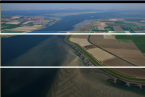



## Wanda User Conference

WANDA 3.70  
Overview of the new components and other improvements

November19th 2008




## WANDA 3.70 news

New/improved in WANDA 3.70:

- Hydraulic components
- Control components
- User interface
- Others...

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## WANDA 3.70 news H-Components

Wastewater treatments plant components:

- Channel                    short open channel
- Collector                 short open channel with lateral inflow
- V-notch weir             V-shaped weir
- Venturi                    measurement channel

Limitations Channel/Collector

- Transitions between sub- and supercritical flow are not allowed
- Free or submerged outflow

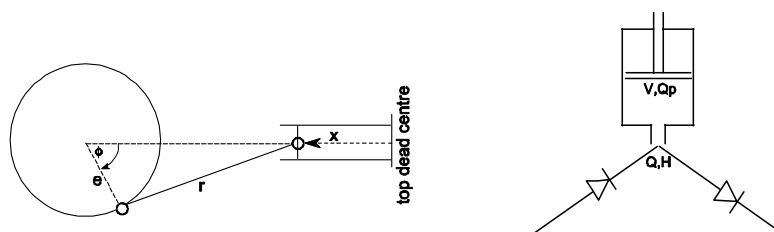
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## WANDA 3.70 news H-Components

Reciprocating pump (Piston Pump): PUMPSS



Single cylinder, single-acting pump with mechanically driven piston



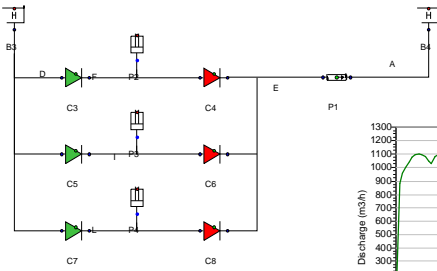
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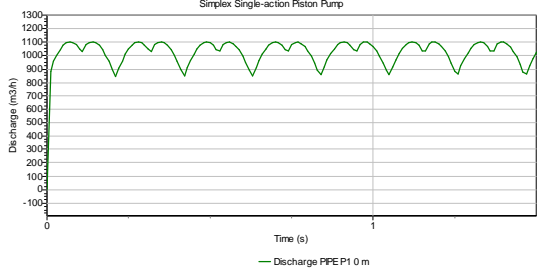
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## WANDA 3.70 news H-Components


### Reciprocating pump (Piston Pump): PUMPSS







pumpspeed via actiontabel or control system

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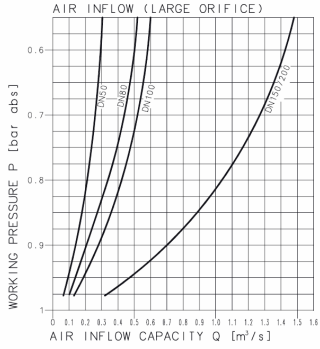


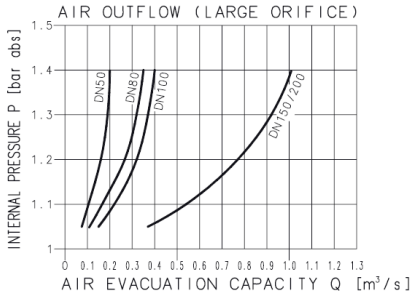
## WANDA 3.70 news H-Components


### Improvements:

VENT head loss characteristic via table instead of contraction-coefficient

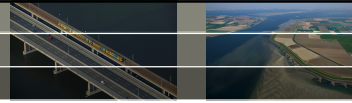




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## WANDA 3.70 news H-Components



Improvements:

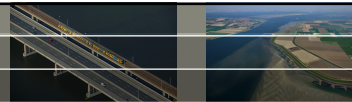
PUMP Drive-type Running and Trip are adjustable via CONTROL

ORIFICE Addition of the pressure ratio  $X_f$

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## WANDA 3.70 news C-Components



New:

New PID -controllers (replacing the PID and PIDLC components)

Based on several special components (pump controllers) and experience

PID continues controller

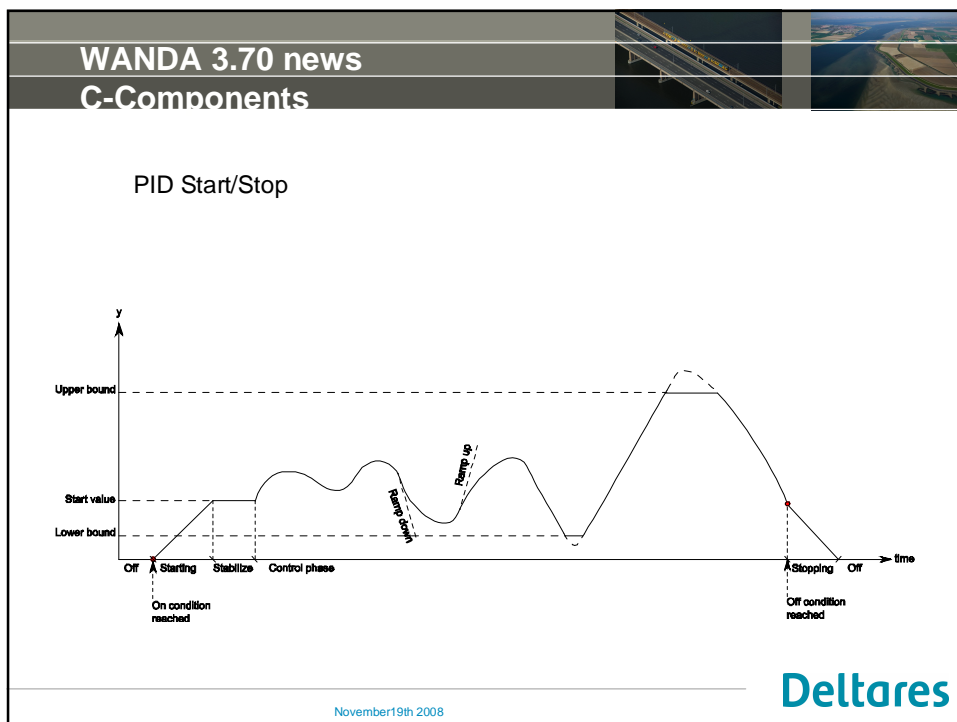
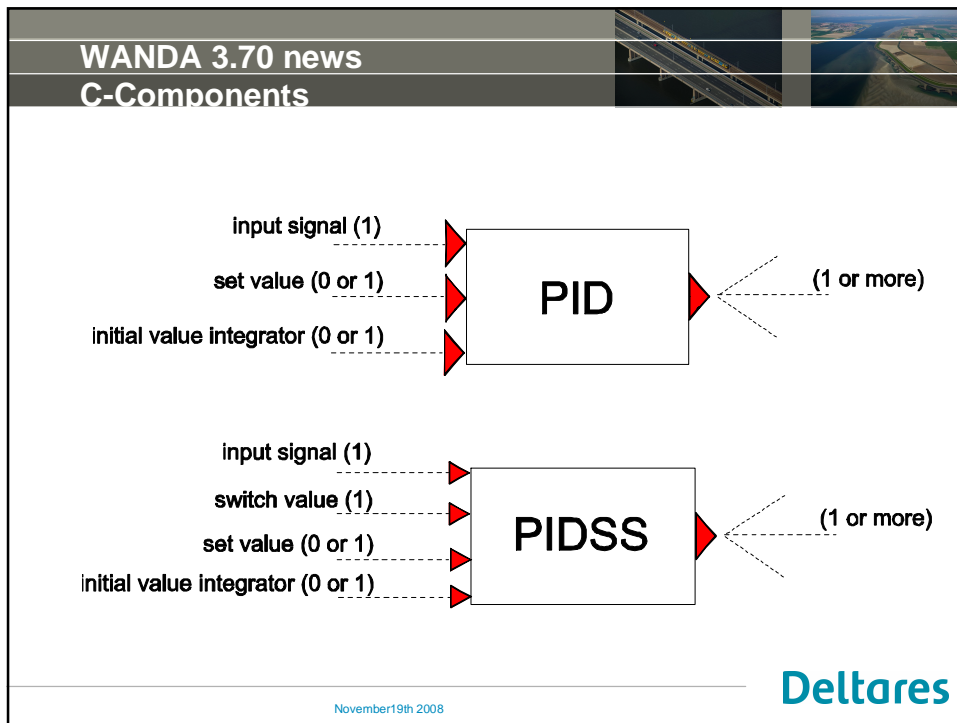
PIDSS PID with start/stop conditions

2 implementations:

- dimension bearing
- dimensionless

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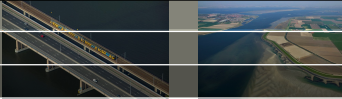
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## WANDA 3.70 news C-Components

Other new C-components

RDFILE	read from file
WRFILE	write to file
WAVE	signal generator
SELECT	Selector
LtoN	Logical to Numeric
INTGR	Integrator
TIME	get Time
MOD	Modulo





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## WANDA 3.70 news C-Components

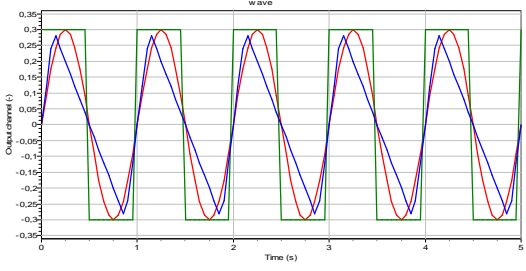
Wave: Sine, Block, sawtooth

frequency (0 or 1) →

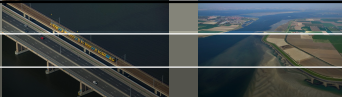
amplitude (0 or 1) →


WAVE

→
←
(1 or more)





— Output channel WAVE Sine wave   
 — Output channel WAVE Square wave   
 — Output channel WAVE Sawtooth wave



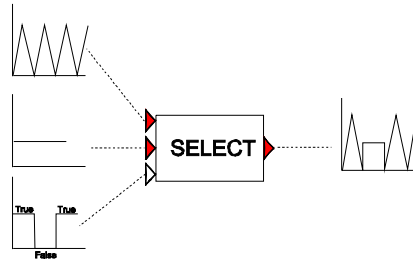



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## WANDA 3.70 news C-Components


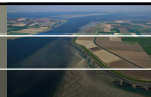
Selector:





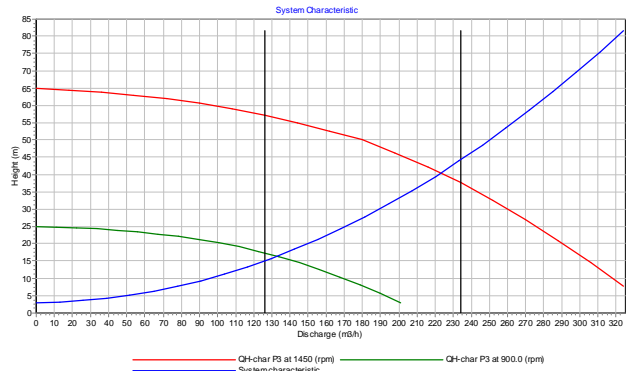
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## WANDA 3.70 news User interface improvements

System characteristic (QSCHAR):

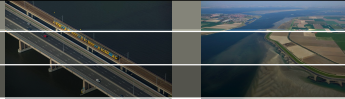
- Addition of markers Qmin - Qmax
- Starts at 0





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**WANDA 3.70 news**  
**User interface improvements**



Implementation of dynamic shapes leads to performance during animations (time navigator) loss with large cases

Solved: option in Mode & Options dialog

Bugfix: color/status conflict with disused components

Floating license management improvements:  
Long startup-times with 3.60 (depending on IT-policy, permissions) up to 2 minutes. Back to normal with 3.70 (ca 15 sec)

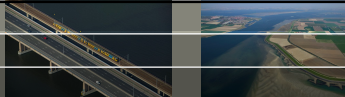
New version of Flowcharter: FC2007 (Improved support for Windows Vista)

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**WANDA 3.70 news**



Release WANDA 3.70

- End of December 2008
- downloads via Wanda Wiki
- New license file can be requested via e-mail

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