

COVER STORY

# A smart dashboard for the Lamborghini Huracán

ZOOM

# Jeep Renegade





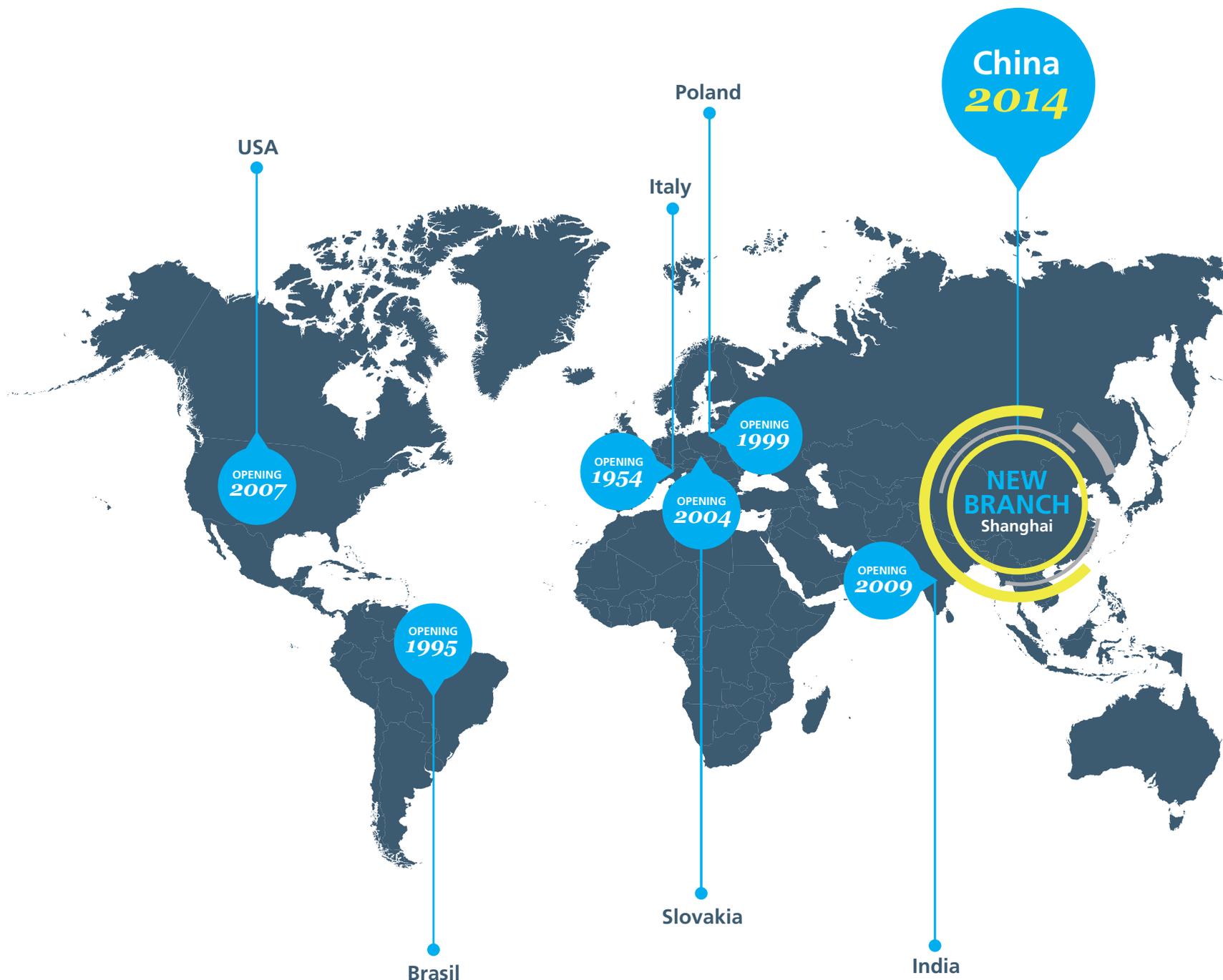
## MTA sets foot in China. Shanghai, here we come!

## MTA 挺进中国市场。上海，我们来了！

Like our other branch offices opened in the past, our newly-established Shanghai office in China is part of our approach to pursue all opportunities offered by the global automotive market. The reason why we recently opened a sales branch in the Chinese megalopolis is to be close to local manufacturers and car makers, that have established large plants in the area. In order to provide faster response to and meet the requests of certain customers, we are looking to find a facility for the assembly of electromechanical components in the Shanghai area. This will be an important facility, as it is scheduled to assemble power distribution boxes for the vehicles of a major car-maker as of 2016. After series production is up and running, the facility will be upgraded to include a moulding department for plastic components to ensure even faster delivery. We will keep you updated on all new developments in this extraordinary country through the pages of this journal.

如同我们过去设立的其他分部一样，在中国新建的上海分部也承担着寻求全球汽车市场机遇的重任。近段时间，我们之所以在中国一线城市设立营业部，是为了紧密依托已在该区域建立起大型工厂的当地制造商及汽车厂家。我们正在上海区域内积极寻找可以装配机电元件的工厂，从而提供更快速迅捷的响应并满足特定客户的需求。该工厂将发挥极为重要的作用，预计在 2016 年能为主要汽车厂家装配车辆电源配电箱。在实现批量生产之后，将对该工厂进行升级改造，增加一个生产塑料模具的部门，进而确保更快捷的交付。我们将在本刊中持续为您展示我们在此神奇国度的全新发展历程。





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# Rolo: a new home for the Electronics Division

## 罗洛：电子部门的新家园

Since we acquired the Concordia plant dedicated to electronic products, as well as other MTA sites in Italy and world-wide, we have never ceased investing in Research & Development, on new cutting-edge equipment and on training of highly specialised staff. This strategy gave excellent results, but also made it necessary to build a new, larger electronics plant that would be more functional than the existing facility in Concordia and closer to the Codogno headquarters. The rationale was to raise quality standards to higher levels and improve the layout of manufacture at the plants as well as logistic flows. In 2011, we purchased a building land area of 42,500 sq m in the municipality of Rolo (Reggio Emilia) to build a new, efficient plant with cutting-edge technology and stylish design.

### LOCATION

The choice fell on Rolo because it is just a few kilometres away from the like-named exit of the Brenner Highway, which is very convenient in terms of logistics and closer to the Codogno headquarters.

### PROJECT

Built with a steel support structure in accordance with seismic building regulations, the new site includes an office building with two floors above ground, with a total surface of 1,500-sq m; a 5,400-sq m dust-free manufacturing area in compliance with strict electronics manufacture standards; a 4,700-sq m warehouse; a 1,100-sq m area for general and technical utilities; shed roofed loading/unloading docks with a surface area of 700-sq m. The whole manufacturing area is an Electrostatic Protected Area (EPA) and is equipped with special devices that prevent electrostatic charge build-up on people. Shop floor, tables and chairs are made from special materials. The plant is energy self-sufficient thanks to photovoltaic panels installed on the roofs of manufacturing area and warehouse, providing a yearly power output of 1,200 kW.

自从我们收购专注于电子产品的孔科尔迪亚工厂以及意大利和全球范围内的其他爱沃提耶基地以后，我们从未停止在研发方面的投资，如采购新的尖端设备和培训高度专业化的员工。这一战略产生了极佳的效果，但也使建立比孔科尔迪亚的现有工厂更强大且更接近科多尼奥总部的全新大型电子工厂成为一种必要。理由是将质量提高到更高水平，并能够改进生产布局和物流水平。2011年，我们在罗洛市（雷焦艾米利亚省）购买占地面积为 42,500 m<sup>2</sup> 的建筑用地，并利用前沿技术和现代设计建造了一座新的高效能工厂。

### 选址

将地址选在罗洛的原因在于，它距离布伦纳公路的同名出口仅数公里，这从物流角度而言十分便利，而且离科多尼奥总部更近。

### 工程

新基地采用钢支撑结构依据建筑物抗震规范建造而成，包括一个总建筑面积达 1,500 m<sup>2</sup> 的双层办公楼、符合严格电子制造标准的 5,400 m<sup>2</sup> 的无尘制造车间、4,700 m<sup>2</sup> 的仓库、1,100 m<sup>2</sup> 的通用设施和技术设施空间；表面积为 700 m<sup>2</sup> 的单坡屋顶装卸平台。整个制造区域是一个静电保护区域 (EPA)，配有防止静电在人体内堆积的特殊设备。车间地板和桌椅均由特殊材料制成。工厂的生产区与仓库的屋顶均安装有光伏电池板，实现了能源的自给自足，每年提供的电力输出可达 1,200 kW。

The move began last June is now completed and our Electronics Division started working again in September

从去年六月开始的迁移现已全部完成而电子部门也于九月开始再次运行。



Photos Marcela V. Grassi



#### PRODUCT LINES

Two are the key product lines designed and manufactured in Rolo: electronic control panels and dashboards for cars, motorcycles and industrial vehicles. A sophisticated tracking system using advanced hardware and software technology is implemented throughout the manufacturing process to trace back each individual component to each and every product. The plant can produce large-scale production runs, small runs and prototypes.

#### BACK UP AND RUNNING

Machinery was efficiently relocated from Concordia to Rolo. The move began last June and has now been completed, and our Electronics Division was fully up and running again in September. The Rolo site now hosts a highly specialised staff of over 200 people, that receive high-level training and are constantly updated on the latest manufacturing technology.

#### 产品线

在罗洛进行设计和生产的主要产品线有两个：用于汽车、摩托车和工业车辆的电子控制面板和仪表盘。精密追溯系统采用了高级硬件和软件技术，可应用于整个制造过程，从而实现对各个单独部件到各个单独产品的追溯。工厂可实现量产，小批量生产以及样件生产。

#### 运行

机器从孔科尔迪亚高效迁移到罗洛。从去年六月开始迁移，现已全部迁移完成，而电子部门也已完成重建并于九月开始再次运行。罗洛基地现有高度专业化的员工 200 余人，这些员工均经过高阶培训，并根据最新的制造技术定期进行培训。





## Laboratory upgraded - again

### 实验室再次升级

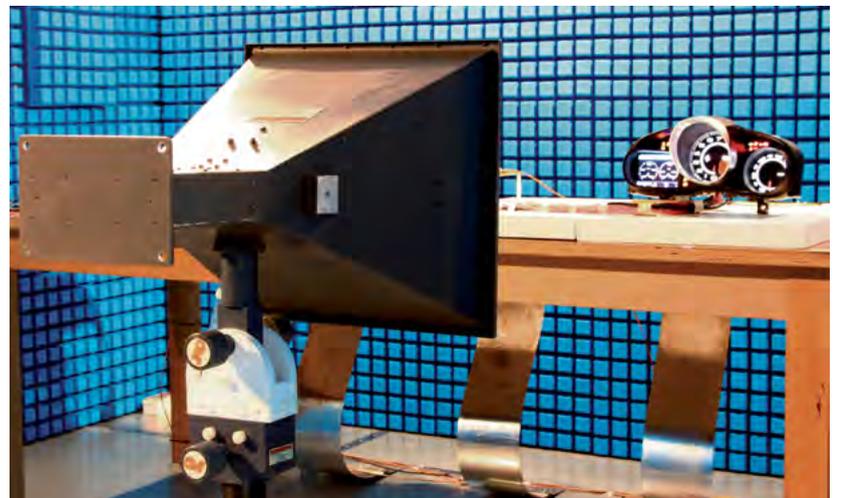
Over recent years, our company has acquired major businesses in the electronic industry, with special focus on the development and manufacture of dashboards for luxury sports cars and other vehicles. At the same time, we made significant investments to improve our competitiveness in the market and keep up with the standards of the electromechanical industry. This is how the production site in Rolo came to be established. You can read an account in this issue of our Magazine (page 4). We then went on to purchase new equipment for our laboratory in Codogno – after it had undergone extensive renovation in 2012 – to expand our in-house testing capabilities in view of the increasingly stringent validation requirements of car makers.

Firstly, we upgraded our anechoic chamber with additional equipment and antennas and now have the capacity to carry out radiated immunity tests – in addition to the usual EMC tests – over an exhaustive range of frequencies as required by car makers' specifications. Test equipment capable of analysing all aspects of EMC compliance is the key to ensuring high quality standards for our customers, and this is why we purchased a specific test bench for Bulk Current Injection testing. Equipped with a second spectrophotometer, the laboratory now has the capacity to perform all optical tests in-house. Lastly, we purchased new test equipment suitable for 24V devices, as we have been developing a new 24V display for farming machinery. As a result, we now have the capacity to perform over 95% of the required tests in-house. This means we can carry out more exhaustive validation testing faster and work at product development in closer contact with customers, because we can support all project stages with our upgraded testing capabilities. This is very convenient when developing highly innovative, cutting-edge products, which has been our major focus in recent years.

#### It's not just about electronics...

New test equipment was also purchased for electromechanical components. A new, highly configurable test rack is now available to test power distribution boxes that protect electric services – our core products. This test rack is capable of simulating a vehicle's electric services and monitoring the electric

近年来，我们公司收购了汽车电子行业的多个大型企业，主要侧重于豪华跑车及其他车辆仪表板的开发与制造。与此同时，为增强市场竞争力并与机电行业标准保持同步，我们投入了大量资金。罗洛的生产基地就是这样得以建成。您可以在本期杂志（第 4 页）中读到一篇报道。2012 年，我们对科多尼奥的实验室进行了大规模的整建，此后我们为实验室又采购了新设备，以扩展我们的内部测试能力，从而满足汽车制造商日趋严格的验证需求。首先，我们添置了设备和天线，同时对消声室进行了升级。此后，我们除了常规电磁兼容性 (EMC) 测试外，还可执行辐射抗扰度测试，测试频率范围广泛，能够充分满足汽车制造商规范的要求。测试设备分析 EMC 合规性各个方面的能力对于确保满足客户的高质量标准至关重要，这就是为什么我们为大电流注入测试购置专用的测试平台。另配备一个分光光度计后，实验室目前可以执行各种内部光学测试。最后，我们购置了适用于 24V 设备的新测试设备，因为我们已针对农业机械开发了一种新的 24V 显示器。这样，目前我们能够在内部执行 95% 以上的所需测试。升级后的测试平台能够支持项目的各个阶段，这意味着，我们可以执行更加全面的验证测试，测试过程也更加迅捷，还能在产品的开发过程





operating parameters of electromechanical components under testing, and was developed in collaboration with a leading company in the testing industry. We purchased a new thermal shock chamber and a climatic cell for environmental, thermal shock and vibration tests. This new equipment along with a vibration test bench enable simultaneous vibration and heat-cycle testing as well as the accurate simulation of the real-life operation of devices when installed in the vehicles.

Lastly, we purchased new test equipment for the terminal and connector products, to meet the needs arisen after the acquisition of several businesses in this segment. One of the machines in the crimping shop, which is also part of the laboratory, was replaced with an upgraded machine to analyse cables with cross-section areas up to 16 sq mm. This enables us to crimp a wider range of cables in-house, to offer faster support to other technical departments when defining new specifications and preparing samples or tests.



中与客户进行更近距离的接触。这在开发前沿高新产品时显得尤为有用，而这也是我们近年来的开发重点。

#### 不仅仅是电子设备的升级…

我们也针对机电元件购置了新的设备。

现在，可以使用全新的高度可配置测试架来测试保护电力供应的配电箱（我们的核心产品）。此测试架是我们与测试行业的领先企业联合开发，可对车辆的电力供应进行模拟并在测试中监控机电元件的电力工作参数。我们购置了全新的热冲击试验箱和温控装置，用于环境、热冲击和振动测试。将这一新设备与振动测试平台结合使用，可以同时进行振动和热循环测试，并在设备安装到车内后对其进行精准的实际操作模拟。

最后，我们还为端子和连接器产品购置了新的测试设备，以满足我们在收购多个企业之后所涌现的需求。实验室压接车间的其中一台机器已被升级后的机器取代，以分析横截面面积达到 16 mm<sup>2</sup> 的电缆。这样，我们便可在内部压接更广泛的电缆，以在定义新规范和准备样本或测试时为其他技术部门提供更迅捷的支持。





## A smart dashboard for the Lamborghini Huracán

### 智能仪表板 专为兰博基尼 Huracán 设计打造

The successor of the Lamborghini Gallardo, the new Huracán LP 610-4 from the maker based in Sant'Agata Bolognese stands out for its innovative style and cutting-edge technology solutions. The streamlined design of bodywork and surfaces and many hexagon-inspired details are also reflected in the car's interior. This is where the innovative dashboard developed by MTA takes centre stage. This is a great step forward for our company. We specifically designed an HMI architecture with a single smart central unit (a multi-core CPU) capable of controlling multiple devices. On the Huracán, the CPU installed in the cluster handles 2 video outputs, one for a high-resolution (1440X540 pixels) 12.3" TFT for the instrument panel (developed by MTA), and a second output for the secondary display located on the central tunnel. The software architecture used for the dashboard is a Linux-based open-source system that supports the management of 3D graphics very close to those seen in consumer electronics products, which MTA adapted to meet automotive requirements. This means certain images must necessarily take into account occupant safety, for instance through a higher start-up speed for the dashboard, as well as image transmission, which is definitely faster than that of consumer products: the rev counter, for instance, must ensure super-smooth pointer movement. Choosing an open-source architecture led to a logic concept focused on ease of integration, flexibility, and expandability for new features, to allow for the future implementation of new capabilities in the dashboard, when the adequate hardware is available to support them. This is why our company decided on a latest-generation graphic processor, Texas Instruments Jacinto 5. This is a multi-core

继兰博基尼 Gallardo 之后,出自兰博基尼总部圣亚加塔·波隆尼工匠之手的又一全新力作 Huracán LP 610-4 凭借其创新的设计风格和尖端的技术解决方案脱颖而出。车身和表面采用了流线型设计,还融入了大量六角形灵感设计,而这些外部设计在汽车的内饰中也有所体现。从此,由 MTA 运用创新尖端设计开发的智能仪表板登上了历史舞台。这是我们公司向前迈出的重要一步。仪表板经过特殊设计,其采用了 HMI(人机界面)架构,并配备有单一智能中央处理单元(多核 CPU),可实现对多台设备的控制。Huracán 车型上安装的 CPU 整合了两个视频输出端子,一个输出端子用于连接到高分辨率(1440X540 像素)的 12.3" TFT 仪表面板(由 MTA 开发),而另一个用于连接位于中央通道的辅助显示屏。仪表板使用的软件架构是 Linux 开源系统,它支持 3D 图形管理,且与消费类电子产品十分接近,MTA 通过调整这种系统来满足汽车需求。这意味着显示某些图像时必然会考虑到乘员的安全,例如,凭借更快的仪表板启动速度以及更快的图像传输速度(绝对比消费类产品的快)进行显示:比如转速表,必须确保其指针移动平稳顺畅。选择开源架构后,实现了一种专注于新功能的易于集成性、灵活性以及可扩展性的逻辑概念,以期将来在有足够硬



件支持的情况下实现仪表板的新功能。这就是我们公司决定采用德州仪器最新一代图形处理器 Jacinto 5 的原因所在。此款多核微处理器配备有一个专用于 HMI(人机界面)任务的中央内核以及其他通用内核,这些内核并行运行,可加快它们对任务的分配速度。仪表板的 3D 图形显示提供了多种不同配置选项。驾驶员可在三种不同



microprocessor with one central core dedicated to HMI and other general-purpose cores operating in parallel to speed up their assigned functions. The 3D graphics of the panel offers different configuration options. The driver can choose among three different versions. In **Full Drive** mode, the large rev counter takes centre stage, with the fuel level, water temperature and speed indicators at its side. In **Mixed** mode, the rev counter is smaller and located on the left. The right portion of the screen is taken up by a window for infotainment features such as the GPS. In **Full Navi and Infotainment** mode, the map takes up most of the screen. Important driving information and alerts remain displayed at the lower edge of the screen in all modes.

模式中加以选择。在“完全驾驶”(**Full Drive**)模式中,以大尺寸居中显示转速表,并在其一侧显示燃油液位、水温以及行驶速度。在“混合”(**Mixed**)模式中,转速表将以较小尺寸显示在左侧位置。而屏幕右侧区域将被资讯娱乐功能窗口占用,用以显示诸如GPS之类的信息。在“完全导航以及资讯娱乐”(**Full Navi and Infotainment**)模式中,地图将占用大部分屏幕区域。在所有模式中,重要驾驶以及警告信息都会显示在屏幕底边位置。





# Jeep Renegade MTA

This is the first B-segment small SUV produced by FCA and – more importantly – the first Jeep manufactured in Italy, at the Melfi plant. The vehicle we are talking about is the Renegade, which was unveiled at the Geneva Motor Show and has received enthusiastic response among the public. Based on 16 different powertrain combinations, including the Multijet II and Multiair engines, manual transmission and the first nine-speed automatic transmission seen in the category, the Renegade is the first vehicle that uses components from all Group brands, as it shares the platform with the 500X. For the Jeep Renegade, which has been nominated for the “Car of the Year Award 2015” and is manufactured in keeping with the well-established Jeep heritage, our Company developed several electromechanical components considering its strongly off-road oriented nature.



**MODULAR RDU MODULES:**  
power distribution/protection box  
installed in the trunk.

**模块化 RDU 单元:**  
电源配电/保护箱安装于发动机舱内



**BATTERY POWER DISTRIBUTION BOX (CBA):**  
protects main electric services and is installed  
directly on the battery positive terminal.

**电池电源配电箱 (CBA):**  
直接安装于电池正极端子上,  
用于保护主电源



这是 FCA 推出的首款 B 级小型 SUV，而且 - 更重要的是 - 这是首款由意大利 Melfi 工厂制造的 Jeep。此款车型正是我们所关注的 Renegade，之前在日内瓦车展上一经公布，便获得了广大公众的热烈反响。Renegade 与 500X 共享平台，是首款采用全部集团品牌部件的车型，其基于 16 种不同的动力组合开发而成，其中包括 Multijet II 与 Multiair 发动机、手动变速箱以及第一款量产的九速自动变速箱。秉承 Jeep 丰富经验和优良传统而打造的 Jeep Renegade 曾获“2015 年度汽车奖”提名，公司专门开发了数款机电控制元件以配合该款车型与生俱来的越野性能。



**C280 HP6 CONNECTORS:**  
sealed signal connectors for engine on-board application (high performance vibration).

**C280 HP6 接头:**  
发动机搭载的应用程序采用密封的信号接头（高性能振动）



**4W POWER CONNECTOR:**  
sealed power connector used as front/radiator cable harness sectioning connector.

**4W 电源接头:**  
使用密封的电源接头，作为前端/水箱线缆线束分接头



**ENGINE BAY POWER DISTRIBUTION BOX (FRB-RB) AND SPLASH SHIELD:**  
key power distribution and protection unit with dedicated plastic mount for proper installation in the vehicle.

**发动机舱电源配电箱 (FRB-RB) 以及防溅板:**  
采用专用塑料支架的主要电源分配及保护单元，可完美安装于车辆机舱内





# MTA India...grows with Mahindra

## MTA 印度分公司 与马恒达共同的成长历程

Over the last few years, our increasingly global presence combined with our approach aimed at meeting the local needs of customers has led us to establish new sales offices around the world and expand the capacity of existing ones to better satisfy demand in the fastest-growing markets. This strategy is evidenced by the new sales offices established in China mentioned earlier in this issue, as well as by our upgraded production capacity in India thanks to a closer partnership with the two leading local OEMs. MTA India started out as a sales office in Pune in 2009, and has grown into a steadily expanding operation that presently assembles several electromechanical PDUs for cars produced in the local market. Just like their European counterparts, Asian car makers have become aware of how important it is to protect electric services directly from the energy source – the battery – and have recognized MTA as the reliable partner that can assist them with this new technological challenge. This is only the beginning. The Indian market has huge potential, the industry has chosen the path of developing electromechanical solutions for electric protection – and MTA is leading the way.



在过去的几年中，我们坚持秉承全球化的理念，同时不断践行满足客户本土化需求的方案，这使得我们的新业务遍及世界各地，能够更好地满足迅猛发展的市场需求。我们通过即将在中国建立新生产基地（本杂志早有提及），并加强与印度当地两个杰出 OEM 的紧密合作提升了产能，这些事实都是对战略的有力见证。2009 年，MTA 印度分公司还只是一家销售办事处，此后其业务稳步拓展，目前已能够为当地生产的汽车组装多种机电 PDU。正如欧洲同行一样，亚洲汽车制造商已清晰认识到直接从能源，即蓄电池角度保护电力供应的重要性，同时公认 MTA 是能够帮助自己面对新技术挑战的可靠合作伙伴。但这仅仅是个开始。印度市场有着巨大的潜力，相关行业已经选择通过开发机电解决方案来实现电力保护，而 MTA 正走在这一领域的前沿。

## Mahindra and MTA

### Components for the Scorpio

Twelve years after the roll-out of the first-generation Scorpio, Mahindra & Mahindra Ltd introduced the revamped version of their SUV this past September. Based on a new platform, it sports a contemporary, alluring design with stylish interiors and – more importantly – cutting-edge technology. The new Scorpio is packed with components supplied by key global players and adopts a real MTA “system” proper to protect key electric services and power distribution devices. In the cabin, on the driver’s side, there is a 4-way frame with relay and fuse holder modules that can be combined as needed and accommodate MTA female terminals.

The scope of supply also includes a CFO fuse holder unit complete with cover that is installed in the engine bay directly on the positive terminal of the battery via an MTA terminal. The CFO unit supplied to Mahindra accommodates 3 Midival fuses rated 125, 80 and 60A, that are assembled at a dedicated line in our Pune plant. Besides the attractive volumes, there are two reasons why this project for Mahindra is especially important to MTA. On the one hand, it is yet more evidence that the decision to establish an assembly plant for electromechanical components in India made a few years ago was a good one. On the other hand, it is a tangible sign that our partnership with Mahindra keeps growing and becoming stronger year after year, and MTA is strengthening its relationship with this major Indian car maker as a strategic supplier of power distribution and electric protection products for key electric services.

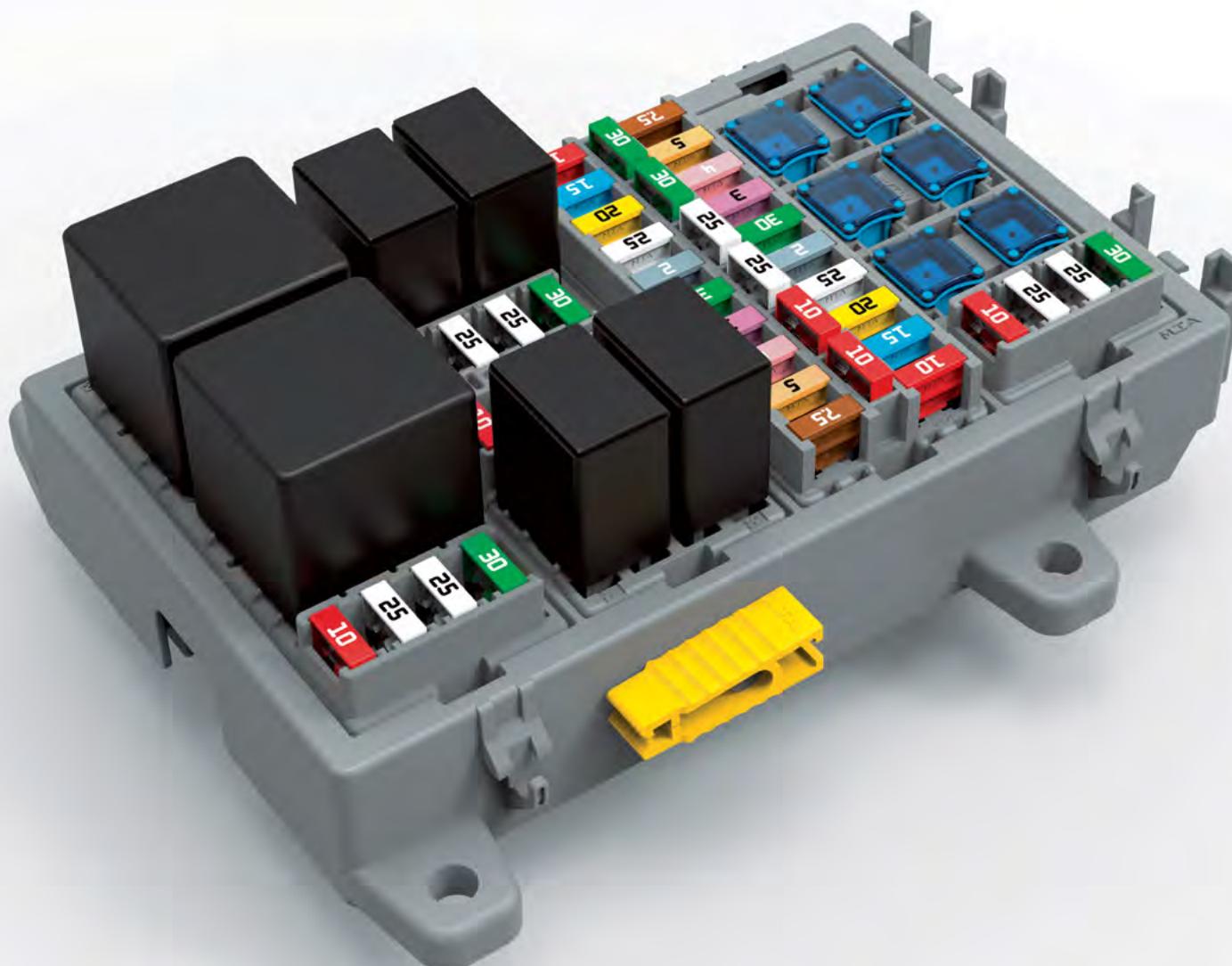
## 马恒达与 MTA

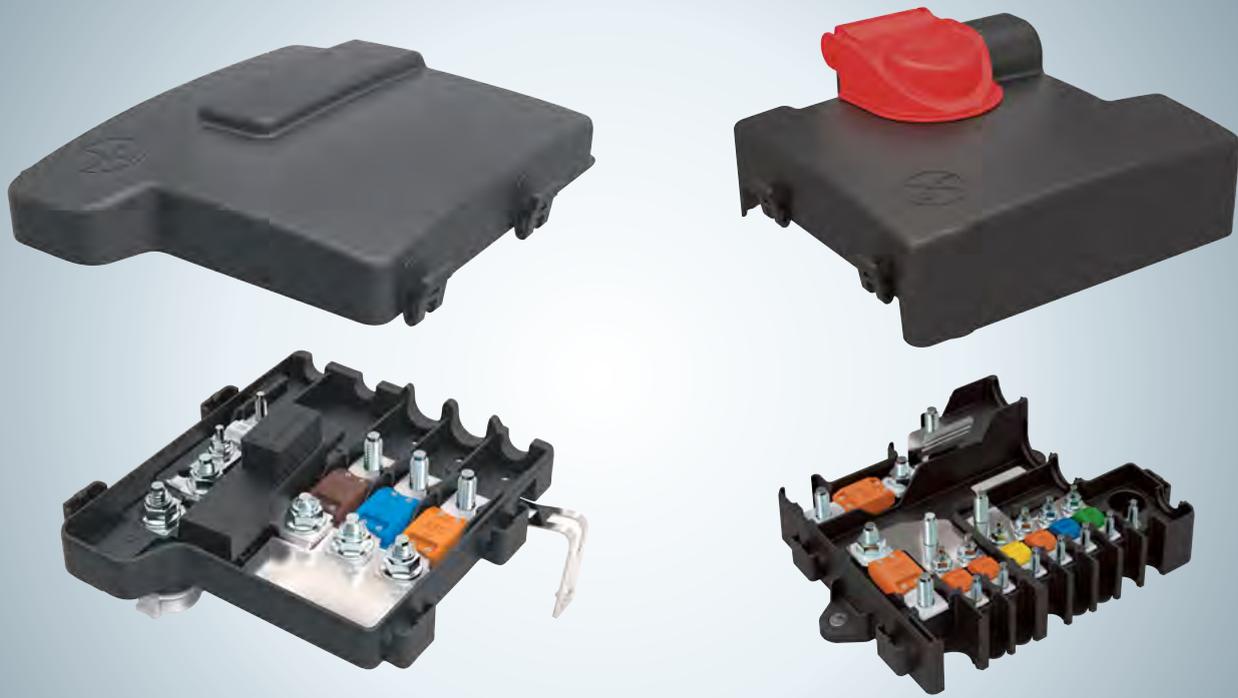
### Scorpio 汽车元件

在第一代 Scorpio 推出的十二年后，即于刚刚过去的九月，马恒达公司将其更新改版的 SUV 投入市场。依托新型平台系统，其设计凭借时尚的内饰彰显出浓厚的时代气息和十足的吸引力，而更为重要的是，这些都是最尖端的技术。新款 Scorpio 配有世界大型供应商提供的元件，并采用了名副其实的 MTA “系统”，能够完全保护重要电力供应系统和配电装置。车厢内的驾驶员侧还配有一个带继电器和保险盒模块的 4 路框架，用户可以根据需要对其进行组合并接入 MTA 母端子。

同时标配一个带有防护盖的 CFO 保险盒装置，该装置通过 MTA 端子直接安装在发动机舱内蓄电池的正极上。向马恒达提供的 CFO 装置可容纳 3 个 Midival 保险丝，等级分别为 125、80 和 60A，它们是由我们 Pune 工厂的专用生产线组装的。

马恒达项目对于 MTA 来说至关重要，除了其业务量可观外，还有两个原因。一是这更加有力地证明了数年前在印度建立机电元件装配工厂实乃良策。二是这标志了我们与马恒达的合作伙伴关系日渐发展壮大，而 MTA 正在强化与印度这家重要汽车制造商的合作，成为向其主要电力供应系统提供电力分配和电力保护产品的战略供应商。





## MTA for Daily. CBA - two is better than one

## MTA致力于Daily系列 CBA - 两个总比一个好

The new Daily has been totally re-designed to meet the current needs of the light commercial vehicle market. The new addition to Iveco's range is set to continue the success story of this model, which has enjoyed unwavering popularity since its launch back in 1978. The many design improvements include the larger headlamps, which are also located higher and set back a bit further to avoid damage in the event of minor collisions. In order to gain space in the engine bay and make room for the new light units, the battery was relocated to a dedicated compartment under the driver seat, and the electric system layout had to be modified accordingly.

### What was MTA's involvement in all this?

Our Research & Development Department has been designing and manufacturing battery distribution units (for power distribution and the protection of main services) for several years, had to re-design our offering to suit the new layout of the electric system.

As a result, we now offer 2 different CBA units that hold more fuses in place of the single unit supplied so far.

A first unit comes complete with terminal and cover. It is installed directly on the battery and held in place by a steel bracket. This unit has smaller height in order to fit in the new location and is supplied in two versions: with shunt or electromechanical battery disconnect switch. The latter version provides added security for special versions of Iveco Daily Minibus designed for passenger transport. Both versions feature 3 Megaval power fuses and 1 Midival fuse.

The second unit also comes with a cover and is powered via the power cables from the battery. It has been designed to protect all main services in the engine bay and offers additional space for extra fuses to cater to the needs of special vehicle outfitters. The unit can accommodate 2 Megaval fuses, 6 Midival fuses and 1 Jump Start socket accessible through a little dedicated cover located on the main cover, with a return spring to ensure proper closing.

The range of products for the Iveco Daily is complemented by an SCM Box accommodated in a specific housing rack to protect secondary services, terminals F280, F480, F800 and F950 and several modular modules. These products were already in use in the previous version.

新的Daily系列已完全经过重新设计，以满足轻型商务车市场的当前需求。新增的Iveco系列续写了此型号的成功篇章，该型号自1978年面市以来一直倍受欢迎。在设计上进行了诸多改进，例如加大了前大灯，并将其置于更高更远的位置，以免在轻微碰撞后受损。为了增加发动机舱内的空间，并为新灯具腾出空间，我们将蓄电池安置在驾驶员座椅下的专用隔舱内，同时对电力系统的布线进行了相应调整。

### MTA为这些改进做出了哪些贡献？

多年以来，我们的研发部门一直致力于电源配电装置（用于配电和主电力供应保护）的设计和制造，重新设计了我们的产品，以适应电力系统的全新布线方式。因此，我们提供了两种容纳多根保险丝的不同CBA装置，取代了目前提供的单一装置。

第一种装置配备有端子和防护罩。它直接安装在蓄电池上并通过钢支架固定。此装置的高度较小，以便适应新位置，并提供两种型号：配有分流器或机电蓄电池断开开关。后一种型号为针对客运设计的Iveco Daily Minibus特殊型号提供了更高的安全性。两种型号均提供了3个Megaval电源保险丝和1个Midival保险丝。

第二种装置随附有一个防护罩，可通过蓄电池经由电源线进行供电。该装置的设计旨在保护发动机舱中的所有主电力供应保护，并为额外的保险丝腾出更多空间，以迎合特殊车型安装工的需求。该装置能够容纳2个Megaval保险丝、6个Midival保险丝和1个可通过主电源罩上的小型专用罩接触到的跳线跨接起动插座，以及一个可以确保主电源罩正常闭合的复位弹簧。

SCM盒完善了Iveco Daily产品系列，它安装在特殊的外罩架中，用于保护次级电力供应、端子F280、F480、F800和F950及多个标准化模块。这些产品已经在先前版本中有所使用。

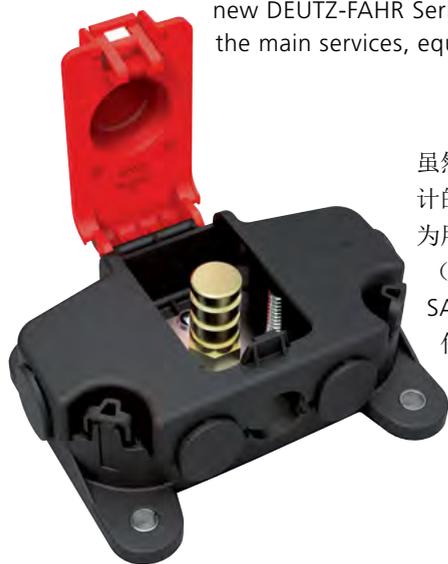


## JUMP START. A JUNCTION NODE AND EVEN MORE...

### 跳线跨接起动 不仅仅是连接节点...

While based on a simple concept, this product was not available in the agricultural machinery industry until now and its need was felt by many manufacturers. It's our new Jump Start node co-designed with SAME DEUTZ-FAHR, which recently went into production at our Codogno plant. This component ensures rational, safe electric power distribution. More precisely, it is a junction node used to disconnect the electric system downstream of the battery, that features a threaded middle pin providing a safe power connection to start up and/or charge external electric devices, such as batteries or other equipment.

This product will be used in some DEUTZ-FAHR tractors, a brand name of SAME DEUTZ-FAHR, world-leading manufacturer of tractors, harvesting machines, diesel engines and agricultural machines. The component has a special design to adapt its configuration to each application. For instance, in the configuration adopted for the new DEUTZ-FAHR Series 9 the two side pins are for the wires running to two PDUs that protect the main services, equipped with MTA fuses with different ampere ratings.



虽然这款产品原理简单，但其为无数制造商所期待，至今才出现在农业机械行业中。我们与 SAME DEUTZ-FAHR 合作设计的全新跳线跨接起动节点，最近已在科多尼奥工厂投入生产。此元件可确保合理、安全的电力分配。更确切地说，此用于断开蓄电池供电系统下游连接的连接节点，其特点在于具有一个中间螺纹接头，可在启动和/或为外部电力设备（例如蓄电池或其他设备）充电时提供安全的电力连接。此产品将应用于数款出自 DEUTZ-FAHR 公司（商标名为 SAME DEUTZ-FAHR）的拖拉机上，该公司是世界领先的拖拉机、收割机、柴油发动机以及各种农业机械制造商。此元件经过特殊设计，可调整其配置以适应不同的应用需要。例如，在全新的 DEUTZ-FAHR 9 系列上，为连接到两个用于实现主电力供电保护的 PDU 的电线配备了两个侧接头，同时配备了不同额定电流的 MTA 保险丝。

## A NEW PDU. OFF-HIGHWAY READY

### 全新的PDU 非公路用车产品蓄势待发



Our PDU (Power Distribution Unit) for power distribution and the protection of main electric services designated for agricultural and earth-moving machines has been renewed to offer higher performance and respond to the new needs of these applications. Our electromechanical PDUs are very popular with OEMs because they permit simpler cable layouts and require less cables. As a result, they are in increasing demand and this has been a great motivation to develop increasingly innovative solutions such as our new PDU. Compared to the previous version which has been in production since 2012, the new PDU features a new layout and a re-designed bus bar with 4 Midi fuses instead of 2 Mini fuses along with the 2 existing Mega fuses from the past version. The PDU can also accommodate different fuse holder module technologies, including the new-concept module with 4 MaxiCompact fuses, which is part of the new compact range developed to replace the Maxi and J-Case fuses in the 20 to 60A current range.

我们对用于农用机械和推土机的配电和主电力供应保护的 PDU（配电装置）进行了革新，旨在提供更高的性能以及应对这些应用的新需求。我们的机电 PDU 布线简单、用线少，深受 OEM 欢迎。

因此，对它们的需求量日益增长，这成为我们不断开发创新解决方案（如我们的全新 PDU）的动力之源。与 2012 年投产的先前型号相比，这种全新的 PDU 采用了新型布线方式和重新设计的汇流条，配有 4 个 Midival 保险丝，取代了具有之前型号的 2 个 Minival 保险丝和 2 个 Megaval 保险丝。PDU 也可适应各种保险盒模块技术，包括带 4 个 MaxiCompact 保险丝的新型模块。MaxiCompact 保险丝属于全新的紧凑型产品系列，取代了电流范围为 20A 到 60A 的 Maxi 和 J-Case 保险丝。

# MTA.

NEW EFFICIENT, ELEGANT  
AND CUTTING-EDGE PLANT



Two are the key product lines designed and manufactured in Rolo plant:  
electronic control panels and dashboards for cars, motorcycles and industrial vehicles



[mta.it](http://mta.it)