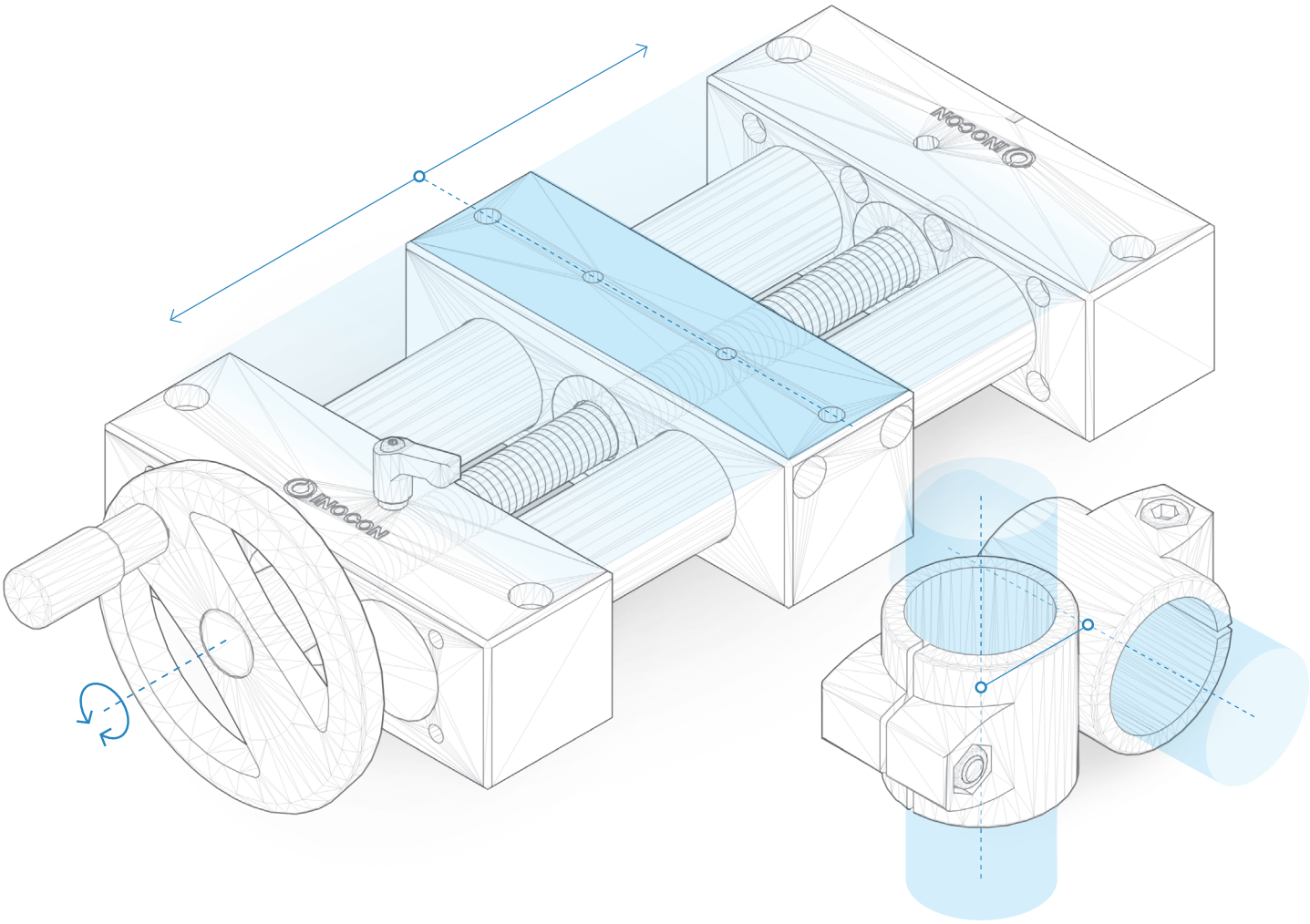
INOCON



Product Overview

Tube clamp assembly systems
Linear units
Precision linear units

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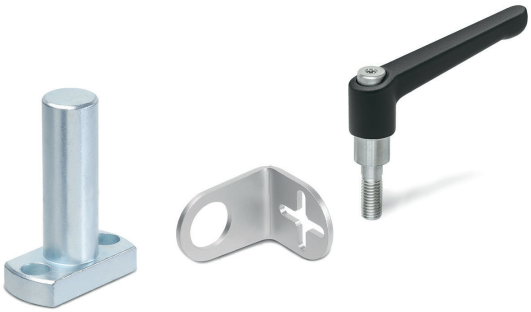

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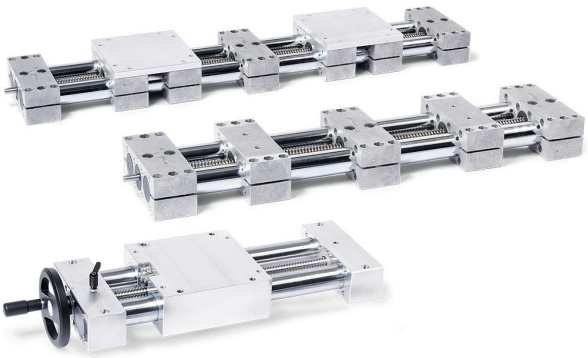

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Our headquarters in Rheinbach

About us

INOCON – Solutions that connect

It all began in 1997 in a small office in the heart of Rheinbach. Today, INOCON is one of the leading providers of assembly components such as tube clamps and linear units.

New production methods, maximum quality, customer-specific special solutions, short delivery times and solid technical advice make INOCON a reliable and competent partner. INOCON is the first choice for anything having to do with positioning systems, multi-axis systems or mechanisms in plant construction.

The selection is continually expanding according to the special needs of customers in a wide range of industries, from labelling technology and food production to research and development systems.

After all, the individually developed solutions often find their way into the standard portfolio, especially if they would benefit all customers. INOCON thinks in practical terms.

That was already the case back when Walter-Franz Marxen founded the company. As an engineer and head of a design office for special machinery, he knew there was always a lack of universal standard elements.
The company has a particular interest in tube clamps and linear units, in other words elements that have always been indispensable in plant construction. INOCON develops its own products with the goal of offering better solutions than typical providers on the market.

With the move to the Rheinbach industrial region in 2005, the company began expanding its own production line to respond more quickly and flexibly to highly individual customer needs – even at small part volumes.

Our logistics center

CNC machining, powder coating, quality control, special solutions

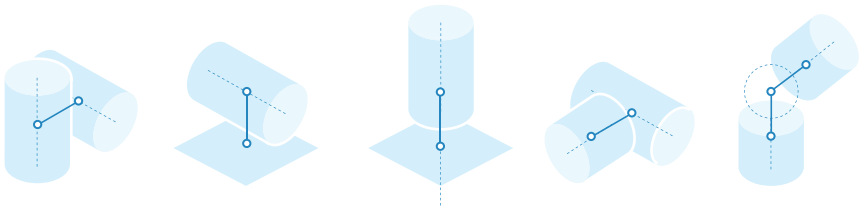
The capabilities were continually upgraded, including installation of a powder-coating plant and other CNC machines. In the meantime, INOCON now has multiple production buildings. All this means that INOCON is able to deliver within 48 hours of receiving an order – and overnight express is available for especially urgent orders.

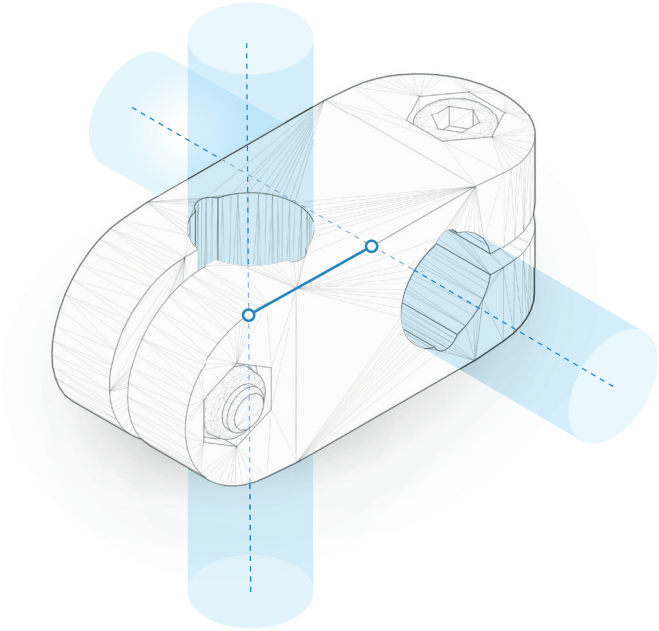
INOCON optimizes more than its production, shipping and portfolio as the company is also focused on sustainability. Since 2020, operations have been entirely powered by completely renewable sources, including the rooftop photovoltaic system.

In this way, INOCON brings innovative thinking, an application focus and continuous optimization to everything it does.

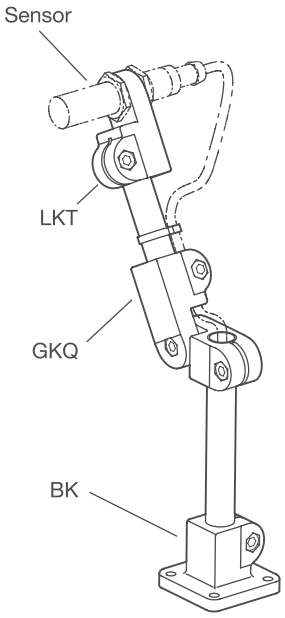
What you get from INOCON

- **Short delivery times thanks to high stock levels**
- **Implementation of individual customer requirements**
- **Special solutions even at small part volumes**
- **Support in the design, planning and implementation of complex projects**
- **Free sample service**
- **Free CAD data available for all products**
- **Inhouse production**
- **Maximum quality thanks to stable processes**
- **Overnight express for urgent projects**





Compact clamps



Application example
Sensor mount

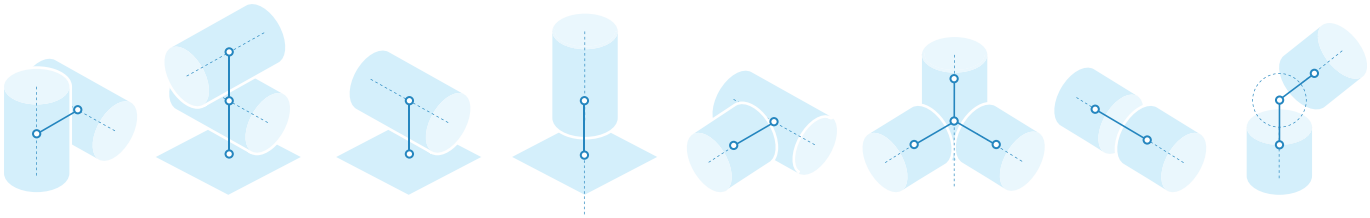
The product group “Compact Clamps 1A” contains single-piece parts made of die-cast aluminum or precision-cast stainless steel. These have slitted clamping points machined by cutting methods that receive typically available rods and precision tubes as per DIN 2391 with full surface contact over the entire cross-section of the bore.

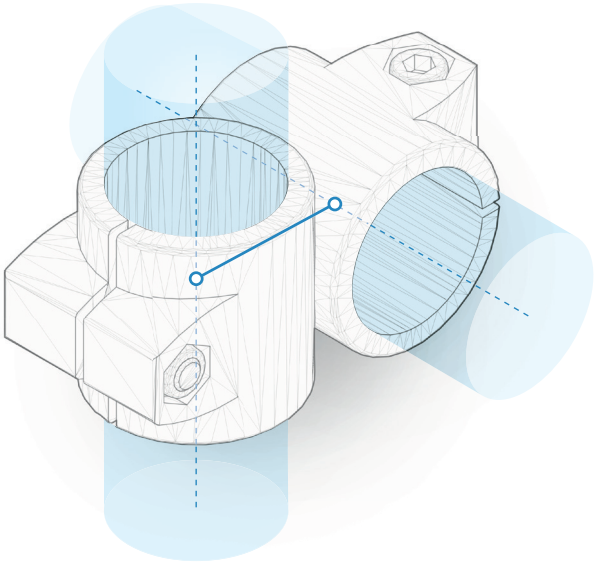
Hex socket cap screws or adjustable hand levers, together with hex nuts, reduce the bore cross-section for clamping. The screw and nut can be positioned anywhere thanks to the hexagonal countersinking on both sides. Hand levers are intended for repeated, tool-free clamping.

Compact clamps are available in all typical part types, such as cross, base or flanged clamps, with bore diameters from 10 to 20 mm. Larger diameters can be found in the group “Tube Clamps 1B”.

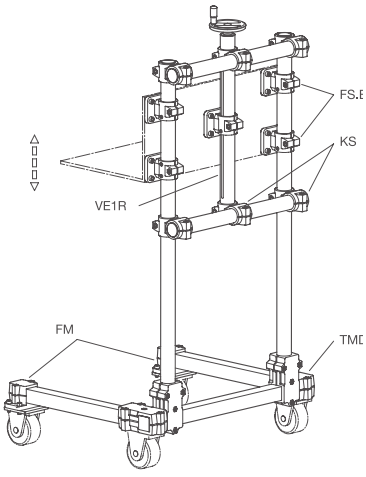
Together with rods and tubes, compact clamps can be used to quickly and easily assemble stable tube constructions that can be flexibly adapted to many different areas of application, such as in automation and machine building.

Cross clamps	KK 							
Flanged clamps	FK 							
Base clamps	BK 	BKZ 	BKG 					
Angle clamps	TK 							
Swivel clamps	LKF 	LKP 	LKT 	LKQ 				
Joint clamps	GKF 	GKP 	GKT 	GKQ 				
Sensor mounts	SKF 	SKP 	SKT 	SKQ 				





Tube clamps



Application example mobile lifting table

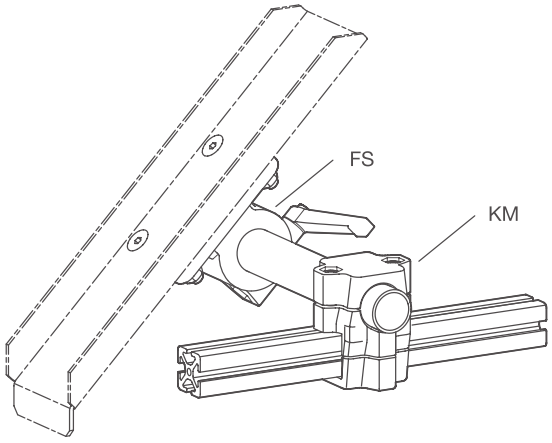
The product group “Tube Clamps 1B” contains single-piece and multi-piece parts made of die-cast aluminum or precision-cast stainless steel. These have slitted or multi-piece clamping points that receive typically available rods and precision tubes as per DIN 2391 or square tubes with full surface contact over the entire cross-section or via multiple ribs in the bore.

Hex socket cap screws or adjustable hand levers, together with hex nuts, reduce the bore or square cross-section for clamping. The screw and nut can be positioned anywhere thanks to the hexagonal countersinking on both sides. Hand levers are intended for repeated, tool-free clamping.

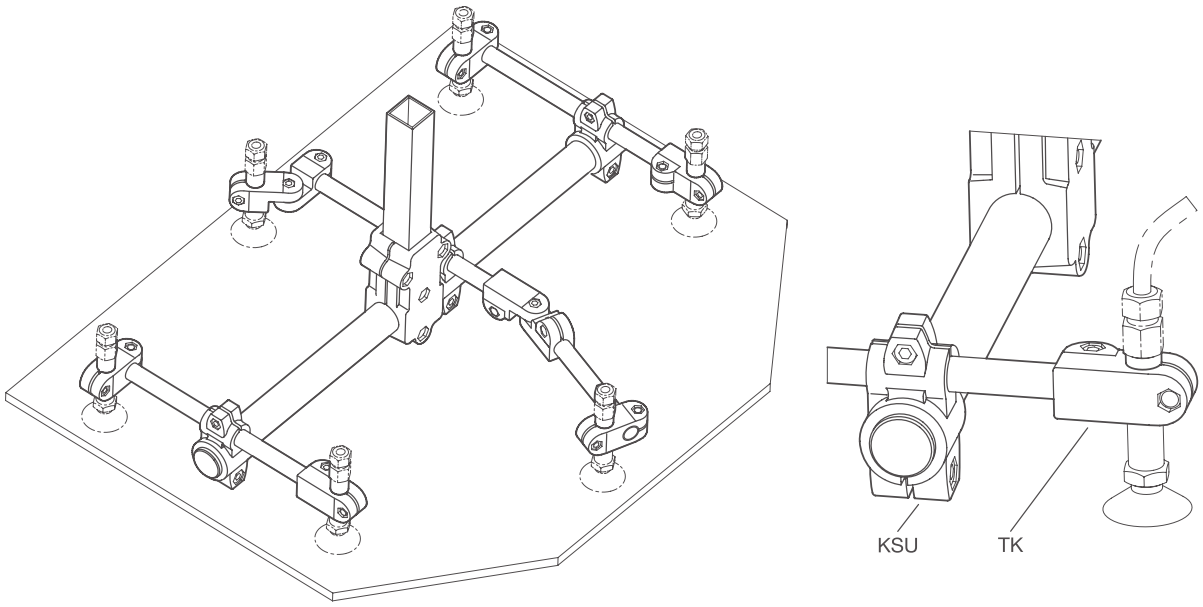
Tube clamps are available in all typical part types, such as cross, base, swivel or flanged clamps, with bore diameters from 20 to 60 mm. The parts can either have identically executed bores or they can mix square and round bores and different dimensions. Smaller diameters can be found in the group “Compact Clamps 1A”.

Together with rods and tubes, tube clamps can be used to quickly and easily assemble stable tube constructions that can be flexibly adapted to many different areas of application, such as in handling systems, machine building, warehousing and conveyor systems.

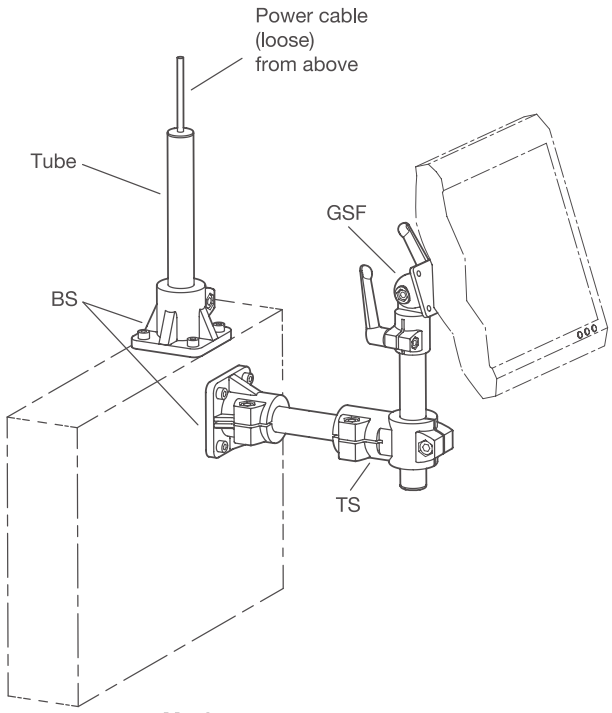
Cross clamps	KS 	KE 	KSU 	KM 	KMU 			
Cross flanged clamps	KMF 							
Flanged clamps	FS 	FSZ 	FE 	FEZ 	FM 	FMS 		
Base clamps	BS 	BE 	BM 	BML 	BMT 	BMA 		
Angle clamps	TS 	TE 	TMD 	TM 	WMD 	WS 		
Angle clamps	ES 							
Sleeve clamps	CM 	MM 	MS 					
Swivel clamps	LSF 	LSP 	LST 	LSQ 	LMQ 			
Joint clamps	GSF 	GSP 	GST 	GSQ 	GMQ 	GMV 		
Sensor mounts	SSF 	SSP	SST	SSQ				



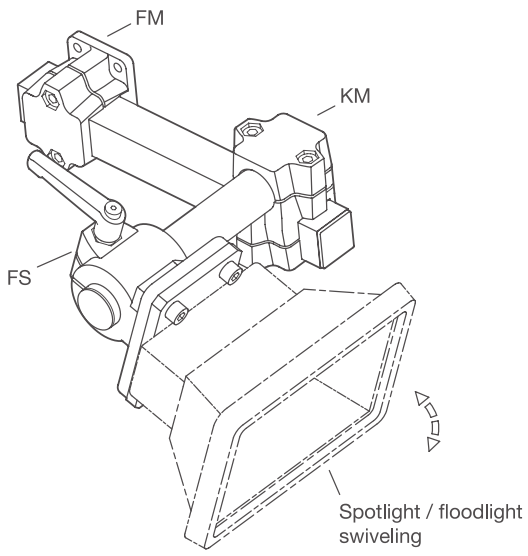
Workpiece slide
Transition to aluminum profile system



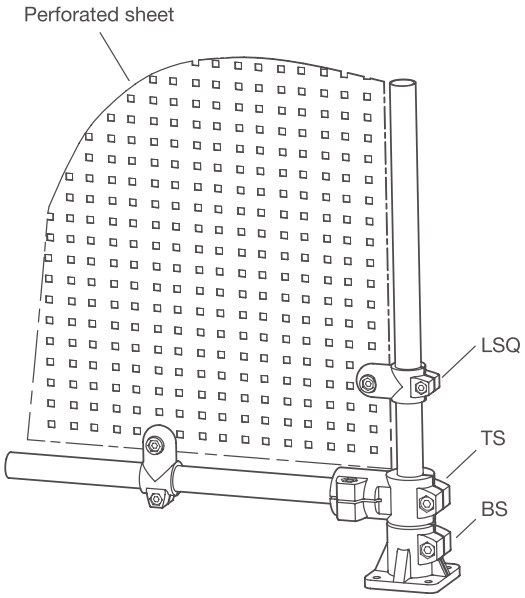
Suction gripper for panels



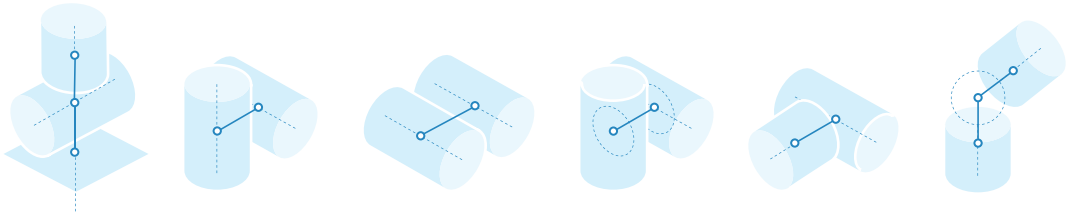
Monitor mount

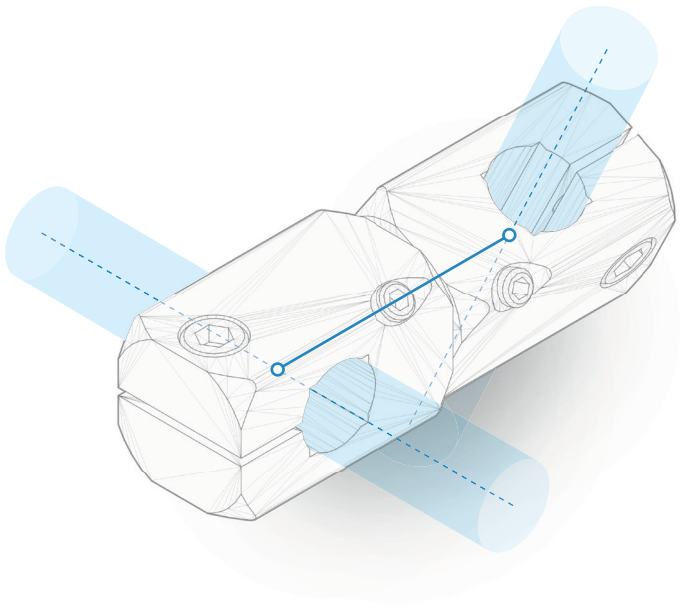


Mount for spotlight

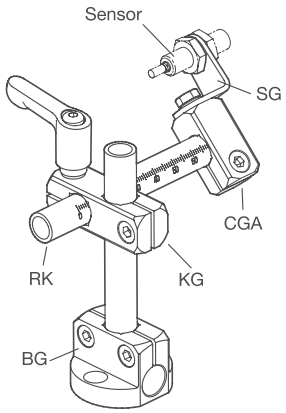


Safety fence





Clamp mountings



Application example
Sensor holder

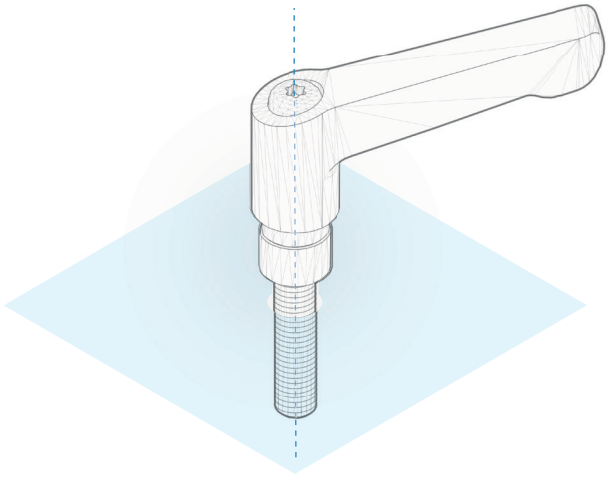
The group “Clamp Mountings 1C” contains single-piece parts made from drawn aluminum profiles or plastic. The aluminum clamp mountings have slitted clamping points machined by cutting methods that receive rods and tubes with round or square cross-sections via the additionally incorporated square bore in some versions.

Hex socket cap screws or adjustable hand levers, together with the thread cut into the part, reduce the bore cross-section for clamping. Adjustable hand levers are intended for repeated, tool-free clamping.

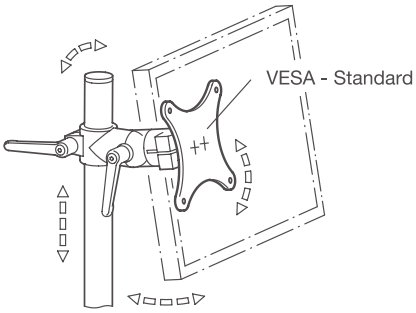
Clamp mountings are available in all typical part types, such as cross, base or flanged clamps, with bore diameters from 8 to 20 mm. Larger diameters can be found in the group “Tube Clamps 1B”.

Together with rods and tubes, clamp mountings can be used to quickly and easily assemble stable tube constructions that can be flexibly adapted to many different areas of application, such as in automation, sensor systems, and jig and fixture construction.

Base clamp mountings	BG 							
Cross clamp mountings	KG 							
Parallel clamp mountings	PG 							
Swivel cross clamp mountings	DGK 							
T-clamp mountings	TG 							
Clamps	CG 							
Attachment clamp mountings	CGA 							
Swivel clamp mountings	LG 	LGT 	LGA 	LGF 				
Plastic clamp mountings	KP 	BP 	SP 					



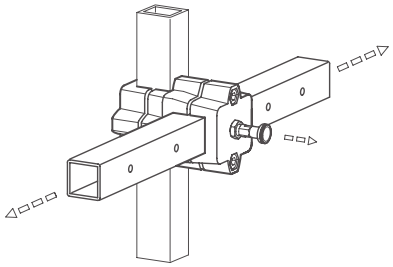
Connecting accessories



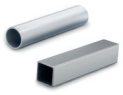
Application example monitor mount

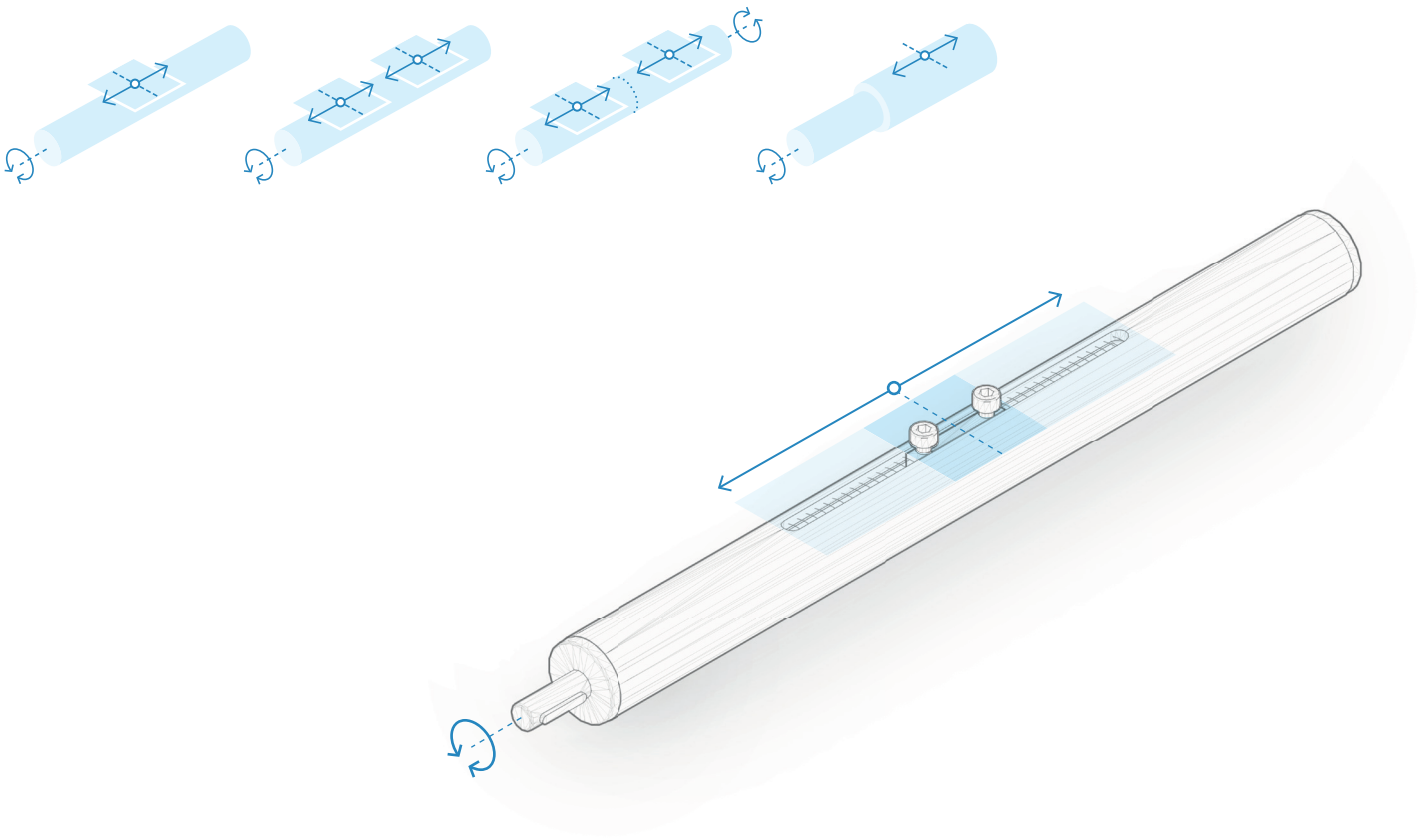
The group “Connecting accessories 1D” contains parts intended for extending or improving the usability of clamps and guide elements.

For example, this includes adjustable hand levers for tool-free clamping and construction tubes, including tube end plugs. Parts such as locking guide elements, VESA monitor mounts and sensor mounts round out this group of accessories.



Application example Locking slide unit

Adjustable hand levers	HSK 	HEK 	HK 	HM 				
Construction tubes	RS 	RK 	RR 					
Locking slide units for construction tubes with locking bores RR	KM.R 	FM.R 						
Tube end plugs for construction tubes	AS 							
Monitor mounts	VS 							
Flanged bolts for clamp mountings / profile systems	RKF 							
Sensor holders	SG 							
Retaining plates	SGU 							



Single tube linear units

The group “Single Tube Linear Units 2A” contains linear units made of chrome-plated steel or bright stainless steel precision tubes. Together with linear unit connectors, these form a solid linear round or square guide. The spindle drive in the guide tube transmits the linear movement to a linear unit connector.

The linear units are freely configurable and are entirely manufactured by Inocon.

Single tube linear units can be divided into four types:

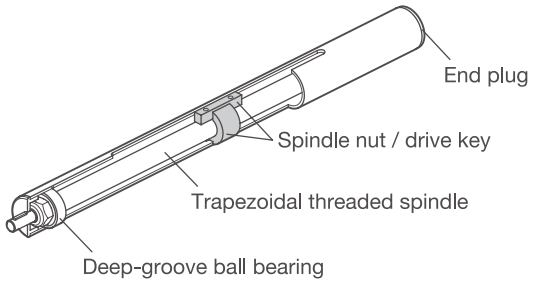
- **Linear units with one guide element:** the linear unit connector is moved along the guide tube by the spindle thread.
- **Linear units with two opposing guide elements:** two linear unit connectors move symmetrically along the guide tube due to different thread directions.
- **Linear units with two independent guide elements:** two linear unit connectors move independently along the guide tube due to separate spindles.
- **Telescope linear units:** an outer tube forms the linear unit connector, which is moved along the inner guide tube by the spindle thread. This increases or decreases the total length of the linear units.

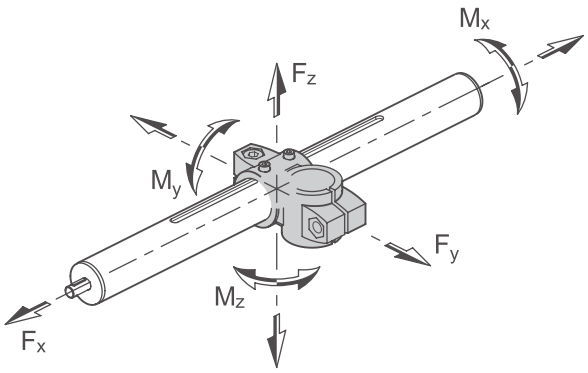
Possible accessories for the single tube linear units offered in group 2D include handwheels in various designs, position indicators and spacer plates for spindle clamping. The accessories are matched to the nominal diameters of the linear units. The matching linear unit connectors are available in group 2B in all typical part types, such as cross, base or flanged linear unit connectors.

Together with the linear unit connectors, single tube linear units can be used to quickly and easily assemble solid linear guides that can be flexibly adapted to many different areas of application, such as for format adjustment and machine building.

An operating manual with instructions for assembly can be downloaded from our website at inocon.de/en/service.

Single tube linear units with one guide element, standard lengths	**VES** 		
Single tube linear units with one guide element	**VE1R** 	**VE1V** 	
Single tube linear units with two opposing guide element	**VE2R** 	**VE2V** 	
Single tube linear units with two independent guide elements	**VE3R** 	**VE3V** 	
Telescope linear units	**VT1S** 	**VT1W** 	

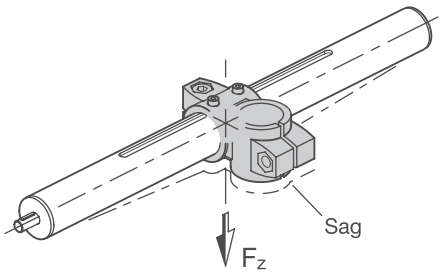




Linear unit nominal diameter	**Fx** in N	**Fy** in N			**Fz** in N			**Mx** in Nm	**My** in Nm	**Mz** in Nm
	l = 500	l = 500	l = 1000	l = 1500	l = 500	l = 1000	l = 1500			
18	400	80	15	-	65	10	-	1,5	4,5	4,5
30	850	500	70	15	550	55	10	6,5	15	15
40	1100	2150	250	65	1900	150	50	15	42	42
50	1750	3100	650	150	3100	650	150	29	69	69
60	2600	4550	1500	400	4550	1400	350	45	125	125

Sag / elastic deformation

The maximum permissible forces and tightening torques listed in the table will result in elastic deformation of the linear unit. For the listed values, this amounts to approximately 0.4 mm. This deformation is shown here using the force Fz as an example.



Positioning precision

The positioning precision indicates the deviation with which a position can be reached. The table shown here lists the maximum arising deviation.

	Trapoidal thread lead screw	Fine thread lead screw
Max. deviation	±0,1 mm / 300 mm stroke	±0,1 mm / 300 mm stroke

Repeatable precision

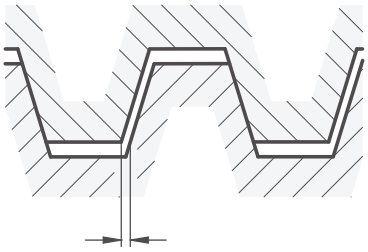
The repeatable precision indicates how precisely a position can be approached multiple times under the same conditions. In most cases, the repeatable precision is higher than the positioning precision because manufacturing tolerances have no influence on the repeatable precision. The trapezoidal and fine thread lead screws have a repeatable precision of ±0.05 mm.

Guide precision

The precision guide tubes of the linear units of steel are manufactured as per DIN EN 10305-4 and also chrome-plated. In the stainless steel version, steel precision guide tubes as per EN10216-5 are used.

Backlash on reversal

Due to the play between the thread flanks of the spindle and spindle nut, backlash (lost motion) occurs when the direction of the drive movement is changed. This backlash must be overcome before the guide element moves in the opposite direction. The backlash on reversal is required to prevent the spindle nut from seizing on the spindle. For linear units with trapezoidal and fine thread spindle, the value is 0.2 mm.



Self-braking

Because trapezoidal and fine thread spindles have pitch angles lower than the angle of friction, they are often self-braking. It is not possible to slide the guide element. In addition, the spindle can be secured against movement with an external spindle clamp. The clamping plates listed as accessories may be used for this.

Lifespan

The lifespan of linear units depends on the expected ambient conditions of the specific application. The following factors come into play here:

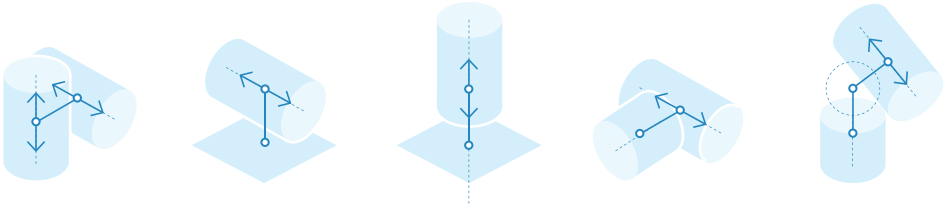
- The installation orientation
- The load to be moved
- The movement speed
- The movement frequency
- Ambient temperature
- External influences
- Compliance with the maintenance intervals

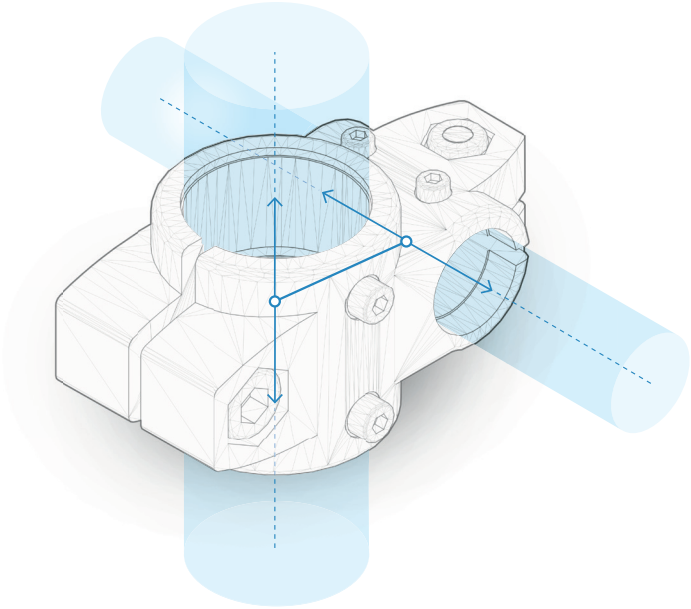
Ambient conditions

The linear units are designed for ambient temperatures from -20°C to +100°C. Large temperature fluctuations and condensing humidity should also be avoided.

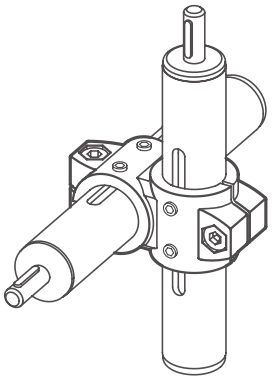
Safety device for vertical linear units

It is possible to install an additional spindle nut that is carried along as a safety nut. This holds the linear unit in position in the event of damage (such as due to overloading or wear) and prevents the guide element from falling when used in a vertical orientation.





Linear unit connectors

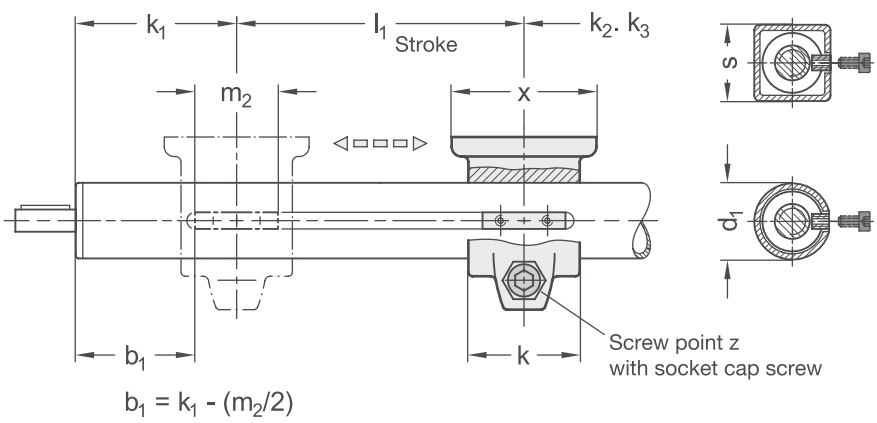


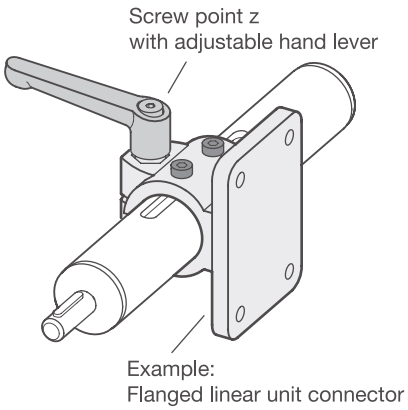
The group “Linear unit connectors 2B” contains single- and multi-piece linear unit connectors made of die-cast aluminum or precision-cast stainless steel. These have clamping points and guide element bores with or without a sliding insert. Together with single tube linear units, they form solid linear round or square guides. Drive keys transmit the linear movement of the linear unit to the linear unit connector.

Hex socket cap screws or adjustable hand levers, together with hex nuts, reduce the cross-section of the guide element bore, allowing it to be adjusted and clamped for low play. The screw and nut can be positioned anywhere thanks to the hexagonal countersinking on both sides. Adjustable hand levers are intended for repeated, tool-free clamping.

Together with rods and tubes, linear unit connectors with linear units can be used to easily build adjustable tube constructions that can be flexibly adapted to many different areas of application. Examples include handling systems, warehousing systems, and conveyor systems for format adjustment.

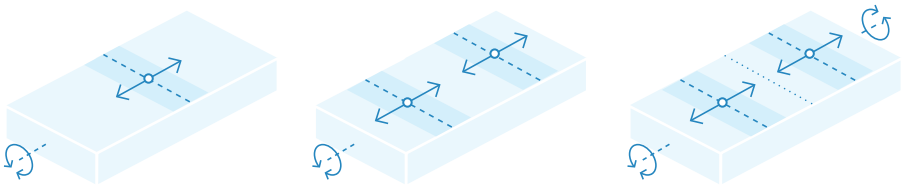
Cross linear unit connectors	KK.E 	KK.Z 	KS.E 	KS.Z 	KE.E 	KE.Z 	KSU.E 	KSU.Z 
	KM.E 	KM.Z 	KMU.E 					
Flanged linear unit connectors	FK.E 	FS.E 	FSZ.E 	FE.E 	FEZ.E 	FM.E 		
Base linear unit connectors	BK.E 	BS.E 	BE.E 	BM.E 				
T-linear unit connectors	TK.E 	TS.E 	TE.E 					
Swivel linear unit connectors	LKP.E 	LSP.E 	LKQ.E 	LSQ.E 				

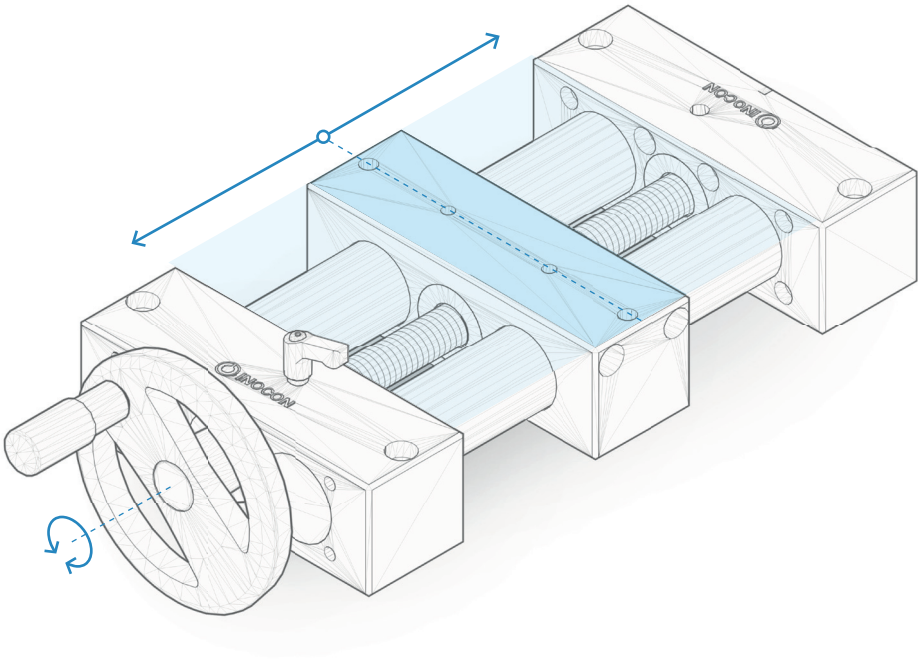




Standard		Material		Cross-section		Interfering contours		Sliding inserts	Hand lever
		AL	ED	d_1	s	k Clamp. length	x Flange	available	available as accessory
KK.E **KK.Z**		×	×	18	-	25	-	yes	yes
KS.E **KS.Z**		×	-	30 40 50 60	-	40 56 65 80	-	yes	yes
KE.E **KE.Z**		-	×	30 50	-	40 65	-	yes	yes
KSU.E **KSU.Z**		×	-	18 30 50	-	40 65	-	yes	yes
KM.E **KM.Z** **KMU.E**		×	-	30 40 50	30 40 50	50 60 76	-	no	yes
FK.E		×	-	18	-	25	35	yes	yes
FS.E **FSZ.E**		×	-	30 40 50 60	-	40 56 65 80	52 78 92 110	yes	yes
FE.E **FEZ.E**		-	×	30 50	-	40 65	52 92	yes	yes

Standard		Material		Cross-section		Interfering contours		Sliding inserts	Hand lever
		AL	ED	d_1	s	k Clamp. length	x Flange	available	available as accessory
FM.E		×	-	-	30 40 50	50 76	50 76	no	yes
BK.E		-	×	18	-	40	-	yes	yes
BS.E		×	-	30 40 50 60	-	50 70 85 100	-	yes	no
BE.E		-	×	30 50	-	50 85	-	yes	yes
BM.E		×	-	-	30 40 50	58 91	-	no	yes
TK.E		×	×	18	-	25	-	yes	yes
TS.E		×	-	30 40 50 60	-	40 56 65 80	-	yes	yes
TE.E		-	×	30 50	-	37 65	-	yes	yes
LKP.E		×	-	18	-	25	-	yes	yes
LSP.E		×	-	30 40 50	-	40 65	-	yes	yes
LKQ.E		×	-	18	-	25	-	yes	yes
LSQ.E		×	-	30 40 50	-	40 65	-	yes	yes





Double tube linear units

The product group “Double Tube Linear Units 2C” contains linear axes made of chrome-plated steel or bright stainless steel precision tubes.

If very high guide precision is required, the group also offers linear units of hard-chrome-plated or polished solid shafts.

The center spindle with ball bearings on both sides can be designed as a trapezoidal or fine thread lead screw or as a recirculating ball screw. The guide elements have either a sliding or roller guide.

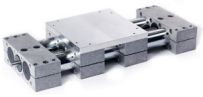
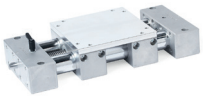
Double tube linear units can be divided into three types, each available with single or double guide elements:

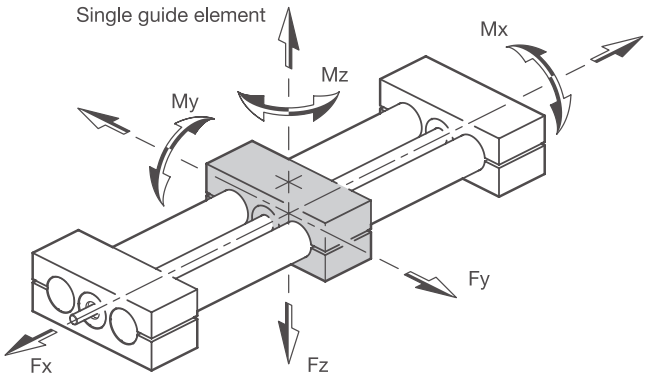
- **Linear units with one guide element:** the guide element is moved along the guide tubes by the spindle thread.
- **Linear units with two opposing guide elements:** two guide elements move symmetrically along the guide tubes due to different thread directions.
- **Linear units with two independent guide elements:** two guide elements move independently along the guide tubes due to separate spindles.

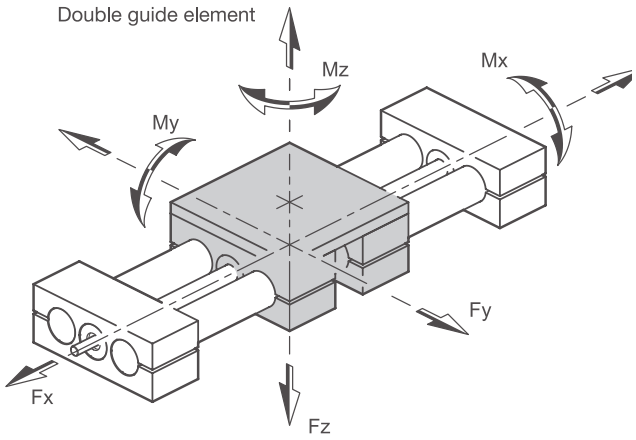
Possible accessories for the double tube linear units include hand wheels in various designs, position indicators and clamping plates for spindle clamping. The accessories are matched to the nominal diameter of the linear units and are found in group 2D.

Double tube linear units are capable of receiving high forces and torques. Depending on the features, a variety of precision levels are possible, which can be flexibly adapted to many different areas of application in machine and system building, such as for height and format adjustment.

An operating manual with instructions for assembly can be downloaded from our website at inocon.de/en/service.

	with single guide element	with double guide element	with recirculating ball screw
Double tube linear units with one guide element	**VD1E** 	**VD1D** 	
Double tube linear units with two opposing guide elements	**VD2E** 	**VD2D** 	
Double tube linear units with two independent guide elements	**VD3E** 	**VD3D** 	
Precision double tube linear units with one guide element	**PD1E** 	**PD1D** 	**PD1DK** 
Precision double tube linear units with two opposing guide elements	**PD2E** 	**PD2D** 	**PD2DK** 
Precision double tube linear units with two independent guide elements	**PD3E** 	**PD3D** 	**PD3DK** 





Single guide element

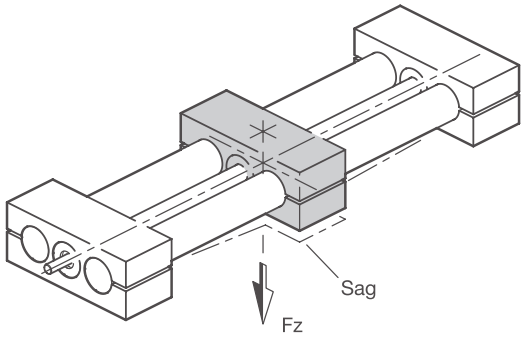
Linear unit nominal diameter	**Fx** in N	**Fy** in N			**Fz** in N			**Mx** in Nm	**My** in Nm	**Mz** in Nm
	l = 500	l = 500	l = 1000	l = 1500	l = 500	l = 1000	l = 1500			
18	425	215	110	-	105	80	-	22	35	40
30	850	1100	900	550	600	350	150	100	100	100
40	1100	3700	2800	1400	2100	600	180	150	140	170
50	1900	3850	2400	2100	3100	700	200	180	220	290
60	2700	6900	5700	5100	6300	2800	360	320	350	500

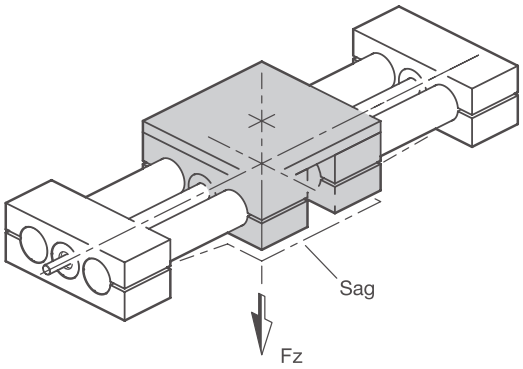
Double guide element

Linear unit nominal diameter	**Fx** in N	**Fy** in N			**Fz** in N			**Mx** in Nm	**My** in Nm	**Mz** in Nm
	l = 500	l = 500	l = 1000	l = 1500	l = 500	l = 1000	l = 1500			
18	425	290	180	-	140	105	-	42	50	75
30	850	1550	1300	800	700	550	250	150	150	200
40	1100	6400	3400	1900	2400	750	280	180	210	260
50	1900	7500	5100	2700	3400	850	340	250	350	530
60	2700	11500	9500	8200	7500	3100	610	550	650	980

Sag / elastic deformation

The maximum permissible forces and tightening torques listed in the table will result in elastic deformation of the linear unit. At the listed values, this amounts to approximately 0.4 mm for guide tubes and 0.3 mm for solid guide shafts. This deformation is shown here using the force Fz as an example.





Positioning precision

The positioning precision indicates the deviation with which a position can be reached. The table shown here lists the maximum arising deviation.

	Trapezoidal thread lead screw	Fine thread lead screw	Ball screw
Max. deviation	±0,1 mm / 300 mm Stroke	±0,1 mm / 300 mm Stroke	±0,05 mm / 300 mm Stroke

Repeatable precision

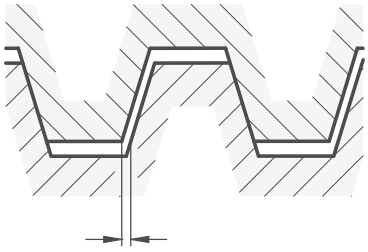
The repeatable precision indicates how precisely a position can be approached multiple times under the same conditions. In most cases, the repeatable precision is higher than the positioning precision because manufacturing tolerances have no influence on the repeatable precision. The trapezoidal and fine thread lead screws have a repeatable precision of ±0.05 mm, and the ball screw has ±0.02 mm.

Guide precision

The precision guide tubes of the linear units of steel are manufactured as per DIN EN 10305-4 and also chrome-plated. In the stainless steel version, steel precision guide tubes as per EN10216-5 are used.

Backlash on reversal

Due to the play between the thread flanks of the spindle and spindle nut, backlash (lost motion) occurs when the direction of the drive movement is changed. This backlash must be overcome before the guide element moves in the opposite direction. The backlash on reversal is required to prevent the spindle nut from seizing on the spindle. For linear units with trapezoidal and fine thread spindle, the value is 0.2 mm and for recirculating ball screws max. 0.04 mm. For recirculating ball screws, the backlash on reversal can be eliminated with pretensioning.



Self-braking

Because trapezoidal and fine thread spindles have pitch angles lower than the angle of friction, they are often self-braking. It is not possible to slide the guide element. In addition, the spindle can be secured against movement with an external spindle clamp. The clamping plates listed as accessories may be used for this.
Due to its lower rolling friction, the ball screw does not have any self-braking properties. An external spindle clamp is recommended to avoid unintentional movement.

Lifespan

The lifespan of linear units depends on the expected ambient conditions of the specific application. The following factors come into play here:

- The installation orientation
- The load to be moved
- The movement speed
- The movement frequency
- Ambient temperature
- External influences
- Compliance with the maintenance intervals

Ambient conditions

The linear units are designed for ambient temperatures from -20°C to +100°C. Large temperature fluctuations and condensing humidity should also be avoided.

Safety device for vertical linear units

It is possible to install an additional spindle nut that is carried along as a safety nut. This holds the linear unit in position in the event of damage (such as due to overloading or wear) and prevents the guide element from falling when used in a vertical orientation.

If more precise guidance is required, it is recommended to use precision double tube linear units from the product group “Double tube linear units 2C”. The round guides are fastened to the end pieces with a non-positive connection by means of tapering, resulting in higher precision.

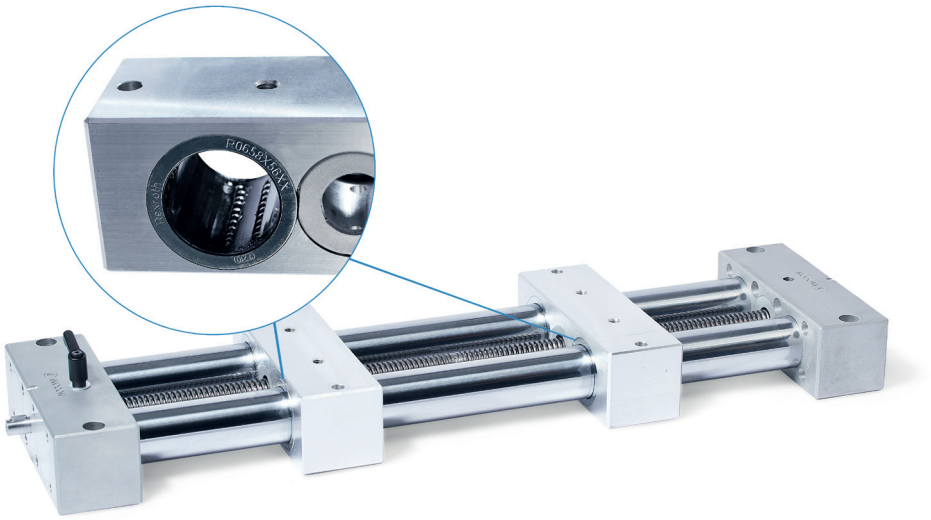
The round guides of the precision double tube linear units are available with either chrome-plated steel or bright stainless steel precision tubes or with hard-chrome-plated and polished solid shafts.

The center spindle with ball bearings on both sides can be designed as a trapezoidal or fine thread spindle or as a recirculating ball screw. The force transmission between the recirculating ball screw and the ball screw nut takes place via rolling elements. This makes it possible to adjust the ball screw to eliminate backlash and achieve higher precision movement. The lower rolling resistance also reduces wear and the required driving force.

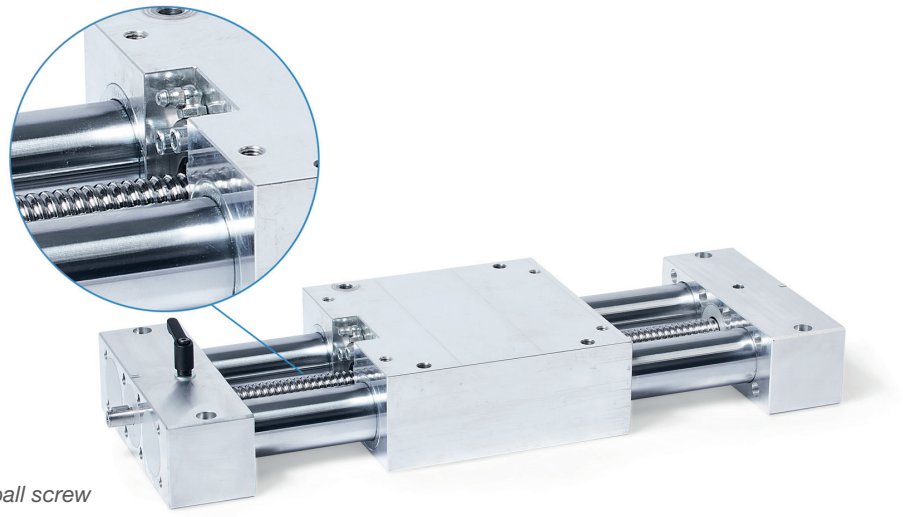
The guide elements have either a sliding or roller guide.

Precision double tube linear units can be divided into three types, each available with single or double guide elements:

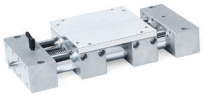
- **Linear units with one guide element:** the guide element is moved along the guide tubes by the spindle thread.
- **Linear units with two opposing guide elements:** two guide elements move symmetrically along the guide tubes due to different thread directions.
- **Linear units with two independent guide elements:** two guide elements move independently along the guide tubes due to separate spindles.



Roller slideway of the precision double tube linear units



Precision double tube linear units with recirculating ball screw

	with single guide element	with double guide element	with recirculating ball screw
Precision double tube linear units with one guide element	PD1E 	PD1D 	PD1DK 
Precision double tube linear units with two opposing guide elements	PD2E 	PD2D 	PD2DK 
Precision double tube linear units with two independent guide elements	PD3E 	PD3D 	PD3DK 

Individual customer solutions that differ from those described here can be manufactured on request.

Possible accessories for the double tube linear units include handwheels in various designs, position indicators and spacer plates for spindle clamping. The accessories are matched to the nominal diameter of the respective linear unit and are found in product group 2D.

Double tube linear units can accept high forces and torques. Depending on the features, a variety of precision levels are possible, which can be flexibly adapted to many different areas of application in machine and system building, such as for height and format adjustment.

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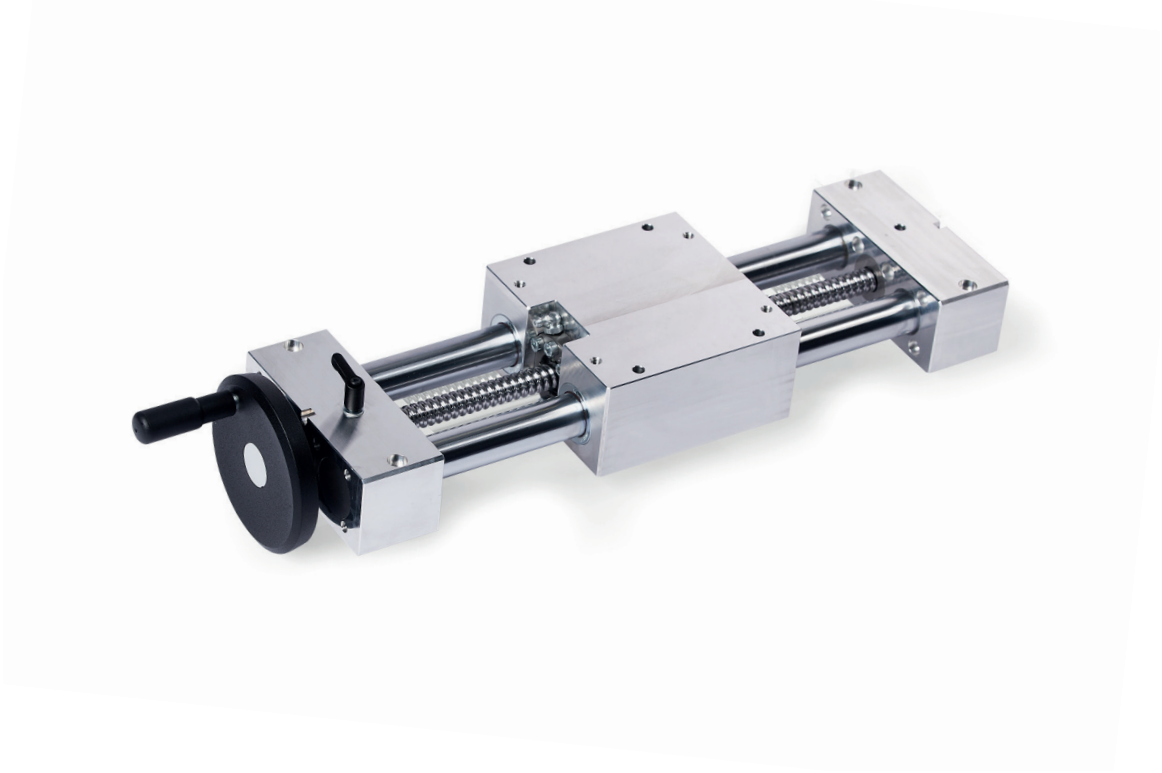

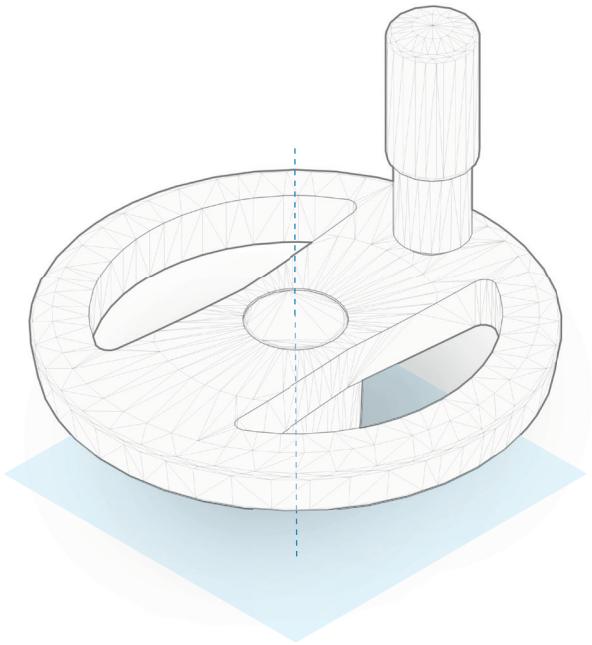

Positioning accessories

The product group “Positioning Accessories 2D” contains parts intended for extending or improving the usability of linear units.

For example, this includes handwheels for moving the linear units, position indicators for position monitoring, and clamping plates for fixation of the spindle.

The group also includes parts and assemblies used for connecting multiple linear units: drive and transfer units, bevel gears, and angle gears.

Handwheels for linear units and transfer units	VZH 							
Position indicators, mechanical or electronic	VZPM 	VZPE 						
Clamping plates	VZK 							
Torque supports	VZDR 	VZDV 	VZDD 					
Drive and transfer units	VA 							
Bevel gear wheels	YK 							
Angle gears for single tube linear units	YLS 	YTS 						
Angle gears for double tube linear units	YLD 							

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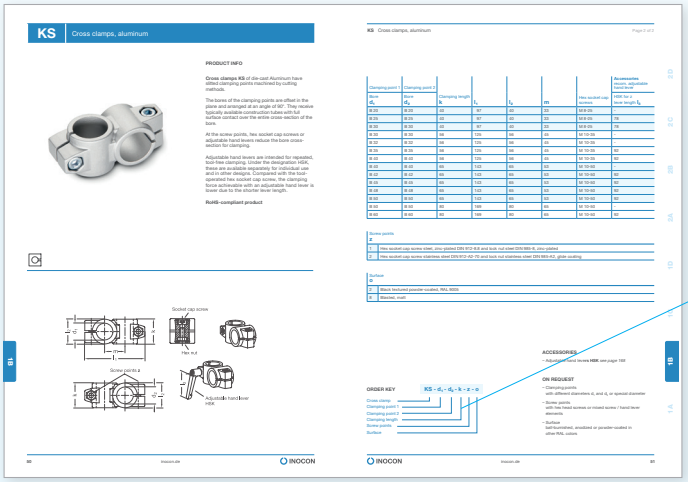
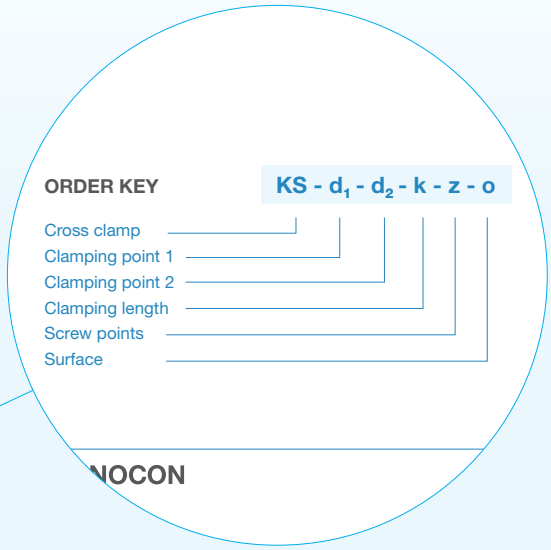


The data sheet contains detailed information about the product.



The order key shows you how to compose your individual article number from the different table values.

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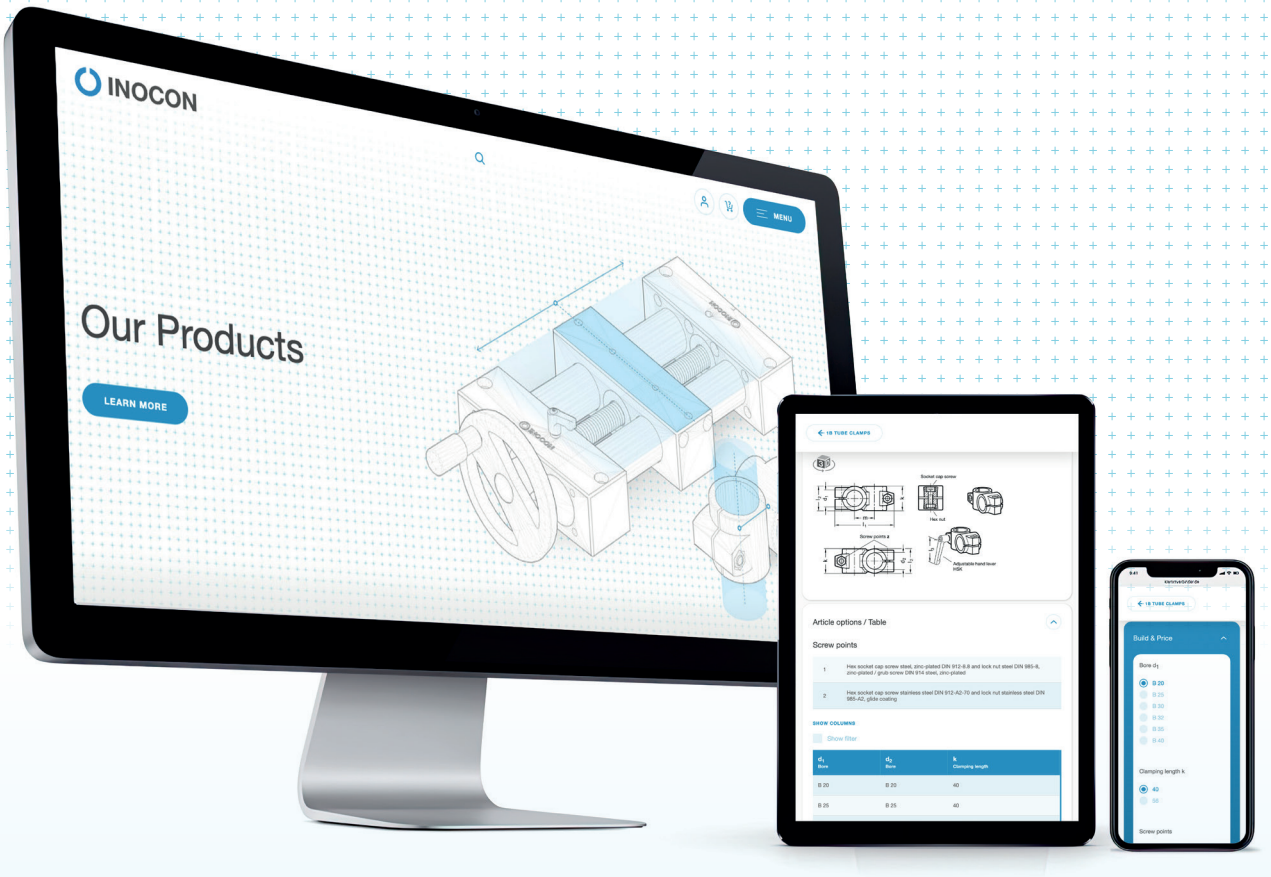

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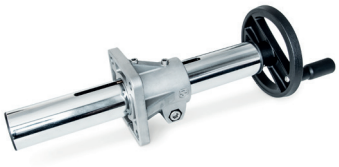


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