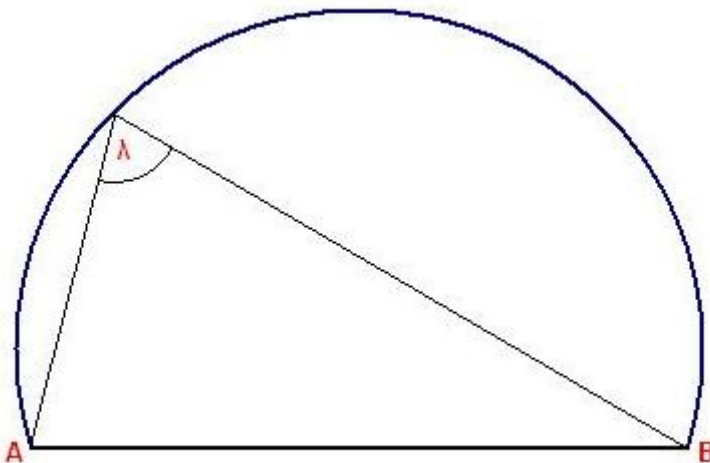


## ROTOR SP1 seatpost – the use of the Capable Arch principle.

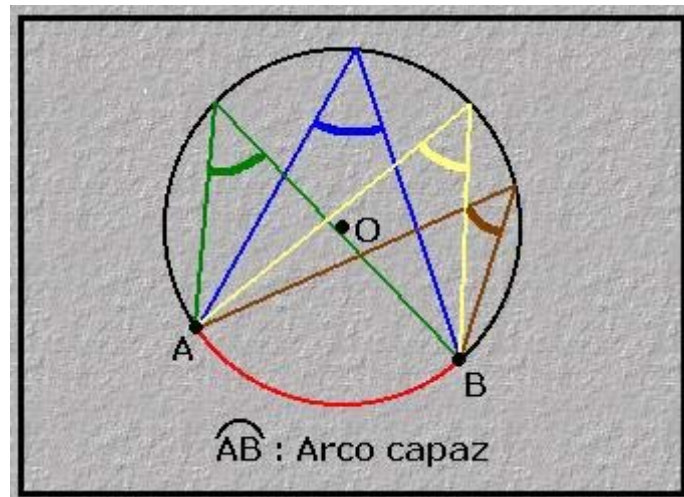
The new ROTOR SP1 Seatpost uses the “Capable arch” geometric principle in the design of the clamping system. This allows an optimal distribution of the tighten forces when applied to the saddle rails. By using this stable geometric principle, we can discard the classic parallelogram clamping system and utilise this new and superior screw angle adjustable system. This unique technology is exclusive to ROTOR.

This angled screw principle always works properly regardless the position of the saddle. Even at the extreme limits. The loading forces in both screws are always equally balanced. The SP1 gives the seatpost both a solid and effective clamping system and a carbon fibre friendly design.



A two bolt conventional seatpost is commonly based on a parallelogram design with two bolts and a top clamp assembly. An extreme saddle position in a traditional parallelogram seat clamp always places a high load in one of the screws and lower load in the other one. The potential for structural failure is located in a small area where a high negative load is placed over a small part of the saddle rails. As the clamping force is not balanced, it is necessary to add more material to reinforce that part but without solving the problem.

The screw angle parallels the Capable Arch principle and maintains this triangular structure giving a consistent angle and load, regardless of the saddle position. This permanent angle is obtained due to the relationship between the pivot points of the saddle and the seat post screws.



The geometric principle used only in the SP1 seatpost, make it fully compatible with all kind of bike geometries and seat angles. The load stress in the materials of the clamping parts is significantly reduced as is the weight of the machined part. Weight savings are significant if you do not need extra reinforcement for the clamping parts.



The lower rail clamp has a large contact area to distribute the rail pressure better. This long support surface on the SP1 avoids the guillotine effect on carbon fibre rails. The top clamp has been specifically designed to be compatible with all carbon and non-carbon fibre rails. Irrespective of matter the rail diameter, it will work correctly on the SP1.

Thanks to this specific design, the SP1 is even compatible with ultra-lightweight saddles like Tune, AX lightness or FRM with carbon fibre oval rails.

The top clamping bracket has therefore been manufactured to be as narrow as possible allowing full use of the entire rail surface. The SP1 allows a greater range of saddle fore and aft adjustment, unlike any other straight seatpost on the market.

A pivot less design allows easy set up.

The forged 7075 aluminium tube is additionally CNC machined internally at both top and bottom to save weight without sacrificing strength or rigidity.