

An update on the scintillator system for the moiré deflectometer



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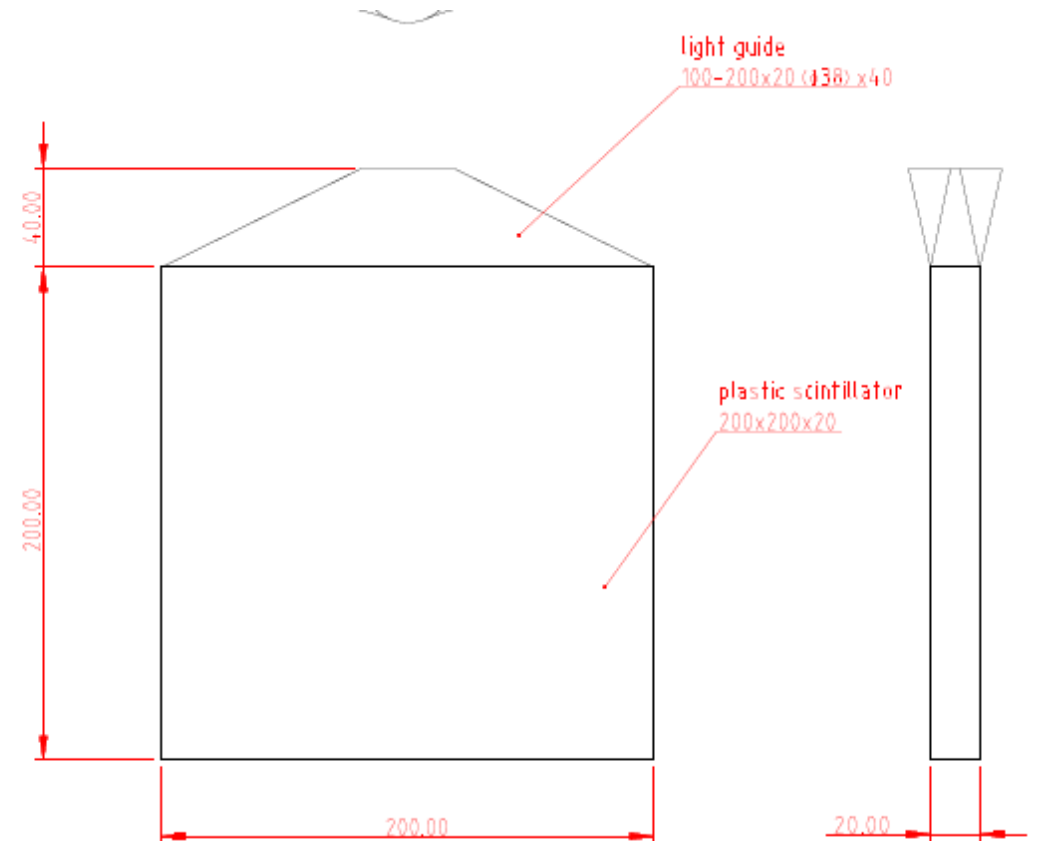
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Enquiry about existing companies



- High prices from Eljen:
about 800 euros for a light guides and 270 euros for a scintillator.
- Better prices from Epic:
780 euros for a single scintillator + light guide

but proposed design not adequate

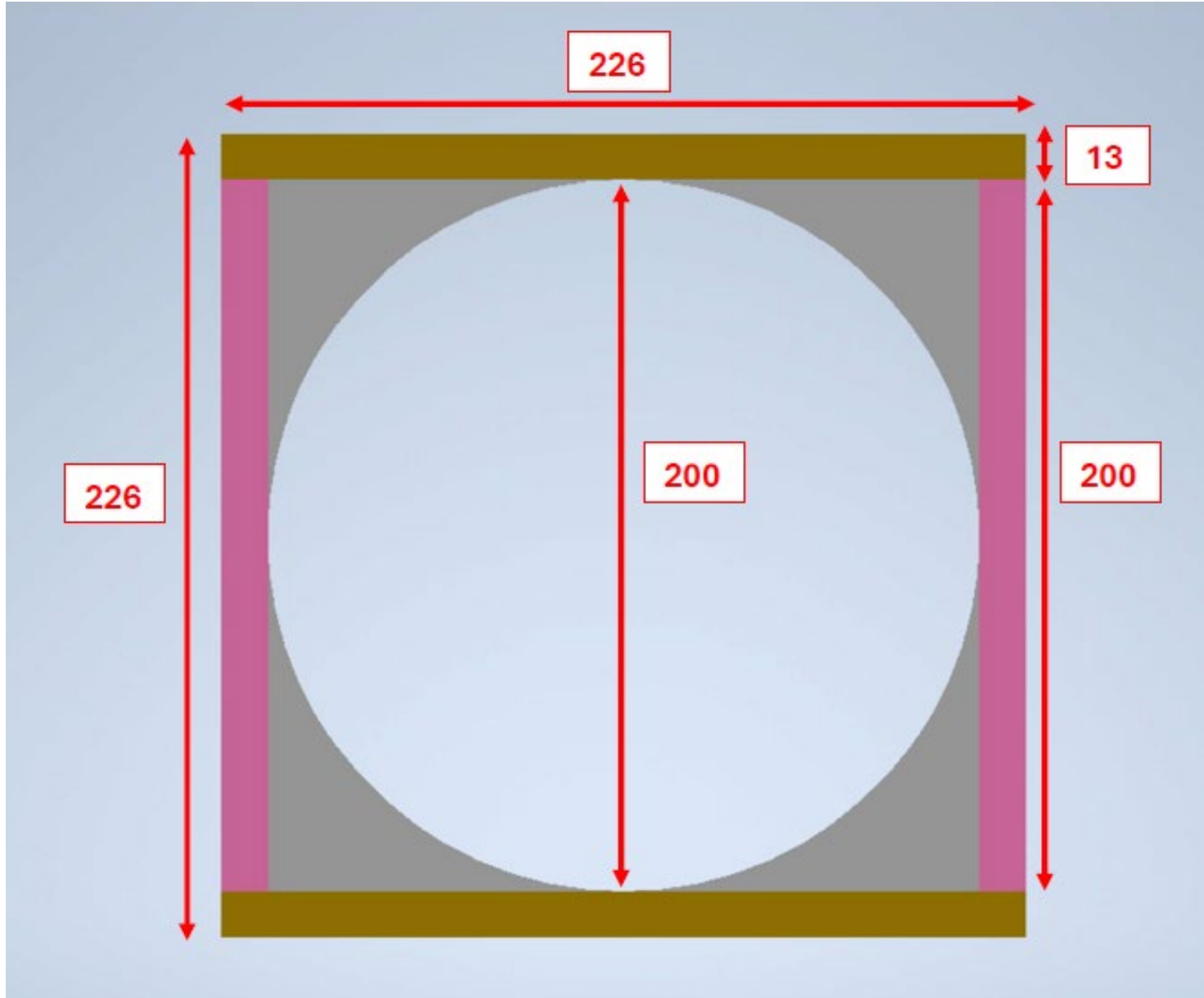


A possible, alternative solution

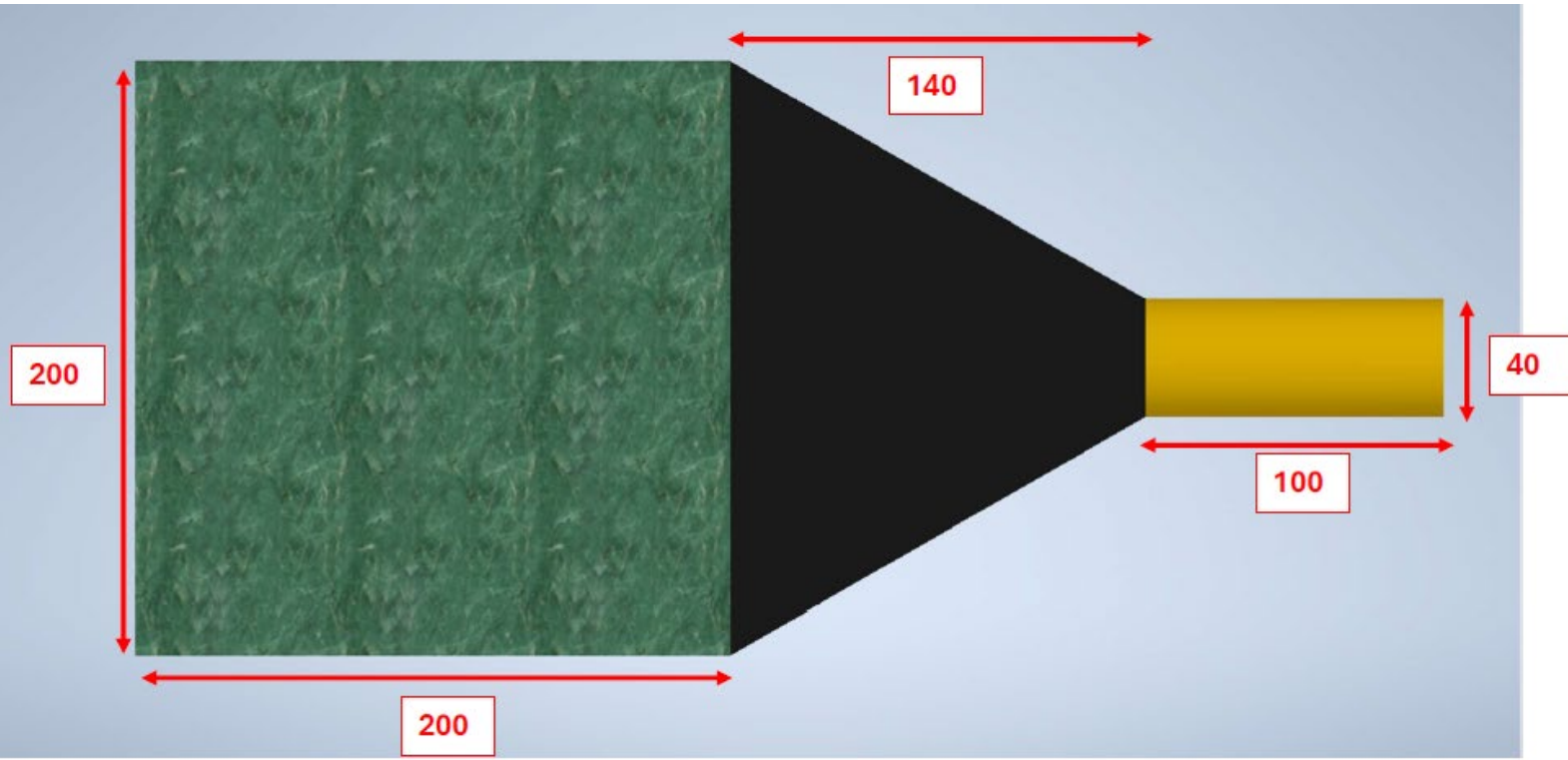


- Use some of the former ATRAP big scintillators (1000x280x13) to obtain slabs (200x200x13).
- Buy PMMA bars and cylinders to make the light guides. The system (scintillator+light guide) around the magnet can be taken as a model.
- The work can be done in the workshop of my Dept.

A possible configuration



A possible configuration



Another layer is needed to improve the signal



- Larger scintillators and light guides, in order not to reduce the acceptance given by the first layer.
- 16 scintillators and light guides, in two layers, around the gratings, 8 smaller and 8 larger.
- 16 PMT (available)
- Power supply?
- To be designed: mechanical support for the assembly PMT+light guides+scintillators.

Dependent on the shielding against magnetic fields.

