

Hytran v 3.7.0 to v3.7.2 New Features

Hytran v3.7.3-1 New Development Coming

- 1 Air Chamber AIRC: New addition for Air cushion
- 2 Discharge Tank Disc: Use feeder pipe + float control valve to act as a surge relief
- 3 Check Valve CHEK: Refinement to the algorithm

Hytran v3.7.2-3 – v3.7.2-5

Changes, Fixes and Bugs

- 1 **AIRC: Horizontal tank for Massal type chamber.** Correction in the calculation of the Steady State conditions.
- 2 **Scale fixed** for the Zooming in tool
- 3 **Hytran engine** did not read the pipe arrays in the hgl profile
- 4 Reading the *.hgl and *.pip files sometimes closed before the file results could be written to the files
- 5 When altering the HGL path by List Data/Hgl Pipe Profile it does not remember the the final pipe as the Previous pipe number when adding a new pipe. Reset the last pipe as the previous pipe in OnApply Networks

Hytran v3.7.2 -1 to v3.7.2-2 New Features

- 1 **Create new network node and pipes in seconds.** Importing node coordinates to set up pipeline very quickly. See menu item Edit BC's/ Create New Network
- 2 **Air Valve AIRV:** Delay response time to open
- 3 **Discharge Tank Disc:** Variable tank area

Changes, Fixes and Bugs

- 1 **Air Chamber AIRC:** Horizontal Air Chamber previously used the water level/Diameter ratio as input for the initial air volume. Now uses the percentage volume.
- 2 **Air Chamber AIRC:** Horizontal Air Chamber previously used minimum level/Diameter ratio as input for the minimum water level. Now uses the percentage minimum volume.
- 3 **Air Chamber AIRC:** Air Chamber previously used the maximum air volume percentage to limit the drawdown. Now uses the minimum percentage water volume.
- 4 **Discharge Tank DISC:** Tank drained too quickly requiring a larger tank. Drawdown corrected

New Features 3.7.1

- 1 **USB dongle** reprogrammed to "Smarx" format to enable auto detection for network applications
- 2 **Rupture** disk added to the PRVA input dialog - after activation the disk remains open
- 3 **Anti-Burst** valve added to PRED/FLOW Control Valve – detects excess flow (due to pipe burst) and valve will automatically close
- 4 **Pump Start** up (Pump/Start/Check) extended to allow shut down, e.g., start up followed by shut down (Pump/Start/Check using pump curve but slight problem when closing down to zero again)
- 5 **Check valve** deceleration measured at time of flow reversal only

Fixes and Bugs

- 1 **Bug in the scale** > 1500 m of the small transient window fixed
- 2 **Scale for the distance** (X scale) not labeled correctly between 1000 and 10000 m after zooming (in/out). Scale now includes a decimal point.
- 3 **Pump/Bypass** did not read in data correctly on reopening the input dialog box
- 4 **Pump Air Chamber:** PUMP/AIRC maximum allowable air volume reverts to default 90% each time the AIRC input dialog is opened
- 5 **Pump Air Chamber:** AIRC maximum air allowable volume reverts to default 90% each time the AIRC input dialog is opened
- 6 **SURGE Tank and TANK:** Inlet and outlet coefficient changed to $K = 1/Cd^2$ (was $K = 1/Cd^2 - 1$)