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The Power of Aluminium

Current micro scooters are not micro enough.

The A4 Scooter folds up to fit within the dimensions of an A4 sheet of paper, 210mm by 297mm.

Its unique folding method uses 2mm Dyneema Rope that is thread through every section of the scooter. By tensioning the rope the scooter becomes rigid and usable. At the end of the journey release the tension in the rope and 'roll' up the scooter.

The A4 Scooter is designed to be used in urban areas with for short distances, such as finishing a morning commute or travelling to the shops. Weighing just less than 3 kilograms, it can be packed into a backpack and carried easily.

The maximum load the scooter can withstand is 100 kilograms, this is the case for many scooters currently on the market.

The main components use **aluminium** because of its ability to be extruded easily and its superior weight properties over other metals such as steel.

The base deck sections use **aluminium 6061 T6** that is perfect for medium difficulty extrusions. Each part then undergoes four post extrusion cuts that turn it into a lightweight piece of precision engineering. The extrusion has a 2mm outer wall that houses interior structures which have a minimum thickness of 1.75mm. Two steel 12mm ball bearings are then placed into the circular extrusion with an interference fit. These help increase the contact points that connect to each part therefore increasing stability and strength. Small groves along the top of the structure allow the deck sections to slot in seamlessly and add strength to the scooter when load is applied.

The rope then transfers through the headset and up the steering column that consists of 10 sections of 20mm **aluminium 6061 T6** round bar. Each part is transformed by seven post extrusion cuts which reduce weight, reveal the rope and allow for responsive steering.

The A4 Scooter will be manufactured for approximately £35 and retail at £149.99. For use by people aged over 13.

It will comply with British Standards - BS EN 14619:2005 Roller Sports Equipment. The standards require the scooter to withstand a 200 kilogram load being placed on its deck and 50 kilograms being suspended perpendicular from its handle bars amongst many others.

The A4 Scooter is aimed at people that want fun, portability, minimalism, speed and ease.

