an initial diameter of 20 mm, final diameters of 16 mm and 12 mm after extrusion with reduction in area of ratios 20% and 40%. A schematic view of the apparatus involved in this process is presented in figure (1). Charpy (simple-beam) subsize impact test specimens were prepared from the casting. The specimen of Charpy test have a dimension 55x10x10mm and have a notch machined across one of the larger faces, the impact energy reported is the average of two readings. Figure (3-6) shows the impact energy of the specimens when liquid fraction 45%, 55%, 65% and 75%.

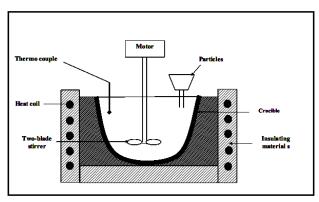
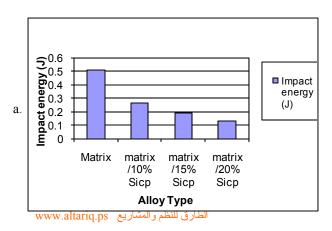
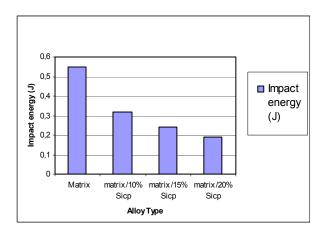
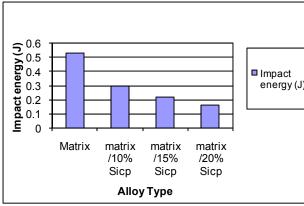


Figure (1): Schematic view of the apparatus involved in this process is presented

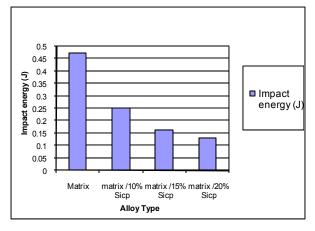




b



 $\mathbf{C}$ 



d

Figure (2): variation of impact energy with volume fraction at

45%,(b)55%,(c)65%, (d) 75% liquid fraction