Sprue Spreader Inspection, Installation & Safety Instructions

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

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

Never grind, machine or install any kind of undercut on the spreader for purposes of pulling the sprue from the bushing. Any undercut will cause additional stresses, resulting in premature failure of the spreader. Never use a torch to preheat before casting or to remove zinc from spreader. The high temperature will alter the steel's microstructure, resulting in areas of un-tempered martensite and cause premature spreader failure.

Do not increase the diameter or depth of the water-cooling hole. Such alterations will decrease wall thickness of the spreader, leading to premature failure.

Never close the die when a spreader could enter the bushing where a stuck sprue, frozen zinc or any other foreign material remains. If the spreader is allowed to close on a solid object, the spreader will be subjected to a tremendous bending force, substantially weakening the spreader (while also damaging the bushing). If any spreader is involved in an incident of this nature, immediately remove it from service and replace with a new spreader. It is mandatory (whether the machine is being run with an operator or on an automatic cycle) to insure the preceding shot and sprue have been fully removed from the die and that no foreign material remains in the bushing that would interfere in any way with the spreader on die closing.

DME recommends that all safety devices be used in any die cast operation. A method to insure 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.
Sprue Spreader Runner Type
Machining & Installation Instructions
For Zinc Die Casting Only
Moveable Ejection Die Portion

Catalog # | L     | Ref. | A     | B     | D Max. | Use With DME Bushing
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ZRS-3000 | 1.54 | Short | 1.625 | 1.350 | .150 | ZRB-3034, 3100, 3151
ZRS-4000 | 1.91 | Long  | 1.875 | 1.475 | .225 | ZRB-4034, 4100, 4151
ZRS-5000 | 2.06 | Short | 2.500 | 1.475 | .300 | ZRB-5034, 5100, 5151
ZRS-6000 | 2.70 | Long  | 2.500 | 1.475 | .300 | ZRB-6034, 6100, 6151
ZRS-7000 | 2.05 | Short | 2.500 | 1.475 | .300 | ZRB-7100, 7125, 7151
ZRS-8000 | 3.55 | Long  | 2.500 | 1.475 | .300 | ZRB-8100, 8125, 8151