



## Mold Base Terminology

It's surprising that the terminology used in describing the same two halves of a mold would have so many variations. To the beginning Technician listening to all the names of just two halves of the mold can be very puzzling. We have the "A" side, "B" side, moving side, stationary side, injection side, ejection side, core side, and cavity side not to mention the hot side or cold side.

The reason for this is easy to explain if you think about it. To start with we have three separate industries involved in using or making the mold. Each industry uses different terminology to describe the two halves of the mold. All of the terms come from the principle that plastic will shrink and be retained on the core when the mold is opened. This requires that the part be removed from the core with an ejector system.

The injection molding press has two functions, one is to inject the material and the second is to remove or eject it. The standard press is designed to have the ejection on the opposite side of the injection unit. This is why the press manufactures use the terms injection side or ejection side to describe the two halves of the mold. The mold makers have three terms they use; one is from the mold base manufactures, the other from the mold makers and the last from the hot runner manufactures. The standard mold base construction companies use the "A"- side and "B". side terminology.

When molders first required mold building the tool and die industry were the natural business to assume the role of mold base manufacturing. They adapted the terminology die bases for metal stampings. The A side was the top of the die and the B-side was the bottom. During the molding process the mold has a part stuck on the core due to shrinkage when the mold is opened, pulling the part out of the cavity. So the mold makers use the terms core side and cavity side.

The hot runner manufactures refer to the cavity side as the hot side because most hot runners are gated into the cavity because they must convey the material from the injection nozzle. The other side of the mold is where the cooling takes place and is referred to as the cold side. In opening the mold the press only has to move one side of the mold.

The side that the press manufacture chose is the same side that has the ejection system. This is because the injection unit needed to remain in the stationary position while building the next shot for the next cycle. Because the molders are very familiar with the molding process and, since the toolbox is intended for molding technicians,

I will refer to the two mold halves as the molder does, the stationary side or moving side. As a final note, I must add that in my career I have seen exceptions to all the above terminology. I've seen cores and ejectors on the stationary side. Stack molds have mirrored the injection side and ejection side, and A plates have become B plates with the hot side in the middle. So just be aware there will always be an exception to the terms used.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1700 Sunshine Drive Clearwater, FL 33765 Phone: (727) 447-7377 Fax: (727) 447-0125 [info@a-t-m.com](mailto:info@a-t-m.com)