ISYTECH

SYTECH!



The engine has been designed and developed by our engineers to make the production of the parts simple and modular in order to improve quality, accuracy and to reduce tooling and manufacturing costs.



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A LOW VIBRATION, LOW EMISSION ENGINE



Introducing the SYTECH Scotch Yoke, opposed cylinder engine







HISTORY

The SYTECH Scotch Yoke engine was originally developed over 20 years ago, is patented and has been tested by VW, Ford, Cosworth, FEV and others.

The engine is the first successful 4 stroke Scotch Yoke engine to be specifically designed and developed for modern Hybrid and Range Extender vehicles and can achieve Euro 6d and China 6b emissions on China RON 92 fuel with minimum expensive add on technologies.

The engine is a flat opposed cylinder boxer-type engine that uses the Unique SYTECH mechanism giving the engine advantages in weight, length, width, height, vibration and emissions over other conventional engines in its class.

The engine naming is based on the number of Cylinders followed by the capacity in Litres. For example, a S415 is a 4 cylinder 1.5L engine.

The engine is based on a pair of pistons connected by a common connecting rod. This results in a family of engines having a lower manufacturing cost as there are many common parts used over the whole engine family.

The SYTECH engine has very low NVH and has been measured to have 15db less NVH than an equivalent Boxer engine.



The S415 is Shorter and Narrower than competitor engines



SYTECH and FEV teamed up to analyse, design, build and develop a new family of engines that can achieve China 6b emissions on China RON92 fuel, the first of these engines is the S415 in both Naturally Aspirated and Turbo-Charged formats.

Feature	S208	S208TC	S415	S415TC
No of cylinders	2	2	4	4
Rated Power at 4500rpm	30 kW	50 kW	60 kW	110 kW
Rated Power at 3000rpm	20 kW	32 kW	40 kW	65kW
Minimum BSFC	Less than 228 g/kWh			
Emission Level	China 6b			
Nominal Fuel	China RON 95			
Weight (estimated depending on accessories)	< 50 kg	< 65 kg	< 90 kg	< 110 kg

These numbers are achieved without VVT or EGR but these technologies can be easily added to gain additional performance with minimal engine changes if desired by the customer. The SYTECH engine achieves Euro 6D and China 6b emissions with ease.

The SYTECH engine can run on Gasoline, LPG, CNG and HYDROGEN fuels.