

China controls about 90% of world production of rare earth magnets, which are used in electric motor for electric vehicles, drones and other devices. Conifer from California decided to abandon rare -earth materials and makes motors from the most common metal - iron.

Previously, iron magnets were considered too weak for powerful engines, but Conifer uses a special type - an axial electric motor. Unlike the usual cylindrical engines with magnets around the axis, such motors are similar to a flat disk. They develop more torque and work at lower speeds. Although axial motors have been known for a long time, it was difficult to produce and cool them before. Now modern technologies allow you to make them easier, more efficiently and cheaper, the company notes.

Conifer focuses on engines with a capacity of 1 to 25 hp. For fans, pumps, tools and small electrical equipment - for example, electric scooters or ATVs.