

Innovations and Motorsports

Corghi boasts lengthy development history in the wheel servicing industry, complete with a variety of experiences

Correggio, Italy-based Corghi are no strangers to innovation and adaptability. From building the world's first fully-automated tyre changer – 2001's Artiglio Master – the company has also specialised in a "Blue Light" vision system, which allows the engineer to interact with the wheel, balancing it from a touch screen monitor. The company also specialises in motorsport, supplying exclusively Ferrari workshops and the official tyre changer for the World Rally Championship (Artiglio 50).

Founded in 1954 by brothers Remo and Erminio, Corghi has strived to be at the forefront of its sector, especially from 1960 – the year in which the two Corghi brothers invented and patented the world's first tyre changer. Corghi continued its development in this field, arriving at a position of leadership in the market for specialised tyre equipment. Now the firm boasts a wide range of products including automatic tyre changers, wheel balancers, wheel aligners, lifts, testing lines and applications for diagnostics, as well as many other products in the sphere of workshop equipment.

Corghi believes that the cornerstone of its production policy is quality and technological innovation, as shown by some of the company's most recent developments, including the mounting system without integrated lever, used for the first time on Artiglio Master and subsequently incorporated in Artiglio 50, which was unveiled in 2006. The latest result of Corghi's emphasis on innovation was presented at the recent Automechanika trade fair in Frankfurt, and is the new, highly sophisticated wheel balancing technology known as Blue Light.

Blue Light, the new balancing frontier

The Blue Light wheel balancer offers the specialists of the wheel and tyre field three key advantages: a touch screen monitor, a "touch-less" measuring technology, and the innovative Blue Light vision system.

The touch screen monitor, introduced on the Blue Light, offers the operator easy interaction with the wheel balancer in a direct and simple way, which also allows them to modify the parameters in real time.

With this technology, the geometric dimensions of the wheel are measured with telecameras and laser sensors, thereby achieving greater degrees of precision. Thanks to the use of a high performance PC unit, the system guarantees a high application speed and real time data processing.

At the same time, the machine's Blue Light vision system lights up the inner side of the rim, allowing the operator to acquire high resolution images under any lighting conditions.

Corghi and motorsport

The company's willingness to experiment and desire to innovate mean that Corghi has been a preferential partner for those who practice competitive motor-sports. Apart from having its products type-approved throughout the world by important vehicle manufacturers, Corghi is the only supplier of equipment for the Ferrari workshops, including the F1 "Scuderia," with its specific "Ferrari Service Workshop Equipment" line. The CS44 tyre changer is the only one in the world specifically developed and used to mount and demount the tyres of the F1 vehicles for all the official competitions.

The rally world has also chosen Corghi and, more specifically, its Artiglio 50, which is the official tyre

changer of the World Rally Championship. The Artiglio 50, with its "leva la leva" (without lever) technology, is able to work with "difficult" tyres such as those used in the world rally competitions. In two days of competitions, every Artiglio 50 demounts and remounts an average of 1500 tyres, often in extreme weather conditions.

As well as the competition tracks, Corghi technology is also chosen at industrial level by those working in the 2-wheel world, like Ducati which uses Corghi lifts, tyre changers and gas analysers in its plant.

World's first fully automatic tyre changer

The Artiglio Master was the first fully automatic tyre changer in the world, but its innovation lay in the elimination not only of the use of levers, but also of the physical effort required and the risk of damaging the costly rims and tyres.

The so-called "without lever" technology introduced by Corghi was a revolutionary invention for a series of reasons: the electronic pre-setting of the wheel diameter, the automatic positioning of the mounting and demounting tools, a lift to place the wheel in the best position, an automatically activated bead breaker disc with controlled penetration, and an automatically activated tool head that mounts and demounts the tyres without using any lever.

The operator can carry out these operations without leaving his work position as the commands are all in a single console, allowing him to work in absolute safety and guarantee the maximum precision, not to mention the optimisation of work times.

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The Blue Light wheel balancer offers "touch-less" measuring technology