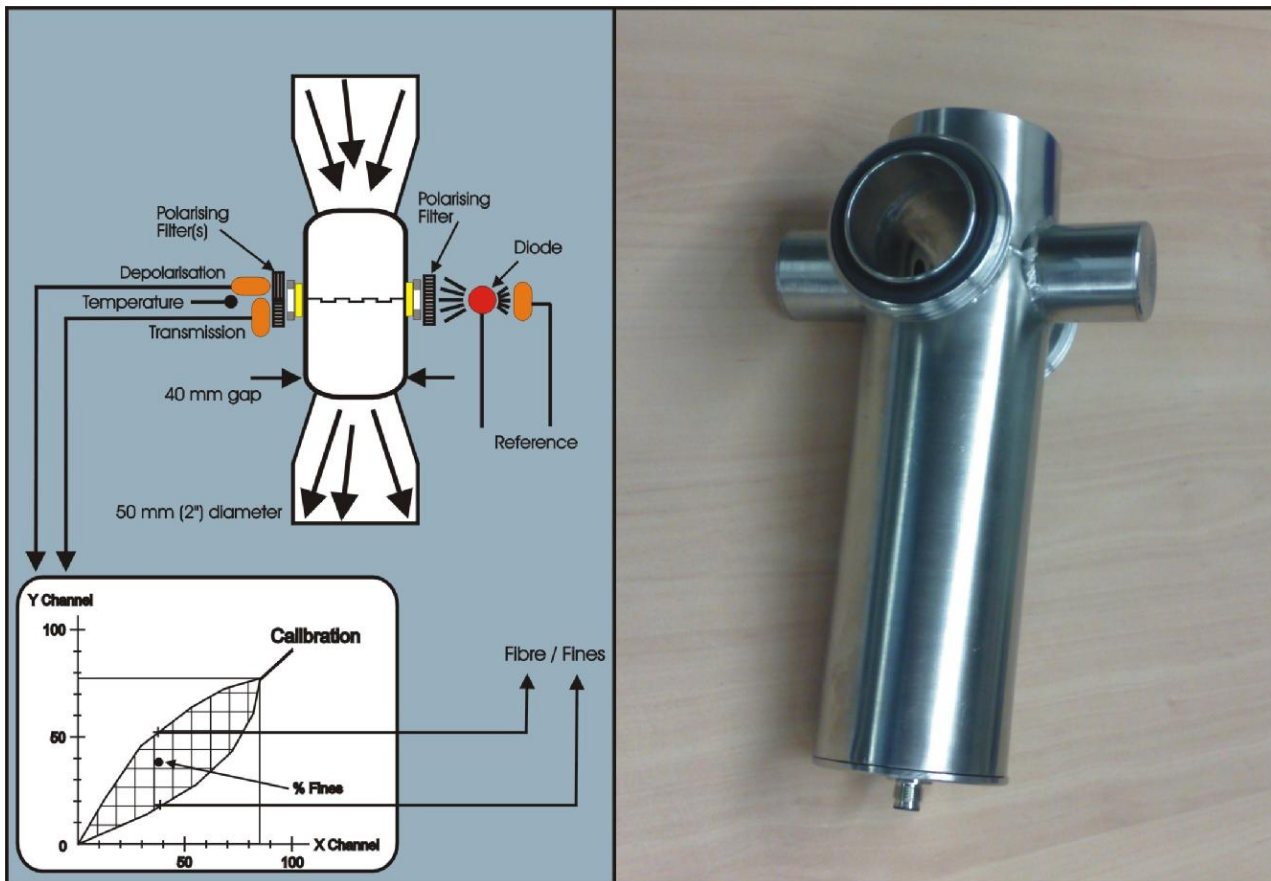


## Optical Consistency / Solids Sensor With Fibre / Fines Determination For Tissue Applications



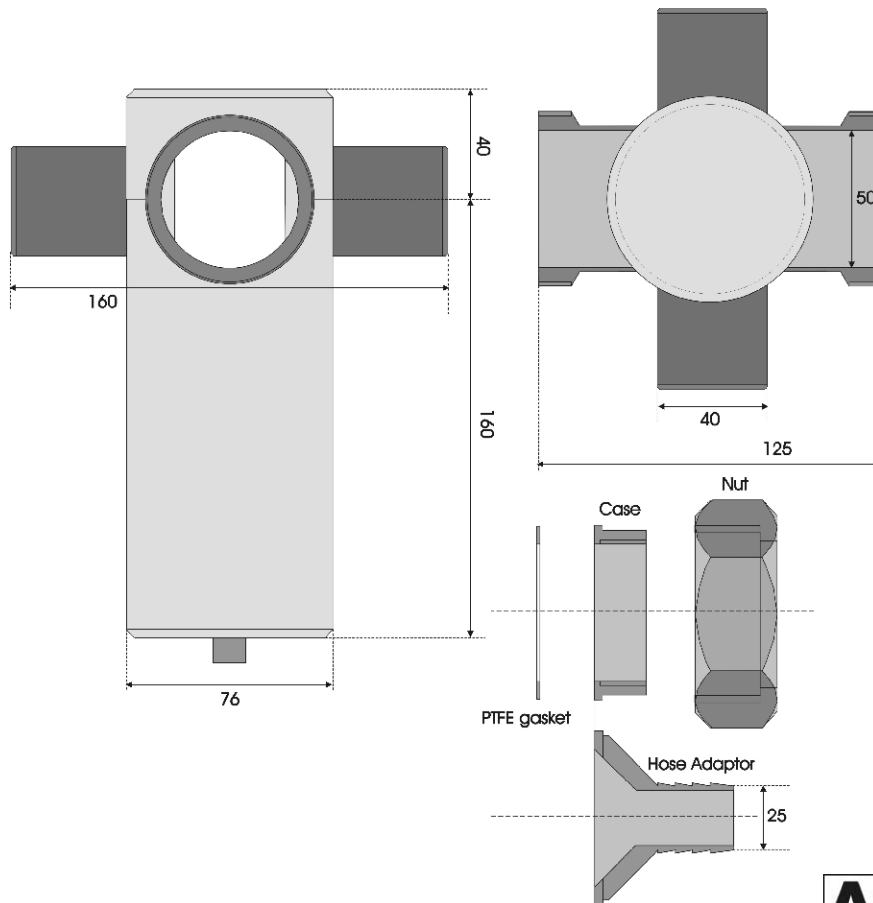
### **AshCon** Product Description

The Ashcon sensor measures the consistency of backwater and/or clarified water streams containing a mixture of cellulose fibre and fine particles. The sensor uses a high-energy nIR diode light source with polarised optics with multiple measurement channels. The light depolarising effect from fibre and the scattering effect from fines is modelled to provide a measurement of the fibre proportion and fines proportion. The sensor is factory pre-calibrated on a custom material mix to simplify on-site calibration. The sensor automatically compensates for process temperature changes as well as any component drift with a reference correction of the light source. The Sensor Interface Unit (SIU) allows mill lab. to sensor calibration values to be entered as well as any grade-specific measurement compensation. The SIU also provides; on screen trending, data-logging and an automated cleaning cycle for the measurement.

### Tissue Application

The Ashcon AC400FF sensor is normally used in Tissue applications around a DAF. The DAF is used to clarify the backwater and reduce fresh water usage. The measurement of the whitewater solids gives an indication of the retention conditions on the machine as well as a measurement of the fines concentration. Excess whitewater is fed to the DAF clarifier. The clarified water solids from the DAF can be controlled to either maximise throughput within limits or minimise clarified water solids. Polymer addition can be controlled and alarm limits can give an immediate indication of a process disturbance.

## Product Drawing



**AshCon**

## Technical Specification

Measurement:	Optical transmission of depolarised near infra-red light.	Material :	Wetted parts 316 St.Steel
Optical Gap:	40mm with Venturi tube from 50mm bore	Weight:	3 Kgs
nIR source:	GaAs Diode, typically 880nm wavelength	Connection:	5 core plug (IP65)
Range:	0 – 50mg/L upto 0.5%Cs. / 5g/L (Total) 0 – 4g/L Total (typical) = 4-20ma signal 0 – 4g/L Fines (typical) = 4-20ma signal	Cable:	4 Metres (std.) upto 15 Mtrs
Accuracy:	Within 3% of range (lab. to sensor 2sigma)	Protection:	IP65 (NEMA 4X)
Flow rate:	10 L/min to 50 L/min (min. to max.)	Mount:	Clamp fitting (to mount plate) Or from pipeline
Pressure:	PN10 (146 psi.g. / 10 bar.g.)		
Temperature:	0 – 60 deg. C (max.)		

### Invista Limited

Unit 16, BVEC Ivy Road  
Aldershot  
Hampshire GU12 4QW  
United Kingdom  
Tel: +44 1252 345000  
Fax: +44 1276 691030  
[www.invista-sensors.com](http://www.invista-sensors.com)

Contact :