



PowerSwat Skating Over All Terrain

Livio Ronchetti is a design engineer using Ashlar-Vellum CobaltTM for an exciting new folding inline skate. His product transforms skating from Saturday morning urban recreation to a viable means of efficient transportation over all types of terrain.

Traditional inline skates are cumbersome when navigating steep stairs, boarding public transportation, or entering retail shops and offices. The skates must come off and proper street shoes put on before continuing.

But this design team in Luzern, Switzerland has changed all of that with the PowerSwat. Strapped to the calf over any type of street shoe, the PowerSwat folds backwards at the touch of a button, clicking into place behind the ankle. Later, with a gentle touch the rollers move down again into place and the toe clip clicks around the foot, offering a secure fit.

Better yet, the rollers can be easily exchanged with four optional adapters including ice blades, mini skis, ice climbing crampons and caterpillar tracks for descending grassy meadows or gravel paths.

The PowerSwat moves skating beyond weekend recreation, to a serious vehicle for urban commuters, onto competitive multi-discipline sports, and finally as a great resource for police and military all-terrain transportation.

Ronchetti is part of a three-person design team, each an expert in marketing, construction or design. Their business model is to develop an idea then sell the international patent and rights to an investor who will finance final revisions, production and marketing channels.

As the team's design engineer, Ronchetti uses Cobalt because of its user-friendly functionality and easy Organic WorkflowTM. Cobalt allows both free-style and parametric modelling giving him the freedom to explore new ideas quickly. He tells us:

« **Cobalt was used exclusively for the entire 3D model. I could have only solved the free forms of the framework and calf shell by modelling in it.** »

Ronchetti and his team used Cobalt at every stage of development and prototype production. The entire prototype and its many adapters were produced on a 3D printer using Cobalt modelling files. He also used Cobalt for developing 2D CAD plans and for renderings used in the marketing brochures and documentation.

Cobalt gives Livio Ronchetti the flexibility to bring a product as diverse and imaginative as the PowerSwat inline skate to real life. ❖



The PowerSwat in closed position, for easy walking and in open position, ready to glide.



The PowerSwat's rollers are easily switched for mini skis, ice crampons, caterpillar tracks or ice blades.

Background / Contact

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