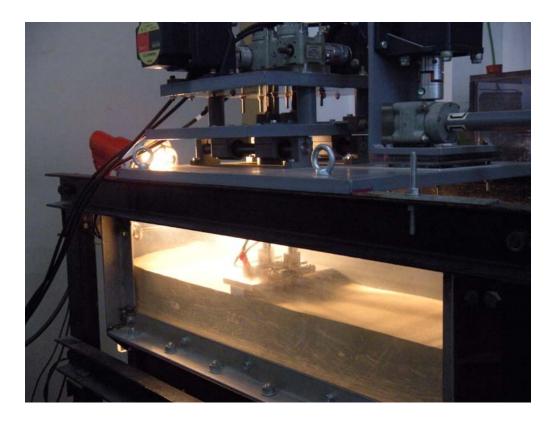
3D (x-y-z) loading apparatus



Shallow foundations are subjected to not only vertical load (V) but horizontal (H) and moment loads (M). This computer controlled 3D loading apparatus is capable of applying arbitrary V-H-M loading to model foundations. The loading tests using the apparatus have been conducted to obtain data to construct load-displacement model of shallow foundations under general loading condition.