



ELETTROMECCANICA GIORDANO COLOMBO: TECHNOLOGICAL ATELIER

Elettromeccanica Giordano Colombo is one of the main world-wide manufacturers of electric spindle and birotative head for working wood, plastic, glass, aluminium and light alloy.

Starting from the early days of foundation, each company's activity was achieved considering research and building of a reliable and high quality product as the final aim. Even today, after more than 60 years, the password is the same: absolute quality. In order to ensure and guarantee this quality Giordano Colombo chose and continues to choose to realize all the components and the main working procedures inside the company, using high-technology machineries, Cnc machining centers, N/C grinders and lathes. This allows to follow the birth and the achievement of each product step by step, checking constantly and carefully each production cycle.

In this way, each electric spindle rises from a design achieved inside the company, where a staff of designers using a 3D CAD plan system is constantly engaged in searching new solutions. Again inside Giordano Colombo all the production procedure processes are carried out and checked. All the required inspections are made: starting from the dimensions checking, when the components are manufactured, up to the customary working checking, when the motor has been completed, i.e. vibration proof, balancing and final testing. The great project flexibility as well as the technical and production ability of proposing several different solutions in according to the precise machine manufacturers requests, make the company peculiar and unique.

Due to the acquired "know how" as well as the gained experience, Giordano Colombo is a real "technological atelier" able to design and build "to measure" motors establishing a continue cooperation relationship based on the dialogue with the customer.

Due to the experience acquired for more than sixty years of activity, the spindles range currently proposed on the market by Giordano Colombo is so wide to allow the company product use for many different applications meeting, therefore, the various customer requirements. Speeds can reach the 60,000 rpm with a power range from 0 Kw to 30 Kw. The faultless service as well as a fast repair service all over the world make the Giordano Colombo service range for the customer satisfaction complete.

At Ligna Giordano Colombo will present: Multispindles Unit "**Bima Cr**", an operating unit with one double ended shaft collet electric spindle (Din1499/B) and one "Atc" electric spindle with Hskf63 (Din69893) cross assembled, with just one interface with the machine, but with power supply and compressed air cooling system separate and independent. "Bima Cr" is the perfect solution for panel and solid wood five Axis and Robot machining centers.



"Bima Cr."

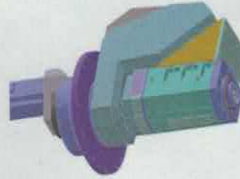
For double ended shaft spindle, speed 12,000-24,000 rpm, Power: 7,5 Kw, Cooling: Compressed air cooling, Bearings: Ceramic, with grease lubrication. For Hskf63 Spindle, Speed: 12,000-24,000 rpm, Power: 7,5 Kw, Cooling: Compressed air cooling, Bearings: Ceramic, with grease lubrication. For Hskf63

Multispindles Unit "**Trima Cr**" is the result of the connection of 3 electric spindles (2 single ended shaft collet electric spindles (Din6499/B) plus one "Atc" electric spindle with Hskf63 (Din69893), in coplanar configuration, with just one interface with the machine, but with power supply and compressed air cooling system separate and independent for each of the 3 spindles, allowing to work one autonomously from the other on the machine.

The machine interface flange is manufactured on customer request and power and cooling supplies for the three spindles are integrated in this unit. "Trima" is the perfect solution for panel and solid wood five axis and robot machining centers. Technical features: for the Two Er32 Collet Spindle: Speed: 12,000-24,000 rpm, Power: 7,4 Kw, Cooling: Compressed air cooling, Bearings: Ceramic, with grease lubrication; for the Hskf63 Spindle: Max Speed: 12,000-24,000 rpm, Max Power: 14,7 Kw, Cooling: Compressed air cooling, Bearings: Ceramic, with grease lubrication.

The "**Compact 110-50**" is a two-axis head with compact body frame. It is suitable for woodworking, light alloys and composites (glass fibers, carbon fibers) machines, this 2-axis unit allows complex medium entity operations. Motion transmission through servomotors (equipped with integrated encoder) controlled motorization.

For "C" Axis: Axis rotation $\pm 220^\circ$, Maximum continuous work speed: 80°/sec, Maximum continuous positioning speed: 140°/sec, Axis torque under continuous work: 430Nm, Torque under discontinuous working condition: 800Nm. For "A" Axis: Axis rotation $\pm 180^\circ$, Maximum continuous work speed: 80°/sec, Maximum continuous positioning speed: 140°/sec, Axis torque under continuous work: 430Nm, Torque under discontinuous working condition: 800Nm; Weight: ~80Kg;



"Compact 110-50".

For electric spindle - RA110 Hskf63: Liquid Cooling: Max speed: 24,000 rpm, Max Power: 10 Kw, Tool attachment: Hskf63 (Din69893).

Optional: Spindle Encoder, Axis Encoder, Axis Brake, Continuous Rotation.

Hall 15, stand D65.

