

Electronics - Mechanical - Filaments

We are working hard on getting ready for the new season. Lot's of new developments you'll be hearing about in the next few months. New electronics, new printers and new filaments are on the schedule for releasing, so keep checking our website regulary! This newsletter will focus on my personal project: the big printer. Also we have some great summer sales going on, so check the out. If you have feedback regarding the newsletter or you like to share your own news that is interesting for our audience, please feel free to drop a email at : info@reprapworld.com.



Already shown at the beer and pizza party, but now ready for an official introduction is my personal project: the big printer. It's build volume is roughly 40x40x100cm, giving a decent volume for larger objects.

Some features:

- Megatronics with 4 external stepper drivers for the bed leveling (allows future auto bedleveling)
- E3D volcano 3mm with bowden
- Full metal cold end
- CoreXY system

After testing with 1.75mm I have decided to switch to 3mm filament, as it was very hard to get enough filament through with 1.75mm.

Both because it was too flexible for the distance and required more speed. To be able to handle 3mm I drilled out the full metal cold with a 4mm drill. This reduces the friction on the filament a lot. With the mk7 drive gear I was bale to get enough grip, but the nema17 stepper motor was not able to handle the pressure. I got a sample geared stepper motor, which worked fine up till the point that the gear came of the shaft of the stepper motor. So as a temporary solution I have switched to a NEMA23 stepper motor, which provides enough torque with the DRV8825.

I choose to use the CoreXY system for the XY-axis. It greatly reduces the weight of the axis, because the stepper motors are on the side. This allows smoother and faster movements. It's a beautiful concept and takes some time to fully understand and appreciate and I am very happy with it.

I do still need to a lot of work: I have decided to and crosses to the side for more stability. Also I will change the carriage mount to a better suited version for the bowden hot end. I plan on releasing the files next week to my github. If you have ideas, questions or remarks, please feel free to drop me an email on techsupport@reprapworld.com. Or come check out the printer in real live at our next beer and pizza party (6th of August) if you can.



[Kanesis seeking to bring natural and decomposable 3D printable hemp filament to market](#)

At some point or another, we all begin to look for more 3D printing options during our making career, as the characteristics of PLA can be a bit limited while ABS is bad for the environment. While there are a lot of interesting 3D printable filaments out there, one Italian startup is now bringing an interesting alternative to the table: hemp filament. Startup Kanesis, founded by Giovanni Milazzo and Antonio Caruso, has already filed a patent for their remarkable, all natural and 100% bio degradable hemp filament and is planning to make it commercially available in the next few months.

[PLEN2 opens up pre-orders and community hub for their 3D printed humanoid robot](#)

Although the rise of 3D printed content sharing sites have led to a seemingly endless supply of robot projects, it's safe to say that not all robot projects are created equal. Combined with the fact that Hollywood is pumping out one robot-themed blockbuster after another, it becomes clear why 3D printed robot projects might be so popular right now. Yet for all of the Raspberry Pi and Arduino projects out there, some users may be wanting something a little closer to what they might be seeing in these movies - such as a customizable 3D printed humanoid robot.

[Dubai says plans world's first fully functional 3D printed office building](#)

In the world of innovation, being the first to do achieve something is of crucial importance and this is something that the people of the United Arab Emirates understand like no other. As a result, the seven Emirates that make up this Gulf State are typically home to fantastic architectural and technological innovations - of which the famous Palm Island is the best example. In that respect, it is hardly surprising to learn that Dubai - one of the two most important emirates - is entering the 3D printed building race. Their goal? To build a 2,000 square feet functional building using nothing but 3D printing technology.

[Did MakerBot knowingly sell faulty 3D printers? Class action lawsuit alleges yes.](#)

In the 3D printing industry's short history, there are few-if any-names capable of bringing up such fervent, hot-blooded and disparaging opinions as MakerBot. And yet, it's hard to feel bad for the once-promising young company. Since closing its retail locations and laying-off a fifth of its staff back in April, the company has been laying low, probably believing things couldn't get any worse. Now, that hope has come to an end. A class action lawsuit has been filed against the Stratasys-owned manufacturer claiming that they knowingly sold faulty, malfunctioning 3D printers to consumers. As a result of the lawsuit, the company's stocks have already taken a hit, and its future is more questionable than ever.

[Experts predict 3D printed customised food items to rule the industry in next 20 years](#)

The use of 3D printers has the potential to revolutionize the way food is manufactured within the next 10 to 20 years, experts from the Institute of Food Technologists (IFT) are claiming. "The price of 3D printers has been steadily declining, from more than USD 500,000 in the 1980s to less than USD 1,000 today for a personal-sized device, making them increasingly available to consumers and manufacturers," researchers said.

Summer sale!



Free sunglasses!

All orders over €100 get a free cool pair of sunglasses! Take a picture, post it on facebook with the tag #reprapworld and get a chance to win 10% discount!



Kossel mini kit €549.99

Our recently released kossel mini kit is now on sale for only €549.99, get your own 3D printer now! This Kossel Delta printer is a high performance and fast printer. All the materials used for this kit are high quality items. Check it out in our [printer kits](#) section!



Minitronics €64.99 €54.99

Our minitronics basic kit is on sale, get one now! The minitronics is designed to be an easy to use, compact and smart solution to fit 90% of the 3D-printers. Unlike the Megatronics, which targets at the advanced range of usages, the Minitronics is plug and play, which will fit the needs of the average user better Check it out in our [Minitronics](#) section!



All ABS 3mm €16.49 €12.49

During the summer sale all ABS 3mm will be sold for only €12.49! Check it out in our [Sale](#) section!

* Prices are excluding VAT and subject to change without notice