

Laser as a manufacturing tool

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Lasers has been used for material processing for more than 40 years, and during this time many advances made this technology a trustful and profitable tool on a factory floor. There are uncountable ways one can use a laser beam focus to produce work in an industrial environment, and some of the most used will be shown in detail.

Many aspects of industrial applications of laser will be discussed, mainly from a practical point of view. History of laser applications in industry, their evolution and many examples of most important uses are presented. Types of lasers, operating ranges, regime of operation and systems developed at Trumpf and dedicated to some specific processing are also discussed.

Topics will cover 2D and 3D cutting; applications and advantages in laser welding and uses and systems to laser heat treatment. Some others significant employments in material processing will also be shown with many practical examples.

Keywords: Laser cutting, laser welding.

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