

# VECTO 2.1

21.04.2015



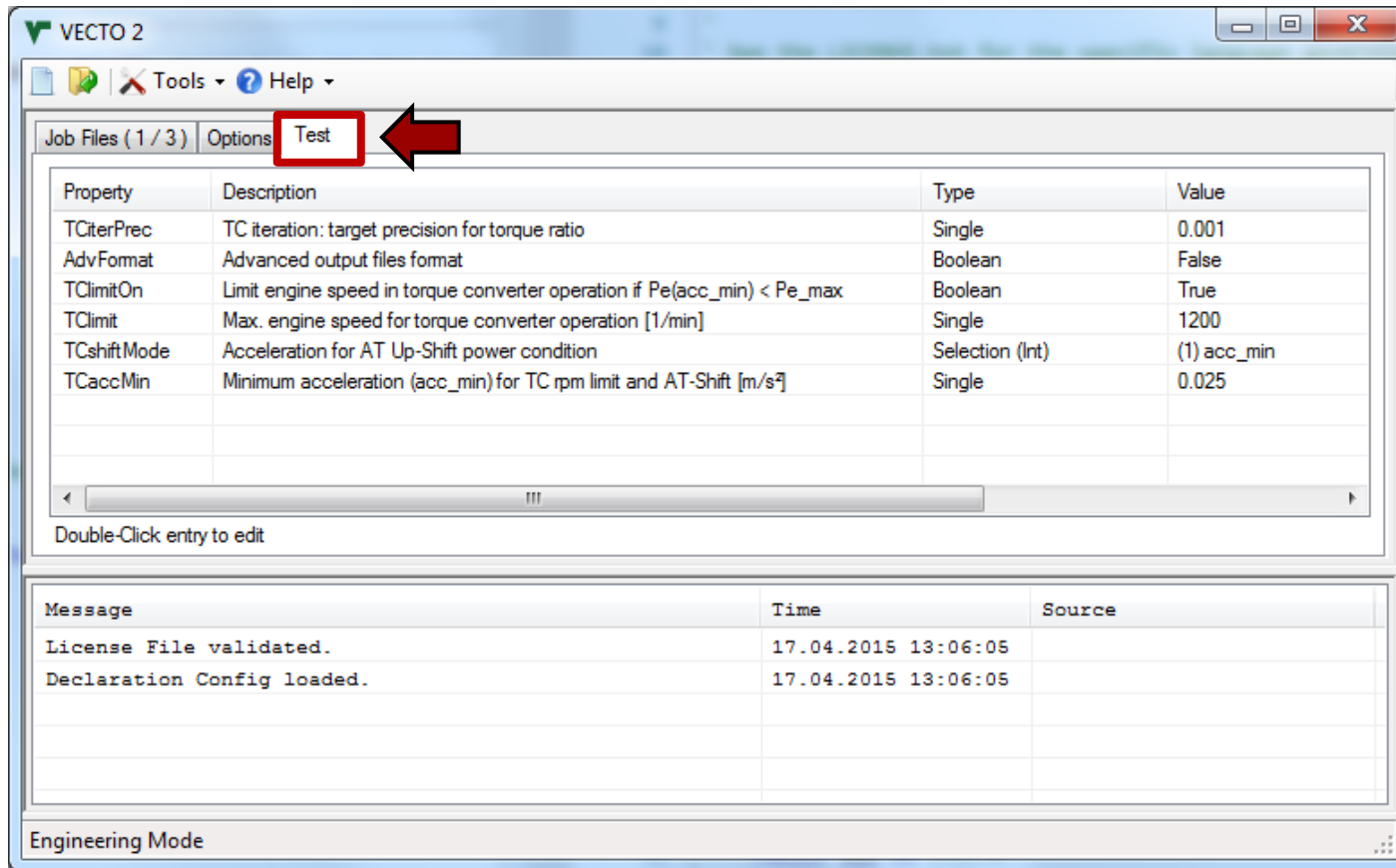
## Release Notes

# VECTO 2.1

- **New AT/TC options:**
  - Limit engine rpm in torque converter operation  $\text{acc.} \geq \text{acc}_{\min}$
  - Shift up (C-to-L, L-to-L) if  $\text{acc.} \geq \text{acc}_{\min}$  and next-gear-rpm > threshold
  - rpm limit [1/min] and  $\text{acc}_{\min}$  [m/s<sup>2</sup>] parameters are currently user-defined
  - C-to-C up-shift condition based on N80h engine speed (instead of N95h)
- **$P_{\text{wheel}}$  input (SiCo test mode)**
  - $P_{\text{wheel}}$  as cycle input
  - Overwrites power calculation
  - VECTO only calculates power train losses, engine torque/rpm and fuel consumption

# AT/TC model update

"Test" tab in main form includes new parameters.



*Note: This is a temporary solution until model and parameters are verified!*

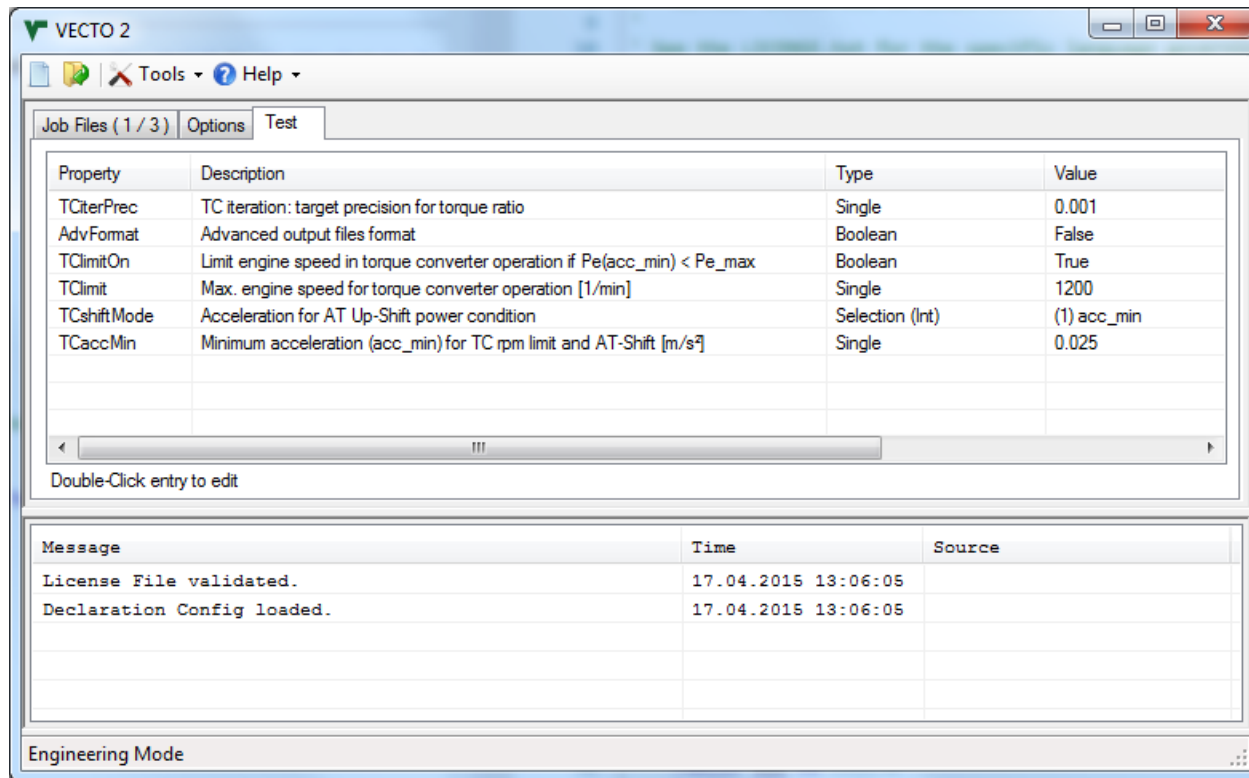
# AT/TC model update

- **New AT/TC paramters:**
  - **TClimitOn (True / False)**
    - Enables engine rpm limit in TC operation
  - **TClimit [1/min]**
    - engine rpm limit (if TClimitOn = True)
  - **TCshiftMode (0/1)**
    - **Mode 0: acc\_target** - Shift up if power demand with target acc. < power-max (pre-V2.1 default)
    - **Mode 1: acc\_min** - Shift up if power demand with min. acc. < power-max
  - **TCaccMin [m/s²]**
    - Minimum acceleration for ShiftMode 1 and TClimit

*Note: This is a temporary solution until model and parameters are verified!*

# AT/TC model update

- Change parameters in Test tab by double-click
- Parameters are saved on application level (..\config\DEVconfig.txt)



*Note: This is a temporary solution until model and parameters are verified!*

## $P_{\text{wheel}}$ Input (SiCo Mode)

- $P_{\text{wheel}}$  can be defined in driving cycle to overwrite power calculation
- Requires **Gear** and **Engine Speed** input
- Cycle identifier: <Pwheel>
- Only time-based cycles are supported
- Distance Correction must be disabled (Options tab in main form)

Example driving cycle

<t>	<Pwheel>	<Gear>	<n>
1	0.0	0	560.0
2	0.0	0	560.0
3	14.0	1	593.2
4	51.9	1	705.5
5	60.0	2	690.0
6	85.6	2	868.4
7	92.0	3	820.0
8	112.3	3	897.6
...	...	...	...

# Full Changelog V2.1

- Limit engine rpm in torque converter operation acc. > acc\_min
- Shift up (C-to-L, L-to-L) if acc. > acc\_min and next-gear-rpm > threshold
- C-to-C up-shift condition based on N80h engine speed (instead of N95h)
- Pwheel-Input (SiCo Mode)
- FC [g/h] is always saved in output (in addition to [g/km]), not only in Engine Only mode
- GUI: Corrected air density unit in GUI
- Bugfix: Format error in .vmod header

## VECTO 2.0.4-beta4\_Test (Test Release)

- Transmission loss extrapolation Errors are now Warnings in Engineering Mode.
- Bugfix: Error in TC Iteration caused crash
- Bugfix: Minimizing Graph window caused crash
- Fixed error in cycle conversion
- Errors if full load curve is too "short"

*Changelog since version 2.0.4-beta3. For full changelog see VECTO Main Form > Help > User Manual or [CITnet](#).*