



**Deliverable Report**

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# Executive Summary

In this deliverable the feasibility of manufacturing a gluing machine has been researched. In order to prove this, a lot of initial research has been done.

Next to that, a set of manual tests have been done over the year. The tests have shown that an extra process is needed to get a good end result: pre-treatment of the materials. The rear side construction is made out of an automotive grade glass-reinforced Polypropylene with intrinsic difficult glue adhesion properties. With a flame this adhesion can be improved. Based on the knowledge gained, during the previous, tooling has been designed to produce large batches with a controlled quality.

Due to changes in the product design as well as the proto-production equipment, improvements in quality as well as cycle times have been achieved. When we compare the first batch to the last one average cycle time has halved. The new bottleneck is the correct and quick application of adhesive. However, great progress has been made.

The next step will be to design a semi-automated solution. First concepts have been drawn up to sketch feasibility as well as price level. Currently there seem to be no game-breaking problems. However, there still is a lot of equipment that is not yet available for these sizes. Rimas is going to see what concepts they can draw up to change this. For now the only problem seems to be the price. With the research up to now it seems that making a 200 MW solution might be almost just as expensive as a 80 MW version. More effort in fine-tuning this will be needed.

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[http://cordis.europa.eu/fp7/cooperation/home\\_en.html](http://cordis.europa.eu/fp7/cooperation/home_en.html)

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