

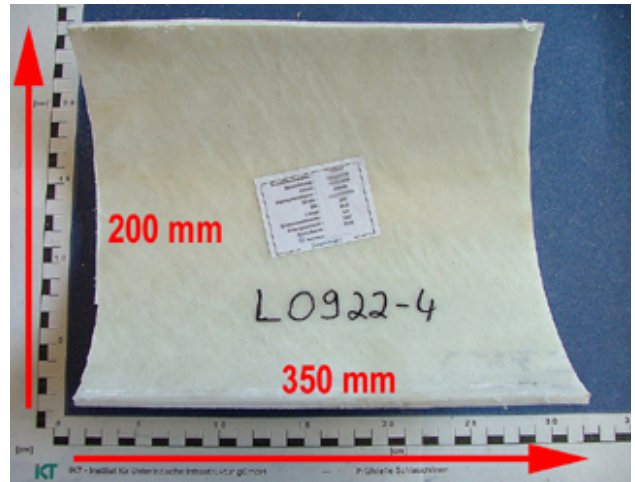
CIPP liners: Site samples

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IKT is accredited with the DAkkS National Accreditation Body for tests on CIPP liners and plastics

A **representative sample** of an installed liner needs to be taken on-site before testing in the IKT laboratory. Samples of CIPP liners which are cured by UV light (“UV-curing liners”) should be packed in light-tight film or foil before being taken out of the manhole.



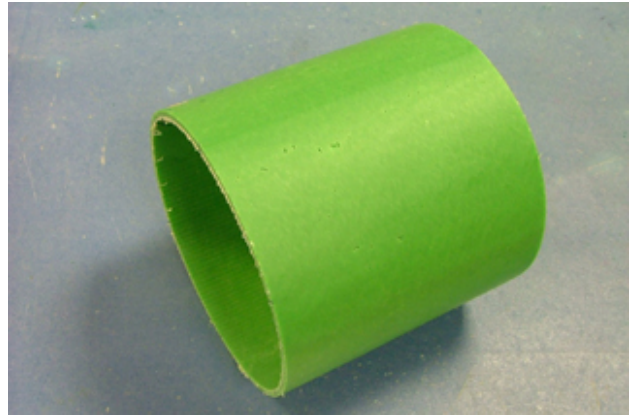
Site sample of CIPP liner: 200 mm x 350 mm

CIPP liners larger than DN 200

The necessary dimensions of such liner samples are:

- Total wall thickness **up to 10 mm**:
Sample must measure not less than 200 mm x 350 mm
- Total wall thickness **greater than 10 mm**:
 - Circumferential direction: 20 x total wall thickness
 - Longitudinal direction: 350 mm

CIPP liners up to DN 200 and sewer lateral liners



Sewer lateral liner site sample

A complete circular ring should be taken for the vertical-compression test if on-site circumstances permit this.

Necessary sample length:

Pipe diameter + 50 mm

Examples:

- Pipe DN 150: Sample length = 200 mm
- Pipe DN 200: Sample length = 250 mm


DSC analysis



Sample for DSC analysis: 20 mm

diameter necessary

A round liner sample of approx. **20 mm diameter** is sufficient as a sample for DSC analysis performed on epoxy resins.

IKT gGmbH Erdersch 1 D-15906 Gehrasskichen T: +49 203 17905-0 F: +49 203 17905-86		APS Sample data sheet (Bitliner Testing Institutes Workgroup) for materials testing of CIPP liners			
<input type="checkbox"/> Initial test		<input type="checkbox"/> Repeat test		to Test Report No.:	
Details of sampling		Supervised by (Name)		Sampling Date Time	
				Sampling continued (competence management performance) Block capital Signature	
Specimen identification					
Client material-testing		Client		Material ID	
Construction project		Company performing		Line designation	
Manufacturer (CIPP)		Material		Specimen designation	
Pipe geometry		Condition of old pipe		Date of installation	
Material		Sampling point		Sampling position	
Pipe geometry		Sampling position		Sampling position	
Required short-term properties as per client's information					
Resisting modulus of elasticity E [MPa]		Bending stress σ_{max} [MPa]		Circular mod. of elast. E_c [MPa]	
Bending stress σ_{max} [MPa]		Reduction factor for continuous loads K_L		Initial ring stiffness S_0 [kNm]	
Reduction factor for continuous loads K_L				Max. creep strain ϵ_{cr} [%]	
				Density ρ [kg/m ³]	

Sample data sheet

Sample data sheet Materials testing of CIPP liners

Please enclose this form when you send us your samples. This ensures that your sample can be correctly identified.

Please complete a sample data sheet for each individual site sample you send us.

[Sample data sheet for CIPP liners](#)

To
IKT - Institute for Underground Infrastructure
Exterbruch 1
45886 Gelsenkirchen
Germany



by e-mail: CIPP@ikt.institute

Please send us an offer for testing CIPP liner samples

Name of project site: _____
Expected number of specimen: _____
Expected period of project site: _____

Request for quotation CIPP
liners

Request for quotation Materials testing of CIPP liners

Do you require standard or expanded-scope tests?

We will provide a quotation tailored to your needs, to ensure that your QA requirements are met.

[Request for quotation CIPP liners](#)



CIPP liner test standards

CIPP liner test standards

The minimum scope of testing for CIPP liners consists of the three-point bending test for determination of modulus of elasticity and bending stress, and the water tightness test.

Further tests are available, as defined in the ZTV Materials Testing (CIPP liner test standards), which make it possible to determine the quality of CIPP liners even more precisely.

[CIPP liner test standards](#)

Taking of a sample



CIPP liner: Taking a sample in a manhole

Contact

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Institut
für
Bautechnik

DIBt

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