

## Influence of returning material on porosity of die castings

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**With increasing tendency of die castings production, also the possibility to produce castings with maximum usage of molten metal grows. Residual of non-used molten metal, e.g. sprues, feeders, splashes and saw-dusts are used in next production as returning material. With returning material a lot of non-suitable elements is brought into the melting process, but with decreasing of input costs it creates inseparable part of production process. Usage of returning material in melt production has negative influence on final quality of produced castings, because of bringing of inheritable properties into produced melt. Important factor in melt production with the amount of returning material is to know to set its optimal amount and the way of melt treatment to achieve the same results in casting quality in comparison to the casting production from clean materials.**

**Keywords:** returning material, porosity, die casting, casting

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