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# DIP VISCOSITY CUPS



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**Mod. 321**



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**Mod. 322**



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**Mod. 343**

testing equipment for quality management



## **MODEL 321**

(technically equivalent to)  
**DIN 53 211**

## **MODEL 322**

(technically equivalent to)  
**EN ISO 2431**

## **MODEL 343**

(in accordance with)  
**ASTM D 4212**

## Dip Viscosity Cups, Models 321, 322 and 343

### **Purpose and Application**

Rapid determination of the viscosity of any type of fluid, as for instance paint, varnish, wet enamel, photogravure ink, dye and lacquer for leather, oil, fat, foodstuff etc. Particularly suitable in the workshop.

### **Measuring Principle**

The viscosity of a substance to be determined is expressed as the efflux time of the measured volume (100 ml) out of a cup through an orifice of specified diameter. The efflux time is measured with a stop-watch.

### **Test Procedure**

The cup is totally immersed into and completely filled with the substance to be measured. It is then lifted out quickly, and simultaneously the stop-watch is started. The time in seconds required for completely emptying the cup is noted whereby the end-point is reached at the moment the orifice becomes visible from above. Care has to be taken that the cup remains vertical during the test.

### **Designs available:**

#### **Model 321 (DIN Dip Viscosity Cup - technically equivalent to DIN 53 211)**

<u>Ord.-No.</u>	<u>Nozzle Dia.</u>	<u>Viscosity Range*</u>	<u>Material</u>
0062.01.31	2 mm	10 - 50 mm <sup>2</sup> /s	Aluminium
0062.05.31	3 mm	30 - 300 mm <sup>2</sup> /s	alloy
0062.02.31	4 mm	50 - 800 mm <sup>2</sup> /s	
0062.03.31	6 mm	300 - 1,500 mm <sup>2</sup> /s	
0062.04.31	8 mm	500 - 5,000 mm <sup>2</sup> /s	

\*) for efflux times in the range of 20 - 200 s

#### **Model 322 (ISO Dip Viscosity Cup - technically equivalent to EN ISO 2431)**

<u>Ord.-No.</u>	<u>Nozzle Dia.</u>	<u>Viscosity Range*</u>	<u>Material</u>
0165.01.31	3 mm	10 - 40 mm <sup>2</sup> /s	Anodized
0165.02.31	4 mm	35 - 135 mm <sup>2</sup> /s	aluminium
0165.03.31	5 mm	90 - 330 mm <sup>2</sup> /s	
0165.04.31	6 mm	190 - 680 mm <sup>2</sup> /s	

\*) for efflux times in the range of 30 - 100 s

#### **Model 343 (Zahn Dip Viscosity Cup - in accordance with ASTM D 4212)**

<u>Ord.-No.</u>	<u>Nozzle</u>	<u>Viscosity Range*</u>	<u>Material</u>
0049.01.32	Nr. 1	5 - 60 mm <sup>2</sup> /s	Aluminium
0049.02.32	Nr. 2	20 - 250 mm <sup>2</sup> /s	alloy
0049.03.32	Nr. 3	100 - 800 mm <sup>2</sup> /s	
0049.04.32	Nr. 4	200 - 1,200 mm <sup>2</sup> /s	
0049.05.32	Nr. 5	400 - 1,800 mm <sup>2</sup> /s	

\*) for efflux times in the range of 20 - 80 s

0030.01.31 complete set with 5 exchangeable cups and one handle in a velvet case.