

BIOMASS YIELD IN POROUS CERAMIC CARRIERS FOR MUNICIPAL
WASTEWATER TREATMENT
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Abstract: Two different porous ceramic carriers with immobilized activated sludge comprised a stationary filling of the reactors. Municipal wastewater was treated at hydraulic retention times from 15 to 70 min and internal circulation capacity of 20, 40 and 60 dm³·h⁻¹. Depending on hydraulic retention time, the sludge yield ranged from 0.138 to 0.066 g TSS·g COD_i in reactor I and from 0.175 to 0.107 g TSS·g COD_i in reactor II. An increase in volumetric loading rate and internal circulation capacity caused a reduction in sludge yield. A decrease in the sludge yield corresponded to an increase in the ratio of endogenous to substrate respiration by the immobilized biomass.