

## IOS basins



15 november 2013

**Deltares**

## IOS basins - kenmerken

### IOS-1

Length: 20 m  
 Width: 12.5 m  
 Height: 1.2 m

Capacity: 350 l/s

Cross-flow: 500 l/s

### IOS-2

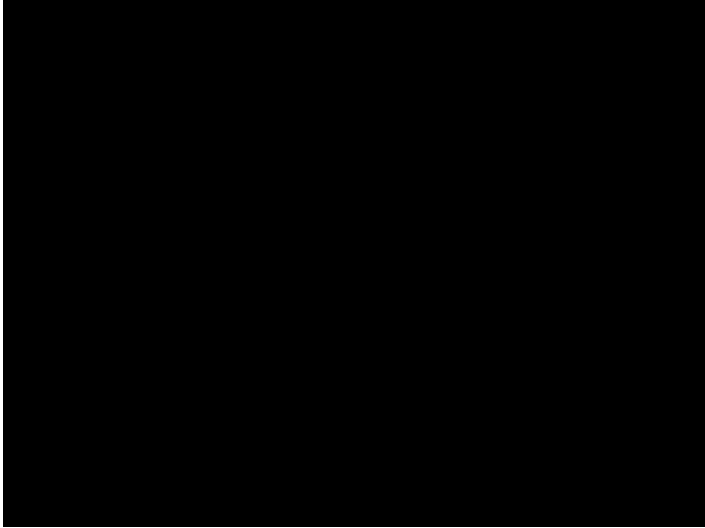
Length: 16 m  
 Width: 6 m  
 Height: 1.4 m

Capacity: 250 l/s

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## IOS-basins




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## AlphaLoop

### De multi-phase flow faciliteit van Deltares

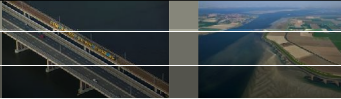

- 320 m lang, DN200 leiding
- Water, lucht en sediment
- Willekeurige 2D geometrie in leidingsysteem door bevestiging aan stalen frame (120 m lang, 7 m hoog)



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## AlphaLoop

Test sectie (120 m lang, 7 m hoog)

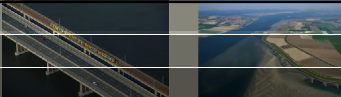
Injectiepunt lucht

Pompen  
Buffertank  
Luchtvat


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## AlphaLoop



- Testsectie uitgevoerd in DN200 stalen leiding (PN16)
- 2 pompen, max 200 l/s (6,5 m/s in DN200) @ 40 m
- 20 m<sup>3</sup> buffervat voor scheiden water/lucht
- 70 m<sup>3</sup> lucht tank
- Compressor, 20 nL/s,  $P_{\max} = 16$  bar



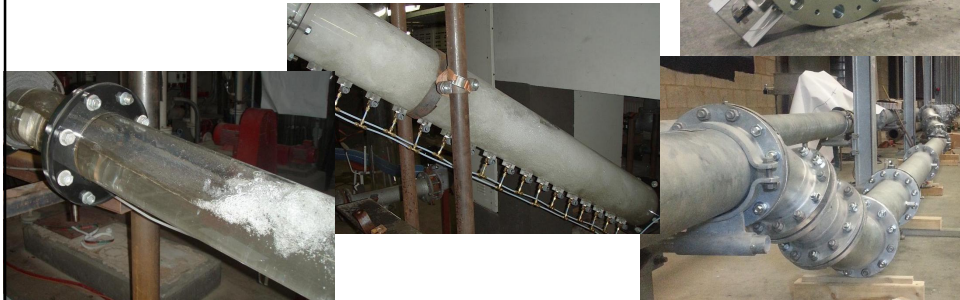
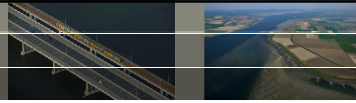
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## Experimenten

Water/lucht stroming:

- Bijvoorbeeld: CAPWAT experimenten
- Slug-stroming
- Snel vullen/leggen
- Cavitatie door waterslag



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