

SPLITTING MACHINES

for laboratories & production



Industrial Cutting Solutions
A division of USM Corporation
32 Stevens St., Haverhill MA 01830
Phone: 978.374.0303 Fax: 978.373.7295
www.hudsoncutting.com

The technique of splitting

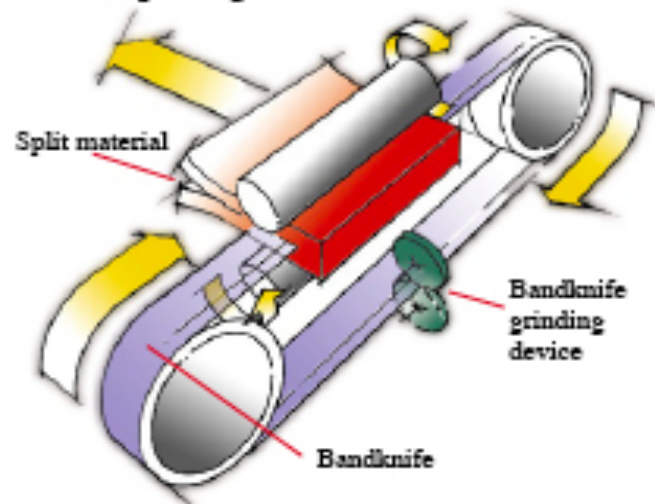
Today, the time-consuming, imprecise grinding down of test specimens is being replaced by separating them into layers by splitting. Splitting machines are accordingly used in laboratories and experimental departments so layers can be analyzed.

For analytical purposes, the material is split into standard test specimens for further examination as to their physical characteristics. Examinations are often carried out in companies' own laboratories, as well as independent laboratories, research institutes and material testing centers.

Splitting means, first, the reduction of materials of irregular thickness to a specified thickness, or reduction from a given starting thickness to a specified finished thickness. Depending on the properties of the material, the minimum thickness of a split layer may be approximately 0.1 mm.

Second, splitting also defines preparing for a layer analysis (separating a work piece into several layers) for quality testing purposes. These call for a standard test specimen, which has been split from a certain layer of the material and die-stamped, and may be, for example, 2 mm +/- 0.1 mm in thickness.

How a splitting machine works



Applications for splitting machines

The rubber and plastic industries, predominantly in laboratories but also in production operations, use splitting machines. They function to within ultra-fine tolerances and are used throughout the world in type of situation where the high-precision separation of materials is an absolute must. In researching and developing new materials, in the performance of quality tests and inspections, or in investigating complaints, Hudson Industrial Cutting's Fortuna machines not only simplify the task at hand, they also enable tests to be carried out with scientific accuracy and with reproducible results.

Various potential uses and laboratory applications (to internationally valid test standards) are:

- Automotive industry: Material analyses of industrial gaskets and seals made of rubber or plastic (also window and door seals, rubber seals for car windows), acoustic and thermal insulating materials, profiled parts, drive belts
- Textile floor covering manufacture: Methods for determination of mass (to ISO 8543) and determination of thickness of pile above the substrate (to ISO 1766)
- Cable manufacturing: Layer analyses of cable sheets and insulations to ensure they meet specifications
- Water hoses: Layer analyses for specification fulfillment
- Tire manufacture: Layer analyses of steel-corded or cross-ply tires for specification fulfillment
- High pressure hoses, brake hoses
- Rubber and plastics industries: Conveyor belts
- Reclaiming rubber from used tires



Industrial Cutting Solutions
A division of USM Corporation
32 Stevens St., Haverhill MA 01830
Phone: 978.374.0303 Fax: 978.373.7295 www.hudsoncutting.com

The company reserves the right to supply products that may differ slightly from those described in this publication.