

#TECHTUESDAY

UNDER THE SKIN

SYNETIQ BMW S1000RR - TECHNICAL SPECIFICATION
MODEL - 2019/2020 K67 MODEL

ENGINE

999cc 4 x cylinder in-line with 80mm x 49.7mm bore and stroke and BMW unique 'Shift Cam' system. The engine performance is further developed by BMW Motorsport in Germany.

RADIATOR SYSTEM

SYNETIQ BMW have options between the standard BMW radiator system, which works extremely well, and an increased water capacity version designed by BMW Motorsport and produced by FEBUR. Either option is further improved with the use of SAMCO silicone hoses. The radiators are protected by EVOTECH PERFORMANCE 'Rad' Guards. We also use their range of lever protectors.

CLUTCH

SUTER INDUSTRIES' design and supply a fully adjustable slipper clutch, with development input shared between SYNETIQ BMW and the BMW World Superbike Team.

EXHAUST SYSTEM

AKRAPOVIC is a direct technical partner with BMW Motorsport and as such, SYNETIQ BMW receive the most technically up-to-date and efficient exhaust system to match the current engine specification. The AKRAPOVIC Evo Titanium system is extremely lightweight and improves BHP across the range with a measured improvement in torque within a specific rev range.

SWINGARM

SUTER INDUSTRIES produce a bespoke aluminium swingarm for the BMW S1000RR to optimise both lateral and torsional stiffness. Development with SUTER is shared with SYNETIQ BMW and the BMW World Superbike Team.

AIR FILTER

Another long-term partner for SYNETIQ BMW, the air filter is designed by K&N Filters to enhance airflow and boost BHP.

FUEL TANK

SYNETIQ BMW use an aluminium 22-litre tank for BSB, designed by BMW Motorsport. This is to optimise the fuel load position to support chassis balance and also improve ergonomics for rider position. The tank is produced in various capacity options.

WIRING LOOM - ECU

MOTEC provide a control ECU within BSB with a standard functionality level and optimised settings to suit each machine. The wiring loom is another BMW Motorsport designed item bespoke to the functionality of the MOTEC and BMW K67 systems, produced by MOTOTRONICS.

BODYWORK/SCREEN

Designed and optimised for aerodynamics in-house by BMW Motorsport and produced by CARBONIN in both Carbon and Avio Fibre versions. Either option is extremely light and stiff with a perfect fit assured as the design is built specifically around the BMW Motorsport range of chassis parts. Aerodynamics are completed with a bespoke design screen produced by POWERBRONZE.

FORK CLAMPS AND CHASSIS PARTS

Fork clamps are multi adjustable and also designed at BMW Motorsport together with a range of chassis parts to include rear sub-frame and various mounting brackets.

SUSPENSION

SYNETIQ BMW holds a direct development role with K-TECH. The current front fork and rear shock unit are K-TECH development, next generation parts. Settings are altered for each BSB round by K-TECH and SYNETIQ BMW staff to suit each riders' bespoke requirements.

BRAKES

BREMBO supply the braking system to SYNETIQ BMW though UK agent Mode Performance. Various options are tested and the current specification is:

Front - machined billet radial master cylinder with flip lever. SBK Evo Calipers comprising 30/34mm pistons with 320 x 6.75mm discs and SBS pads.

Rear - we use a BREMBO thumb brake with bespoke lever; a radial mount caliper with 34mm pistons and 5mm fully floating disc again with SBS pads.

WHEELS

SYNETIQ BMW use an OZ forged aluminium wheel which is strong yet lightweight to enhance steering and handling capabilities. SYNETIQ BMW has a partnership agreement with OZ through UK representative Mode Performance.



REARSETS

Another item designed by BMW Motorsport specifically to work within each individual riders' operating range. Weight and strength are both considered in design together with structure, to ensure efficient replacement in the event of crash damage.

SPROCKET AND CHAIN

SYNETIQ BMW has enjoyed a long-term partnership with TALON Engineering, who has produced a strong but lightweight aluminium sprocket to cope with over 200bhp.

Another long-term relationship is with Japanese chain manufacturer RK TAKASAGO. The specification used currently for both BSB and road racing is the 520 ZXW, which is lightweight but also strong enough to cope with the rigours of BSB and road racing.



www.britishsuperbike.com

SYNETIQ
BMW Motorrad
Motorsport

