**Chamber Tank Relation**

**S C3 C2 C1**

**DM3 (All tanks are active):**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tank/Chamber** | **S** | **C1** | **C2** | **C3** | **W** |
| **S-L** | 1 | 0 | 0 | 0 | 0 |
| **S-R** | 1 | 0 | 0 | 0 | 0 |
| **M1-L** | 0 | 1 | 0 | 0 | 0 |
| **M1-R** | 0 | 1 | 0 | 0 | 0 |
| **M2-L** | 0 | 0 | 1 | 0 | 0 |
| **M2-R** | 0 | 0 | 1 | 0 | 0 |
| **M3-L** | 0 | 0 | 0 | 1 | 0 |
| **M3-R** | 0 | 0 | 0 | 1 | 0 |
| **W** | 0 | 0 | 0 | 0 | 1 |

**S C3 C2 C1**

**SM1 (S and M1 tanks are active)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tank/Chamber** | **S** | **C1** | **C2** | **C3** | **W** |
| **S-L** | 1 | 0 | 0 | 1 | 0 |
| **S-R** | 1 | 0 | 0 | 1 | 0 |
| **M1-L** | 0 | 1 | 1 | 0 | 0 |
| **M1-R** | 0 | 1 | 1 | 0 | 0 |
| **M2-L** | 0 | 0 | 0 | 0 | 0 |
| **M2-R** | 0 | 0 | 0 | 0 | 0 |
| **M3-L** | 0 | 0 | 0 | 0 | 0 |
| **M3-R** | 0 | 0 | 0 | 0 | 0 |
| **W** | 0 | 0 | 0 | 0 | 1 |

**SM2 (S and M2 tanks are active):**

**S C3 C2 C1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tank/Chamber** | **S** | **C1** | **C2** | **C3** | **W** |
| **S-L** | 1 | 0 | 0 | 1 | 0 |
| **S-R** | 1 | 0 | 0 | 1 | 0 |
| **M1-L** | 0 | 0 | 0 | 0 | 0 |
| **M1-R** | 0 | 0 | 0 | 0 | 0 |
| **M2-L** | 0 | 1 | 1 | 0 | 0 |
| **M2-R** | 0 | 1 | 1 | 0 | 0 |
| **M3-L** | 0 | 0 | 0 | 0 | 0 |
| **M3-R** | 0 | 0 | 0 | 0 | 0 |
| **W** | 0 | 0 | 0 | 0 | 1 |

**S C3 C2 C1**

**DM2 (S, M1 and M2 tanks are active)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tank/Chamber** | **S** | **C1** | **C2** | **C3** | **W** |
| **S-L** | 1 | 0 | 0 | 1 | 0 |
| **S-R** | 1 | 0 | 0 | 1 | 0 |
| **M1-L** | 0 | 1 | 0 | 0 | 0 |
| **M1-R** | 0 | 1 | 0 | 0 | 0 |
| **M2-L** | 0 | 0 | 1 | 0 | 0 |
| **M2-R** | 0 | 0 | 1 | 0 | 0 |
| **M3-L** | 0 | 0 | 0 | 0 | 0 |
| **M3-R** | 0 | 0 | 0 | 0 | 0 |
| **W** | 0 | 0 | 0 | 0 | 1 |

**DM2 (S, M1 and M3 tanks are active)**

**S C3 C2 C1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tank/Chamber** | **S** | **C1** | **C2** | **C3** | **W** |
| **S-L** | 1 | 0 | 0 | 0 | 0 |
| **S-R** | 1 | 0 | 0 | 0 | 0 |
| **M1-L** | 0 | 1 | 1 | 0 | 0 |
| **M1-R** | 0 | 1 | 1 | 0 | 0 |
| **M2-L** | 0 | 0 | 0 | 0 | 0 |
| **M2-R** | 0 | 0 | 0 | 0 | 0 |
| **M3-L** | 0 | 0 | 0 | 1 | 0 |
| **M3-R** | 0 | 0 | 0 | 1 | 0 |
| **W** | 0 | 0 | 0 | 0 | 1 |

**S C3 C2 C1**

**DM2 (S, M2 and M3 tanks are active)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tank/Chamber** | **S** | **C1** | **C2** | **C3** | **W** |
| **S-L** | 1 | 0 | 0 | 0 | 0 |
| **S-R** | 1 | 0 | 0 | 0 | 0 |
| **M1-L** | 0 | 0 | 0 | 0 | 0 |
| **M1-R** | 0 | 0 | 0 | 0 | 0 |
| **M2-L** | 0 | 1 | 1 | 0 | 0 |
| **M2-R** | 0 | 1 | 1 | 0 | 0 |
| **M3-L** | 0 | 0 | 0 | 1 | 0 |
| **M3-R** | 0 | 0 | 0 | 1 | 0 |
| **W** | 0 | 0 | 0 | 0 | 1 |

**Comments**:

1. Added enumeration parameter to Parameter Manager: **TanksOperationMode.**
2. **ChamberTankrelationArr[][]** holds 6 tables (the tables mentioned earlier).
3. Table enumeration:

typedef enum {

S\_M1\_ACTIVE\_TANKS\_MODE,

S\_M2\_ACTIVE\_TANKS\_MODE,

S\_M1\_M2\_M3\_ACTIVE\_TANKS\_MODE,

S\_M1\_M2\_ACTIVE\_TANKS\_MODE,

S\_M1\_M3\_ACTIVE\_TANKS\_MODE,

S\_M2\_M3\_ACTIVE\_TANKS\_MODE,

NUM\_OF\_TANKS\_OPERATION\_MODES

}TTankOperationMode;

1. The parameter **TanksOperationMode** is updated in MRW process.
2. The parameter **TanksOperationMode** is used in method **CContainerBase::UpdateChambers(…)** to select the right **ChamberTankRelation** from **ChamberTankrelationArr[][]** and to update it in ~PerMachineDefault.cfg.