Abstract: Remote Ablation Cutting (RAC) with continuous wave lasers holds a lot of untapped potential for laser material processing. High speed cutting for thin metal sheets and foils as well as box or tube processing without inside spatter contamination are only two benefits. In order to develop RAC further for an industrial application, gaining of a better understanding of the process mechanisms is essential. In this paper main influencing parameters are investigated and a first model to describe the process behavior is presented. For that purpose different experimental methods like high speed camera observations and longitudinal cross-sections along the cutting kerf were adapted to the special requirements of the RAC. With this article a further step to achieve the goal of a fundamental understanding of the process shall be contributed.
Occurences:

- Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Mechatronik > Lehrstuhl für Produktentwicklung und Leichtbau (Prof. Zimmermann) > Konferenzbeiträge
- Einrichtungen > Fakultäten > Fakultät für Maschinenwesen > Institut für Mechatronik > Lehrstuhl für Produktentwicklung (Prof. Volk komm.) > Konferenzbeiträge