



## WATKINS M001

**Watkins M001** is a custom motorcycle with a unique design, advanced technical solutions and modern technology inside.

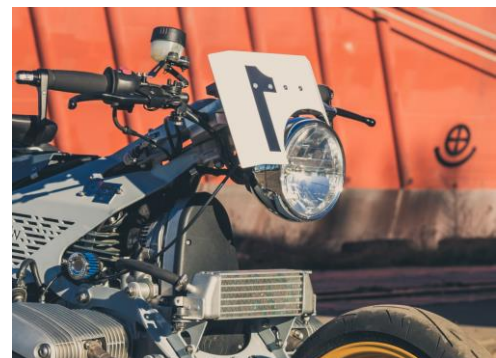
Based on my skills and experience coming from heavy duty machine industry I finally decided to go for it and to design and build my own motorcycle.

On every stage of the project the most important to me was to design fully functional and user-friendly machine. After all the riding position is comfortable, the engine is strong and reliable, the fuel tank is generous, brakes efficient, lighting road legal. Even the license plate holder is part of the global design. It is a very complex project with lots of attention to detail.

There are hundreds of hours behind the project in front of the computer to verify possibilities, check best solutions and try different arrangements. The critical components and mechanisms are carefully analysed to provide safety. The manufacturing process is fully covered with industrial documentation. Finally the high quality components are provided by professional suppliers.

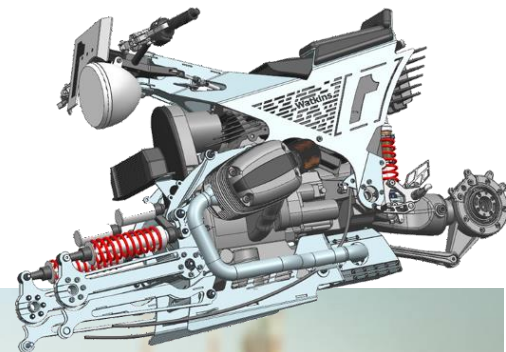
Despite the crazy way the M001 looks it is road legal motorcycle that You can use every day and that magnetizes crowds. I am proud of this final result.

*Jack Watkins*



### Watkins M001 - specification

Front suspension	Custom adjustable mechanism with main swingarm, 2 stabilizing arms and 2 horizontal shocks. Unique arrangement with full functionality.
Steering	Centre hub steering with double cable control. Compact design combined with high strength aluminium parts.
Frame	Laser cut and bent steel elements welded together handling the forces and shaping the machine.
Fuel tank	16l (4,2 gallon) tank located under the seat. Thanks to spatial internal skeleton it is used also as a rear shock bracket.
Exhaust	Piping (42mm diameter) made of stainless steel. Double layer silencer box made of laser cut and bent stainless steel components. Screwed instead of welded.
Powertrain	1130cc fuel injected 2 cylinder boxer engine (95bhp); 5-speed transmission with mono swingarm and cardan shaft (BMW R 1150 RT)
Front brakes	Double 320mm disk with Brembo caliper (BMW R 1200 GS K51)
Rear brakes	276mm disk with Brembo caliper (BMW R 1150 RT)
Dimensions / wheelbase	L2115 x W850mm x H1035mm / WB1500mm
Weight	under 200kg
Front / rear tyre	120/60 R17 / 150/60R17





## WATKINS M002

Watkins M002 is an improved evolution of the M001. Based on the experience coming from the M001 project I decided to develop further. Most of the engineering effort is focused on purely technical aspects like suspension characteristic, mass reduction or easier assembling. The unique style and recognizable design however is going to be kept.

Watkins M002 - main improvements	
Frame	All sheet metal components made of aluminium in order to reduce mass and for better weight distribution.
Front suspension	Improved kinematics in order to reach more progressive damping characteristic. Redesigned parts for easier assembling and service.
Steering	Increased steering angle ( $\pm 6$ deg) for better manoeuvrability at low speed. Improved cable guiding in order to reduce friction and reach more precision and feeling.
Ergonomics	Lowered (-60 mm) seat and foot sets for convenience.
Maintenance	Modified assembling. The top frame is going to be mounted as a final step after the fuel tank. Service friendly improvement.
Front wheel	Fully custom front wheel in order to optimize the design of the hub mechanism.
Side stand	Obviously...

