

2020 in the technical spaces at IdeaSquare

The pandemic did bring some gifts

The ex-ProtoTroll



Idea^s

Technical upgrades : Epilog Fusion Pro 32 – 60W CO2

- Two (known) other lasers at CERN but it is not possible for visiting students at CERN to use them either because of technical training or because the owners does not allow it. Thus having our own makes sense.
- Already been put to use in several projects at CERN even with the low presence of people at the site.



Technical upgrade : Epilog Fusion Pro 32 – 60W CO2

From: Gilles Favre <Gilles.Favre@cern.ch>
Date: Wednesday, 19 February 2020 at 08:27
To: Hans Boe <hans.hagenes.boe@cern.ch>
Subject: RE: Laser Cutter @ CERN

Dear Hans,

Our laser machines are dedicated to metal welding and cutting. The user interface requiring significant training and specific knowledge to use the equipment.

You are welcome if you want to visit our installations. Production of metallic parts for your applications could possibly be done but only by our team.

Please let me know if you want to pass by the workshop for further discussions with our laser experts.

Regards
Gilles

From: Juan Carlos Perez <Juan.Carlos.Perez@cern.ch>
Date: Thursday, 14 May 2020 at 13:27
To: Hans Boe <hans.hagenes.boe@cern.ch>
Subject: Re: Laser Cutter ?

Dear Hans,

We have this machine for several years and it's devoted to activities linked to several projects and R&D running in the lab.

I don't feel comfortable to give access to external members of my section.

Regards



Juan Carlos Perez
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TE Department MSC_MDT
Magnet Design & Technology Section
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Idea^s

Technical Upgrades : 3D Printers

- New printers to allow more people to print when they need to.
- Two new Creality CR-20 Pro
- Two new Creality CR-10S Pro
- Three new Prusa i3 MK3s



Technical Upgrade : LED Video Wall

- Installation set to February 2021
- Expected lifetime is 10 years if it is on 24/7.



Technical Upgrade : Desktop Water jet

- Wazer Water Jet is in the pipeline.
- Great complementary tool to the laser.
- Prototype in wood – make final part in metal.



Technical Upgrades : IdeaSquare Infrastructure

Digital Whiteboards : Four Samsung Flip 2 55" that can be used by visiting students. Easy UI and connects to computers and phones and is also connected to the internet.



Technical Upgrades : Microcontrollers and Sensors

- A big variety of sensors and electrical components added to the electro shop.
- Focus on sensors that can be used to capture data about the environment.



Hands-on Course(s)

- FPGA Course with the National Instruments MyRio. Run by Adriaan Rijllart with good feedback both in a physical format, and a digital format.
 - Courses fully booked withing 2hours.
- 3D printing introductions one to one. Mostly familiarized users.
- Laser cutting for a small sample size of CERNies.

