# Re: help

Dayron Ramos [dayron.ramos@ba.infn.it]
**Sent:** 01 November 2021 12:58
**To:** Ian Crotty
**Cc:** Giuseppe Iaselli; gabriella.pugliese@ba.infn.it
**Attachments:** collimator_layout.pdf (307 KB)

Hi Ian,
Thanks a lot for your help.
Attached is a schematic layout of the collimator.

Best, Dayron

On 1 Nov 2021, at 12:18, Ian Crotty <ian.crotty@cern.ch> wrote:

Also
We can make a visit here if they can do the job.
I will call this pm.

https://www.jwyss.ch/

Ian

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From: Ian Crotty
Sent: 18 October 2021 18:57
To: dayron.ramos@ba.infn.it
Cc: Giuseppe Iaselli; gabriella.pugliese@ba.infn.it; Ian Crotty
Subject: RE: help

of course Pb sheet exists in CERN stores in 10, 20 and 50mm, very cheap.

see my EDH
8958044

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From: Ian Crotty
Sent: 18 October 2021 18:36
To: dayron.ramos@ba.infn.it
Cc: Giuseppe Iaselli; gabriella.pugliese@ba.infn.it; Ian Crotty
Subject: RE: help

Colleagues

Talking with colleagues confirms my comment that CERN will not drill holes, especially 400. Four mm holes on 50mm of Pb is no easy task once you have found the external WS to do the job. The problem is the health hazard that making swarf produces.

We discussed moulding, but produces vapour, and punching that could be done at CERN but the softness of Pb would require far greater pitch and filing each hole with metal before doing the next.

There is the possibility of making the holes with water jet at CERN , I will investigate, if not in Meyrin.

I suggest alternate materials, such as steel and brass. 40mm sheet exists in CERN stores or in steel anything up to 200mm

I found a solution with perforated sheet steel with either holes of 2mm and pitch 3mm OR 8mm holes and pitch of 11-12mm. If 150mm thick is sufficient then the latter costs 172chf and in stainless steel there is sheet with 4mm holes on a pitch of 6mm that will cost 1120chf. The 200mm x 200mm sheets would be piled up and a screw in each corner to align the holes.

I am sure there are alternatives

Ian

Or the

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From: Ian Crotty
Sent: 18 October 2021 12:30
To: Dayron Ramos
Cc: Giuseppe Iaselli; gabriella.pugliese@ba.infn.it
Subject: RE: help

Hi Dayron

great, this pm I guess, call me around 3pm

you do of course reaslise that machining Pb is not allowed in CERN.....
What about brass or steal

Ian

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From: Dayron Ramos [dayron.ramos@ba.infn.it]
Sent: 18 October 2021 12:14
To: Ian Crotty
Cc: Giuseppe Iaselli; gabriella.pugliese@ba.infn.it
Subject: Re: help

Hi Ian,
I made some calculations and is enough a lead block of 5 cm thickness to stop gammas.
We can meet and I could give you a sketch/layout of what I need, and also share the experimental idea with you.
Please let me know when are you available, I'm at GIF.

Thanks in advance.

Dayron.

> On 18 Oct 2021, at 11:59, Ian Crotty <ian.crotty@cern.ch> wrote:
>
> Hello Pino and Co.
>
> ok see what I can do.
>
> we need some more details, source etc, divergence of beam, what paricules to stop/attenuate.
>
> suggest a sketch with some details

Ian

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From: Iaselli [giuseppe.iaselli@ba.infn.it]
Sent: 18 October 2021 10:07
To: Ian Crotty
Cc: gabriella.pugliese@ba.infn.it; dayron.ramos@ba.infn.it
Subject: help

Dear Ian,
Dayron needs to produce some lead filter for a dedicated measurement with a gamma source of the RPC response.
The idea is to use available lead brick at CERN and make a grid of holes (diameter 4 mm) spaced by 1 cm.
Unfortunately there is nobody from Bari at the moment who could work in the mechanical workshop.
I wonder if you could help. It should not be a big effort.
If you have some spare time, please discuss with Dayron (at present at CERN) the matter.
Many thanks anyway.
Ciao Pino