

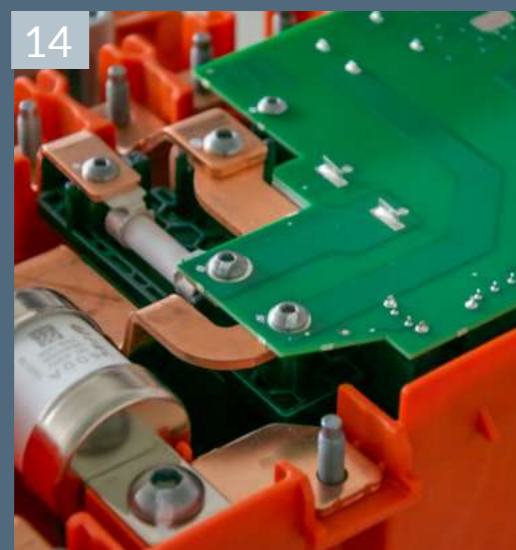
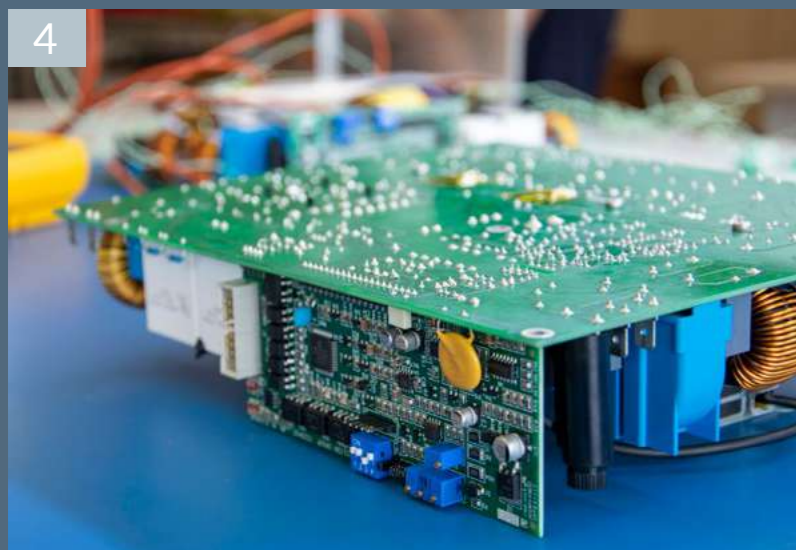
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## Editorial 主编



This Journal brings us to number 25!

This is an important milestone and it seems a good opportunity to look back at how we started. It was 2007, we had recently changed the name of the company - from Meccanotecnica Codognese to MTA - and just redesigned our logo.

We worked with a single site in Italy, Codogno, and just three sites abroad, but we were already aware that we needed to expand.

At the same time, we wanted to make our projects, products and partnerships with customers and our key objectives more widely known. We decided to do so through the MTA Journal, an editorial product in several languages that enabled us to engage readers from all over the world.

Through this simple tool, where images and text are managed in such a way as to give the page the right "balance" in order to facilitate reading for those who receive it, we hope to have succeeded in doing this and have aroused your interest.

As always, I hope you enjoy reading this issue and I look forward to welcoming you back to the next issue of the MTA Journal.

本杂志已成功发行了 25 期!

这是一个重要里程碑, 也是我们回顾往昔、忆及杂志创立之始的好机会。

2007 年, 我们的公司从 Meccanotecnica Codognese 正式更名为 MTA 并重新设计了公司徽标。我们仅在意大利科多尼奥设有一家工厂, 在国外也只有三家工厂, 但是我们早已意识到我们需要扩张。与此同时, 我们希望让我们的项目、产品、与客户的合作关系以及主要目标更为人知。为此, 我们决定通过《MTA Journal》来实现这一目标, 这是一款以多种语言编写的杂志, 能够吸引来自世界各地的读者。

该杂志图文并茂, 采用合理的页面排版方式, 便于读者阅读。我们希望通过这一简单工具达成我们的目标, 引起您的兴趣。

一如既往, 我希望您喜欢本期内容, 并欢迎您阅读下一期《MTA Journal》。

**Maria Vittoria Falchetti**

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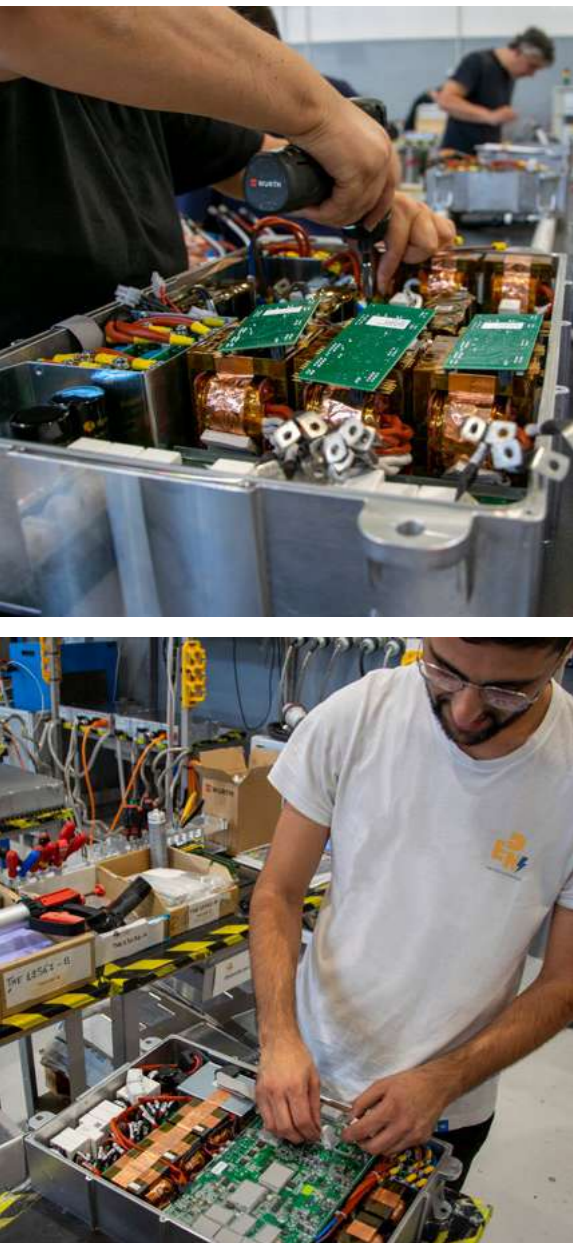
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## EDN, the new site, new projects and new challenges

### EDN, 新工厂, 新项目, 新挑战



The acquisition of 80% of the shares of EDN at the end of May 2021 allowed the MTA group to present customers a broader and more diverse offer in the field of electrification, and with a product portfolio that covers the entire range of High Voltage distribution products: from electrical components to power electronics.

The speed with which this sector has evolved has led EDN to make some very important decisions, such as moving to the new site, increasing production with the purchase of new lines and the introduction of a second shift to cope with the increase in orders.

MTA 集团在 2021 年 5 月末收购了 EDN 80% 的股份, 从此可在电气化领域为客户提供更广泛、更多样化的产品, 并提供涵盖整个高压配电领域的产品组合, 包括电气元件以及大功率电子元件。

MTA 集团在该领域的迅速发展促使 EDN 做出了一些非常重要的决定, 比如搬到新工厂、购买新产线以扩增产量, 以及增加班次以应对订单增加。

Most importantly, this new site will allow EDN to express its passion for research and innovation to the fullest. By the end of the year, the R&D department will be expanded in order to facilitate the design of new products required by the market.

For example, the BHP19 and BHP22 chargers have recently been developed. For the US and European markets respectively, the two OBCs stand out because of a conversion technology that improves power density and specific power, and bidirectional charging that allows energy to flow in two directions: to and from the battery.

From the point of view of hardware, we have achieved a weight reduction of 30%, a volume reduction of 25% and an increase in power density of 35%.

EDN is also moving forwards in the automotive field and is developing an innovative high performance DC/DC converter for a European manufacturer.

最重要的是, EDN 可在新工厂中全力投入研发与创新。到今年年底, 其研发部门将进一步扩大, 以方便设计新产品, 满足市场需求。

例如, EDN 最近开发出了 BHP19 和 BHP22 充电器。对于美国和欧洲市场而言, 这两款车载电池充电器 (OBC) 的突出之处在于其转换技术提高了功率密度和比功率, 而双向充电技术可支持能量在电池的输入和输出方向上双向流动。

从硬件上看, 我们将重量减轻 30%, 体积缩小 25%, 功率密度提升 35%。

EDN 也向汽车领域发展, 目前正在为一家欧洲制造商开发一种创新型高性能 DC/DC 转换器。



BHP22



# Clean, risk-free connections

## 简洁、无风险的连接

For all new units with printed circuit boards, for many years now MTA has adopted solderless connection technology based on press-fitting a contact into a metalized through-hole in the PCB. This technology is characterized by good conductivity and superior mechanical strength and will make it possible in the future to equip all electronic boards with clean connections without the hazards of soldering.

This technology is therefore perfect for the printed circuit boards increasingly found in modern vehicles, which are full of electronic systems dedicated to safety, infotainment, and driver assistance, requiring extremely reliable electrical connections. Not to mention the fact that they often operate in extreme temperatures, dust, humidity, and chemicals.

Today there are eight Press-Fit lines in MTA sites around the world and they are located in Italy, Slovakia, Morocco, Brazil, and China. We have two different types: one to ensure very high productivity when the numbers require it, the other more suitable for lower volumes as it allows greater flexibility, ensuring shorter setup times.

Both types have a control system for all parameters such as:

- Adaptation to the thickness of the printed circuit board.
- Strict control of the force and insertion height of each individual terminal.
- 100% optical inspection of the dimensional compliance of the terminals, and especially the GAPS of the Forks where fuses and relays are inserted.
- Complete data traceability of each individual inserted terminal associated with each individual product.

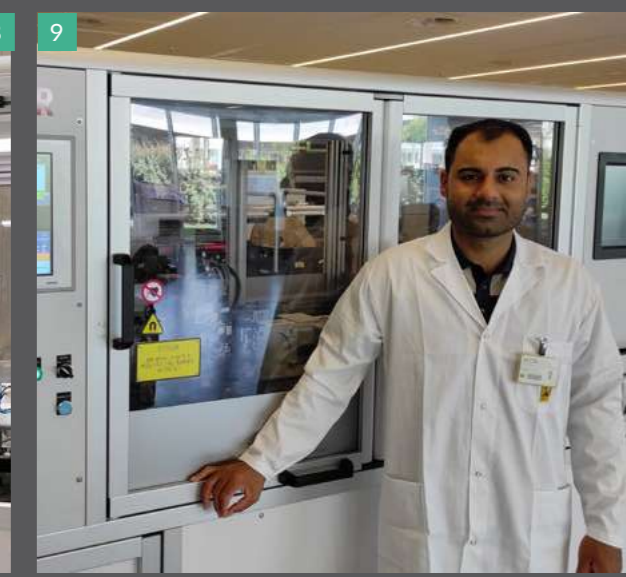
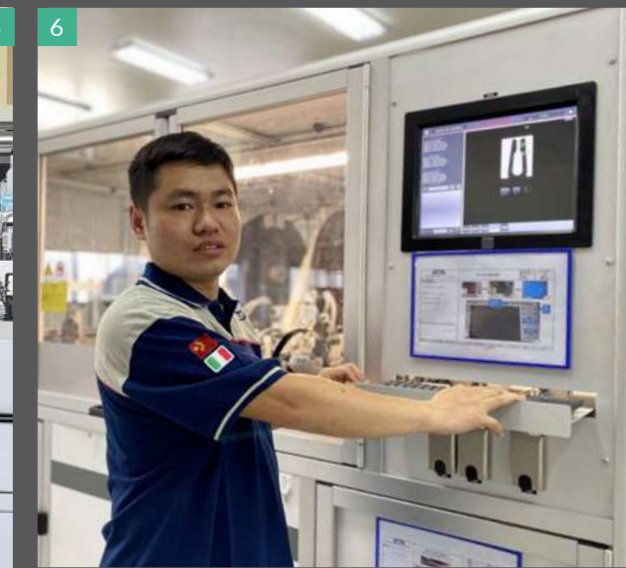
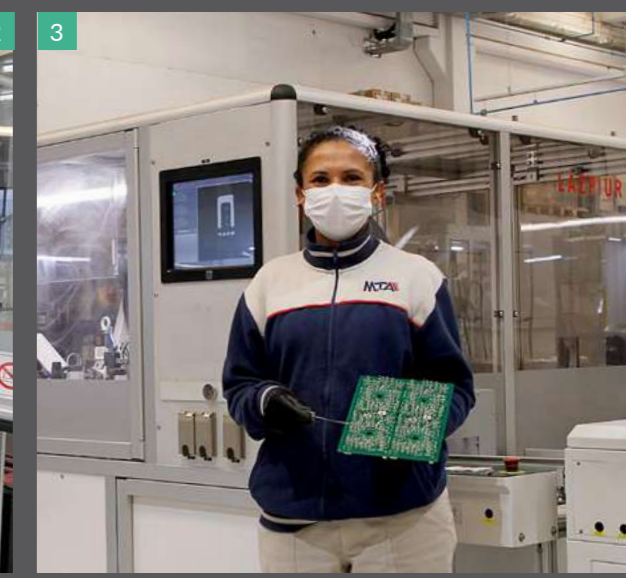
对于所有带有印刷电路板的新装置，MTA 多年来一直采用无焊连接技术，将触点压装到经过金属化处理的 PCB 通孔中。该技术的特点是具有良好的导电性和优越的机械强度，未来有望使所有电路板都实现没有焊接风险的简洁连接。

因此，这项技术非常适合日益广泛用于现代汽车的印刷电路板中，因为汽车内布满了专用于实现安全、信息娱乐和驾驶辅助功能的电子系统，需要极其可靠的电气连接。更重要的是，这类印刷电路板经常需要在极端温度、灰尘、湿度和化学环境中运行。

如今，MTA 全球工厂共设有八条自动插针机产线，分别位于意大利、斯洛伐克、摩洛哥、巴西和中国。我们的生产线分为两种类型：一种可在订单量大增时确保非常高的生产效率，另一种更适合小批量生产，灵活性更强，可确保更短的准备时间。

这两种生产线都有一个控制系统来控制所有参数，例如：

- 调整印刷电路板的厚度。
- 严格控制每个端子的插入力度和高度。
- 对端子尺寸合规性进行 100% 光学检测，尤其是保险丝和继电器的嵌入间隙。
- 完善的数据跟踪功能，能够确保对每个产品的每个嵌入端子进行跟踪。



1. Martin, Electrical Manufacturing Engineer, e Ľuboš, Electrical Engineering Manager, Bánovce nad Bebravou, Slovakia.
2. Long, Assembly Department Operator, Shanghai, China.
3. Priscila, Assembly Department Operator, Arujá, Brazil.
4. Fabrizio, Assembly Department Operator, Rolo, Italy.
5. Adel, Assembly Department Operator, Kenitra, Morocco.
6. Zhao, Machine Maintenance Specialist, Shanghai, China.
7. Alessandro, Assembly Department Operator, Rolo, Italy.
8. Igor, Machine Maintenance Specialist, Arujá, Brazil.
9. Own, Electronic Technologies Engineer, Rolo, Italy.
10. Elisabete, Assembly Department Operator, Arujá, Brazil.







## The exclusive digital clock for the Maserati Grecale

### 玛莎拉蒂 Grecale 的独家数字时钟

Unveiled to the world on March 22, the Maserati Grecale is the new SUV from the Trident Company that combines versatility, elegance, performance, and innovation. Developed at the Maserati Innovation Lab in Modena, Italy, and produced at the Cassino plant, this car with an extraordinary personality is equipped with several components from our electronics and electric divisions.

In the center of the dashboard is the digital clock made for Maserati in our Rolo site. Elegantly and uniquely designed, it displays specially-generated images from the infotainment system through a 1.8" high-resolution (200ppi) TFT enclosed by a chrome bezel. Several screens can be accessed by the driver, with content related to the clock, compass, accelerometer, and performance, the latter for displaying key parameters of the car.

In terms of power distribution and protection, the engine compartment of the Maserati Grecale has an FRB unit and two modular fuse and relay holder modules, as well as a two-way junction node equipped with a jump starter. The correct positioning of the FRB and modules is ensured by plastic supports, which optimize the layout and ensure an optimal degree of protection.

The trunk compartment houses the FRB-RB unit and the fuse and relay holder module, for which a plastic frame was developed to make installation easier, with attention to the rear wiring layout. Also for the trunk compartment, where the battery is installed, we also supplied the well-tested CBA unit, attached to the positive pole via a screw terminal.

玛莎拉蒂 Grecale 于 3 月 22 日面向全球公开亮相，这是 Trident 公司推出的新款 SUV，兼具多功能特性、优雅外观、杰出性能及创新技术于一身。这款 SUV 由位于意大利摩德纳的玛莎拉蒂创新实验室研发并在卡西诺工厂生产，该汽车个性非凡，配备了 MTA 电子事业部研发的多个元件。

中控台中央是 MTA 罗洛工厂专门为玛莎拉蒂制造的数字时钟。该数字时钟设计优雅而独特，采用以镀铬边框封装的 1.8 英寸高分辨率 (200ppi) TFT 显示屏，可显示信息娱乐系统特别生成的图像。驾驶员可以访问多个屏幕，内容涉及时钟、指南针、加速度计和性能，后者用于显示汽车的关键参数。

在配电与保护方面，玛莎拉蒂 Grecale 的发动机舱配备一个 FRB 单元和两个模块化保险丝及继电器支架模块，以及一个配有跨接起动器的双向连接节点。为确保正确放置 FRB 和相关模块，我们采用了塑料支架以优化布局，确保实现最佳保护。

行李箱中装有 FRB-RB 单元、保险丝和继电器支架模块，为此，我们开发了一款塑料支架以简化安装，方便后方布线。此外，对于行李箱中安装的电池，我们还提供了已成功通过多项测试的 CBA 单元，并使用螺丝端子连接到电池正极。



FRB unit  
FRB 单元



Fuse and relay holder modules  
保险丝和继电器支架模块



Junction node  
连接节点



FRB-RB unit  
FRB-RB 单元



Fuse and relay holder modules  
保险丝和继电器支架模块



CBA unit  
CBA 单元



# Tonale, the most technological Alfa Romeo ever

## Tonale, 有史以来技术最先进的阿尔法罗密欧

The Alfa Romeo Tonale is the brand's first electrified C-SUV and the model that marks the metamorphosis of the brand. Available with both hybrid and diesel engines, Tonale features state-of-the-art electrification systems designed specifically for the brand and its daring attitude.

For components located in the "heart" of the car, Alfa Romeo has chosen MTA, a well-established supplier that over the years has developed technological and innovative products designed for the various needs of its models. Technology and innovation combine with the quality required to guarantee 100% safety, especially when it comes to the "primary" power distribution and services protection.

MTA has developed three power distribution units for Tonale, made at the MTA factories in the EMEA area: Italy, Slovakia and Morocco.

阿尔法罗密欧 Tonale 是该品牌的首款电动 C-SUV，也是标志着该品牌蜕变的车型。Tonale 提供混合动力和柴油发动机，配备专为该品牌设计且秉承其大胆创新精神的先进电气化系统。

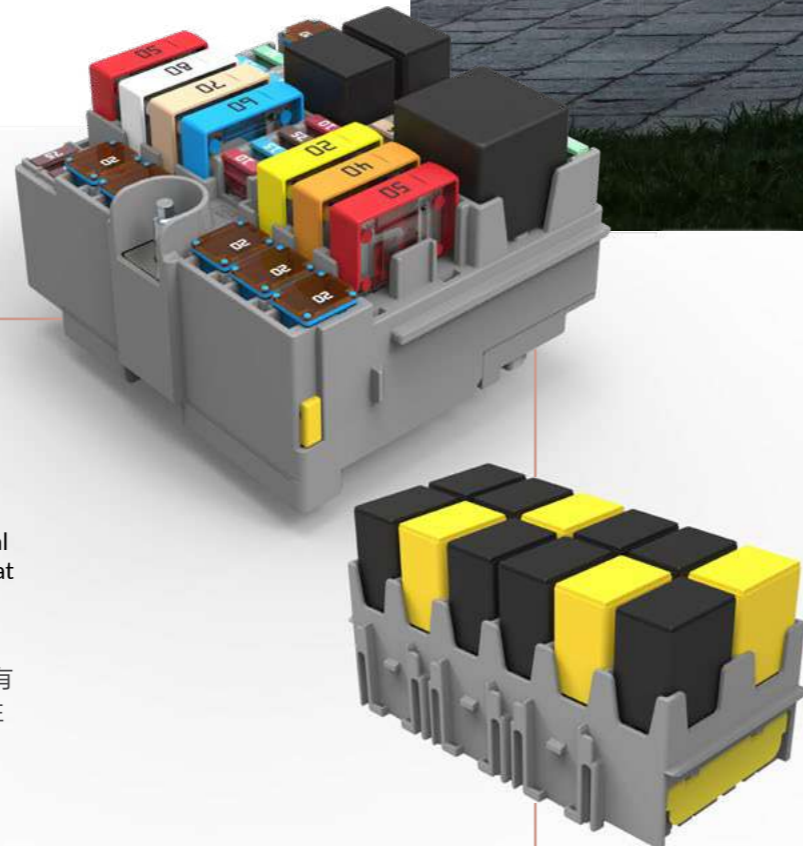
对于位于汽车“心脏”的元件，阿尔法罗密欧选择了 MTA。MTA 作为一家久经盛名的供应商，多年来已为其车型的各种需求开发了多种技术和创新产品。

技术、创新与品质的结合保证了 100% 的安全性，尤其是在“主要”配电和维修保护方面。

MTA 为 Tonale 开发了三种配电装置，并在 MTA 位于 EMEA 地区的工厂中进行生产：意大利、斯洛伐克和摩洛哥。

Alfa Romeo enters the age of electrification while remaining 100% faithful to its DNA of Italian sportiness

阿尔法罗密欧进入电气化时代，但仍 100% 忠实于其意大利运动基因



FRB and RB are "wired" units, housed in the engine bay in a single plastic mount with cover, which allows better cable organization and the protection of the units it contains. Both the FRB and RB units come with a busbar designed using MTA Fork technology to guarantee an ideal contact surface for improved electrical/mechanical performance and heat dissipation.

FRB 和 RB 是“有线”单元，安装在发动机舱内的一个带盖塑料支架中，这样可以更好地整理电缆，并保护支架中的单元。FRB 和 RB 单元都配有采用 MTA Fork 技术的母线，可确保理想的接触表面，提高电气/机械性能并改善散热。

The third unit is the CBA, equipped with bolt-down fuses and a terminal, for direct installation on the positive pole of the battery. The supply to Alfa Romeo Tonale is completed with modules fitted with MiniVal fuses and micro relays, C280 connectors and terminals.

第三个单元是 CBA，配备螺栓固定式保险丝和端子，可直接安装在电池正极上。供应给阿尔法罗密欧 Tonale 的模块配备了 MiniVal 保险丝和微型继电器、C280 连接器和端子。



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© Copyright Peugeot

## An innovative unit for the new Peugeot 308 新款 PEUGEOT 308 的创新装置

The modern and stylish, new PEUGEOT 308 has recently arrived on the market, continuing the tradition of the "series 300", one of the longest-lived in the history of the Lion brand.

7 million PEUGEOT of the "series 300" were sold over the first two generations, before the new PEUGEOT 308, which is fitted with our highly innovative product, made its debut.

We are referring to a unit that provides power distribution and services protection, called UDB, Underhood Distribution Box, which is equipped with a splash-shield and installed in the engine bay of the car. The unit, with PCB, is large (337 mm x 32 mm x 129 mm) and extremely complex given the high number of inputs and outputs it handles. The UDB houses 21 relays and 81 fuses of various types, among which are our exclusive M8Compact and MaxiCompact fuses which stand out because they take up less space than equivalent products.

The UDB for the new PEUGEOT 308 is produced at MTA Morocco where plastic molding and assembly take place, ready to be supplied to local cable assemblers.

现代时尚的新款 PEUGEOT 308 已于最近上市，延续了 300 系列的传统，PEUGEOT 300 是该品牌历史上最长寿的车型之一。

在装配了 MTA 创新产品的新款 PEUGEOT 308 首次亮相之前，前两代 PEUGEOT 300 系列共售出 700 万辆。

MTA 创新产品是指一种可提供配电和维修保护的装置，称为 UDB，它配有防溅板，安装在汽车发动机舱内的配电盒下方。该装置带有 PCB，体积较大 (337 mm x 32 mm x 129 mm)，并且极其复杂，因为它要处理大量的输入和输出。UDB 装有 21 个继电器和 81 个不同类型的保险丝，其中包括 MTA 特有的 M8Compact 和 MaxiCompact 保险丝，这两款保险丝十分出色，与同类产品相比，其占用空间更少。

新款 PEUGEOT 308 的 UDB 在 MTA 摩洛哥工厂生产，在那里进行注塑和组装，并准备供应给当地的电缆组装商。



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## Renault crash-test-proof units Renault 防碰撞测试装置



MTA has reconfirmed its historic partnership with Renault, developing an innovative power distribution and utility protection unit for the new Renault Trafic, the multi-purpose commercial vehicle that combines comfort and convenience.

Our R&D department had to deal with several complexities related to the integration of the unit. In fact, it was split into Primary and Secondary units, both located on the battery in order to meet the requirements of Euro NCAP regarding crash tests.

This also made it possible to orient and optimize wiring in two different directions, all to the benefit of today's increasingly tight spaces.

The Primary unit houses 1 MidiVal fuse and 2 MegaCompact fuses and is connected to the positive battery terminal via Go/No-go terminal. In contrast, the Secondary unit, located on the battery side, houses 7 MidiVal, 2 MegaCompact, and 1 MiniVal fuses. All fuses in the units are MTA-made, indeed the MidiVal clinched fuses were specifically developed for this application.

The unit for the Renault Trafic is produced at MTA Slovakia where plastic molding and assembly take place.

MTA 与 Renault 的历史性合作伙伴关系步入新台阶，将为兼具舒适性与便利性的全新多功能商用车 Renault Trafic 开发一种创新的配电和设施保护装置。

我们的研发部门必须处理与该装置集成相关的多个复杂问题。事实上，为了满足欧洲新车安全评鉴协会 (Euro NCAP) 关于碰撞测试的要求，该装置被拆分为主要单元和辅助单元，都位于电池上方。

这样可以在两个不同方向上进行定向并优化布线，从而克服如今日益狭窄的空间限制。

主要单元包含 1 个 MidiVal 保险丝和 2 个 MegaCompact 保险丝，并通过通/止端子连接到电池正极端子。相比之下，位于电池侧方的辅助单元装有 7 个 MidiVal 保险丝、2 个 MegaCompact 保险丝和 1 个 MiniVal 保险丝。这些单元中的所有保险丝均由 MTA 制造，而且 MidiVal 紧锁保险丝是为此应用专门开发的。

用于 Renault Trafic 的单元在 MTA 斯洛伐克工厂生产，在那里进行注塑和组装。



## A Junction Box for Stellantis' electric vans Stellantis 电动面包车的接线盒

No vibrations, no jolts, no gear changes: the ride is perfectly smooth and silent. This is how CITROËN ë-Berlingo and PEUGEOT e-Partner, the new generation of multipurpose commercial vehicles produced by Stellantis and developed on the group's EK9 electric platform in Vigo, Spain, are presented to the public.

The two vans made by CITROËN and PEUGEOT feature a more economical driving style: gentle acceleration and regenerative braking allowing you to maximize the range.

The Junction Box supplied by MTA to the platform also contributes to these characteristics.

没有振动，没有颠簸，没有换挡：行驶非常平稳安静。这就是CITROËN ë-Berlingo 和 PEUGEOT e-Partner 向公众展示的驾驶新理念，这两款汽车是由 Stellantis 生产并在该集团位于西班牙维戈的 EK9 电动平台上开发的新一代多功能商用车。

CITROËN 和 PEUGEOT 制造的这两款面包车具有更经济的驾驶风格：温和加速和再生制动将为您最大限度的提升自主控制。

MTA 为该平台提供的接线盒也有助于实现这些特性。



Peugeot e-Partner

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Citroën ë-Berlingo

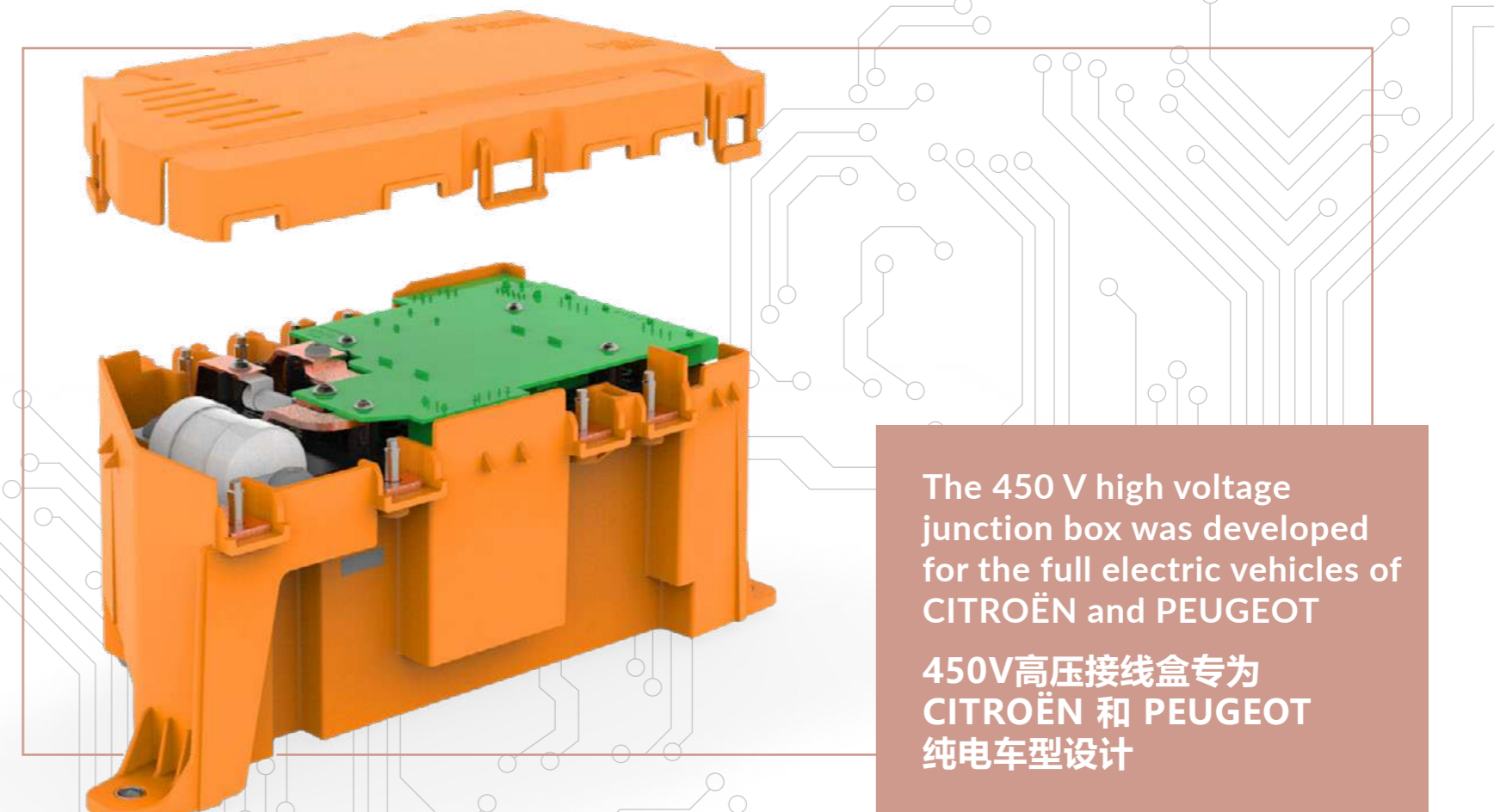
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The junction box is a 450 V unit installed in the battery pack compartment, which on the one hand supplies current to the electric motor and, on the other, recovers energy during braking to recharge the battery. The unit contains an HV fuse and a PCB that allows the current, voltage and battery charge to be measured.

The busbar of this unit is blanked in the MTA site in Codogno, the PCB is assembled in Rolo, the site specialized in electronics, and the plastic is molded by MTA Morocco where the final assembly is also carried out and the product forwarded to the Stellantis facility.

接线盒为一个 450 V 的单元，安装在电池组中，一方面可为电动机提供电流，另一方面可在制动期间回收能量为电池充电。该装置包含一个高压保险丝和一个 PCB，可以测量电流、电压和电池电量。

该装置的母线在 MTA 科多尼奥工厂下料，在专门生产电子产品的罗洛工厂组装 PCB，在 MTA 摩洛哥工厂注塑并进行最终组装，再将产品运送到 Stellantis 工厂。



The 450 V high voltage junction box was developed for the full electric vehicles of CITROËN and PEUGEOT

450V高压接线盒专为CITROËN和PEUGEOT纯车型设计



## Citroën Ami: a 100% electric vehicle for new mobility

### Citroën Ami: 一款 100% 电动汽车，带来全新出行方式



Woe to call it a car: Citroën Ami is in fact a light quadricycle, 100% electric, drivable at the age of 14 with a moped license, and from 16, it is even possible to carry a passenger. Conceived for a new model of economic urban mobility, Citroën Ami has already met with great success with the public, also focusing on the identity and original design that each customer can choose to customize to their own taste.

To Citroën Ami, MTA supplies a 48 V off-the-shelf electric unit connected directly to the battery, which allows the electric motor to be powered. Its two outputs are protected by 60 A and 80 A MegaVal fuses and used both for power distribution and for the protection of utilities: one, in fact, is connected to the on-board AC/DC charger and to the DC/DC converter, while the second is used for the auxiliary power supply of some vehicle utilities.

Thanks to this off-the-shelf product, capable of fully satisfying the needs of Citroën Ami, the production start-up took place in less than 4 months at our plant in Kenitra, Morocco, which directly supplies that of Stellantis, located in the same area.

A 48 V electric unit which allows the electric motor to be powered

一个 48 V 的电力装置，可为电动机提供动力

Citroën Ami 与其称之为汽车，不如说是一辆 100% 电动的轻型四轮摩托，凭助动车驾驶证 14 岁就可以驾驶，16 岁甚至可以搭载乘客。Citroën Ami 是一种针对城市经济出行而打造的新车型，已成功收获了公众认可，同时该车型也注重个性化及原创设计，每个客户可根据自己的品味进行定制。

对于 Citroën Ami，MTA 提供了一个直接连接到电池的 48 V 现成电力装置，可为电动机提供动力。该装置的两个输出端由 60 A 和 80 A MegaVal 保险丝保护，可用于配电和设施保护：事实上，一个输出端可连接到车载 AC/DC 充电器和 DC/DC 转换器，另一个则可为一些车辆设施提供辅助电源。

由于这种现成的产品能够完全满足 Citroën Ami 的需求，我们位于摩洛哥盖尼特拉的工厂在不到 4 个月的时间内便启动了生产，而该工厂已经为位于同一地区的 Stellantis 直接供应该产品。



## One product, multiple functions

### 一种产品，多种功能



New Holland T6 Series



MEC 97 makes it possible to simplify wiring and reduce assembly times

MEC 97 可以简化布线并缩短组装时间

Rationalize the power distribution and protection of the main electrical consumers in the engine compartment of some of its off-highway vehicles: this was the goal set by CNH Industrial that led us to develop MEC 97 in close collaboration with its engineering division. MEC 97 is a unit that is the result of the synergistic efforts of our Business Units, which have integrated their know-how to create a compact product capable of encompassing the functionality of the various products we used to supply. What are the benefits? A simplification in the wiring, a tidier layout, and reduced assembly times.

MEC 97 is a plug-and-play product, PCB-type, whose pins are assembled by press-fitting, which ensures optimal electrical contacts even under strong vibrations. Thanks to the PCB logic, the control unit also proves to be very versatile: in fact, by changing only the PCB and varying the number of connectors, the customer was able to use MEC 97 on a variety of applications. The first was for New Holland-branded T6 and T7 tractors, then the supply was extended to other CNH agricultural applications in the EMEA market, and recently to a 4WD vehicle for the construction world in NAFTA.

The PCB for MEC 97 is made at our Italian plant in Rolo, from where it is then sent to MTA Slovakia where the unit is manufactured.

为一些越野车辆发动机舱中的主要用电装置实现合理配电与保护：这是 CNH Industrial 设定的目标，也促使我们与其工程部门密切合作开发了 MEC 97。MEC 97 是我们各业务部门共同努力的结果，这些业务部门通过整合各自的专业知识，打造出了这款设计精巧的产品，该产品兼具我们过去所提供的各种产品的功能。有什么好处？简化布线、使布局更整洁并缩短组装时间。

MEC 97 是一款即插即用的 PCB 型产品，其引脚通过压装组装，即使在强烈振动条件下亦可确保最佳的电接触性能。得益于 PCB 逻辑，该控制单元还具有出色的通用性：事实上，只要改变 PCB 和连接器数量，客户就能够在各种应用中使用 MEC 97。该产品最先应用于 New Holland 品牌的 T6 和 T7 拖拉机，随后扩展到了 EMEA 市场的其他 CNH 农业应用，最近又扩展到了北美自由贸易区 (NAFTA) 建筑用四轮驱动汽车。

MEC 97 的 PCB 是在我们位于意大利罗洛的工厂中制造的，然后从那里送到 MTA 斯洛伐克工厂进行 MEC 97 制造。



## MTA equips Triumph MTA 为 Triumph 提供装备

The Triumph Speed Triple 1200 RS and RR and the Tiger 1200 GT and Rally, stand out for their high technological standards. This is due to the introduction of a series of advanced features, designed to improve riding conditions and to offer unique advantages in terms of safety, comfort and control. This is also ensured by the dashboards developed specifically for the two bikes: a 5" Full TFT display for the Speed Triple and a 7" Full TFT display for the Tiger 1200.

Triumph 的 Speed Triple 1200 RS 和 RR 以及 Tiger 1200 GT 和 Rally 以出色的技术标准大放异彩。这是由于这些产品引入了一系列高级功能，不但改善了骑行条件，同时在安全性、舒适性和控制方面具有独特优势。专为 Speed Triple 和 Tiger 1200 这两款摩托车开发的仪表盘也确保了这一点：前者采用 5 英寸全 TFT 显示屏，后者采用 7 英寸全 TFT 显示屏。



### SPEED TRIPLE 1200

Speed Triple 1200 RS is a naked sports bike designed from the ground up to offer an absolute revolution in terms of power, performance, handling and technology. Its offshoot, the Speed Triple 1200 RR, has more of a racing soul, which is evident from some of the decidedly sporty technical modifications.

Speed Triple 1200 RS 是一款采用全新设计的运动型街车，在动力、性能、操控和技术方面颠覆以往。Speed Triple 1200 RR 脱胎于该系列，但在运动方向上进行了一些明显技术修整，更具赛车灵魂。



### TIGER 1200

Tiger 1200 is available in two versions: the GT, with the look and characteristics of a road bike and the Rally, which has a more off-road soul. The different configurations, base model, Pro and Explorer are all designed to offer a customized experience for every motorcyclist.

Tiger 1200 有两个版本可供选择：具有公路摩托车外观和特征的 GT 和更具越野灵魂的 Rally。基本型号、Pro 版及 Explorer 版采用不同配置，但均可为每位摩托车手提供个性化体验。



The two dashboards display all the information outputs from the on-board computer and thanks to a series of latest generation features, offer a unique riding experience.

- Innovative operating system for accessing and managing the My Triumph Connectivity System, which provides turn-by-turn navigation, music, phone and GoPro control.
- 6 different screens with adjustable high and low brightness settings.
- 2 classic Bluetooth channels for connecting smartphones and earphones.
- 2 Bluetooth Low Energy (BLE) channels for GoPro camera and future connectivity additions.
- Bluetooth integration in the dashboard, which means there is no need for an external module.

这两款仪表盘可显示车载计算机输出的所有信息，并具有一系列最新功能，可提供独特的骑行体验。

- 用于访问和管理 My Triumph 连接系统的创新操作系统，可提供转弯导航、音乐、电话和 GoPro 控制功能。
- 6 种不同屏幕，可调节亮度高低。
- 2 个经典蓝牙通道，用于连接智能手机和耳机。
- 2 个低功耗蓝牙 (BLE) 通道，用于连接 GoPro 相机和更多其它设备。
- 蓝牙集成于仪表盘内，即不需要外部模块。





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## Smart display goes to Silicon Valley Smart 显示屏走进硅谷

Lightning Motorcycles, a Silicon Valley company renowned for producing the best performing electric motorcycles on the market, has chosen our Smart dashboard to equip its new creation: Strike. A sports bike with powerful aesthetics and high aerodynamic efficiency that exploits a series of innovations deriving from the LS-218, the superbike of the House that holds the speed record for series electric motorcycles.

Smart is an instrument panel with 4.3" color TFT that stands out for a design that recalls that of the most recent smartphones and for the production techniques that ensure its visibility in all light conditions. The panel for Strike features customized serigraphs and some of the warning lights have been specially created taking into account the specificities of an electric vehicle. We find, for example, the light that monitors the temperature of the battery or its thermal management system, the one that signals malfunctions in the electric motor, or the one that shows when the bike is charging.

Smart was supplied with basic software then implemented by Lightning Motorcycles engineers thanks to MTA Studio®, the proprietary software tool that allows manufacturers to customize dashboards, displays and electronic control units according to the specific needs of their vehicles.

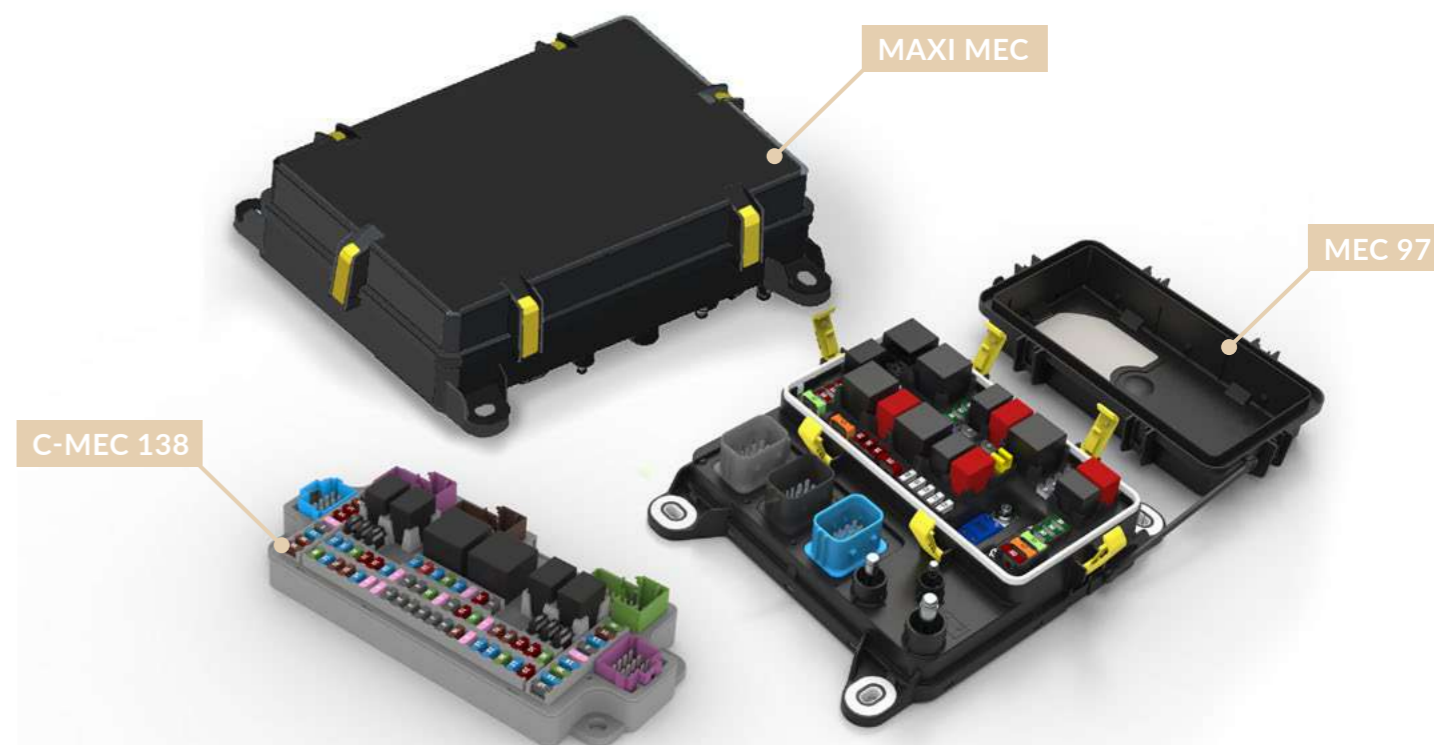
Lightning Motorcycles 是一家位于硅谷的公司，以生产市场上性能最佳的电动摩托车而闻名，该公司选择了 Smart 仪表盘来装备其新产品：Strike。这是一款兼具出色外观与出众气动效能的电动摩托车，采用了源自 LS-218 的一系列创新成果，LS-218 超级摩托车是电动摩托车速度记录的保持者。

Smart 是一款配有 4.3 英寸 TFT 的彩色仪表盘，其独特设计可令人联想到最新款智能手机，而其生产技术可确保在所有光线条件下清晰可见。Strike 的仪表盘具有定制的绢网印花，部分警示灯是在考虑到电动摩托车的特殊性后而专门设计的，例如，用于监控电池温度或其热管理系统的警示灯、发出电动机故障信号的警示灯，或在摩托车充电时亮起的警示灯。

Smart 配备了基础软件，然后由 Lightning Motorcycles 工程师借助专有软件工具 MTA Studio® 实施。MTA Studio® 允许制造商根据摩托车的特定需求对仪表盘、显示器和电子控制单元进行定制化设置。

An electric sports bike with high aerodynamic efficiency, equipped with our Smart dashboard  
一款具有高气动效能的电动摩托车配备了我们的 Smart 仪表盘

## Electric modules become "intelligent" 电子模块变得更加“智能”



MTA's offer for Off-the-shelf products which can be customised according to the specific application they are intended for, has grown.

The MEC 97 and the Maxi-MEC, designed for the engine compartment, and the C-MEC 138, for installation in the cabin, are plug & play Modular Electric Centers with a press-fit PCB specifically designed for agriculture and construction applications.

They have a rational design, compact dimensions and allow to integrate all the functions in one piece, thus eliminating the need of using different modules and associated wirings. The vehicle is therefore lightened from costly and heavy modules and cables, the wiring layout is simplified and the assembly time reduced.

The MECs have different customisation levels and, for example, for different fuses/relays configuration, a simple replacement of a mask is enough.

Today, faced with the request of many customers who need to use a CAN Bus line, MTA is developing a CAN Module Plug-in, which can drive the MEC's relays by CAN Bus, to make these products even more performing. This way the Modular Electric Centers will become "Smart Modular Electric Centers". The CAN Module Plug-in, will connect the Modular Electric Centers with the CAN Bus line to generate the actuations needed.

The CAN Bus Module can be programmed through MTA Studio®, like MTA customizable dashboards, displays and ECUs. This represents a great advantage for those already using some MTA products, allowing to obtain the best synergies.

MTA 提供的现成产品越来越多，可根据具体应用对这些产品进行定制。

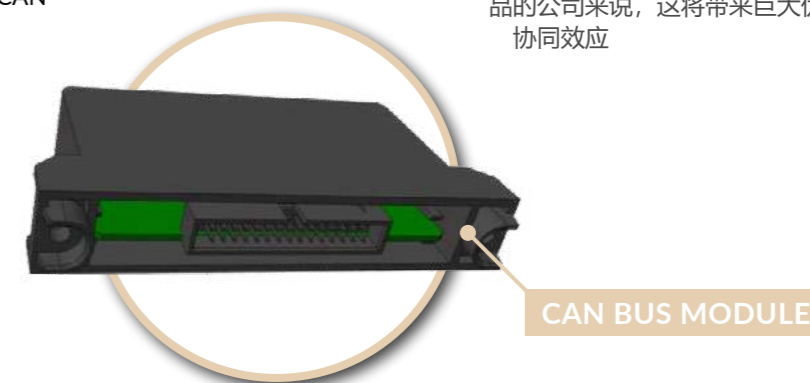
设计用于发动机舱的 MEC 97 和 Maxi-MEC 以及安装在驾驶室内部的 C-MEC 138 均为即插即用的模块化电子中心，配有专门为农业和建筑应用设计的压装 PCB。

这些模块化电子中心设计合理、尺寸小巧，可将所有功能集成在一个部件中，从而免除使用不同模块和相关布线的需要。因此，车辆无需再使用昂贵且沉重的模块和电缆，从而减轻重量、简化布线并缩短组装时间。

MEC 具有不同的定制级别，例如，对于不同的保险丝/继电器配置，只需更换掩模即可。

现如今，面对众多需要使用 CAN 总线的客户需求，MTA 正在开发 CAN 模块插件，以便通过 CAN 总线驱动 MEC 继电器，使这些产品的性能更上一层楼，这样，模块化电子中心将成为“智能模块化电子中心”。CAN 模块插件可将模块化电子中心与 CAN 总线连接，以形成所需的驱动连接。

CAN 总线模块可以通过 MTA Studio® 进行编程，例如 MTA 可定制的仪表盘、显示屏和 ECU。对于那些已经使用 MTA 产品的公司来说，这将带来巨大优势，甚至可以获得最佳的协同效应。







## All the computing power in one unit: Agri SIC

### 在一个装置中集中所有算力: Agri SIC

The system for any tractor cabin  
适用于任何拖拉机驾驶室的系统

Agri SIC is a complete in-vehicle system for off-highway vehicle applications, featuring an intelligent central unit that can manage and control all the displays, sharing data and contents.

- **INNOVATIVE CHARACTER**  
Due to the high performance of the main unit, Agri SIC allows the use of very compact and small displays for simplified layout.
- **STATE-OF-THE-ART**  
The Agri SIC meets today's demands for a system able to manage always more information and to integrate specific agriculture functionalities.
- **SPECIAL FEATURES / ADVANTAGES**  
The system features the latest technologies available, a fast boot time and a layered security architecture.

Agri SIC 是一个完整的车载系统，用于非公路车辆应用，带有一个智能中央单元，可以管理和控制所有显示器，共享数据和内容。

- **创新性质**  
得益于主单元的出色性能，Agri SIC 允许使用小巧紧凑的显示器来简化布局。
- **世界先进水平**  
Agri SIC 满足了当今用户对只用一款系统来管理更多信息和集成特定农业功能的需求。
- **特色/优势**  
该系统采用最新技术，启动时间更短，且具有分层安全架构。

## Next generation displays 新一代显示屏

Giotto and Leonardo have been first choice customizable displays for manufacturers of agricultural and earth-moving vehicles for many years now.

Today the two successful displays have been upgraded and based on the Linux operating system and the Qt framework.

- **NO NEED TO RECODE**  
With the new version of Giotto and Leonardo featuring Linux and Qt tools, OEMs have the possibility to reuse some existing applications on MTA hardware without the need to recode them from scratch.
- **SOFTWARE ADVANTAGES**  
Thanks to Qt, the new displays will enable future-proof and best-performing applications' development.
- **HARDWARE FOR TOUGH ENVIRONMENTS**  
Giotto and Leonardo are built to resist the rugged conditions and harsh environments typical of construction applications.

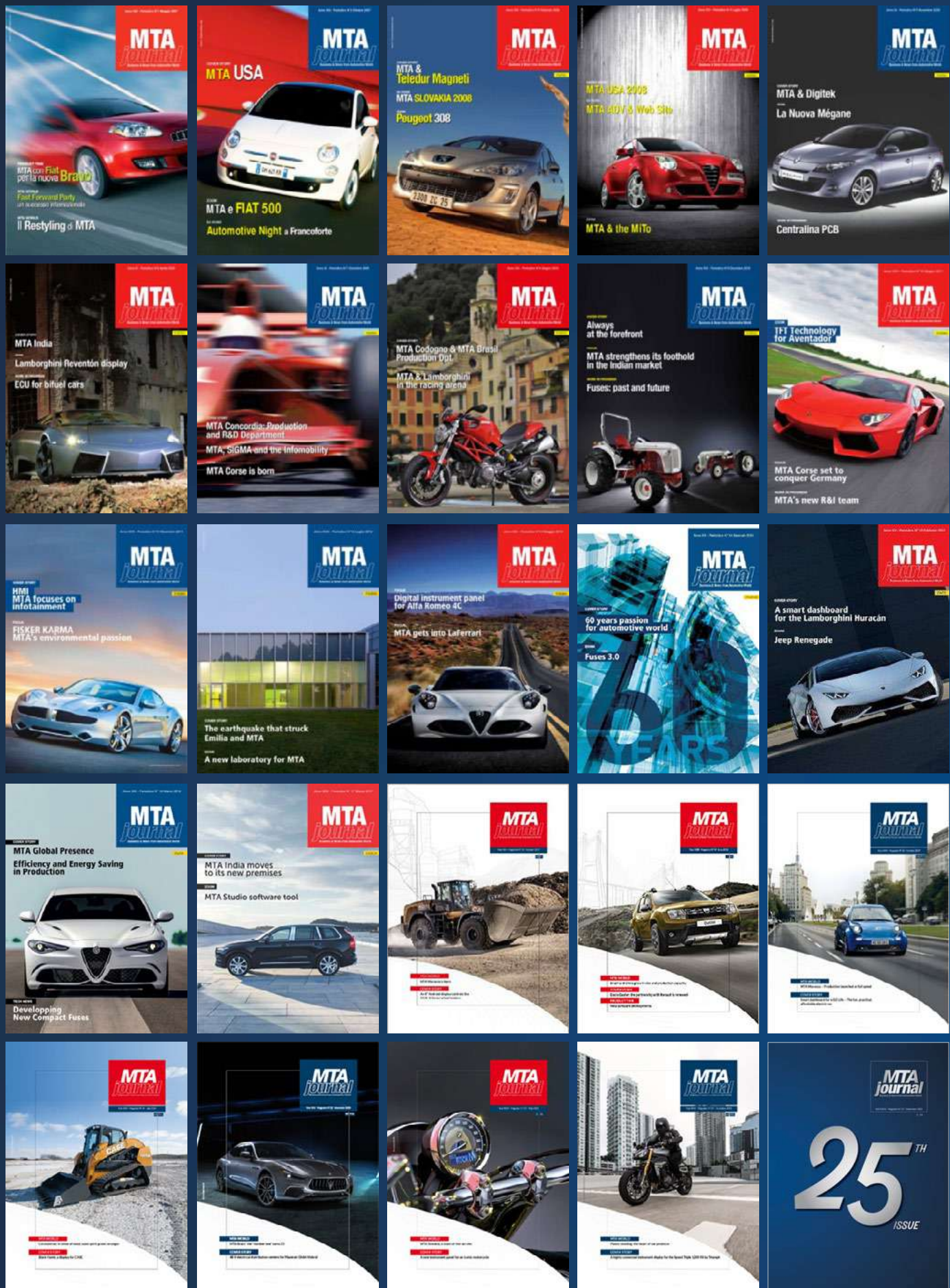
多年来，Giotto 和 Leonardo 一直是农用和土方车辆制造商的首选定制显示屏。今天，这两款大获成功的显示屏已完成了基于 Linux 操作系统和 Qt 框架的进一步升级。

- **无需重新编码**  
借助具有 Linux 和 Qt 工具的新版 Giotto 和 Leonardo，OEM 可以重复使用 MTA 硬件上的一些现有应用程序，而无需重新编码。
- **软件优势**  
得益于 Qt 框架，这两款新显示屏将支持面向未来、性能卓越的应用程序开发。
- **适用于恶劣环境的硬件**  
Giotto 和 Leonardo 经过专门设计，可抵御建筑应用中常见的恶劣条件和环境。

Giotto and Leonardo displays, towards a new era with an important upgrade  
Giotto 和 Leonardo 显示屏完成重磅升级，迈向全新时代







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