirma has decided not to stand idly but to become protagonist in the sectors of the industrial washing and painting, at home as well as in China. In Beijing, in the Shun Yi district, they have created Diamond (Beijing) Machinery Equipment Co. Ltd, the new reality of the TT Group that overlooks the immense continent with the made in Italy technology.

«The team in Beijing can satisfy the demands for treatments coming from Chinese companies but also from all multinationals delocalized in eastern nations. —explains Francesco Goi, General Manager – Once accomplished the bureaucratic phase of the business establishment, today Diamond is facing the market, already ready to operate with a branch featuring offices and workshop, sale and after sale service. Diamond can produce upon know how by Tecnofirma, which for over sixty years has been proposing its

Tecnofirma constantly expands its range of action both on the geographical and on the technological front. The credit goes to the investments in human and technical resources, including the birth of Diamond (Beijing) Machinery Equipment Co. Ltd, which faces the immense Asian continent with the best of the made in Italy technology.

customers both standard and customized products, according to specific job order requirements ».

The production range includes the different typologies of solutions requested by the market: washing with positioned jet, dipping, spray, high pressure deburring, liquid and powder painting, ana-cataphoresis with convection, UV and IR cooking. Besides all that, over the last few years they have developed forefront lines for the painting of aluminium profiles and the

impregnation of electrical motors. The list of the sectors where it has succeeded in developing new solutions is more and more numerous and ranges from the automotive to compressors, from agricultural machines to furnishing, household appliances, electronic supplies, railways, buses, lorries, foundry, galvanic, lighting, textile machines, small metal parts, pumps and valves, taps.

DIAMOND BEIJING MACHINERY LTD

They are located at Beijing, in the Shun Yi district inside Mahoua Park, the offices of Diamond. In the meeting room the two flags, the Chinese and the Italian one, dominate.

In the last two years several are the plants already produced by the company delocalized in China. And the customers' names are already a list of fine references: Alcoa, Automotive Lighting, Atos, Magneti Marelli, Juli, Util.

But how was it possible to face the Chinese market starting from zero?





Pavel Schymchonak
and
Giulio Montaldi



Francesco Goi

作了很多年，并且曾对很多大订单的装配工作进行监督。在Tecnofirma公司工作时，我就开始了解中国版图、文化、人民、工作方法和人民的特殊需要以及中国文明（现在似乎已胜过西方文明）。我的经验就是我的名片，从而让我和其他公司进行交往，并且俘虏客户的信心。这些都需要技巧并且需要综合素质。”

“毫无疑问，最困难的障碍就是官方案序，也就是成立公司所必需的文件批示。”达尔梦迪公司董事长说到，“我不得不承认，尽管我从1998年开始听取有关东方国家的建议，但与过去相比，Tecnofirma公司比以前发展地更加迅速。我在中国呆了几年，在这几年里，我认识了当地一些咨询顾问，他们很有经验而且经常与我合作，要是没有他们的帮助，我们现在仍淹没在一堆盖戳的文件里。通过与他们进行合作，建立良好关系并且相互沟通，我们懂得了很多中国文化，我们很尊敬他们。要是让我把中国文化和欧洲文化作比较，当然是中国人更加注重与合作伙伴的关系，通常情况下他们会和合作伙伴成为朋友。”

达尔梦迪公司主营的产品行业与母公司的



专业化领域是一致的。首先是在汽车行业（Tecnofirma公司在该行业是国际领头羊），但也在考虑其他若干行业：农业和施工机械、压缩机、减速机、液压元件和其他行业。

工业洗涤行业无论是在意大利还是欧洲其他国家，都在不断发展，这主要归功于技术的不断发展与创新。

“我们的产品不仅拥有过硬的质量，同时也拥有灵活性，” Francesco Goi补充到，“我们会通过机器人技术来满足此类需要。Tecnofirma公司最近安装的设备就广泛使用了拟人机器人，从而能够对不同的元件处理以及清洗设备进行管理。机器人清洗机器人的诞生是一项绝妙的工程，涉及若干技术行业：从力学到设备工程，从电子学到机器人学，不一而足。最近交付给知名汽车公司的设备主要是用于引擎内大型元件的最终清洗：生铁、铝制曲轴箱、引擎盖、垫板以及顶板。整个周期按顺序包括很多工序，

➡ «Actually, we haven't faced it starting from zero but after years of delocalized job orders. – explains Pavel Schimchonak, General Manager of Diamond – I had already worked for Tecnofirma for years, and I supervised the assembly works of some big job orders. In those years I started knowing the Chinese territory, the culture, people, the working methodologies and the specific requirements of a population and of a civilization that today has almost surpassed the western one. My experience was my business card, which opened me companies' doors and conquered customers' confidence. Which are very skilled and ask for total quality».

«The most difficult hurdle to tackle is definitely bureaucracy, the management of the necessary documentation to set up the company. –says Giulio Montaldi, president of Diamond – Even if I have to admit that in comparison with other past experiences, and I have been taking care of advice for East since 1998, everything was much faster with Tecnofirma. The years spent in

China have allowed me to know several local advisors, skilled and collaborative, and without their help we would be still drowning in piles of paper to be stamped! Working with them, we have understood a lot of the Chinese culture, based on the relations and mutual exchange, but especially on respect. If we make a comparison with the European culture, in China they certainly pay more attention to the relationships with partners, who often become friends »

The product sectors that Diamond addresses coincide with the parent company's specialization areas. The automotive industry, first of all, where Tecnofirma is international leader, but the wide product range is conceived for several other sectors, too: agricultural and construction machines, compressors, reduction gears, hydraulic components and much more.

The industrial washing industry is living a constant evolution, both in Italy and in the rest of Europe. The credit goes to innovations that allow taking constant technological steps forward. ➡

例如浸渍流体清洗、水箱冲洗、油管高压去毛刺以及所有机械表面的高压清洗。进入设备时，进料时需确认，并且选择最恰当的周期。然后进行卸料并且每项操作应借助专用测试设备和电子设备在中央控制器注明，并且由中央控制器完成，这样便可控制整个操作过程»。

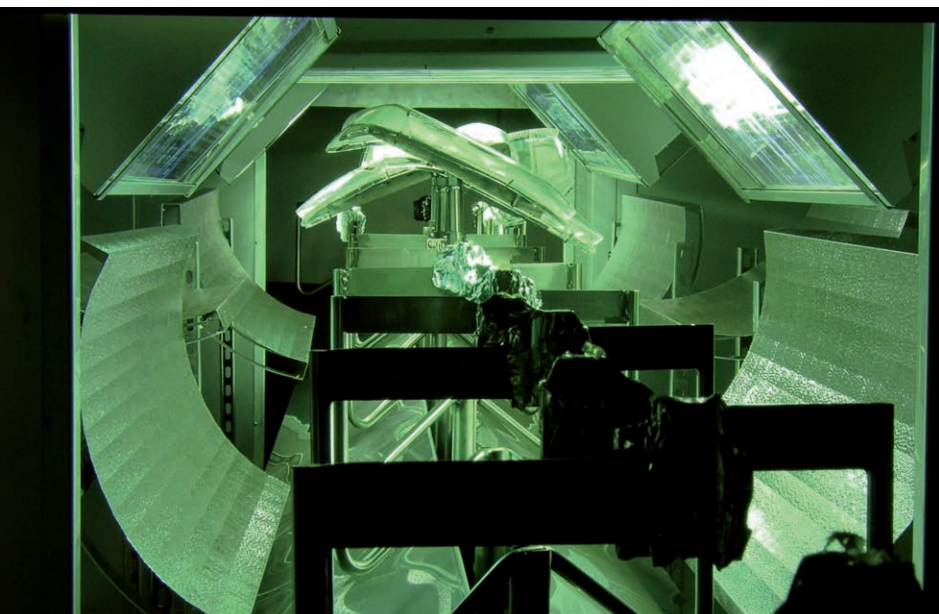
“在喷涂领域，很有趣的一个现象就是车头灯和尾灯镜片中的新防雾工艺带有喷淋和流

涂应用，并且有可能使用机器人进行装卸工作。”Goi补充到，“我们已在镜片得到恰当保护的情况下在外部进行喷涂，这是一种特殊的技术性喷涂。”

母公司Tecnofirma同样也专门通过流涂应用和紫外线干燥对车头灯的聚碳酸酯镜片进行喷涂，并且通过流涂应用和紫外线干燥对BMC反光

片进行喷涂。

另外，Tecnofirma公司已建成了新的超紧凑型、高生产率工厂，通过紫外线干燥来喷涂各种元件。



➡ «Flexibility has become a must as much as quality, – adds Francesco Goi – and the answer to these needs is provided by robotics. The most recent installations implemented by Tecnofirma make wide use of anthropomorphic robots, able to manage different models dedicated both to the handling of components and of washing equipment. The birth of a robotic washing machine is a fascinating project that involves several technological sectors: from mechanics to plant engineering, from electronics to robotics. The latest machines delivered to prestigious automotive companies are dedicated to the final washing of all big-size components of the engine: cast iron and aluminium crankcases, heads, sub-bases and over-heads. The complete cycle puts in sequence a range of processes such as the dipping hydrokinetic washing, the flushing of water chambers, the high-pressure deburring of oil pipes and the high-pressure washing of all machined surfaces. Each piece is identified while entering the machine and then the most appropriate cycle

is dedicated to it. The piece goes back to the unloading and by means of stateks, electronic devices, the operations have been registered and entrusted to the central unit, so that the traceability of operations can always be controlled ».

«In the painting sector it is interesting the new anti-fog process inside the lenses of headlights and taillights, with both spray and flow coating application and possibility of robot loading and unloading. – adds Goi – It is a particularly technological painting because we handle a lens already painted outside that must be opportunely protected».

The parent company Tecnofirma is also specialized in the painting of polycarbonate lenses of headlights with flow coating application of the paint and UV drying, and in the painting of BMC reflectors for headlights with flow coating application of the paint and UV drying.

Besides, it has developed new ultra-compact high-productivity plants to paint various components through UV drying.