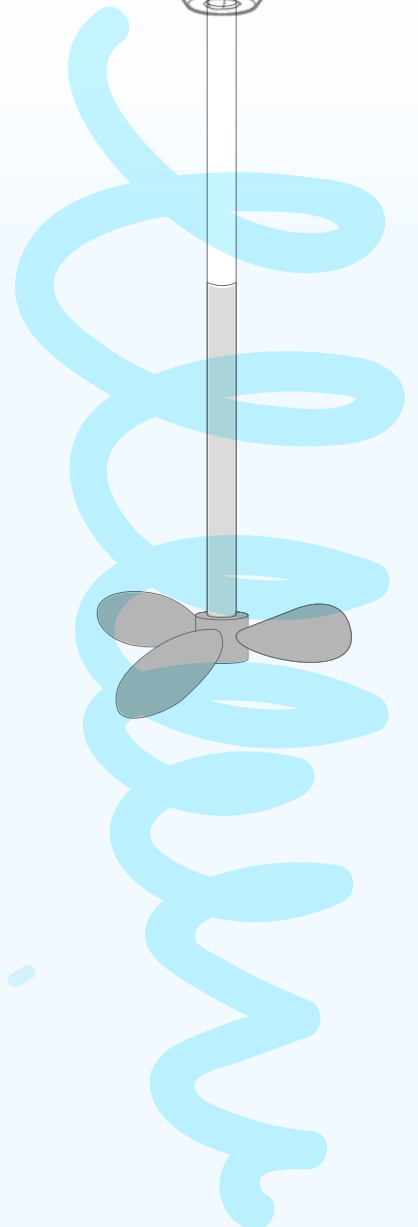
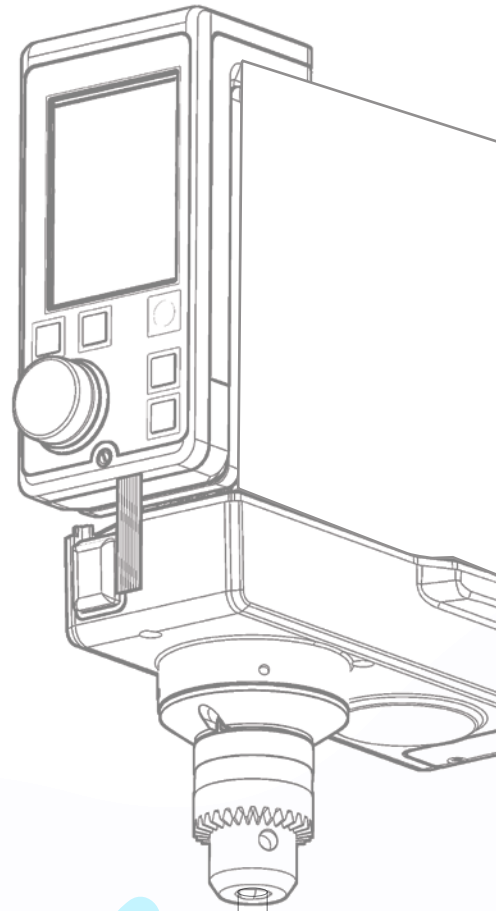
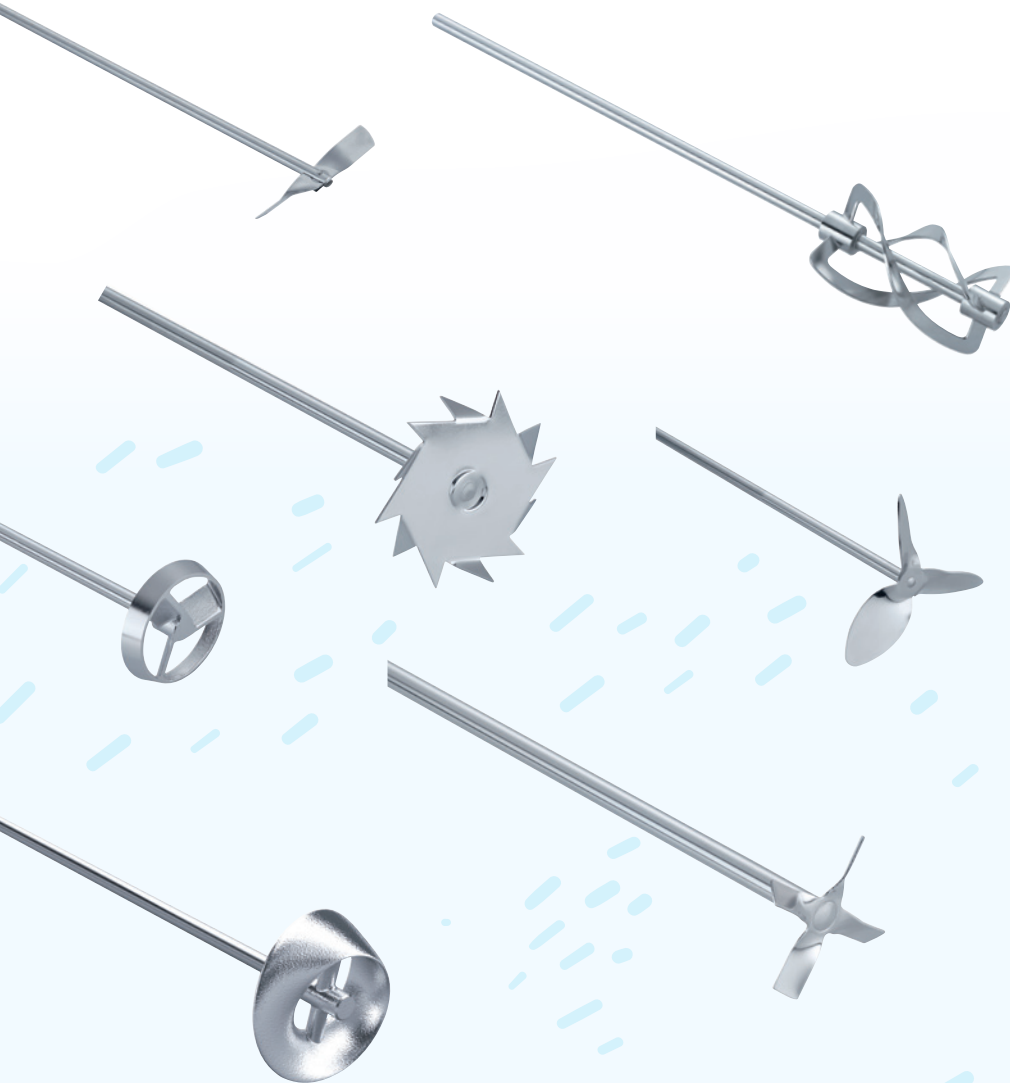


# IKA

designed for scientists

## Overview Stirrers / Geometry

/// The key to successful mixing





STIRRER	PROPELLER 3-BLADED	PROPELLER 4-BLADED	DISSOLVER	ANCHOR	SPIRAL	RUSHTON/ TURBINE	PADDLE
Images							
Direction	axial	axial	radial	tangential	axial	radial	tangential
Flow pattern							
Tip Speed/ Circumferential Speed (m/s)	2 – 15	2 – 15	8 – 20	1 – 5	2	3 – 7	1 – 3
Viscosity range	low – medium	low – medium	low	high	high	low	medium – high
Shear Forces	low	medium	very high	low	low	high	low
Applications	Homogenize Suspend Disperse - High Shear Promote circulation	Homogenize Suspend Disperse - High Shear Promote circulation	Disperse - High Shear	Heat Exchange	Homogenize Heat Exchange	Disperse - very high Shear	Homogenize Heat Exchange
Preferred geom. dimension $d_2/d_1$	0,1 – 0,5	0,2 – 0,5	0,2 – 0,5	0,9 – 0,98	0,9 – 0,98	0,2 – 0,5	0,5 – 0,7
Preferred geom. dimension $h_3/d_1$	0,3 – 3	0,3 – 3	0,3 – 3	–	–	0,3 – 3	–
Preferred geom. dimension $h_1/d_1$	1,0	1,0	1,0	1,0	1,0	1,0	0,75

$d_1$ : container diameter  
 $d_2$ : stirrer diameter  
 $h_1$ : fill height  
 $h_3$ : bottom distance

**IKA-Werke GmbH & Co. KG**

Janke & Kunkel-Straße 10, 79219 Staufen, Germany  
 Telefon: +49 7633 831-0, Fax: +49 7633 831-98  
 eMail: sales@ika.de, Web: www.ika.com



IKAworlwide // #lookattheblue