

Title (en)
Rotary cutting apparatus.

Title (de)
Rotationsschneidgerät.

Title (fr)
Appareil de coupe rotative.

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Abstract (en)
A method and apparatus particularly suited for cutting continuously moving thermoplastic film such as linear low density polyethylene includes a stationary anvil, preferably a roller of tool steel and a tungsten carbide die mounted for rotation along a circular arc intersecting the anvil. In an embodiment for punching holes in the film, the apparatus includes a saddle shaped hollow tungsten carbide die projecting slightly above the cylindrical surface of a roll passing under a spring biased tool steel roller for cutting a semicircular hole in a continuously moving continuous plastic film web for the manufacturer draw tape bags. A vacuum is supplied to the center of the die for removing the segment of plastic film cut out by the apparatus. In an alternate embodiment, the rotary cutting apparatus includes a tungsten carbide plate member having a straight cutting edge is rotated along a circular arc at the end of support mounted to a shaft to intersect a spring biased roller supported along the arc to cut a perforation in a continuous plastic film passed between the straight cutting edge and roller. The alternate embodiment is suited for employing a plurality of the rotary cutting devices at spaced stations for cutting perforations across a moving film web.

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Citation (search report)
• DE 3302038 A1 19840726 - WINKLER DUENNEBIER KG MASCH [DE]
• US 3106121 A 19631008 - ABRAHAM NOVICK
• DE 2722972 A1 19771124 - KOBE STEEL LTD
• DE 2054474 A1 19710909 - IBM

Cited by
CN114055564A; CN114226351A; WO2015150851A1; US10207416B2

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