ABSTRACT
In this study, plaster (moulding plaster or gypsum plaster) stemming method is used in blast holes and compared with conventional method of stemming with “dry drill cuttings”. The test blasts are carried out in clay quarry of Göltas cement factory. ANFO is used as a main blasting agent and holes are blasted with Nonel caps. Both experimental blasting tests are carried out at the same location and hole patterns and geometries was recorded before the blasts. Fragmentation after the trial blasts is measured and finer fragmentation is obtained by plaster stemming. The conventional classic method of drill cutting stemming gave higher percentage of +30 cm size than plaster stemming 23.5% against 9.3%. This finding shows that the plaster stemming method can be used in clay quarries which are a better alternative. Also muckpile volume is larger in the case of plaster stemming. As a result powder factor is reduced giving better economy in ANFO consumption. The study gives a valuable knowledge in blasting at cement factories.