Guzzi's CX twin

Five years before the 1000cc Le Mans was introduced worldwide, America's craving for cubes created a pioneering cross-breed

WORDS AND PHOTOS BY NOLAN WOODBURY

Above: 'Just another Le Mans' you might say. You might also be less than accurate...

Opposite: All the familiar Moto Guzzi features are present and correct, from the beefy engine poking its pots out through the fairing, to the shaft-drive round back, angular glassware and bewildering switchgear

COMMISSIONED BY THE Berliner Group, the USA-only Moto Guzzi CX100 was built to satisfy demand for a litre-size Le Mans in place of the 850cc sold elsewhere. This was accomplished by substituting the larger engine from the Convert 1000 into the restyled Le Mans Mk.2 and giving it a new name.

The engine needed to meet new emission limits for 1978, so its mild tune, airbox with crankcase breather and restricted exhaust ensured certification for all 50 America states.

Released in 1979, the CX100 arrived as De Tomaso reacted to poor sales of the Benelli inline fours and sixes. With solid sales behind them, Berliner's import empire had the clout to request special models, but it was De Tomaso who dictated the form.

Now considered a period style applied by most manufacturers of the era, the CX100's angular lines moved Guzzi's concept away from the V7 Sport's curve and closer to the Modena wedge depicted on De Tomaso's Ford Pantera. The purist uproar was still a few years in the future; De Tomaso's influence would continue, chiselling angles and squaring corners as production moved through a series that lasted until 1993.

The 850 Mk.2 and CX100 share an identical chassis specification, and use a mass-produced version of the first CroMo V7S frame. Mild steel tubes form a cradle that supports the engine front and rear via full-width mounting bolts, one at the leading front edge of the engine, another running through a boss cast on the bottom of the transmission.

An additional cross-brace connects at the top of the transmission and serves as the battery mount. To facilitate major servicing, the detachable lower rails allow the forks, front wheel and upper frame to be rolled away, wheelbarrow style, leaving the engine and transmission resting on the main stand.

Wrapped tightly to reduce size and offer a stronger, more sporting platform than the touring V7 frame, two horizontal tubes cut between the engine splay, shadowed by a large, single tube

joining the steering stem to a cross-brace under the fuel tank.

A distinctive identifier, those side-facing V sections point to the swinging arm pivot, the right-side tube holding driveshaft components. Like all Tonti heavyweights of the time, the rakish Moto Guzzi-made fork is fixed at a 28° angle.

Carried over from the original Le Mans 850, two-piston Brembo calipers attach to each slider, now located in a trailing axle position. Twin, two-piece 300mm drilled cast-iron discs fit to the front wheel, with a matching caliper acting on a single 242mm rear. Making its first appearance on the 1000cc Convert automatic, all triple-disc Lino Tonti designed twins used the firm's patented linked braking system.

Awarded and acclaimed for more effective panic stops, the foot pedal activates the rear and left front via a diverting manifold, the hand lever squeezes the right front independently. Controls and placement are identical to the first series 850, as are the Guzzi-made 18in alloy wheels. Both the CX100 and Le Mans Mk.2 weighed 520lb wet; up some 17lb from the original Le Mans.

Only 300 CX100s were delivered in 1979, sharing engine, transmissions and final drive specification with both the SP1000 and the five-speed G5 tourer. As part of the 949cc 'family' the CX100 received the same mechanical updates determined by date and serial number. What then, to make of the CX100 designation? "I don't know," answered Berliner's former PR agent Seth Dorfler. "Availability in California was critical for sales success, but emission laws there were even tougher."

A common symbol for pre-production prototypes, it's plausible the 'X' identifies the CX100 as a made-for-California special. Perhaps it was a stab at Honda's Guzzi-shaped CX500, released a year earlier? Moto Guzzi chief tuner, Bruno Scola, revealed that the big valve, high-output 949cc twin was completed by 1980, but that engine wasn't seen until the world market Le Mans 1000 arrived in 1985.

For 1979, the CX100's 88mm bores used a pressed-in steel liner wrapped around 9.2:1 pistons, 30mm Dell'Orto VHB carburetors, the SP's distributor/ignition curve and its two-into-two exhaust, now in flat black. Another 70-odd machines were assembled for 1981 and were uprated with Guzzi's patented Nigusil bores, round-slide PHF30s and circuit boards instead of point-to-point wiring behind the four-pot dash.

Fitted with clip-ons offering only modest adjustment, the dash conveniently hides a set of 'universal' trees cast with unused handlebar bosses. Fork spacing increased from 180 to 195mm, the distance made up by deeper disc carriers. Price in 1979 was $5000.

The CX100 cockpit is a cosy place from which to conduct business. Leaning forward to reach the grips tucks the body out of the blast, placing it behind a system of wind tunnel tested aerofoils that attach at the fork and front downtubes.

Stability and road holding at speed earned high marks, and despite its modest output the CX100 ➧

PRICE GUIDE

£3500 low to £7500 high (for UK equivalent models)

FAULTS & FOIBLES

Nasty switchgear and fragile electrical systems; linked brakes don't suit all riding styles (and need to be in good mechanical condition for best effect); variable finish on cycle parts gets tatty with age

ALSO CONSIDER

Genuine Coburn and Hughes Le Mans Mk.2, stunning in black and gold, fetch top dollar. Automatic Converts are more affordable, as are slightly later SP1000s (plenty of recent imports from Italy)

SPECIALIST INFO

Stein-Dinse (www.stein-dinse.biz) gutsibits.co.uk, Motori Di Marino

OWNERS' CLUB

Moto Guzzi Club GB: motoguzziclub.co.uk

Above: 'Never an everyday motorcycle nor one for the masses, the CX100 caters to the individualist looking for flash and performance in a fuss-free package. It's one of a special few...' Indeed it is

encouraged high-speed manoeuvres not comfortably attempted on other motorcycles. This at-speed composure and the CX100's rugged simplicity was noted by editors at Cycle in 1980, but their comments regarding its appearance contrast with popular criticism: "We stood in awe, entranced by the Italian V-twin's incredibly deft and well-integrated styling. What the Le Mans does to most other European marques in terms of looks is embarrassing, and what it does to bikes from the Orient is positively humiliating."

Its touring tune meant that the CX100 was a half-second slower in the quarter mile against an earlier sporting 850. Some benefits in terms of low rpm torque are offered by the displacement increase, but riders accustomed to the 850's spooled-up punch might find the CX's lazy attitude, especially at high altitudes, a disappointment.

Both engines use the same camshaft, demonstrating the power gains offered by the 850's larger valves (44/37mm intake and exhaust compared with the 949's 41/36mm) increased compression (10.2:1) and heartier PHF36 carburettors. Most CX100 owners didn't wait long to even things out, boosting performance with straight intake manifolds, properly sized Dell'Orto pumpers and open aftermarket exhausts.

Replacing the timing cogs with heat-treated alloy gears eliminates the last link of chain from the entire machine, just as God and Lino Tonti intended. So equipped, the small-valve 949cc gained a considerable advantage over its smaller, edgier 850cc brother. So popular and effective were these modifications, that a 'standard' CX100 isn't only rare, it's devalued.

Many Mk.2s and CX100s have been modified into Series One clones, made into café specials, or stripped down for racing. Dealers sold out of stock, despite reports to the contrary. Most were finished in traditional red with flat black accents, but a few may have been delivered in white with black trim. Our feature bike's non-standard finish hides a little-used example which retains the majority of its factory specification.

The Guzzi's electrics and cheaply painted flat-black parts win no favours in damp climates, and signal the importance of owner involvement and care. When properly sorted on the mechanical end, the CX100 is more than capable of the extended vintage tour or one taken at a thoroughly modern pace.

With more than a decade of experience in the saddle of a high mileage example from 1981, this writer can attest to the CX100's toughness, durability and enduring charm when the path turns twisty.

Original examples are hard to find – almost invisible in the UK – but still reasonably priced in the USA. Moto Guzzi's decision to work from a standard platform means the spare-parts overlap spreads over a range not measured in years, but decades.

Never an everyday motorcycle or one for the masses, the CX100 caters to the individualist looking for flash and performance in a fuss-free package. It's one of a special few. CBG

BUILT: 1979 **ENGINE:** Air-cooled, four-valve per cylinder, ohv, transverse V-twin **CAPACITY:** 949cc **BORE / STROKE:** 88 by 78mm **COMPRESSION:** 9.2:1 **CARBS:** 2 x 30mm Dell'Orto PHF **TRANSMISSION:** five-speed **FINAL DRIVE:** Shaft **FRONT SUSPENSION:** Tele forks **REAR SUSPENSION:** Swinging arm, twin shocks **FRONT BRAKE:** 2 x 300mm discs **REAR BRAKE:** Single 242mm disc **FRONT TYRE:** 110/90-H18 **REAR TYRE:** 110/90-H18 **WHEELBASE:** 1486mm **SEAT HEIGHT:** 30.3in **DRY WEIGHT:** 220kg **ACCELERATION:** 13.5s standing quarter mile **TOP SPEED:** 135mph