

Chip Yates and the SWIGZ.com Pro Racing Electric Superbike

Take a former Boeing advanced aerospace engineer with a passion for motorcycles and racing, add the massive torque of an electric drivetrain, and you have the formula for a powerful new challenge



Photos courtesy Jensen Beeler, Asphalt and Rubber Magazine

Chip Yates made history on January 9 at the Auto Club Speedway in California, on the first electric bike to go head to head against conventional gasoline powered race bikes in a professionally organized roadrace. Developed by SWIGZ.COM Pro Racing in the US, this is the world's most powerful and technically advanced electric superbike and has become the most powerful road racing motorcycle of any kind being actively campaigned.

Yates, the bike's rider and owner of SWIGZ Pro Racing, said prior to the race, "We have to thank WERA Motorcycle Roadracing for inviting us into their series to make history with this. Our electric motorcycle will compete head on with real racing superbikes such as the Ducati 1198 and KTM RC8, as well as other established manufacturers, and we expect to work hard to show the world that electric technology can achieve laptime parity with gasoline superbikes. We're not going on track to make up the numbers; we're going out to compete in order to raise our game and catch up to these gasoline guys."

The bike had previously been excluded from the FIM and TTXGP Championships for electric motorcycles, which had imposed a low maximum weight limit of 250 kg (550 lbs) for the 2011 season. "Our bike weighs in at 266 kg", said Yates. "Clearly, these championships are more concerned with promoting scooter development, and our bike is so much faster than the electric competition that we feel far more inclined to push our bike's unique technology platform forward in the ultimate competitive environment of gasoline bike racing."

The SWIGZ Racing machine has a power-to-weight ratio slightly better than 600cc gasoline bikes, and began the 2011 season by competing in the WERA Pirelli Sportsman Heavyweight Twins Superbike class, where its power-to-weight ratio put it in the middle of the field. To be competitive against these heavyweight twin cylinder superbikes going forward, the bike has since benefitted from a more than 20 percent increase—to its current 194 hp—after that first race weekend in January.

Yates explains, "Our scheduled power increase (made) our electric superbike more powerful than a MotoGP bike and (brought) us extremely close to power-to-weight parity with the best 1000cc Japanese superbikes. Those two facts are a simply outstanding reflection of the potential in electric power."

Ahead of the WERA Pirelli Sportsman Series race weekend in January, the bike had been invited by Infineon Raceway, a motorsports leader in green performance and sustainability, to be put through its paces at race speeds for the first time

ever on December 15, 2010, with Chip and the team enjoying private use—with media invited—of the world-class Infineon road course for the day.

And at Auto Club Speedway in January? The SWIGZ.COM Pro Racing team scored two podiums with the electric superbike against gas superbikes in WERA racing action, hitting 158 mph in race 2. Yates credits crew chief Jimmy Summers and Program Electrical Engineer Robert Ussery.

SWIGZ Racing will soon announce additional race dates where the electric superbike can be seen competing directly against gasoline bikes in the WERA championship series, including Miller Motorsports Park, Las Vegas Motor Speedway, and other major venues across the US. ■

ALL ABOUT...

WERA MOTORCYCLE ROADRACING, INC.: At 37 years and with over 3000 licensed racers, WERA is one of the oldest and largest national motorcycle race sanctioning bodies, with races at Barber Motorsports Park, Virginia International Raceway, Miller Motorsports Park, Road Atlanta and more. Series include the WERA/Michelin National Challenge Series, Pirelli/WERA Sportsman Series, Bridgestone/WERA National Endurance Championship, the Grand National Finals, and seven regional championships. www.wera.com

SWIGZ.COM: Made in Orange County CA, SWIGZ® is the world's first dual hydration sports bottle, so athletes can carry two drinks in one bottle. www.swigz.com

CHIP YATES: Chip Yates is an engineer with a master's degree in business from USC. Before turning pro racer later than many, Yates was a Boeing executive in charge of transitioning advanced aerospace technology and patents to other industries, such as automotive for racing and OEM applications. He personally holds 7 US patents on automotive drivetrain and other technologies. Chip has raced in the AMA Pro Daytona Sportbike series and the FIM World Supersport series and owns SWIGZ.COM Pro Racing. www.chipyates.com

