

## D-M-E SPRUE BUSHING INSPECTION AND SAFETY INSTRUCTIONS

The D-M-E die cast bushings were designed for die casting with zinc only. Do not use these bushings when casting aluminum, magnesium, brass, lead or any other non-zinc material.

These bushings, when in service on any die cast machine, must be inspected at least once a shift to determine if any signs of heat checking, erosion, inside bending or breakage, severe wear, or any evidence of impact or other damage exists. If any abnormality exists or if the bushing has been subjected to high external temperatures from a gas torch, the bushing must immediately be removed from service and replaced with a new bushing. Failure to perform the required inspection procedure may result in damage to the die and/or machine and possible injury to operating personnel. If any doubts exist regarding the integrity of the bushing, remove it from service immediately.

Do not attempt to burn-out a stuck sprue, frozen zinc or any other foreign material with a torch to free the bushing area for the next shot. High external temperatures will drastically alter the characteristics of the steel and result in premature failure.

Never close the die when there is solid foreign material left in the bushing. When the die closes, the spreader will strike this material and impact sideways into the inside wall of bushing with tremendous pressure. This will weaken the inside wall and may lead to cracking and failure. If the bushing is involved in an incident of this nature, immediately remove it from service and replace it with a new bushing. It is mandatory to determine that the preceding shot and sprue has been fully removed from the die and that no foreign material remains in the bushing that might interfere in any way with the spreader on die closing.

If the machine is run in a automatic cycle, it is absolutely necessary to sense that the sprue and shot have been physically removed from the die and that no frozen material remains to interfere with the die closing.

D-M-E recommends that all safety devices be used in any die cast operation. A method to insure that the zinc part, runner and sprue has been physically removed from the machine should be incorporated in all zinc die cast processing. Adequate safety instructions for operational personnel, including the dangers of water leakage and use of torches on spreaders and bushings, should be given to all people involved in the die cast operation.

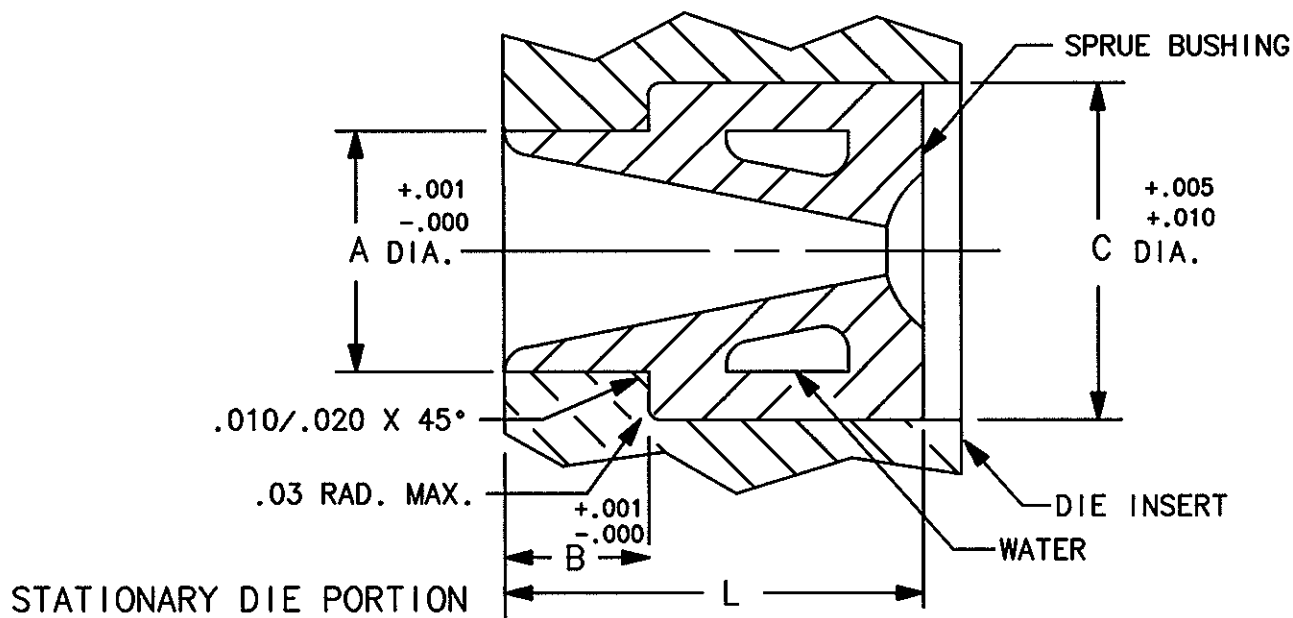
# D-M-E

## SPRUE BUSHINGS - CONSTANT AREA & RUNNER TYPE

FOR ZINC DIE CASTING ONLY

### MACHINING & INSTALLATION INSTRUCTIONS

ME-0604-PS-003-A DC9997 4-96



CATALOG NUMBER	L	REF.	A	B	C	USE WITH D-M-E SPREADER
DC-33, DC-35, DC-37	1.75	SHORT	1.500	.500	2.125	DC-30
DC-44, DC-46, DC-48	2.12	LONG				DC-40
DC-51, DC-52, DC-57	2.50	SHORT	1.750	.750	2.375	DC-50
DC-64, DC-66, DC-69	3.12	LONG				DC-60
DC-300, DC-301, DC-302, DC-303, DC-304	2.50	SHORT	2.500	.625	3.125	DC-310
DC-400, DC-401, DC-402, DC-403, DC-404	4.00	LONG				1.000
ZRB-3034, ZRB-3100, ZRB-3151	1.75	SHORT	1.625	.500	2.250	ZRS-3000
ZRB-4034, ZRB-4100, ZRB-4151	2.12	LONG				ZRS-4000
ZRB-5034, ZRB-5100, ZRB-5151	2.50	SHORT	2.000	.750	2.625	ZRS-5000
ZRB-6034, ZRB-6100, ZRB-6151	3.12	LONG				ZRS-6000
ZRB-7100, ZRB-7125, ZRB-7151	2.50	SHORT	2.750	.625	3.625	ZRS-7000
ZRB-8100, ZRB-8125, ZRB-8151	4.00	LONG				1.000

NOTE: DC = CONSTANT AREA TYPE  
ZRB & ZRS = RUNNER TYPE