

Siebert + Knipschild GmbH Bergstücken 25 22113 Oststeinbek, Germany Phone: +49 40 688714-0 E-mail: info@siebert-testing.com	Sample Submission Form Material Examination of CIPP	 siebert+knipschild Ingenieurbüro für Kunststofftechnik
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☐ **Initial Test**
☐ **Retest**

Reference Test Report No. _____

Information on Specimen Sampling

Supervised by (Name)	Sampling		Confirmation of Sampling (Contractor Company/Site Manager)	
	Date	Time	Name in Block Letters	Signature

Sample Identification

Client (Material Tests)	
Building Owner	
Project	
Contractor Company	
Manufacturer (Liner)	
Type of Resin	☐ UP ☐ VE ☐ EP ☐ Other
Substrate	☐ Synthetic Fiber ☐ Glass Fiber
Pipe Geometry	☐ Circle DN ☐ Oval/.....
Coating is an Integral Part of the CIPP	☐ Yes ☐ No ☐ Outside ☐ Inside

DIBt Approval No.: Z-42.3-

Liner Material ID			
Length of CIPP			
Pipeline Drive Name			
Sample Name			
Installation Date			
Sampling Location	Drive	Reception Manhole	Interm. Manhole
	☐	☐	☐
Sampling Position	Top	Springline	Bottom
	☐	☐	☐
Remarks			

Required Short-Term Properties (According to Client)

Flexural Modulus of Elasticity E_f [MPa]	Circ. Modulus of Elasticity E_U [MPa]
Bending Stress σ_{fb} [MPa]	Max. Creep Tendency $K_{N,24}$ [%]
Wall Thickness e_m [mm]	Glass Content [%]
Reduction Factor for Long-term Load A_1	Density ρ [g/cm ³]

Test Results (Please mark the tests to be conducted with an "X"):

Flexural Modulus of Elasticity, Bending Stress DIN EN ISO 178 / ☐ DIN EN ISO 11296-4							24h Creep Tendency DIN EN ISO 899-2 (in-line)		
☐	Test Date	E_f [MPa]	σ_{fb} [MPa]	e_m [mm]	h_m [mm]	Test Direction ☐ axial ☐ radial	☐	Test Date	$K_{N,24h}$ [%]

Circumferential Modulus of Elasticity, Initial Ring Stiffness DIN EN 1228						24h Creep Tendency DIN EN 761 (in-line)		
☐	Test Date	E_U [MPa]	S_0 [N/m ²]	e_m [mm]	h_m [mm]	☐	Test Date	$K_{N,24h}$ [%]

Water Tightness ☐ DIN EN 1610 (in-line) ☐ DWA-A 143-3 (section 7.2.9)					Density DIN EN ISO 1183-1		
☐	Test Date	Test Duration [min]	Test Pressure [bar]	Test Result ☐ tight ☐ leaking	☐	Test Date	Density ρ [g/cm ³]
		30	0,5 ± 5%				

Annealing Residue by Calcination Method DIN EN ISO 1172						Spectral Analysis ASTM D5576 (FT-IR) (in line)		
☐	Test Date	Resin Content [%]	Total Residue [%]	Glass Content [%]	Aggregate [%]	☐	Test Date	Resin

Thermal Analysis DIN EN ISO 11357-2 (DSC measurement) for Epoxy Resin					
☐	Test Date	Glass Transition Temperature T_g [°C]			Enthalpy [J/g]
		T_{g1}		T_{g2}	☐ exothermic ☐ endothermic

Residual Styrene Content DIN 53394-2 (GC) for UP or VE resin					
☐	Test Date	Weight [mg]	Residual Styrene Content [mg/kg]	Residual Styrene Content [%]	Weight relative to ☐ total weight ☐ pure resin

Evaluation of the results to be carried out by the testing laboratory: ☐ yes ☐ no

Requirement	fulfilled	not fulfilled	Requirement	fulfilled	not fulfilled
Flexural Modulus of Elasticity E_f [MPa]	☐	☐	Circ. Modulus of Elasticity E_U [MPa]	☐	☐
Bending Stress σ_{fb} [MPa]	☐	☐	Max. Creep Tendency $K_{N,24}$ [%]	☐	☐
Wall thickness e_m [mm]	☐	☐	Glass Content [%]	☐	☐
Water Tightness	☐	☐	Density ρ [g/cm ³]	☐	☐
Remarks					

Test results by email to (please provide email address):

Signature Tester/Lab Head		sample ID	- keep free -

* For comparability of the test results, testing will follow the standards forming the basis of DIBt approval.