# **Cold Mounting** Accessories



Mounting cups, dye, taper section angles and other accessories for cold mounting



Many tools and accessories are used throughout the materialographic preparation process

Struers offers a wide variety of these tools, all developed with the main purpose of providing easier handling and more accurate specimen mounting

## **Mounting cups**

FlexiForm for big rectangular specimens





FixiForm is a two part mounting cup designed with practical handles to be as user-friendly as possible.

FlangeForm, developed for use with AccuStop



holder AccuStop for controlled material removal of e.g. PCBs. The specimen is mounted in the FlangeForm and afterwards inserted into the AccuStop.

#### ViaMount

ViaMount is a part of the ViaKit toolbox for high-precision preparation of PCB coupons. ViaMount consists of a stainless steel ring with a special lining for easy unmounting, and a tear-off end cap that is removed after curing.

See separate ViaSamling System brochure for further details.

#### FixiForm

FixiForm is a two part, a cylinder and a lid, mounting cup, designed to be as user-friendly as possible. It has practical handles for removing of the lid and the cylinder is a little conical for easy removal for the mounts. FixiForm is made of hard polypropylene which ensures that it can be re-used several times. The closing system is specially designed for optimal closeness also over time. The side is very smooth which make the sides of EpoFix, SpeciFix, CaldoFix-2 and ClaroCit mounts extremely clear.

#### FlexiForm, round

FlexiForm is for acrylic resins only and the best mounting cup for all Struers acrylic resins. The flexible silicone rubber makes it very easy to remove the mount from the mounting cup.

#### FlexiForm, rectangular

FlexiForm is made of very flexible silicone rubber which makes it very easy to remove the mounts. The inner sides are polished, so the sides of the mounts get clear. The sides are also straight which



FlexiForm, the best choice for acrylic resins

makes it easier to fasten the mounts in a specimen holder.

FlexiForm are especially suitable to be used with acrylic cold mounting resins (ClaroCit, DuroCit and VersoCit) where they can be reused many times. It can also be used with epoxy resins.

#### SeriForm

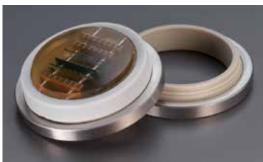
This polypropylene mounting cup has two parts, which gives the mounted specimen straight parallel sides. Parallel sides are necessary when AccuStop is used or to avoid the tilting of the mount when it is clamped into a specimen holder. SeriForm is recommended especially for Struers acrylic resins.

#### FlangeForm

Mounting cup for specimens mounted with a flange. FlangeForm is developed especially for use with the specimen



SeriForm, recommended for acrylic resins



ViaMount, a part of the ViaKit toolbox

## **Fixation clips**



Struers MultiClips in plastic



The angle is formed like an "N" with two different heights in "upright" position. This provides the possibility of two different magnifications, depending on which way the angle is turned.

The 10° angle gives a magnification of the layer of 5.90 times

The 20° angle gives a magnification of the layer of 2.86 times

200



Accessories for mixing from Struers



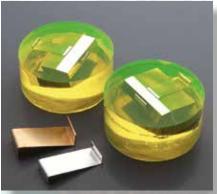
Struers metal spring clips

A number of fixation clips are available to support or hold small, thin specimens during mounting. Struers MultiClips in plastic can support up to 5 specimens at a time. Struers metal spring clips are available in 6 mm and 9 mm.

#### **Taper Section Angles**

It is much easier to measure the thickness of thin layers by making a Taper Section. By mounting the specimen tilted, the layer will be magnified and therefore the thickness measurement will be easier and more accurate. Struers offers a Taper Section Angle for this purpose.

The angle is available in three different materials: Steel, aluminium and copper.



Taper Section Angles makes it much easier to measure the thickness of thin layers

#### **Mould Insert**

For 90° positioning of a specimen in ø40 mm mould.

#### Protection

The prepared specimen or mount can be protected either by a plastic Protecting cap or by spraying Protecting Lacquer over the surface. The Protecting Lacquer can be removed with acetone without damaging the specimen.



Protecting caps for protecting of specimens/mounts



When using epoxies, the correct mixing ratio is essential to the result and Struers therefore recommends to measure by weight. To measure by volume use the syringes delivered with the epoxy sets. For precise measuring, when working with acrylic resins, we recommend to measure by weight, but the spoons delivered with the resins may be used for fast measuring.

Struers propylene mixing cups are suitable for mixing of all resins. They neither melt nor will the resin seep through the cup.

### **Electric mixer**

For optimal mixing of cold mounting epoxies, mixing for approx. 3-5 minutes is required. Struers small electric mixer ensures easy and quick mixture of the components. The mixer has disposable propellers, so no tedious cleaning is required. The mixer has 2500 rpm, giving a quick mixing of the components and at the same time avoiding air bubbles in the mixture.



## **Measuring and mixing**

## Dyes

## - colour your mounts for easy identification



Add colour to your mounts for easy identification with Struers' AcryDye for colouring of acrylic cold mounting resins.

In some cases it can be difficult to distinguish pores and cracks from the base material. With Struers' fluorescent dye, EpoDye, mixed into the mounting resin, you can easily identify pores and cracks when examining the specimen.

In order to get the best results from EpoDye it is necessary to have two filters in the microscope: One filter (400-440 nm) located between the light source and the specimen, and another filter (above 520 nm) located between the specimen and the eye piece. Please contact your microscope supplier to get the right filter combinations.



## **CitoVac**

 vacuum unit for mounting and impregnating porous specimens

## Wupty

- tool for pressing mounts out of FixiForm



Using CitoVac will fill all pores connected to the surface with resin. This reinforces fragile materials, and prevents pull-outs and cracks during preparation

CitoVac is a vacuum impregnation unit, especially designed for mounting and impregnation of porous materials. For perfect impregnation of porous materials it is important that mounting cup and specimen are first evacuated, then the resin is poured, and then the atmospheric air pressure is allowed to press the resin into the pores and cracks. It is recommended to vacuum impregnate porous materials, such as ceramics or spray coatings.

Only epoxy resins can be used for vacuum impregnation due to their low viscosity and their low vapour pressure. EpoDye can be mixed with epoxy to allow easy identification of all filled pores.

See separate CitoVac brochure for further details.



The mount is pressed carefully out of FixiForm

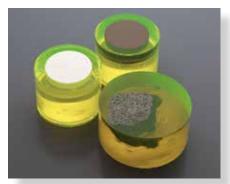
Using Wupty, the mount is pressed carefully out of FixiForm and the lifetime of the mounting cup is thus increased. No rough treatment of the mounting cups is necessary to remove the mounts!

Wupty can only be used with FixiForm, as the handles are used to secure it while pressing the mount out. Other mounting cups only have small flanges which are not big enough to hold the cup while pressing the mount out.

### **Drybox** - drying and curing oven

By circulating a constant stream of temperate air, Drybox can act as a drier for specimens or specimen holders as well as a curing oven for cold mounting.

To achieve uniform mounting results Drybox can be used to control the temperature during the curing process.



Struers fluorescent dye makes it easy to identify pores and cracks



Struers Drybox controls the temperature during the curing process and optimizes your mounting results

Specific	cations		Contents	Cat. no.
Mounting cups	<b>FixiForm</b> Two part mounting polypropylene (PP) cup to be used with all Struers cold mounting resins. Can be re-used several times.	25 mm / 1" dia. 30 mm dia. 40 mm dia. 50 mm / 2" dia. 1¼" dia. 1½" dia.	10 pcs. 10 pcs. 10 pcs. 10 pcs. 10 pcs. 10 pcs. 10 pcs. 10 pcs.	40300085 40300086 40300089 40300090 40300087 40300088
	FlexiForm Flexible silicone rubber mounting cups for acrylic cold mounting resins	25 mm dia. 30 mm dia. 40 mm dia. 1¼" dia. 1¼" dia.	5 pcs. 5 pcs. 5 pcs. 5 pcs. 5 pcs. 5 pcs.	40300018 40300019 40300022 40300020 40300021
	FlexiForm Translucent silicone rubber mounting cup for mounting of rectangular specimens. To be used with acrylic cold mounting resins where they can be reused many times. Epoxies reduces the lifetime as the resin over time affects the silicone rubber.	68 x 37 x 35 mm, fits to specimen holder MAXDI, 02606920 90 x 50 x 35 mm, fits to specimen holder MAXOT, 02606922 120 x 60 x 45 mm	3 pcs. 3 pcs. 2 pcs.	40300082 40300083 40300084
	SeriForm Polypropylene mounting cups for acrylic and polyester cold mounting resins	25 mm dia. 30 mm dia. 40 mm dia.	10 pcs. 10 pcs. 5 pcs.	40300007 40300008 40300009
	FlangeForm Mounting cups with flange for AccuStop	30 mm dia. 40 mm dia.	Set of 3 Set of 3	40300012 40300014
Fixation clips	MultiClips Multiple plastic clip for holding up to 5 small and thin specimens when mounting		50 pcs.	40300027
	Metal spring clips For holding small and thin specimens when mounting	6 mm dia. 9 mm dia.	100 pcs. 100 pcs.	40300026 40300025
	Taper Section Angle	Aluminium Copper Steel	50 pcs. 50 pcs. 50 pcs.	40300070 40300071 40300069
	Mould Insert	Mould insert for use with 40 mm dia. mounting cups Max specimen size 35 x 20 mm	50 pcs.	05756912
Measuring and Mixing	Cold mounting Consumables Kit	400 mixing cups, 400 stirrers		40300032
	Consumables Kit for CitoVac	100 dispensing tubes and one chamber protector		40300080
	Epovac Consumables Kit	80 mixing cups, 80 stirrers, 80 tubes, 2 rubber plugs		40300030
	Disposable syringes	5 ml 10 ml 20 ml	100 pcs. 100 pcs. 100 pcs.	40300047 40300048 40300049
	Electric mixer for mixing of epoxy	1 mixer, 1 disposable propeller		05696101
	Disposable propeller		20 pcs.	40300072
	Silicon oil, release agent		100 ml	40300076
Dyes	EpoDye		20 g	40300002
Protection	AcryDye Protecting caps Plastic cap for cylindrical specimen/ mount	Blue, red and yellow dye         For 25 mm dia. specimens/mounts         For 30 mm dia. specimens/mounts         For 40 mm dia. specimens/mounts         For 50 mm dia. specimens/mounts	3 x 20 ml 100 pcs. 100 pcs. 100 pcs. 100 pcs.	40300081 49900033 49900034 49900035 49900036
	Protecting Lacquer	In spray can	400 ml	49900012
CitoVac	CitoVac with built-in vacuum ejector. Vacuum impregnation unit. Compressed air supply. 4.5-6 bar required.	1 x 100–240 V / 50-60Hz		05926119
	CitoVac for external pump. Vacuum impregnation unit. External vacuum pump required.	1 x 100–240 V / 50-60Hz		05926219
Wupty	Tool for pressing mounts out of FixiForm			05696901
Drybox-2	Combined specimen drier and curing oven with adjustable temperature (approx. 40-90°C) and low noise fan. With basket for specimens (04236904) and slot for specimen holders	1 x 220 V / 50 Hz 1 x 220 V / 60 Hz		03706133 03706134



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