

A Comprehensive Line of Standard Components

D-M-E Standard Components: A Hallmark of the Plastics Industry

It's not uncommon for a mold designer, moldmaker, or molder to engineer a specialized component that is available as a standard, off-the-shelf product. D-M-E, a worldwide leader with its broad offering of standardized mold components, frequently invents new technologies, such as Innovative IN2 Interlocks with their interchangeable wear surfaces, and the Dual-Ring Mold-Dating Insert with its patented 'click-into-position' indexable mold dating technology. More options and faster delivery of basic components, such as advanced mold action products like D-M-E VectorForm Lifter Systems, have become a hallmark of today's molding industry.

The wide range of standard components available from D-M-E has one common theme: all are problem-solving devices that make life easier for the mold designer, moldmaker, and molder. Each component was originally created by a craftsman in the field, but thanks to industrious ingenuity, the rest of us don't have to reinvent the wheel.

Following are a few of the latest industry innovations that were created to meet rising molding challenges.



Euro-Standard Mold Bases & Components. There is more than one standard around the world when it comes to mold bases. Molds built in Europe use a standard quite different from the Inch standard commonly used in North America. As molding programs accelerate in their frequency to move from one region of the world to another, D-M-E recognizes the importance of having easy access to the mold components that fit the mold that you are working on today. We offer Euro-Series mold bases and more than 4,000 Euro-Series mold components, as well as standard DIN and JIS products. *See the Mold Components section of this catalog for a myriad of product selections.*



Dual-Rod Lifter Systems. Most off-the-shelf lifter systems today are based upon the simple, single-rod lifter system. The dual-purpose (guiding and lifting) single-rod of a single-rod lifter system introduces an inordinate bending moment upon the dual-purpose single-rod. This results in the well-documented limitations of the single-rod systems: limited lift angles (generally 15° or less), inability to lift large lifter cores, inability to lift very small cores, difficulty in changing the speed of the lifter core, and inadequate cooling. On the other hand, a dual-rod, like the D-M-E VectorForm Lifter System, separates the lifting and guiding motions, dramatically reducing the bending moment and all but eliminates the aforementioned limitations. *See the Molding Undercuts section of this catalog for solutions to molding products with threads, dimples, undercuts, protrusions or cut-outs.*

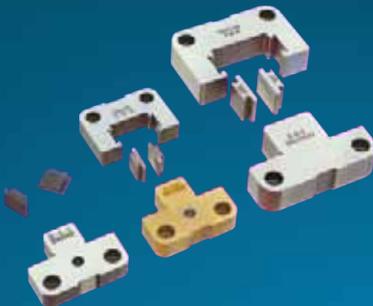


Plate Control Devices. Many of today's molds have multiple plates moving during the mold open and close sequence. Ensuring that these plate movements are coordinated and timed to avoid mold crashing is imperative. A positive and precise mechanism is generally preferred to other less optimal solutions such as springs. Springs wear with use, and do not provide the positive precision of mechanical plate control devices. Springs can allow plates to tilt during movement, placing undue stress and wear on the mold and its plate alignment components. *See the Plate and Pin Control section of this catalog for solutions, including Helical Gear Stack Mold Components, the Internal Latch Lock, and the Toggle-Lok.*

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Two-Stage Ejectors. Complex molds commonly have multiple ejector plates. Timing multiple ejector plates can be accomplished by a variety of methods, including springs. Two-stage ejectors have been used in Europe for decades. They offer simplified design and installation into a mold, as well as the ability to provide long lasting, positive, precise positioning of ejector plates. D-M-E 2-Stage Ejectors can be offset from the mold center, encouraging their use in molds built in North America. *See the Plate and Pin Control section for 2-Stage Ejectors.*



Mold Interlocks. Originally offered in rectangular or round arrangements that were inserted from the parting line, mold interlocks that mount on the side of the mold are now available. These side interlocks have the advantage of maximizing the area inside of the mold. Additionally, a new D-M-E innovation — IN2 Interlocks with interchangeable wear surfaces — has recently been introduced that offer superior materials and the ability to interchange the wear surfaces rather than the entire interlock set during mold maintenance. *See the Plate and Pin Control section for a wide offering of D-M-E interlocks.*



Runner Shut-Offs. It is sometimes desirable to have the ability to selectively shut-off different cavities in a multi-cavity mold. Runner shut-off inserts are a simple way to achieve control of which cavities are to be active and which are to be idle in multi-cavity molds. Simple to install and even easier to operate, these devices are available in a variety of sizes and are easily customizable to virtually any style of cold runners. *See this Cavity and Core Components section for D-M-E Runner Shut-Off Inserts.*



Venting. It's a fact — when plastic fills a cavity, trapped air must go somewhere. Burning and flow restrictions are the most common symptoms of this problem. In the past venting was accomplished by machining slots opposite the gate, or by putting flats on the leader pins — resulting in nonuniform venting and complicated remachining in the event of a repair. Advances in powder metallurgy have enabled the creation of standardized sintered, porous metallic vents. These venting plugs are composed of a large number of straight, parallel, uniform pores that allow trapped air or gas to escape the cavity. *See D-M-E Sintered Vents in this Cavity and Core Components section for your venting solutions.*



Slide Retainers. When the cam pin moves out of the slide upon mold opening, a method must be employed to ensure that the slide does not move back to its mold-closed position and damage the mold. Some mold designs employ a simple spring or a homemade component to prevent the slide from moving back. However, simple springs and homemade components may wear or break unpredictably. *D-M-E Slide Retainers, in the Slide Action Components section, make obsolete the cumbersome external spring or hydraulic methods.*