# Table: Tanks

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| **Schema:** | SystemSchematicBuilder |
| **Responsible:** | Kurt A Vedros |

Table holds the information on the Tank part.

Tank – an object that holds contents in a cylindrical cylinder for extended periods of time, considered to have one entrance and one exit. Is in an upright top to bottom condition on a grid square.

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| **Column Name** | **Data type** | **Description** |
| TankID | Int | Primary Key of Tank Table. |
| GradeID | Int | Foreign Key to connect the Grade Table. |
| MaterialID | Int | Foreign Key to connect the Material Table. |
| Name | String | User given name of the tube (can be left blank). |
| Diameter | Float | The diameter of the tube in meters. |
| Distance | Float | The distance (length or height which ever user prefers to reference it as) given in meters. |

**Procedures (Database functions)**

* sprocGetTanks
  + Returns a list of Tank objects that are currently stored in the database.
* sprocGetTank
  + Returns a Tank object that is currently stored in the database that has the given Tank ID number.
* sproc\_TankAdd
  + Stores the given Tank object into the database and returns its assigned Tank ID number.
* sproc\_TankUpdate
  + Changes information of the Tanks Table in the database with the given primary key to the given Tank class object.
* sproc\_TankRemove
  + Removes the Tank from the Tanks Table with the given Tank ID number.

**DAL (Software Functions)**

* TanksGetAll()
  + Returns a list of Tank objects that are currently stored in the database.
* TankGet(int ID)
  + Returns a Tank object that is currently stored in the database that has the given Tank ID number.
* TankAdd(Tank Tank)
  + Stores the given Tank object into the database and returns its assigned Tank ID number. Returns -1 if error occurred, otherwise returns null.
* TankUpdate(Tank Tank)
  + Changes a Tank object that is currently stored in the database with the given Tank’s Tank.ID with the Tank’s information.
* TankRemove(int ID)
  + Removes the Tank object stored in the database with the given Tank ID number. Returns -1 if error occurred, otherwise returns null.