IKA®

Overhead Stirrers

designed
to work perfectly

Mechanical, Electronic, Software, Control and Design Engineering… Combining the best of all worlds

Designed to optimize complex stirring applications, IKA® offers the very best in overhead stirrer technology. Our overhead stirrers provide the perfect solution to all of your laboratory stirring and mixing needs, from lower to higher viscosities. IKA® overhead stirrers process stirring quantities up to 200 liters.

Our overhead stirrers stand out because of their indispensable features, which include: electronic safety circuit, push through agitator shaft, digital display, two speed ranges, and the ability to control the rheological changes and monitor all parameters using labworldsoft® software. Additionally, there are several other special features available, such as microprocessor controlled speed technology, removable wireless controller and a digital error display. A broad spectrum of stirring tools is the key to successful mixing! IKA® equipment meets CE standards and fulfils international safety regulations.

3 Year warranty*

* 2+1 years after registering at www.ika.com/register

Protection class according to DIN EN 60529: IP 40

CE

Twin technology | **Digital & Control**

Digital Display

Digital display for precise monitoring of set and actual speeds

660 Ncm

Torque trend display to get real-time information on viscosity changes

Rotating knob for adjusting the speed and **pressing knob** for navigating through the menu on the wireless controller

TFT Display

TFT Display for better image quality and easy navigation

°C

External probe for connection to a temperature sensor for accurate temperature control

USB interface to control and document rheological changes and other parameters using labworldsoft® software and for updating your firmware

EC motor

Brushless EC motor for longer life span, low maintenance and higher efficiency

Wireless Controller (WiCo)
Removable wireless controller for easy and user-friendly operation

2+1 Year warranty*

2+1 years after registering at www.ika.com/register

IKA®+

R 60 keyless chuck is available for EUROSTAR 20 / 40 / 60 / 100 series

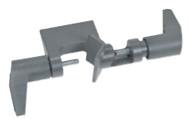
The EUROSTAR digital and control series are conceptually similar; both series feature a speed display and an overload protection. Furthermore, the control version is designed with a removable wireless controller and is equipped with a torque trend display, TFT display, RS 232 and USB interface. In addition, you will be able to update your firmware online by connecting your control device via USB to a computer.

Special features | **Accessories**

① **R 2723 Telescopic stand**

Particularly stable stand with an H-shaped base that prevents the stand from tipping backwards. Additionally, this stand is equipped with a spring stand rod, which enables heavy instruments / attachments to be raised and lowered smoothly without difficulty.

Ident. No.	Price
1412100	$ 382



② **R 270 Boss head clamp**

Specialized clamp with openings for stands R 2722 and R 2723

Ident. No.	Price
2657800	$ 32

RH 3 Strap clamp

For securing vessels incl. boss head clamp R 270

Ident. No.	Price
3008600	$ 48

③ **R 301 Stirring shaft protection**

Prevents potential injuries around rotating shafts and stirring elements

Ident. No.	Price
2603000	$ 205

IKA®+

To get customized and additional accessories, please visit **www.ika.com/service**

EUROSTAR control | **Advanced precision**

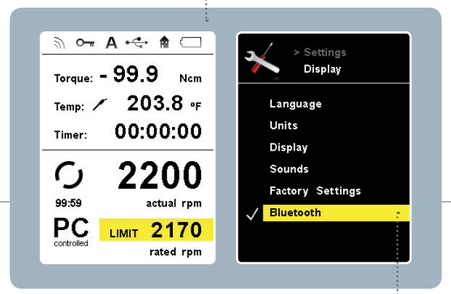
IKA® further advances its' mixing technology by offering the first overhead stirrers with wireless technology. Stress-free mixing at your convenience with increased productivity, flexibility and enhanced safety features. Additionally, comes equipped with the new online update function (only control version), your device is always up-to-date.

LED bar indicates the connectivity of the wireless controller (WiCo)

Safe stop function for the quick stop of overhead stirrer

The display shows torque, temperature, timer, speed and PC connectivity. Additionally, several other parameters can be set such as language, background, brightness, sound, etc.

Connector for fixing the wireless controller



The EUROSTAR control series can be operated via Bluetooth as well

EUROSTAR control | **Wireless technology**

The wireless controller can be separated from the overhead stirrer. This allows for working in a fume hood or safety cabinet without lifting the protective screen, which in turn helps protect the user from toxic material exposure in addition to preserving sample integrity.

IKA®+

The only stirrer with clockwise and counter clockwise rotation for intensive applications and better mixing results

Laboratory stirrer designed for **highly viscous applications and intensive mixing**

2+1 years after registering at www.ika.com/register

Clockwise and counter clockwise rotation

Digital display for precise monitoring of set and actual speeds

Wireless Controller (WiCo)
Removable wireless controller for easy and user-friendly operation

TFT Display for better image quality and easy navigation

Extremely powerful laboratory stirrer designed with **high torque**

USB interface to control and document rheological changes and other parameters using labworldsoft® software and for updating your firmware

RS 232 interface for PC connection

Electronic Overhead Stirrers

reddot design award
winner 2012

The Beginner

The Compact Power

The Unique Clockwise and Counter Clockwise Rotation

Technical data	EUROSTAR 20 digital | 40 digital	EUROSTAR 60 digital | control	EUROSTAR 100 digital | control
Stirring quantity max. (H_2O)	15 l | 25 l	40 l	100 l
Max. viscosity	10,000 mPas | 30,000 mPas	50,000 mPas	70,000 mPas
Motor rating input/output	70 / 42 W | 118 / 84 W	176 / 126 W	186 / 136 W
Permissible ON time	100 %	100 %	100%
Speed range	0/30 – 2000 rpm	0/30 – 2000 rpm	0/30 – 1300 rpm
Speed range I (at 50/60 Hz)	–	–	–
Speed range II (at 50/60 Hz)	–	–	–
Max. torque at stirring shaft	20 Ncm | 40 Ncm	60 Ncm	100 Ncm
Display	LED	LED | TFT	LED | TFT
Reverse operation	no	no	no | yes
Intermittent operation	no	no | yes	no | yes
Temp. sensor connection	no	no | PT 1000	no | PT 1000
Chuck range	0.5 – 10 mm	0.5 – 10 mm	0.5 – 10 mm
Hollow shaft	yes	yes	yes
Torque trend measurement	no	no | yes	no | yes
Timer	no	no | yes	no | yes
Temperature measurement	no	no | yes	no | yes
Temperature measuring range	–	– | -10 to 350 °C	– | -10 to 350 °C
Dimensions (W x D x H)	86 x 208 x 248 mm	86 x 208 x 248 mm | 86 x 230 x 267 mm	86 x 208 x 248 mm | 86 x 230 x 267 mm
Weight	4.4 kg	4.4 kg | 4.7 kg	4.4 kg | 4.7 kg
Permissible ambient temp.	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80%	80%	80%
Protection class DIN EN 60529	IP 40	IP 40	IP 40
USB / RS 232 interface	no	no | yes	no | yes
Voltage	115 V	115 V	115 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Price	**$ 1,040 | $ 1,171**	**$ 1,301 | $ 1,483**	**$ 2,282 | $ 2,538**
	Ident. No. 4442001 | 4444001	Ident. No. 4446001 | 4440001	Ident. No. 4238101 | 4028501

reddot design award
winner 2012

The All-Rounder

The High-Performer

The Speedster

Technical data	EUROSTAR 200 digital | control	EUROSTAR 200 control P4	EUROSTAR 20 high speed digital
Stirring quantity max. (H_2O)	100 l	100 l	20 l
Max. viscosity	100,000 mPas	150,000 mPas	10,000 mPas
Motor rating input/output	130 / 84 W	134 / 76 W	176 / 125 W
Permissible ON time	100%	100%	100%
Speed range	0/6 – 2000 rpm	0/4 – 530 rpm	0/150 – 6000 rpm
Speed range I (at 50/60 Hz)	0/6 – 400 rpm	0/4 – 110 rpm	–
Speed range II (at 50/60 Hz)	0/30 – 2000 rpm	0/16 – 530 rpm	–
Max. torque at stirring shaft	200 Ncm	660 Ncm	20 Ncm
Display	LED | TFT	TFT	LED
Reverse operation	no	no	no
Intermittent operation	no | yes	yes	no
Temp. sensor connection	no | PT 1000	PT 1000	no
Chuck range	0.5 – 10 mm	0.5 – 10 mm	fixed
Hollow shaft	yes	no	no
Torque trend measurement	no | yes	yes	no
Timer	no | yes	yes	no
Temperature measurement	no | yes	yes	no
Temperature measuring range	– | -10 to 350 °C	– | -10 to 350 °C	–
Dimensions (W x D x H)	91 x 209 x 274 mm | 91 x 231 x 274 mm	91 x 230 x 379 mm	86 x 208 x 325 mm
Weight	4.6 kg | 4.9 kg	5.8 kg	5.3 kg
Permissible ambient temp.	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80%	80%	80%
Protection class DIN EN 60529	IP 40	IP 40	IP 40
USB / RS 232 interface	no | yes	yes	no
Voltage	115 V	115 V	115 V
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Price	**$ 2,932 | $ 3,046**	**$ 1,694**	**$ 3,656**
	Ident. No. 3990001 | 3992001	Ident. No. 4090001	Ident. No. 4028601

Mechanical Overhead Stirrers

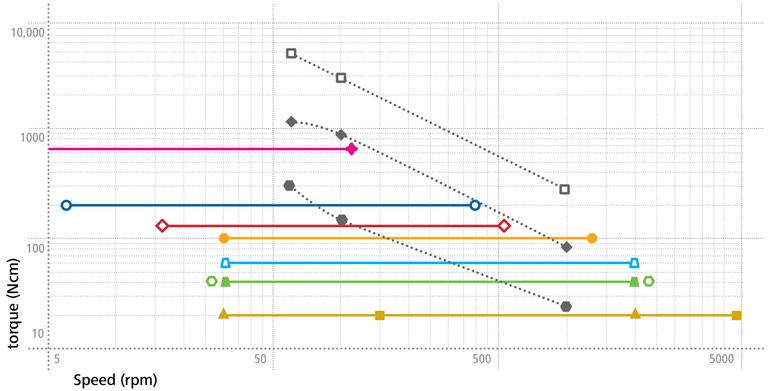
Please also see IKA® Pilots

RW 20 digital

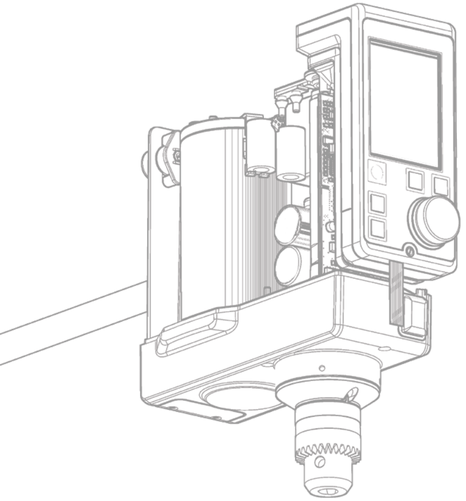
RW 28 digital

RW 47 digital

Technical data	RW 20 digital	RW 28 digital	RW 47 digital
Stirring quantity max. (H_2O)	20 l	80 l	200 l
Max. viscosity	10,000 mPas	50,000 mPas	100,000 mPas
Motor rating input/output	70 / 35 W	220 / 90 W	513 / 370 W
Permissible ON time	100%	100%	100%
Speed range (at 50/60 Hz)	60 – 2000 rpm / 72 – 2400 rpm	60 – 1400 rpm / 72 – 1680 rpm	57 – 1300 rpm / 69 – 1560 rpm
Speed range I (at 50/60 Hz)	60 – 500 rpm / 72 – 600 rpm	60 – 400 rpm / 72 – 480 rpm	57 – 275 rpm / 69 – 330 rpm
Speed range II (at 50/60 Hz)	240 – 2000 rpm / 288 – 2400 rpm	240 – 1400 rpm / 288 – 1680 rpm	275 – 1300 rpm / 330 – 1560 rpm
Max. torque at stirring shaft	150 Ncm	900 Ncm	3000 Ncm
Display	LED	LED	LED
Reverse operation	no	no	no
Intermittent operation	no	no	no
Temp. sensor connection	no	no	no
Chuck range	0.5 – 10 mm	1 – 10 mm	3 – 16 mm
Hollow shaft	yes	yes	no
Torque trend measurement	no	no	no
Timer	no	no	no
Temperature measurement	no	no	no
Temperature measuring range	–	–	–
Dimensions (W x D x H)	88 x 212 x 294 mm	123 x 252 x 364 mm	145 x 358 x 465 mm
Weight	3.1 kg	7.5 kg	16 kg
Permissible ambient temp.	5 – 40 °C	5 – 40 °C	5 – 40 °C
Permissible relative moisture	80%	80%	80%
Protection class DIN EN 60529	IP 20	IP 40	IP 54
USB / RS 232 interface	no	no	no
Voltage	115 V	115 V	3 x 400 Y
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Price	**$ 898**	**$ 3,990**	**$ 7,259**
	Ident. No. 3593001	Ident. No. 5040001	Ident. No. 4050010



ES 200 control P 4 I
ES 40 digital
ES 100 digital / control
ES 60 digital / control
ES 200 digital / control I
ES 200 control P 4 II
ES 200 digital / control II
ES 20 digital
ES 20 high speed
RW 47 digital
RW 28 digital
RW 20 digital



The electronic overhead stirrers have a constant torque over the entire speed range. They can also be used for short-term overload operations. The electronic stirrers are ideal for reproducible procedures as well.

The mechanical overhead stirrers have a high torque at low speed and the torque decreases when the speed increases. The speed range I is for highly viscous samples and the speed range II is for intensive mixing of low viscous samples.

Stirring elements | **Accessories**

Propeller stirrer, 4-bladed

Standard stirring element for drawing the material to be mixed from the top to the bottom. It creates local shearing forces and axial flow in the vessel. This propeller stirrer is used at medium to high speeds.

axial flow

Name	R 1342	R 1345	R 2302
Ident. No.	0741000	0741300	0739000
Stirrer (Ø) mm	50	100	150
Shaft (Ø) mm	8	8	13
Shaft length mm	350	540	800
Max. speed rpm	2000	800	600
Price	**$ 173**	**$ 200**	**$ 852**
	A B C D F	A B C D F G	H

Propeller stirrer, 3-bladed

Flow-efficient design for drawing the material to be mixed from the top and the bottom while creating minimum shearing forces. This propeller stirrer is used at medium to high speeds.

axial flow

Name	R 1381	R 1382	R 1401	R 1405
Ident. No.	1296000	1295900	1242900	1289800
Stirrer (Ø) mm	45	55	55	45
Shaft (Ø) mm	8	8	–	–
Shaft length mm	350	350	–	–
Max. speed rpm	2000	2000	–	–
Price	**$ 434**	**$ 463**	**$ 391**	**$ 311**
	A B C D F	A B C D F	E	E

Propeller stirrer, 3-bladed

Flow-efficient design for drawing the material to be mixed from the top and the bottom while creating minimum shearing forces. This propeller stirrer is used at medium to high speeds.

axial flow

Name	R 1385	R 1388	R 1389 (PTFE-coated)
Ident. No.	0477700	0477800	2343600
Stirrer (Ø) mm	140	140	75
Shaft (Ø) mm	10	10	8
Shaft length mm	550	800	350
Max. speed rpm	800	400	800
Price	**$ 201**	**$ 557**	**$ 797**
	A B C D F G	A B C D F G	A B C

Dissolver stirrer

This stirrer provides radial flow for drawing the material to be mixed from the top and the bottom while creating high turbulence and high shearing forces for particle reduction. Medium to high speeds required.

radial flow

Name	R 1300	R 1302	R 1303	R 1402
Ident. No.	0513500	2387900	2746700	1243300
Stirrer (Ø) mm	80	100	42	42
Shaft (Ø) mm	8	10	8	–
Shaft length mm	350	350	350	–
Max. speed rpm	2000	1000	2000	–
Price	**$ 404**	**$ 835**	**$ 580**	**$ 454**
	A B C D F G	A B C D F G	A B C D F	E

Turbine stirrer

This stirrer is used for drawing the material to be mixed from above while generating axial flow within the vessel. It carries a minimum level of danger of injury when contact is made with vessel. It also creates minimum shearing forces and is used at medium to high speeds.

axial flow

Name	R 1311	R 1312	R 1313
Ident. No.	2332900	2333000	2333100
Stirrer (Ø) mm	30	50	70
Shaft (Ø) mm	8	8	10
Shaft length mm	350	350	400
Max. speed rpm	2000	2000	800
Price	**$ 277**	**$ 350**	**$ 453**
	A F C	A B C D F	A B C D F

Centrifugal stirrer

Two-bladed stirrer who's blades open with increasing speed. Perfect for stirring in round vessels with narrow necks and the effect is similar to that of a 4-bladed propeller stirrer. Medium to high speeds required.

axial flow

Name	R 1352	R 1355
Ident. No.	0756900	1132700
Stirrer (Ø) mm	60 / 15	100 / 24
Shaft (Ø) mm	8	8
Shaft length mm	350	550
Max. speed rpm	2000	800
Price	**$ 245**	**$ 311**
	A B C D F	A B C D F

Paddle stirrer

This stirrer creates tangential flow, minimum turbulence, good heat exchange and gentle treatment of the product. Low to medium speeds required.

tangential flow

Name	R 1375	R 1376	R 2311
Ident. No.	0757700	0757800	0739500
Stirrer (Ø) mm	70	150	150
Shaft (Ø) mm	8	10	13
Shaft length mm	550	550	800
Max. speed rpm	800	800	600
Price	**$ 264**	**$ 550**	**$ 1,144**
	A B C D F	B C D F G	H

Anchor stirrer

This stirrer creates tangential flow, high shearing rate at the edges, minimum deposits on the vessel wall making them great for polymer reactions and even distribution of high mineral contents in liquids. Ideal for medium to highly viscous fluids. Low speeds required.

tangential flow

Name	R 1330	R 1331	R 1333
Ident. No.	2022300	2022400	2747400
Stirrer (Ø) mm	45	90	150
Shaft (Ø) mm	8	8	10
Shaft length mm	350	350	550
Max. speed rpm	1000	1000	800
Price	**$ 260**	**$ 290**	**$ 1,110**
	A B C D F	A B C D F G	B C D F G

* IKA® recommendations only

EUROSTAR 20 digital
EUROSTAR 40 digital
EUROSTAR 60 digital
EUROSTAR 60 control

A

EUROSTAR 100 digital
EUROSTAR 100 control

B

EUROSTAR 200 digital
EUROSTAR 200 control

C

EUROSTAR 200 control P4

D

EUROSTAR 20 high speed digital

E

RW 20 digital

F

RW 28 digital

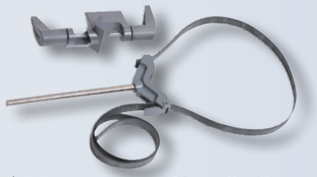
G

RW 47 digital

H

RH 5 Strap clamp

For securing vessels against walls or for synchronized rotation during stirring, incl. boss head clamp R 270.



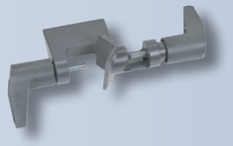
Ident. No.	Price	
3159000	$ 127	2 3

RH 3 Strap clamp

For securing vessels during stirring.

Ident. No.	Price	
3008600	$ 48	1

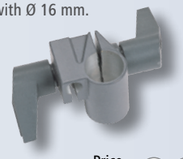
R 270 Boss head clamp



Ident. No.	Price	
2657800	$ 32	2 3

R 271 Boss head clamp

Specialized clamp with openings for the stands R 2722 and R 2723 as well as extensions with Ø 16 mm.



Ident. No.	Price	
2664000	$ 48	2 3

FK 1 Flexible coupling

Required for stirring tasks using glass stirring rods. The flexible coupling compensates for any structural variances.

Ident. No.	Price	
2336000	$ 304	A

R 182 Boss head clamp

Ident. No.	Price	
2657700	$ 27	1

H 62.51 Stainless steel sensor

Temperature sensor for working with non-aggressive media.

Ident. No.	Price
2735451	$ 161

* Option available only for control units

H 66.51 Stainless steel sensor glass-coated

Temperature sensor for working with media such as acid and alkaline solutions.

Ident. No.	Price
2735551	$ 200

* Option available only for control units

H 70 Extension cable

To connect EUROSTAR control with the temperature sensor.

Ident. No.	Price
2735600	$ 106

* Option available only for control units

Several safety accessories are available for RW 47 digital

R 60 keyless chuck

Available for EUROSTAR 20 / 40 / 60 / 100 series. It allows you to quickly and easily remove the stirring elements without any tools.

Ident. No.	Price
3889500	$ 107

H 66.53 Temperature sensor

Chemical resistant coated sensor.

Ident. No.	Price
4499900	$ 272

* Option available only for control units

Stirring shaft protection

Available for all overhead stirrers for preventing potential injuries at rotating shafts and stirring elements

IKA+

COMING SOON:
More stand options for optimal stability!

NEW

R 4765 Floor stand

Electrically adjustable telescopic floor stand, specially designed for RW 47 digital and T 65 basic/digital

Ident. No.	Price
4035000	on request

Height: 1014 – 1588 mm

H

Plate stands

R 1825 / R 1826 / R 1827

With slip resistant foil.

	Ident. No.	Price
R 1825	3160000	$ 137
R 1826	3160100	$ 155
R 1827	3160200	$ 162

A F

Height R 1825: 560 mm
R 1826: 800 mm
R 1827: 1000 mm

R 2722 H-Stand

Stable stand with H-shaped base which prevents the stand from tipping backwards.

Ident. No.	Price
1412000	$ 317

A ··· G

Height: 1010 mm

R 2723 Telescopic stand

Similar to R 2722, additionally equipped with a pneumatic spring, which enables effortless raising of the dispersing unit.

Ident. No.	Price
1412100	$ 382

A ··· G

Height: 620 – 1010 mm Stroke: 390 mm

R 474 Telescopic stand

Specially designed for RW 47 D/digital.

Ident. No.	Price
1643000	$ 3,263

H

Height: 1200 mm
Stroke: 500 – 1000 mm

R 472 Floor stand

Mobile floor stand, specially designed for RW 47 D/digital.

Ident. No.	Price
0738700	$ 5,818

H

Height: 2020 mm
Stroke: 980 – 1860 mm

Typical Dynamic viscosity values (Range 1 – 100,000 mPa*s)

Substance	Viscosity η in mPa*s
Water	1
Milk	2
Coffee whipped cream	10
Olive oil	100
Lubricant oil	200
Motor oil	650 – 900
Shampoo	3000
Hand cream	8000
Honey	10,000
Ketchup	50,000
Toothpaste (40°C)	70,000
Asphalt	100,000

Unless otherwise stated, the values refer to the viscosity at 20°C and atmospheric pressure

Torque

Torque is mathematically defined as the vector product of force and lever arm. It is therefore calculated as M = F * r , where M is the torque, r is the lever arm and F is the force. The magnitude of the force is based on the perpendicular distance from the axis of rotation to the line of action of the force.

The unit of measurement of torque is Nm. For example, in mixing systems, the drive power of an electric motor is delivered to the rotating drive shaft or the drill chuck fixed to the mixing tool. What matters is the transfer of power in the drive to the rotating mixing tool. Torque is the key to the relationship between the mixing tool geometry, viscosity of the medium to be mixed and the speed of rotation. The power is transferred from the motor to the shaft and then to the mixing tool. The torque acts on the mixing tool at the drill chuck as shown in the brochure.

Viscosity

The “viscosity” shown in our brochure always refers to the dynamic viscosity η. Viscosity is a measure of the fluid’s resistance to flow or change in shape due to internal friction between the molecules. If a fluid has high viscosity, then it strongly resists flow. This is an important parameter to be considered when it is required to create product emulsions and suspensions by mixing and homogenizing or merely in the transfer of fluids from one location to another.

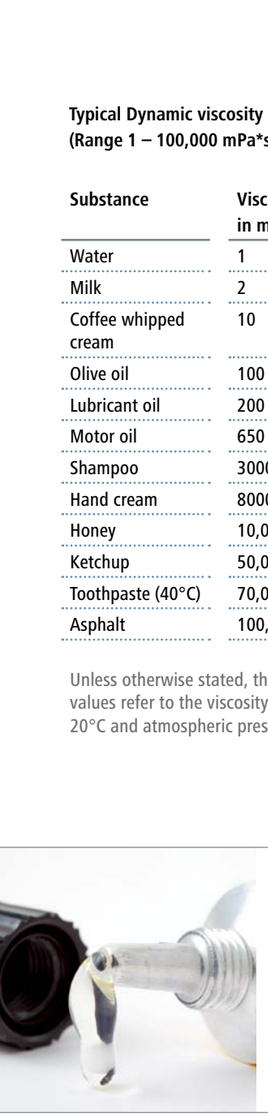
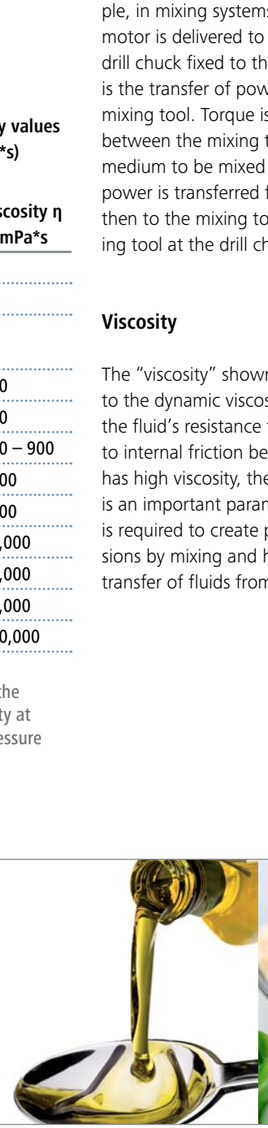
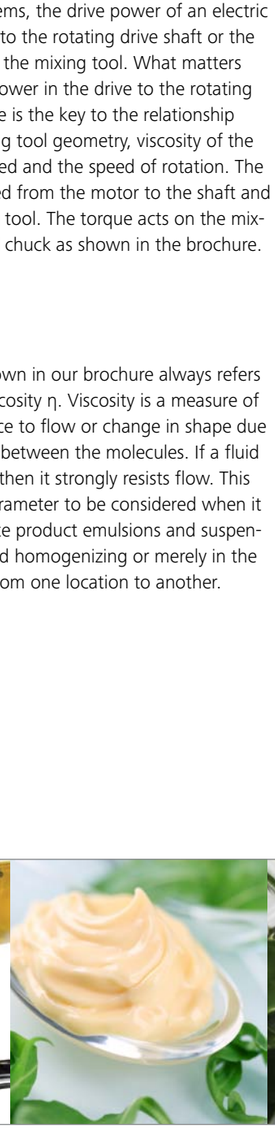
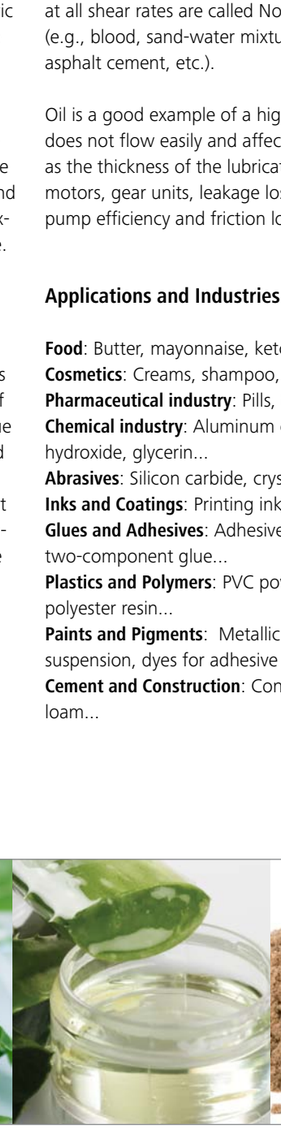
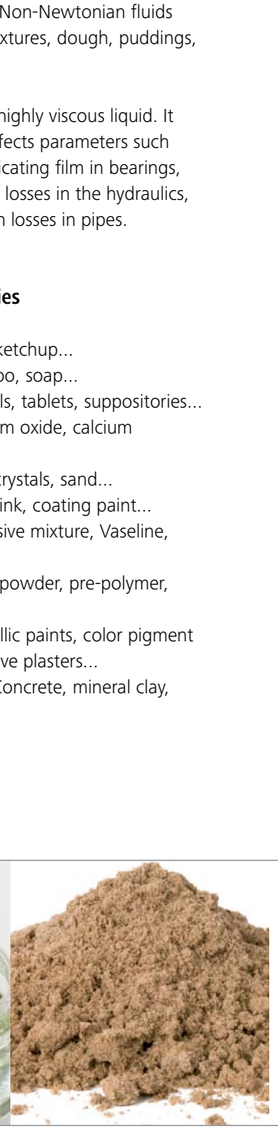
$1N = [\eta] . (m^2 m / m s) => [\eta] = Ns / m^2 = Pa*s$

Fluids are either Newtonian or Non-Newtonian. Fluids whose viscosity is constant at all shear rates are called Newtonian fluids (e.g., pure fluids, ideal fluids / water, oil and most gases which have a constant viscosity). Fluids whose viscosity is not constant at all shear rates are called Non-Newtonian fluids (e.g., blood, sand-water mixtures, dough, puddings, asphalt cement, etc.).

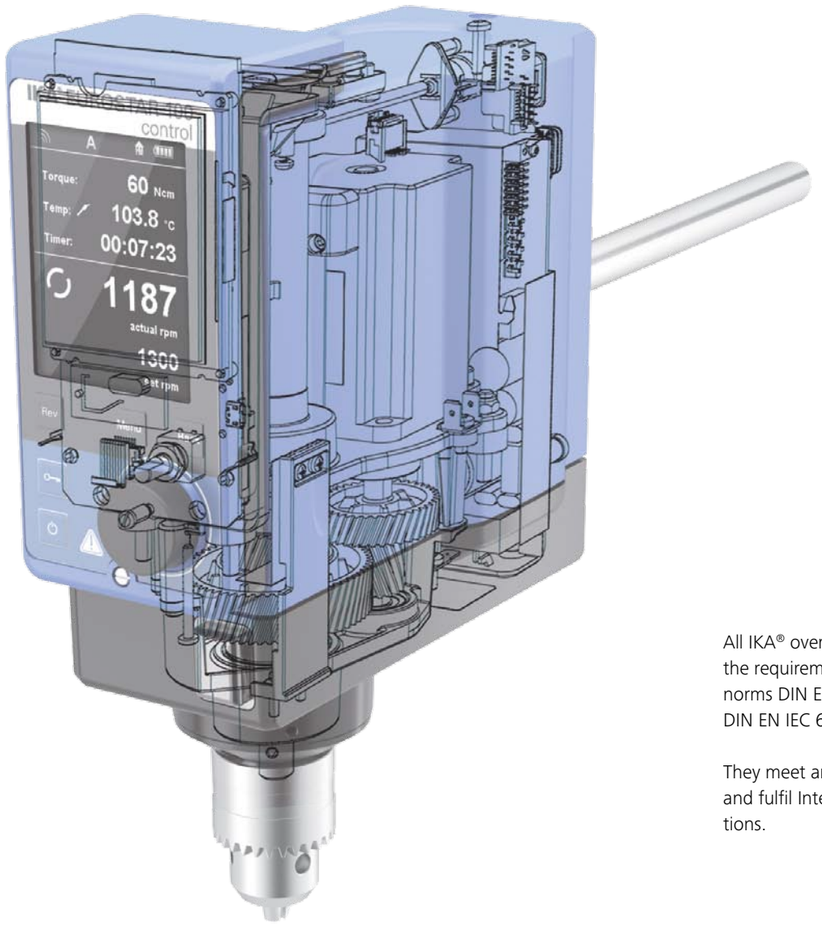
Oil is a good example of a highly viscous liquid. It does not flow easily and affects parameters such as the thickness of the lubricating film in bearings, motors, gear units, leakage losses in the hydraulics, pump efficiency and friction losses in pipes.

Applications and Industries

Food: Butter, mayonnaise, ketchup...
Cosmetics: Creams, shampoo, soap...
Pharmaceutical industry: Pills, tablets, suppositories...
Chemical industry: Aluminum oxide, calcium hydroxide, glycerin...
Abrasives: Silicon carbide, crystals, sand...
Inks and Coatings: Printing ink, coating paint...
Glues and Adhesives: Adhesive mixture, Vaseline, two-component glue...
Plastics and Polymers: PVC powder, pre-polymer, polyester resin...
Paints and Pigments: Metallic paints, color pigment suspension, dyes for adhesive plasters...
Cement and Construction: Concrete, mineral clay, loam...

CE | DIN EN IEC 61010-1
DIN EN IEC 61010-2-051



All IKA® overhead stirrers adhere to the requirements set forth by the norms DIN EN IEC 61010-1 and DIN EN IEC 61010-2-051.

They meet and exceed CE standards and fulfil International safety regulations.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Our Application Center spans 400 sqm and offers modern facilities for presenting and testing lab devices and processes. This brings us even closer to our customers and improves our service. Here, prospective buyers and customers can test out processes that involve stirring, shaking, dispersing, grinding, heating, analyzing and distilling. In addition, it also further extends the opportunity to test your own devices and to develop new models.

FAQ

Does IKA® supply an explosion-proof stirrer system?
IKA® does supply custom-made explosion-proof systems for larger volumes upon request.

What does torque trend display mean in the case of the EUROSTAR control range – can they measure viscosity?
The EUROSTAR control units only display the change in torque. Normally, this is associated with a change in the viscosity of the medium. The viscosity cannot, however, be directly calculated from the data. In order to do so, one can use a viscometer.

How long can a stirrer be operated without interruption?
All IKA® stirrers have a 100% duty cycle, i.e. they can be operated without interruption.

Are there any stirrers which rotate in different directions?
All IKA® stirrers rotate in clockwise direction except for EUROSTAR 100 control which rotates in both clockwise and counter clockwise direction. Additionally, upon request for special applications, counter clockwise direction can be incorporated.

What is the difference between the electronic and mechanical versions of the stirrers?
In mechanical stirrers, the speed is set by means of a continuously variable transmission. A higher torque can be made available directly in the lower speed range by altering the transmission ratio of the actuator. Whereas in electronic stirrers, the power output is monitored and controlled by a processor. This ensures a constant speed range even with changes in viscosity.

What quantities and viscosities can be processed with IKA® stirrers?
Depending on the unit, maximum stirring quantity ranges from 20 ml to 200 liters. Similarly, the viscosity ranges from 1 mPas to 150,000 mPas.

What should be the diameter of the vessel in relation to the stirrer tool?
In the case of water, the diameter of the vessel should be twice the diameter of the stirrer element and the height two or three times that of the stirrer element. In the case of high viscosity material, the stirrer element should be closer to the vessel wall.

What ambient conditions are required for the operation of IKA® stirrers?
The ambient temperature should be consistent between 5 °C and 40 °C and the humidity should not exceed 80%.

IKA®+

Application Support!

For questions regarding applications and processes, you can call our hotline number:
+1 800 733-3037*
E-Mail: sales@ika.net

* Monday – Friday
from 8:30 AM – 5:00 PM (EST)

Prices valid until 31st of December 2014
All prices exclusive to VAT
Subject to alteration of prices
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201407_Overhead_Stirrers_brochure_EN_USD

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