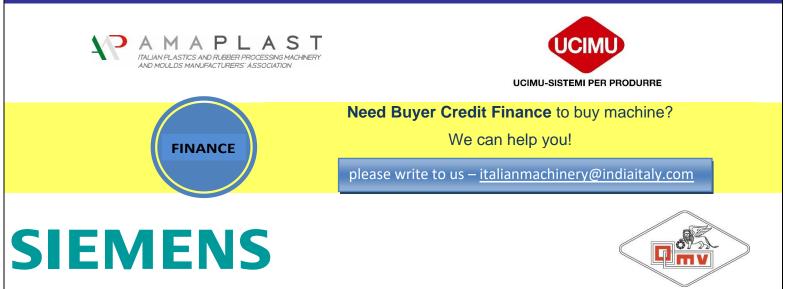
# ITALIAN MACHINE TOOLS, ROBOTICS & AUTOMATION INDUSTRY ~ NEWS

#### Oct 2023

### PIATTAFORMA INDIA PROJECT

NEWSLETTER NO. 82



### PARTNERSHIP BETWEEN O.M.V. (GRUPPO PARPAS) AND SIEMENS

**O.M.V. Officine Meccaniche Venete S.p.A.** has been founded in 1969 and together with **PARPAS S.p.A.** (founded in 1951) is forming the **GRUPPO PARPAS** who deals with the design and production of high-tech machine tools for the AUTOMOTIVE, AVIATION, SPACE, GENERAL ENGINEERING AND POWER GENERATION sectors.

The history starts with the production of pantographs and duplicaters and after more than 70 years it has become a trusted partner of many important companies in the world. The Group's philosophy has always been based on three

main factors: very high precision, reliability and reliability of accuracy over time.

**GRUPPO PARPAS** offers a wide range of products, some standard solutions some more customized solutions among which Bridge type milling machines, Gantry machines (up to 30.000 mm longitudinal axis), Moving column milling machines, moving column and fixed table, Blade / blisk /impellers machining centers, these are the models that **GRUPPO PARPAS** produce. Another important aspect of the group's philosophy is the internal production of motor spindles since 1999.



**GRUPPO PARPAS** has 3 production sites in Italy and 3 international branches:

**O.M.V. Officine Meccaniche Venete S.p.A.** site: OMV headquarter (design, production, assembly, research & development) of small and medium-sized machine tools (including fixed portals with fixed and/or mobile table, machining centers for blisks and blades) and medium-large moving columns / boring machines.

**PARPAS S.p.A.** site: Parpas headquarter (design, production, assembly, research & development) of medium-large machine tools, gantry and multitasking milling centers.

PARPAS 2 site: for the assembly of flexible production systems and/or large machine tools.



**FMS FLEXIBLE MANUFACTURING SYSTEM: GRUPPO PARPAS** to ensure maximum productivity, offers its customers fully automated lines with pallet change for a production 24 hours a day – 7 days a week – 365 days a year. These systems machines with high accuracy, reliability and flexibility, Automatic pallets systems, precision stations inside the machine, precision loading/unloading stations, pallet automation with rack storage, interconnection and management of multiple machines with supervisor, HMI interface for pallet handling, control and management of temperatures.

**MULTITASKING SOLUTIONS**: The Multitasking Solutions of the **GRUPPO PARPAS** allow to centralize different types of machining in a single machine thanks to the possibility to integrate different models of rotary tables for milling and/or turning.

Multiple models and sizes differ in configuration but equally ensure flexibility and reliability to customers. The wide range of configurations offers a competitive advantage in the production process allowing the users to be always on the leading edge of the market. The constant research for new products and technologies continues, aiming to meet the needs of the various industrial sectors. This allows the **GRUPPO PARPAS** to establish itself increasingly as a partner-solution and be recognized in the world market as a brand of quality and professionalism.

In addition to relying on the latest technologies and many patented solutions, **GRUPPO PARPAS** can count on partners/suppliers of the calibre of **SIEMENS**.

**O.M.V. Officine Meccaniche Venete S.p.A.** was able to get full support from **SIEMENS** to complete a very important blades machining centers turnkey project with its **UNIKA BLADE** for high accuracy aerospace parts. The collaboration with SIEMENS started already in the initial stage of the project during designing of proper solution for a customer and continued during the production of the machine and commissioning.

**UNIKA BLADE** is a high speed-milling machine with moving column, full linear motors and box in box structures. It allows a rapid feed of 60 m/min. The movements of the linear axes are realized with water-cooled linear motors. The column, the saddle and the ram are generously dimensioned. The structures are naturally symmetrical guaranteeing therefore constancy of behavior independently from the temperature variations and from the solicitations produced in machining phase.

In the working area can be installed rotary tables,

tailstocks, clamping piece systems. **PARPAS** and **SIEMENS** worked together on setting up the kinematics for this specific machining configuration and for the parametrization of the anti-collision function, taking care of all phases and proposing and supplying the customer with a high-performance machine.



Looking to the future to make machine tools smart and sustainable, **SIEMENS** offers a wide range of Software and Hardware solutions, without ever losing sight of **SUSTAINABILITY**.

The latest SIEMENS' CNC "SINUMERIK ONE" and its digital native is able to include 8 different levels of digital twin, 4 for machine builders through software application "Create myVirtual Machine" and 4 for the end users through "Run myVirtual Machine" software.

Other of the most digital applications to make one or more machine tools smart and sustainable, are **"Manage MyMachines /Remote"** for remote service accessibility and/or programming support, **"Analyze MyMachine** 

**/Condition**" for machine status monitoring and maintenance scheduling, "Manage MyResources /Tools" for tool monitoring and status, "Manage MyResources /Programs" for assigning part programs to machine tools and comparing them with others, "Analyze MyPerformance /OEE" and many more apps.

One of the most used digital applications is **Protect MyMachine /3D Twin** (Full machine protection based on Digital Twin).

Protect MyMachine /3D Twin is an Industrial Edge for Machine Tools application that is able to monitor static and

movements of machine tool components, like setup tools and 3D bodies avoiding collisions and considering space in relation to kinematics and machine tool axis positions. **Protect MyMachine /3D Twin** displays the machining process and machine movements using 3D simulation, it calculates potential collisions in advance and stops machining process in case of collision detected. For example, you can simulate and checking the execution of NC programs in AUTOMATIC mode, MDI or manual mode and tool changing in JOG mode. Machine protection is based on the real machine model and includes collision groups. The User can define the variable protection areas such as tools with holders, stock and clamping operations. All of them are stored in a library.



At the end SIEMENS remember that the sustainability is included in every its product. The latest CNC SINUMERIK ONE includes 8 customizable

energy-saving menus through CTRL+E functions, e.g., during coffee breaks, lunch breaks or other periods of machine inactivity, many complementary devices can be deactivated for greater energy savings.

**O.M.V. Officine Meccaniche Venete S.p.A. of GRUPPO PARPAS** is not a simple supplier of a machine, but a supplier of machines responding to the needs of each single customers, offering its experience in choosing the proper machine to obtain the highest results together.

## For information: <u>www.gruppoparpas.com</u> or <u>info@parpas.com</u>

The project Piattaforma India has been promoted by UCIMU – Association of Italian Machine Tools Manufacturers and AMAPLAST – Italian Plastics and Rubber Processing Machinery and Moulds Manufacturers Association. The two associations agreed on the idea that promoting a network of associations and entrepreneurs who have developed knowledge and experience on the Indian market, can be useful in favoring of new paths of development for business. The Indian companies who are interested to form JV, cooperation, technical tie up, purchase machinery etc from/with Italian companies can contact below mentioned address for any assistance:

Contact information of Piattaforma India desk:

Mr. Nilesh Joshi Manager - Italian Machinery Desk in India



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