

Abstract

The present invention relates to a process for the continuous manufacture of PMI foam blocks. This has high flexibility in respect of the size of the blocks. This process begins by bonding the ends of individual prepolymerized PMI blocks to one another, preferably by means of hot-plate welding, and then passes the blocks into an NIR heating unit. The PMI polymer here foams continuously during passage through the said unit. The PMI foam is discharged at the end in the form of continuous material and can be cut or sawn into individual pieces of any desired length and shape. This process is advantageous in comparison with the continuous procedure in that the PMI foam material is almost stress-free and has a very uniform, closed-cell pore structure. At the same time, uniform density distribution is achieved over the thickness of the block, since the foaming procedure does not proceed from the outside to the centre of the block, but instead the volume of the polymer is increased uniformly.