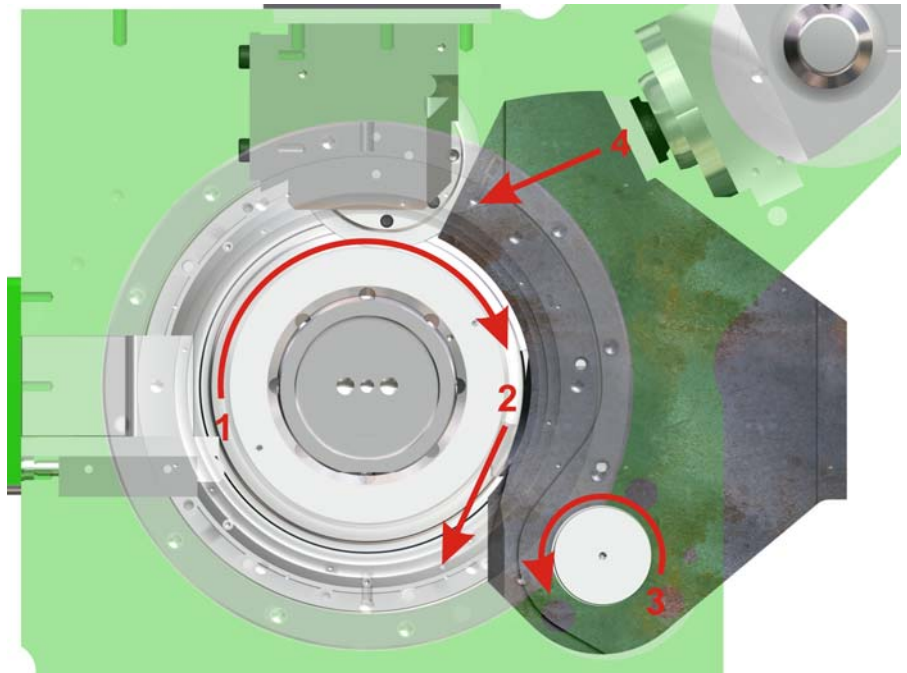


Designed-In Stability

BWE has been designing and manufacturing Conform machines since 1976. Very early in the development of the process, a concept was introduced that has been successfully used on well over 100 installations around the world.

What is this concept, and how does it work ?

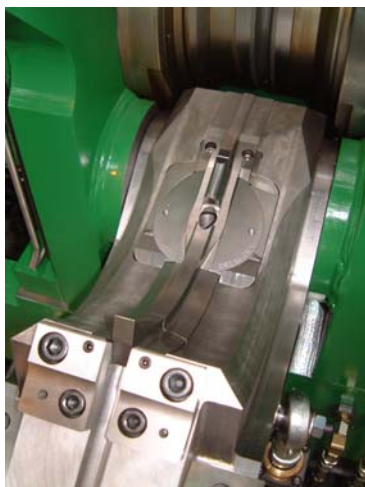
BWE's Conform and Conklad machines are characterised by the unique, pivoted shoe assembly with hydraulic opening and closing. This allows easy access to the tooling, facilitating tooling changeover times of only a few minutes and in operation maintains very accurate alignment of the tooling.



The fundamental principle behind the pivoted shoe is the **Self-Closing Mechanism**. During operation the extrusion pressure tends to push the Shoe away from the Wheel, and a substantial clamping arrangement is necessary to maintain the correct alignment of the tooling. To assist with the clamping force, Conform and Conklad machines are designed in such a way that some of the forces generated during operation act to close the Shoe. Torque loading from the Wheel (1) acts to produce a load on the abutment (2). This in turn generates a turning moment about the pivot point and produces a force (4) to push the Shoe towards the Wheel.

The Self-Closing Mechanism can be used "in reverse" to open the shoe. Sometimes the layer of aluminium or copper on the wheel tends to stick to the Die Chamber, making the shoe difficult to open. When this happens the Wheel can be reversed, to generate a "self-opening" force.

Extrusion Shoe in Open Position



Features

- Built-In Compensation as Extrusion Pressure Changes.
- Rigid Construction with Low Deflection Under High Load.
- Accurate Tooling Alignment.
- Easy Access for Rapid Tool Changes.
- "Unstick" Action for Opening.

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Cold Welding · Continuous Extrusion · Continuous Cladding · Continuous Sheathing



Beaver Industrial Estate · Ashford · Kent · England
Tel: +44 (0)1233 627736 · Fax: +44 (0)1233 630670
Email: mail@bwe.co.uk · www.conform.com