

Italy, August 2017

PROXAUT Automated Guided Vehicles AGV/LGV

PROXAUT is a leading technology and solution provider within the **Material Handling Industry**. With over 20 years of experience in this business, we design, manufacture, test and service state-of-the-art AGVs (Automated Guided Vehicles) and LGVs (Laser Guided Vehicles) for our customers, worldwide.

An AGV system provides automated transportation based on driver-less vehicles. Systems can be designed to suit a variety of operations.

PROXAUT is the manufacturer which offers the highest number of options to choose, among a variety of product configurations, navigation systems, SW interfaces and performances, implementing in our AGVs the most advanced technologies available within the material handling industry.

PROXAUT has delivered AGVs capable to move items from 500 kg to 170.000 kg (from 1,100 lbs to 340,000 lbs), net capacity load.

In our **vision of modern warehouse and modern manufacturing**, automation is the main driver for achieving higher productivity, leaner manufacturing, better process and product control, real time information and a high level of factory integration. At PROXAUT we understand your challenges and we help you to maintain a technological edge vs. your competitors.

PROXAUT can design, assemble and deliver AGVs that have been used in applications ranging from high throughput sectors like Food & Beverage and Automotive, to high demanding industries like Aerospace, Pharma and Medical Devices. In addition to that, we can meet your transportation requirements like rough environment conditions, low temperatures, high racking, over-sized items, heavy weight items, as well as fragile or expensive products which must be handled with additional care, superior accuracy and safety.

Additional applications which are normally delivered by Proxaut are: AGVs for outdoor, AGVs 100% Stainless Steel for Food&Pharma, EN/UL compliancy, integration with any ERP / WMS / MES, and integration with any PLC: Siemens/Omron or proprietary.

PROXAUT can deliver AGVs 100% customized. Starting from your application, we provide fully personalized solutions. No matter which application you have, PROXAUT will deliver the right AGV for each single application and this means only one thing to you: **PROXAUT will deliver the AGV you are looking for.**

Because **our systems are** easy to customize, integrate and commission, they are **easy to operate and maintain**. They can also be easily reconfigured or extended, if your requirements change overtime.

We deliver a variety of vehicle types such as steer/drive or quad and multi-wheeler, with capability of shifting 90°, without bending. **A variety of standard or custom attachments** are also available including on-board roller, chain or belt conveyors, mast lift assemblies, telescopic forks, three-lateral forks and hydraulic clamps, all designed to meet the toughest requirements.

The off-board master control program for order management and traffic control runs on Microsoft Windows and **the human interface is AUTOCAD based and extremely used friendly**. The standard master controller can control over 50 vehicles in one system and can be used for stand alone applications as well as interfacing with a host computer.

Using a layout diagram in AUTOCAD and tables, our interface allows total operating control of the AGV system, providing a large set of data on the status of the vehicles and products transported, all in real time.

Each AGV has a map of the entire operating route stored within its controller, allowing the vehicle to navigate a path to any destination in the layout. The map is easily generated from a CAD drawing within the given Layout. Each vehicle is in constant contact with the off-board control system via radio or WLAN.

Besides improving operating safety, **PROXAUT AGV systems deliver a considerable return on investment** by reducing your unit cost basis, along with reduced product and equipment damage.

By utilizing **Lithium batteries**, each AGV provides a net availability of 22+ hours per day, 7 days per week.

Each AGV is delivered with an impressive set of **safety devices**, all controlled by a dedicated PLC SICK and a dedicated communication network, EFI SICK. This makes the AGV intrinsically safe, reducing to zero the risk of injuries and increasing considerably the safety of your transported products.

Another main advantage of our technology is the **complete traceability of your products**, while you know, **real time**, which AGV is transporting a specific item, where the AGV is storing or has stored an item, which item will be taken next and for which destination and through which route.

By scheduling tasks in advance, you are sure that your supply chain will never run out of parts, the AGVs will ensure a consistent timely delivery, avoiding the oversupply of your production lines.

An additional advantage of AGVs is that **you will free up skilled drivers from repetitive tasks**, utilizing them only for higher valued task, where human intelligent skill-set is requested.

An example of our distinction for quality: OEM partnership with Jungheinrich Italy

PROXAUT has been for many years the **original manufacturer of AGVs for Jungheinrich Italy**, delivering the high quality demanded by one of the most recognized brand of the Material Handling Industry.

From large Pallet Movers, to Very Narrow Aisles applications, we delivered customized units for a variety of applications.



Applications

1000 kg



2000 kg



6000 kg



Stainelss Steel or Metal Body for applications from 1.000 kg (2,205 lbs) to 2.000 kg (2,410 lbs), up to 6 tons (13,230 lbs), all capacities calculated assuming a center of gravity of the loading unit of 600 mm. Max travel speed 1,5 meters per second (approx. 5 ft/s).

Mast and Forks can be fully customized for handling any kind of loading unit.



Vehicles for Very Narrow Aisle Applications, with tri-lateral tool.



Special Clamps designed by Proxaut for tilting, rotating, shifting and lifting paper reels up to 2.500 kg (5,512 lbs)



3.000 kg (6,614 lbs) net capacity. Ultra-flat shuttles, with capability of shifting laterally 90°, without bending.



10.000 kg (22,046 lbs) net capacity, with capability of shifting laterally 90°, without bending.

Shuttles – Pallet Movers



Modular pallet movers for handling from 1 to 6 pallets simultaneously. Picking / delivering from/to automated conveyors.



From 10.000 to 20.000 kg (from 22,046 lbs to 44,092 lbs) long bars.

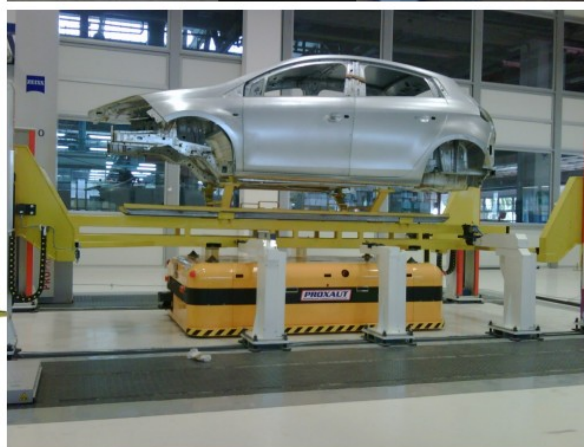
AGVs for Outdoor



Quad driven AGVs for Narrow Aisles



Automotive



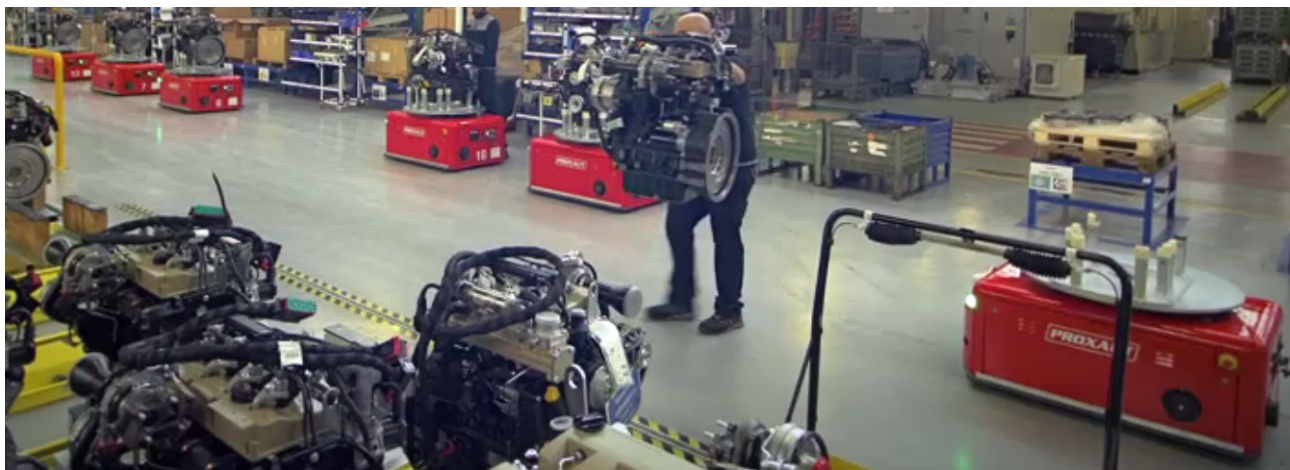
Aviation: flat AGV for 170 tons (375,000 lbs)

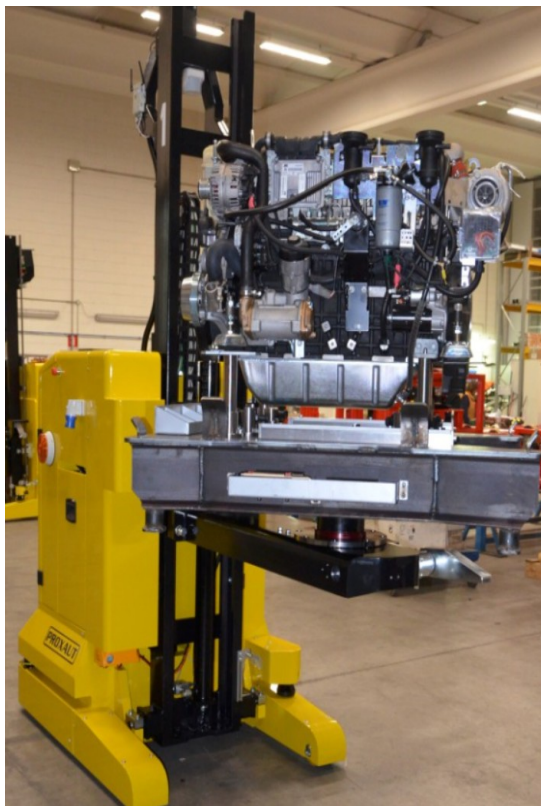


Coils 30+ tons (from 66,000 lbs)



Production Lines with AGVs





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