

Application No. 85: Exercise Bike Generator

Author: Drs. ing. P. Dingemans, Netherlands

Producing electricity with your own muscular strength - very informative!

One of my first self-made generators was an exercise-bike generator. I used an old exercise bike, removed the front wheel, and mounted a generator in its place.



The generator is built on two rotating metal plates, each of which is fitted with 16 block magnets Q-20-20-10-N (www.supermagnete.de/eng/Q-20-20-10-N), for a total of 32 magnets.



The stator is located between the rotors and includes the spools. I constructed the spools by hand using lacquered copper foil.



This generator works very well. To be honest, too well!

I have performed several load tests, e.g. with two 12V/55W-light bulbs for car headlights. Here you have to be careful not to pedal too quickly, otherwise the light bulbs burn out. I had no problem reaching 30 volts. At this voltage, the 12V car headlamps burn out.

First they glow white, then blue, and then suddenly *puffff*.

I also tried producing enough electricity to run a color TV. This worked very well and it seems to me the perfect solution for "couch potatoes": as soon as you stop pedalling, the picture disappears! :-)



Articles used

32 x Q-20-20-10-N (www.supermagnete.de/eng/Q-20-20-10-N)

Online since: 29/04/2008

Have you found an interesting use for our super magnets? Send us a description! If we publish it on our website, you will receive a **supermagnete voucher with a value of EUR 30**. Further Information: www.supermagnete.de/eng/project_terms.php

The copyright for the complete content of this website (text, photos, videos, documents, etc.) lies with the author or with supermagnete.com. The content of this website may neither be copied nor otherwise used without our explicit permission.