

PRESS RELEASE

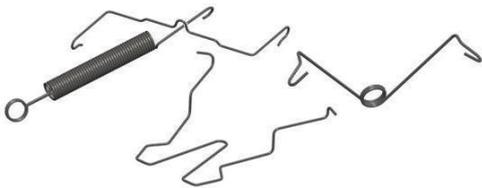
Numalliance – 05 october 2012

FRX04 Game changer

“We see our Tecnocenter as the innovative one-stop-shop manufacturing center of Mexico”, says Jose Oldak, CEO of RYPSA. “With this vision and our desire to grow from our spring manufacturing core business, we had to think outside the box and tap in resources we did not consider in the past. In that aspect, Numalliance and its equipment really met our standards”. RYPSA stands for Resortes Y Partes SA and is spanish for “Springs & Parts” that, as a matter of fact, is exactly what the wire and spring bender FRX04 from Numalliance has been designed for.



Bringing flexibility where it is most required, that machine from its conception is a game changer. Numalliance sized and placed the servo where they are the most efficient, instead of positioning them radially like any other manufacturers. The result of this new servo arrangement is a one-of-a-kind looking machine, with one-of-a-kind capacities. “Being able to run extension and compression springs or wire forms without any tooling change or long set-up is a tremendous asset for our customers, who are facing shorter runs and greater complexity in parts and springs design” adds Manuel Uriarte, Business Development Manager of Numalliance for Mexico.



The FRX04 is perfectly in line with Numalliance’s core values: the quill and bending mandrel rotate around the wire, reducing the tension in the wire, hence facilitating repeatability and quality of the parts. The machine comfortably runs basic wire from .8mm to 4.0mm or any of its higher tensile equivalents.

Making the FRX04 “Naturally Servo Driven”, frees the machine from hydraulic and its possible downfalls: spillage and breakage. Thanks to decades of knowledge –one of Numalliance’s founding firms is 140 years old- Numalliance has learned how to optimize direct coupling so the right amount of power is delivered when and where needed. Thus, all components are designed and built with the purpose to bend and to form efficiently. The combination of these efforts brings also a great value to the customer: the most energy efficient machines on the market. The machine has a full 19” touchscreen display and is powered with the new user friendly interface “Touch and Form”(see photo). Capable of real time simulation the interface comes also with the very handy teach-in pendant (see photo), that allows operator to get safely close to the bending arm for trouble shooting, and part manufacturing optimization. This feature also reduces greatly tooling crashes, directly impacting operating costs of the machine. The patented feed system also reduces the operating cost by eliminating the need of air source to clamp the wire. The mechanical clamping on the wire provide the right amount of force to grip the wire and the 6 feed rolls, controlled by an encoder in a closed loop, ensure that the amount of material fed is correct. Compatible with 3D measuring control devices, the machine would automatically tweak itself from the feed-back of these equipments. This also



makes prototyping, sample production and set up time extremely fast. Of course, like any other product from Numalliance the electrical cabinet has room to host other drive to use other secondary operation of line. Interfacing a robot or integrating the machine in a work cell would not be a bother.

“Numalliance has become a growing partner to support RYPSA efforts in innovation” stresses Jose Oldak. “Not only we are proud to be the first North American company to acquire a FRX04 a year ago, we are looking forward to further develop innovative products with Numalliance.” With operation in North America as well as in Europe, Numalliance can service customers almost around the clock. “Numalliance R&D is in Europe but competence is where the market is, and each region or countries has its specificities that we need to address” says Jean Francois Counhil C.T.O. of the firm, “and that goes beyond being able to translate our interface in 12 different languages”. All new equipment is networkable, and capable for remote assistance with chat-room.

The CNC line of business at Numalliance find its roots in the automotive industries, when the first 3D CNC wire bender was invented. It happened nearly 30 years ago by a team of French engineers and created what was to be the first “F” Line machine from Macsoft. Now this company became a part of the Group. Automotive industry was the first interested in the productivity gain of such equipment. Today CNC wire and spring equipments found their place in almost every sector of the industry. The versatility of the FRX04 opens new applications in medical, dentistry or even jewelry fields.

For now RYPSA is only taking advantage of the FRX04 in its basic format. The machine comes with several options that can easily be retrofitted. One of them is a laser pointer that enables the two legs of a spring to be perfectly aligned. The full control given by the interpolation of the servos enables to use one side of the bending tool as a cutter. “This is what we call the virtual 8th axis” brags Manuel Uriarte. But as conveniently that can be for prototyping, and small series, Numalliance added an additional arm that can be used as a cutter, but also as a table to ensure flatness of a part and even more interestingly can be used as a gripper and holds the last straight length of a part to close a second loop on a double looped part (See photo). With these additional capabilities that does not much compromise the speed, sky seems to be the limit for that machine.

The FRX 04 definitely position itself as a game changer in both the wire bending and the spring manufacturing industries, bridging the gap between these two worlds. Designing a 7 servo spring and wire form machine, without any hydraulic or pneumatic assistance was the “out-of-the-box” challenge Numalliance set for itself to better serve its customer and partners.