



# *A long-standing effective collaboration*

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<< We cannot hide the pride of working with an avant-garde group such as General Electric >> begins by saying Dino Duso (Chairman of Rössl e Duso Srl) and, he continues, << a company that, through innovation and targeted investments, has contributed to improve people's lives and the environment in which we live >>. Energy saving, decarbonisation, reduction of greenhouse gas emissions optimization of resources; topics we hear about every day, but which are not a fleeting trend for GE, rather a cognitive process, a constant commitment. How many of us can tell to actually make a difference? How many of us win the challenge of reinventing themselves to advocate the cause of unstoppable technological, scientific and human progress?!

The comparison between reality and expectations, between a distant future and today's pressing changes: dichotomies that refer us to perspectives of necessity, flexibility, opportunity.

It is with this attitude that we think of GE: relying on their Research & Development department, their analyses, their designs. Hence, based on these premises and with a corroborated awareness, we have made available our many years of experience in the field of mechanical machinings and troubleshooting, to guarantee high- quality products and services, solutions to problems and timely deliveries.

Our partnership dates back to prior to 2008. It was not that easy for a small company of the northeastern of Italy, where the

entrepreneurial fabric tends to be closed and generalist, to deal with an international corporation of such significance.

Initially, they were mostly occasional cooperations in the field of renewable energy, but with inherent unexpressed potential; for instance: mechanical machinings on components for hydroelectric power plants, revamping of gas and/or steam turbines, complex machinings of rotors for the nuclear sector.

We bet on ourselves, on our staff, we tested ourselves, we prepared and trained. Over the years we have managed to establish a relationship of mutual respect, trust and esteem. The analysis and optimisation of the processes have made us grow.

As a matter of fact, it was exactly by embracing this philosophy of continuous challenge in the direction of improvement and innovation that, in 2020, we collaborated with GE Steam Power UK on " a new rotor for a nuclear customer in Scandinavia.

In detail, our company provided the cnc machining of a two-pole rotor over 60 tons in weight, 12m long, and 1.3m in diameter; on which had been drilled holes over 5 metres long and with a maximum deviation of 2 mm.

The milling of the slots was carried out after planning special tools (specially designed and manufactured by our technicians); while the control and correction of the deviation of the drilling was performed through a specific laser instrument, which,

through a probe, allows to detect the linearity of sloping holes exceeding 5 metres. Two more elements worthy of note were: the execution of the turning of some coupling flanges diameters, which was expecting a circularity tolerance of 0.006mm (about 10 times thinner than a sheet of paper) and the design of a metal structure in heavy carpentry suitable for transporting the rotor, which would have guaranteed its safety and have preserved its integrity during all phases of its handling (lifting, loading into the means of transport and transport up to the arrival on site into the plant).

However, it must be pointed out that, if we were able to achieve that outstanding result, it was only thanks to the high "technical benchmarking" between GE and Rössl e Duso. A structured and open technical sharing of the "best practices" that were used both on mechanical machinings, and on the approaches to intermediate inspections, as well as on the selection of the most efficient tools. This pragmatic approach has allowed us to create a solid relationship and has placed a good mortgage on our future partnerships.

Currently, we are working on two other projects providing the mechanical machining of a rotor similar to the one mentioned above. These are the stories we like to tell; examples of how diversities, be they cultural, geographical or professional, join and improve people, striking a balance between our beloved planet and us.