

OFFICIAL INDUSTRY MAGAZINE FOR THE WORLD CHAMPIONSHIP OF CUSTOM BIKE BUILDING™

Ultima EPA/CARB-certified engines and high performance offerings

IDWEST MOTORCYCLE SUPPLY has announced that the 100, 107, 113, 120 and 127ci configurations of its Ultima brand engines are now available in both current EPA and CARB versions.

The company, which says it is the second largest supplier of USA-made V-twin engines in the market, was a relative latecomer to the process of certification.

The achievement means the company is "finally at a point when we can actually supply the demands of most of the small-volume manufacturers with this type of product," said Ken Francis, who heads up Midwest's Ultima engine program.

Francis was brought into the business in 2000 to spearhead development of the program. Appointed VP Engineering at Midwest in 2003, he has steered the distributor to a strong position, with a product range that has achieved widespread respect in the market.

Francis told AMD that the company is now accepting orders for the EPA engines. They will be delivering engines for Short Test Certifications by late-June, in 49 State or California versions. "Custom V-twin manufacturers who want to use these engines will be offered assistance in the compliance procedures and will not be charged a fee to use Ultima's durability information," said Francis, adding "there are no minimum quantity requirements for any of our products, whether bought by manufacturers or custom shops".

According to him, the principal challenge has been the allowable Fuel Permeation Standard set by CARB; one that has caused some small-volume manufacturers to seek out new air cleaner assembly designs.

"We had to make some internal part changes to get through EPA and CARB," said Francis, "but the most important thing we did was to improve our fuel system and air filter assembly. We developed a completely new Mikuni-based carb kit which passes the CARB shed test that comes with the EPA and CARB requirements.

"A new filter cover design is a tough choice, in a market where style and function rarely meet with this type of product, but we think our newly designed and patented air filter assembly is not only a good-looking product, but also works well in California trim and delivers great performance in 49 State versions."

"We are very happy about the relationship with Mikuni as the new carb supplier for our complete engine program. We are finding that most people prefer the flat slide carbs for their efficiency and overall performance advantages.

The company says that this new relationship with Mikuni will spawn an entirely new Ultima/Mikuni offering in 42-45-48 and larger carbs, in both Competition Series and the replacement carb kits market for OEM H-D and "most other aftermarket V-twins on the market".

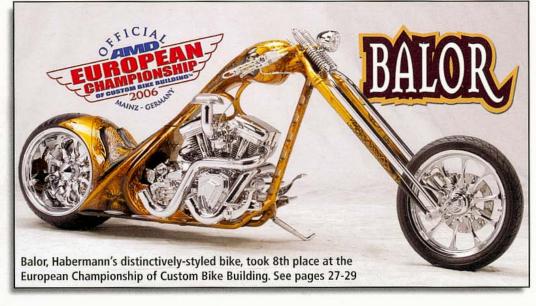
Midwest adds that it will continue to offer its existing performance engine product line, including unassembled complete engines and long blocks.

Francis told AMD that another Ultima initiative will see the introduction of several new engines offering CNC ported cylinder heads that Ultima will use for its new HO

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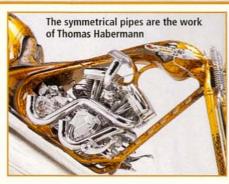
EUROPEAN CHAMPIONSHIP OF CUSTOM BIKE BUILDING

HOMAS AND DANY Habermann describe their European Championship of Custom Bike Building eighth place winner, Balor, as an evolution of their previous creation Caligo (featured in AMD #70).

It is certainly easy to draw comparisons - the extremely radical frame, the massive rear tire and the intricate paint. However, Balor is an evolution, with many clever, even trick, features. Like all of Habermann Performance's previous



Concealing the mounting bolts for the pulley and rim brake was one of the hardest parts of the build

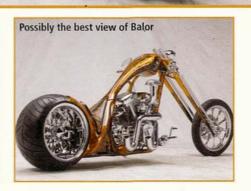


bikes, Balor is built around one of the company's own frames. The initial idea of the design was to create a high-tech looking bike with Old School values. In order to achieve this, the frame was stretched up and out by 5in and raked to 40 degrees. To combine the best of both schools, at the rear a single-sided swingarm was built, only it's not a swingarm. Balor is in fact a traditional rigid chop; it just doesn't look like it is.

Held in place by the single-sided swingarm is an RC Components 12x17in wheel, shod with a 330



Habermann shunned the current trend for open primary belts and simply polished the stock cover



section tire. Creating the clean lines around the wheel was one of the hardest parts of the build. The first challenge was to build a spinner to fit on the outside of the wheel inside the rim. Once that was completed a rim mounted brake disc and drive pulley were installed on the inside of the wheel, without any mounting bolts being left visible. Finally a jackshaft was made to mount the wheel to the frame. Braking at the rear is taken care of by a six-piston Buell caliper.

Providing drive for the massive rear end is a



The licence plate follows the curve of the 12x17in rear wheel, which is shod with a 330 section tire

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Dany and Thomas receive their prize at the European Championship from AMD's Robin Bradley (right centre) and Custom Chrome's Holger Mohr (left centre)



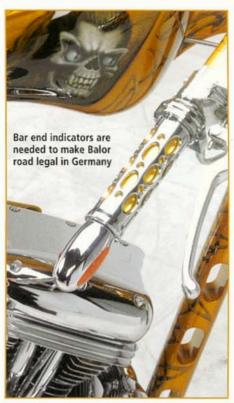


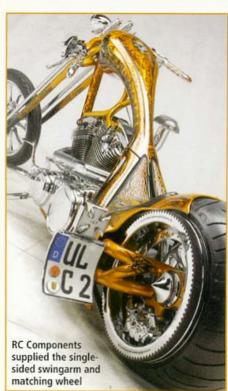
relatively stock 95ci H-D Twin Cam B motor. The only changes that have been made are the addition of an S&S E carb, an Altmann ignition, Habermann exhaust and the whole of the engine being chrome plated by Kißling, Germany. Likewise, the primary drive and gearbox are both stock Harley items that have been show-chromed. Thomas modified a set of Springer forks to get the necessary length needed for them to fit the bike. Another RC Components wheel, this time a 2.5x19in, was then fitted, with a PM two-piston caliper. Topping the forks off is a W&W lamp and a set of Habermann bars. Keeping the bars clean and uncluttered is a set of OMP controls and Pistor mirrors, which include a digital speedo. The final bit of finishing kit on the bars are Ness Battis grips.

oving back along the bike, the gas tank is a Habermann-produced piece, as is the rear fender. Both items were made with layers of steel built up to create a subtle three-dimensional result to the finished pieces. In between the two is a seat by Custom Leather of Germany. The tooling on the seat follows the ideas established by the paintwork of Celtic knot work and death's heads. Neither words, nor indeed, pictures are capable of doing justice to the elaborate paint and airbrush work done by the painter Bianca Hennig.

There is no denying that Balor is an evolution in







terms of design for Habermann Performance. However, it can also be seen as an example of evolution for the whole custom bike scene as it shows how frames are getting more extreme, rear ends wider, with more wiring, controls and fittings being hidden and paint becoming ever wilder. With Habermann Performance's DNA at work, who knows what evolutionary developments the 2005 European Champions will have in store for us next...

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