```
Water        ->      V301      closed    ->    ALARM    ->    System OFF
                     V301      opened    ->    3B3 low    ->    ALARM    ->    System OFF
                                               3B2 high   ->    3B10 low   ->    WARNING       -> 3M4 OFF
                                               3B10 high  ->    ALARM    ->    System OFF
                                               3B3 high   ->    3B2 low    ->    GOOD        -> 3M4 ON    -> 3B1 above    -> WARNING    -> 3M1 OFF    -> 3M2 ON
                                                                                                          -> 3B1 below    -> NOTHING    -> 3M1 ON     -> 3M2 OFF
                                                                                                          -> 3B1 good     -> 3M3 OFF     ->WARNING
                                                                                                                          -> 3M3 ON (PUMP)   -> STATION 4
```

```
V301 == „closed“          => ALARM
V301 == „opened“     &&      3B3 (low sensor) ==„low“              => ALARM
V301 == „opened“     &&      3B2 (middle sensor) ==„high“     &&      3B10(high sensor) == „low“      => WARNING
V301 == „opened“     &&      3B10 (high sensor) ==„high“      => ALARM
V301 == „opened“     &&      3B3 (low sensor) ==„high“        &&      3B2(middle sensor) == „low“      => GOOD
V301 == „opened“     &&      3B3 (low sensor) ==„high“        &&      3B2(middle sensor) == „low“      &&      3B1(tempratursensor) == „above“     => WARNING
V301 == „opened“     &&      3B3 (low sensor) ==„high“        &&      3B2(middle sensor) == „low“      &&      3B1(tempratursensor) == „below“     => NOTHING
V301 == „opened“     &&      3B3 (low sensor) ==„high“        &&      3B2(middle sensor) == „low“      &&      3B1(tempratursensor) == „good“      &&      3M3 == „turnedOFF“      => WARNING

V301 == „opened“     &&      3B3 (low sensor) ==„high“        &&      3B2(middle sensor) == „low“      &&      3B1(tempratursensor) == „good“      &&      3M3 == „turnedOn“      => GOOD
```

title Reactor Station

V301->Tank B301: fill tank
note over Tank B301: flued sensors: \n3B2, 3B3, 3B10
V301<-Tank B301:check sensor values
note over Tank B301: thermometer:\n   3B1
Tank B301-> 3M1: switch state
Tank B301-> 3M4: switch state
Tank B301->3M3:flush to pump
note over 3M3: If temperature is above circulate water
3M3->Tank B301:circulate water
Tank B301->3M2:water flush to pump
3M2->Station 4:water to next station