

TD-140 Tablet Drilling Laser Systems

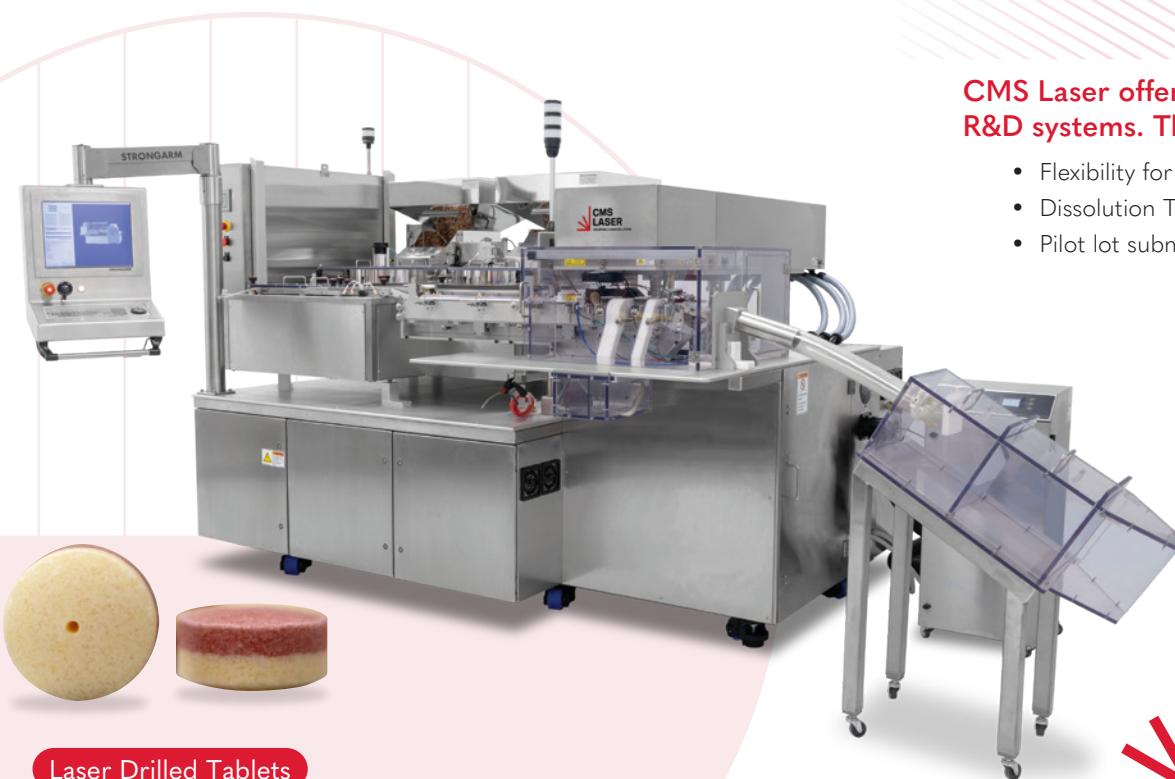
High-Speed Laser Processing Machines for the Pharmaceutical Industry

CMS Laser has been an industry innovator in on-the-fly tablet drilling systems for pharmaceutical companies. We have over 30-years of experience with high speed, reliable on-the-fly laser systems—making us the best choice for drilling oral solid dosage tablets or capsules. We have a global install base and have worked with many pharmaceutical companies to provide research and development, batch submittal and full production solutions.

Contact us today to learn more about our solutions for the pharmaceutical industry. We provide free sample testing through our applications development lab to determine the best laser configuration and optics for the material being processed.

SYSTEM FEATURES

- CDRH Class 1 CO2 laser drilling system
- Laser with galvanometer scanhead
- Dual bowl feeder with tablet conveyor
- Dual vision inspection with tablet reject bins
- Fume extraction system
- Stainless steel frame and panels
- Windows® operating system with CMS LaserDrill software



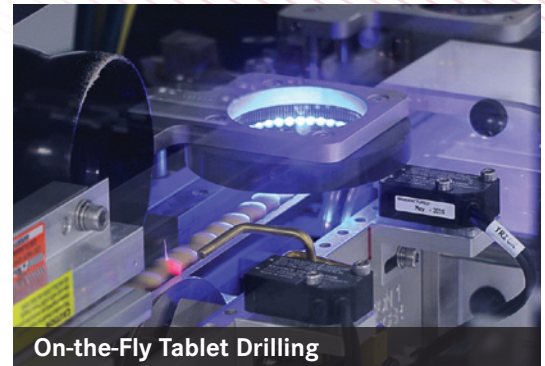
Laser Drilled Tablets

CMS Laser offers both production and R&D systems. These systems offer...

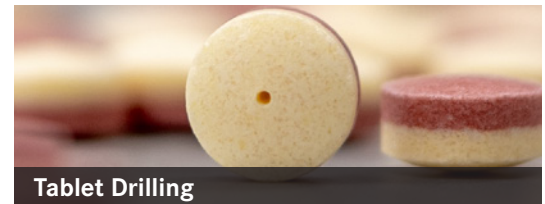
- Flexibility for development work
- Dissolution Testing
- Pilot lot submissions

TD-140 System Details

- Processing speeds up to 140,000 tablets per hour for bi-layer, bi-color tablets.
- True, closed-loop feedback, on-the-fly tracking of the tablets which results in better orifice quality with a large range of orifice sizes.
- Standard orifice sizes range from 0.2mm - 2mm. Small and large orifice sizes are programmable and multiple holes per side of tablet is available upon request.
- The laser selected provides superior orifice and repeatable release profile of the active pharmaceutical ingredient (API).
- Integrated oscilloscope and remote-diagnostics
- Integrated ionizers for ESD control



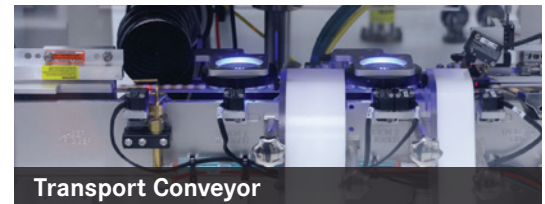
On-the-Fly Tablet Drilling



Tablet Drilling

Dual Machine Vision Inspection

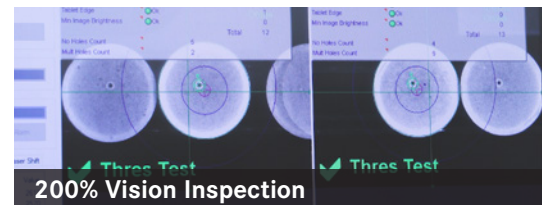
- Due to the presentation of the tablet and our design of the system, the surface of the tablet is visible with the integrated dual vision systems leading to 200% inspection.
- Tablets that fail vision inspection are blown off the conveyor into separate reject bins.



Transport Conveyor

Tablet Transport System

- Our superior bowl feeder and transport systems design results in smoother transitions, reduced tablet breakage and increased yield.
- A large range of tablet sizes can run on a single system with a minimal change in parts—typically less than 30 minutes.



200% Vision Inspection

CMS provides the software that allows for compliance to 21 CFR part 11 concerning electronic signatures and audit logs. Support and documentation to the Validation Group will be provided for the performance of the IQ, OQ and PQ tests.

The TD-140 tablet drilling systems meet all criteria listed in the applicable OSHA Safety Codes and meet or exceeds GMP standards. The Laser Drilling system will comply with appropriate GMP regulations including cGMP and GAMP 5 requirements that are the most current at the time of order.



Dual Bowl Feeders

 **DESIGNED & BUILT IN USA**
24/7 Worldwide Support & Service



Control Micro Systems, Inc.
4420-A Metric Dr.
Winter Park, FL USA 32792

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CMS Laser follows a policy of continuous product improvement. Specifications and system design are subject to change without notice.



The CMS Laser Systems described in this brochure complies with the requirements of 21 CFR 1040.10 and 1040.11, except for deviations pursuant to laser notice No. 50 dated June 24, 2007. These systems are certified by Control Micro Systems as a Class I laser product or Class IV Compliance with 21 CFR and may be verified by contacting the Office of Compliance at the Center of Devices and Radiological Health. Copyright © 2022 Control Micro Systems, Inc.