

Europe's Most Potent Boxer?



R1100S, the heads were modified, a second injection system added (now with four injectors) and then the engine fully converted with a KKK Turbo plus intercooler with a new exhaust system in all stainless steel. The result of this work is an output of 156 hp and 122.4 lb./ft. of torque, giving a maximum speed of 160.3 mph (when controlled by the rev-limiter), or 175.2 mph when set free.

The subframe is re-worked in light alloy and an Ohlins shock fitted, while the transmission has been lifted from an R1200 cruiser. The bodywork is in handcrafted aluminum, the front fairing with two Xenon lights mounted one above the other on the left side, as is the seat unit with its integrated LED taillight and the 6.9 gal. gas-tank, which is fitted with a pair of filler caps. Add on all-electronic instrumentation and neat touches like a silver Iridium-coated wind-screen and other CNC machined accessories and you really do have a unique motorcycle.

What is more, Metisse promise that the machine will definitely stay unique, as they have no intentions—ever—to build another one like it...you're insured absolute exclusivity!

Development and production costs topped 80,000 Euros, (approximately \$100,000), so it's not cheap, but "The strongest Boxer of all time" is for sale. —Doug Jackson

TEAM METISSE is a German company that came into being in the Eighties, dealing primarily in British motorcycle equipment. But times change, and today they are producing and marketing special equipment to suit a wide range of European and Japanese machines, and are also acknowledged specialists in the development and production of unique BMW-based bikes.

During 2003, Team Metisse, led by engineer Horst Edler, set about building the "Ultimate Boxer"—or as he likes to put it—"The strongest Boxer of all time." Starting with a basic BMW



New Sauer V-Rod Combo Sidecar

IN EUROPE WE call them a "Combination," a term normally used for a sidecar hitched to a bike, but in this case, it's both a 4-seat family tourer, or a two-person circuit scratcher!

Built in Germany by the Sauer Sidecar Company, the sidecar itself is called the "Wing-Storm-Racer" and of very low-profile construction, fitted with a 13" front wheel carrying a 165/55R13H tire. Capa-

ble of carrying two passengers side-by-side, it also incorporates a 6.5 gal. auxiliary fuel tank. A removable 170 liter trunk at the rear is the novelty. In situ, it has the luggage carrying capacity of a touring sidecar, but detached (an easy operation) along with the seats, it becomes a roomy flat-bed sidecar for the track. Attached to a modified Harley-Davidson V-Rod, lowered with 13" and 15" wheels, the front matching the sidecar and the rear carrying a 185/55 R15 tire, plus a major modification to the forks (now hub steering with a special Sauer knuckle), it really does handle, and the photos show just how sporting it can be. Total weight is 490 kilos (1080 lbs). It has just been announced in Germany but is available for export, too.

—Doug Jackson



Brand New 1978 Cagiva Gran Prix Racers For Sale



with rider John Kocinski aboard, adding some much needed continental flavor to a series long-dominated by Japanese manufacturers. The machine's 498.3cc (56mm x50.6mm) watercooled 80° V-4 two-stroke uses reed valve induction, CDI ignition, twin contra-rotating crankshafts, and CTS, Cagiva's system for electronically controlling the exhaust port height. It produces in excess of 190 hp @ 12,600 rpm with a torque figure of 75.9 ft./lbs. @ 12,100 rpm. The gearbox is a quick-change cartridge type with six ratios and the clutch a dry multiple disc. The twin spar frame has inverted Ohlins forks and a rear mono-shock from the same source, while wheels are 3.75"-wide front and 6.25"-rear on 17" diameter magnesium Marchesinis, helping keep weight down to just 286 lbs. Fuel tank capacity is 5.5 gals.

The bikes will be produced during the early part of 2004, each one with a platinum plate with the machine's serial # and owner's name. Spare parts are being made at the same time to ensure that there are no worries for the new owners on this score. If your collection just wouldn't be complete without one, place your order now, but remember it costs a princely sum—no less than \$156,000—not cheap in any language—but what an exotic machine to own and ride!

—Doug Jackson

CELEBRATING THE 25TH anniversary of the Cagiva company, created in 1978 by the Castiglioni family, a batch of 25 replicas of the C594 500cc GP bike will be built for sale to the general public. It last contested the 500cc World Championships in 1993

New Aprilia 450 V-Twin

APRILIA HAS TO be one of the great success stories in the Italian industry for the past 20 years, and has been successful in competition, cleaning up on just about every sector they have entered, but now they are looking very seriously at the off-road market. The first step had to be a dedicated engine unit, and that is exactly what Ivano Beggio, boss of Aprilia, has just announced, and it is a beauty.

In recent times, the new high-tech four-stroke singles have frequently met and overcome the two-stroke brigade—proving that they have what it takes in both enduro and motocross, and certainly in the high profile desert events like the Dakar.

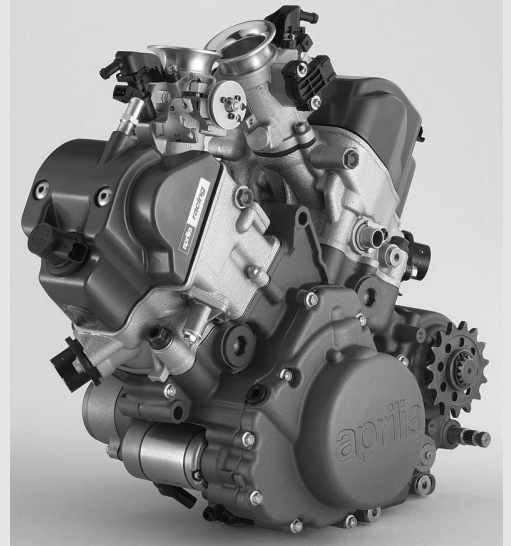
Currently, most of the competition is closely-matched on power, so Aprilia has looked further into the future and decided that a small V-twin will be the answer, and enable them to turn the tables on the opposition. "Small" it certainly is, with overall dimensions actually less than some of its existing single-cylinder rivals.

Starting from a scratch, the Aprilia R&D engineers have opted for a 77° V-twin to achieve maximum power, compact dimensions and light weight, and it seems that this has been achieved. Capacity is 450cc (bore and stroke not revealed) with four titanium valves per cylinder operated by SOHC and driven by a Hy-Vo type silent chain. Electronic fuel injection is also employed and a powerful rare earth magnet alternator provides ample power for Aprilia's "total electronic engine management," ensuring low noise levels and at the same time very low emissions, plus allowing battery charging and lighting circuits plus an electric starter.

Actual hp-output is not revealed, but the factory does confirm it will happily rev to 14,000 rpm which does give food for thought. The clutch is a wet multiplate disc which can be actuated either mechanically or hydraulically, and the gearbox can be either 4 or 5 speeds. Cooling is via liquid with a centrifugal pump and the lubrication has two circuits, the engine using a pressurized oil circuit with the transmission supplied separately.

Although the weight is a detail not yet revealed, Aprilia has gone to considerable lengths to trim it, using special materials.

For example, the central engine casing is in aluminum-silicon alloy and all covers are magnesium.



The first machine to receive the new motor is the SV-X 450 supermotard pictured. The frame has short twin aluminum spars combined with a trellis of steel tubes supporting the engine, and the small fuel tank is nestled between the top tubes and underneath the long, nearly flat seat-unit, permitting the rider to move around and shift weight quickly and easily. The twin exhausts wrap around the rear mono-shock, finally exiting via a single silencer tucked up tightly under the rear mudguard.

But the new motor could also appear as a streetable replacement for the 250cc two-stroke twin in the RS250. Whatever it is, Aprilia could find a number of markets for this outstanding new motor!

—Doug Jackson

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