

STEMME



Soaring and Power **S6^{-T}_{-RT}**



for aviation passionates only

the new face - smiling to the world

STEMME S6 - The New Generation of Motor Glider



Prototype S6 at flight test

- Fastest cruising - up to 180 kts
- Soaring with an L/D of up to 39
- Short take-off and landing
- Powerful for glider-towing

STEMME S6 offers a **new experience in flying**

A beautiful and elegant appearance invites you to take seat in a comfortable cockpit with first-class leather interior. Multi-adjustable seats allow you to find easily your individual convenient position. Taxiing is easy on the robust steerable undercarriage. At take-off S6 demonstrates its power. A short take-off run, even on grass strips, and it climbs away fast after being rotated. The spectators back on the ground are left wondering where the noise has gone to.

The S6 speeds you to new horizons with up to 180 kts (with retractable gear) at low fuel consumption. Under power with a setting of 55% the range is more than 1.300 NM. Much wider of course, when you switch to soaring mode. A fascinating silence engulfs you and you feel the aircraft being lifted by the power of nature. Enjoy sportive soaring in thermals as well as in waves side-by-side in the comfortable cockpit with a spectacular view. Pure independence in choosing flight mode and route ensures most fun and brings you almost everywhere.

Flying the STEMME S6 is **purely fascinating**

The S6 is the perfect all-in-one aircraft meeting the growing requirements of modern pilots. Highest quality, innovative technique, dynamic appearance and best aerodynamics melt to become everybody's darling.

For **private pilots**:

Independence and great fun factor. The reliable, easy-handling aircraft for sportive flying in powered flight as well as in soaring mode. S6 is providing low direct operating costs.

Go for recreational flying, for a short trip or for holiday - go by S6!

For **flight schools**:

Perfect for basic training as all systems are freezable in one standard defined configuration.

Advanced and complex training with constant speed propeller, variable wing profile with flaps, retractable gear, turbocharged engine.

Soaring and powered flight under safety conditions with high reliability and good glide ratio.

For **flight clubs**:

Promises a high utilisation due to its multi-use character: Powerplane for fast cruising, good sailplane, towplane. Robust and easy to handle, for instruction as well as for advanced training, low direct operating costs.

For **business flights**:

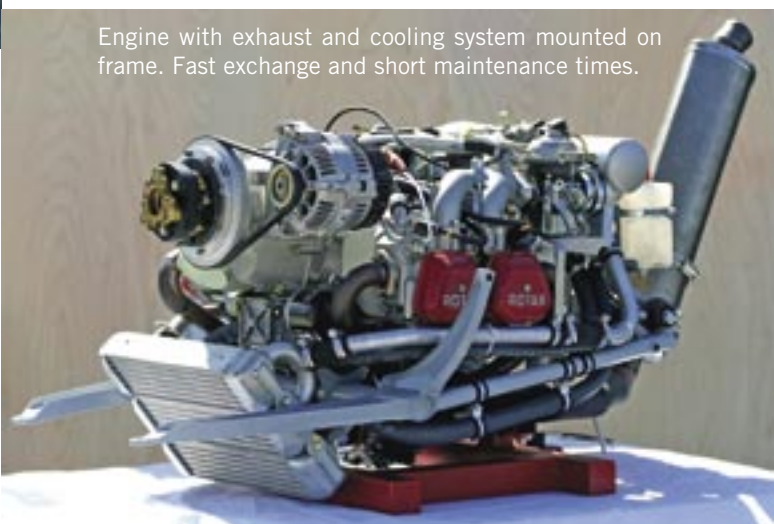
Elegant and presentable appearance with luxurious cockpit and many options for the business traveller.

Fast cruising, long range, spacious luggage compartment, short take off and landing, even on grass strips, providing thereby a short distance to final destination.

The S 6 is the newest type of STEMME aircraft setting new standards right from the start. A powerful and fast aircraft, most reliable with excellent handling qualities and good soaring performance. Last but not least the S6 is environmentally friendly due to low fuel consumption and extremely low noise emission even under full power – all this in one aircraft. At the heart of the S6 is the remarkable STEMME propulsion system. It is similar to the one well proven in 200 S10-aircraft.

The S6 has a mid-plane-engine, currently the ROTAX 914 with turbocharged 115 hp. The propeller is a Mühlbauer constant speed 3-blade propeller suitable for reduced propeller speed as well as high static thrust at the same time. The connection between front propeller and mid-plane-engine is provided by a carbon drive shaft. This combination allows an ideal engine position from the perspective of weight balance and aerodynamics – at 2 m distance from the propeller. For soaring, drag can be minimized by fully feathering the propeller blades to soaring position.

Engine with exhaust and cooling system mounted on frame. Fast exchange and short maintenance times.



For easy handling during taxiing, start and landing the S 6 is equipped with a tricycle gear including a steerable nose-wheel. The sophisticatedly developed suspension system is capable to absorb shocks in a very smooth manner. Wide wheel track and wheel base increase comfort and safety even more. Fix gear and a retractable gear are optional.



No hangar space available? The S6 can live outside during the whole year. If you like better to keep it inside for a longer period of not flying, there is a trailer available, rigging time 30 min. (2 people).



In the spacious cockpit both pilots enjoy comfortable seats, full control and best panoramic view. Ergonomic principles have been considered during designing seats and controls. Sitting side-by-side is best positioning for instructing, training, crew coordination or recreational and social flying just for fun. Easy access is ensured by the low canopy frame. The cockpit meets the highest level of safety architecture. The structural centre console and the short side-by-side length lead to a new standard of cockpit stiffness and crash-worthiness.



Robust undercarriage for smooth landings.

The aerodynamics of the S 6 are outstanding. Clean aerodynamics are the basis for best performance as well as best behaviour. The high position of the wings frees their upper side from fuselage influence. Done by Boermans in Delft the wing design provides an optimization for laminar airflow along the whole span. High attention has been paid to the fuselage-wing junction in order to minimize interference drag. Special profiles were developed for the wing region closest to the fuselage to take into account the unavoidable turbulent airflow in this region, responsible for stall behaviour. This makes the S6 completely docile at stalls. The aircraft has flaps along the whole span optimizing flight performance throughout the wide speed range.



Ergonomically designed cockpit
with precious materials - most
comfortable

design by www.de-hamburg.com

technical data

S 6-RT

S 6-T

max. take off weight (MTOW)	850 kg	1.870 lb	850 kg	1.870 lb
empty weight	640 kg	1.411 lb	630 kg	1.389 lb
total payload	210 kg	463 lb	220 kg	485 lb
Bombardier-Rotax engine 4 cyl. 4 stroke	914F	914F	914F	914F
MTOP	115 hp	115 hp	115 hp	115 hp
MCP	100 hp	100 hp	100 hp	100 hp
fuel capacity standard	70 l	18,5 gal	70 l	18,5 gal
fuel capacity long range (option)	140 l	37 gal	140 l	37 gal
wing span	18 m	59,1 ft	18 m	59,1 ft
wing span folded for hangar spacing (option)	7,2 m	23,6 ft	7,2 m	23,6 ft
wing area	17,9 qm	192,7 sqft	17,9 qm	192,7 sqft
aspect ratio	18,1	18,1	18,1	18,1
length	8,5 m	27,9 ft	8,5 m	27,9 ft
height	2,5 m	8,2 ft	2,5 m	8,2 ft
landing gear: tricycle type, steering nose gear	retractable	retractable	fixed	fixed
wheel track	2 m	6,6 ft	2 m	6,6 ft
wheel base	2 m	6,6 ft	2 m	6,6 ft
best glide ratio about	39	39	32	32
airspeed of best glide ratio	121 km/h	65 kts	115 km/h	62 kts
min. sink rate (empty weight +70 kg) about	0,8 m/s	157 ft/min	0,93 m/s	183 ft/min
min. wing loading (empty weight +70kg) about	40 kg/qm	8,13 lb/sqft	39 kg/qm	8 lb/sqft
max. wing loading about	48 kg/qm	9,76 lb/sqft	48 kg/qm	9,76 lb/sqft
rate of climb at MTOP (MTOW) at MSL	5,9 m/s	1160 ft/min	5,6 m/s	1100 ft/min
cruising speed at MCP (TAS) at 16,000 ft	345 km/h	186 kts	310 km/h	167 kts
cruising speed at 55 % MCP (TAS) at 16,000 ft	280 km/h	151 kts	250 km/h	135 kts
fuel consumption at MCP	27 l/h	7,1 gal/h	27 l/h	7,1 gal/h
fuel consumption at 55 % MCP	15 l/h	4 gal/h	15 l/h	4 gal/h
range at 55 % MCP,				
long range version, no fuel reserve, 16,000 ft	2500 km	1340 nm	2300 km	1250 nm

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