

8 mm



## Thin fronts, easily assembled

The first fixing system for thin fronts  
for lift systems, doors and pull-outs

[www.blum.com](http://www.blum.com)



# Rediscover simplicity

Minimalist design creates room for inspiration. Broaden the range of possibilities for implementing trends in kitchen manufacturing. The first fixing system for thin fronts for lift systems, doors, drawers and pull-outs makes minimalist cabinetry design simple.

 **blum**





GOLD  
AWARD  
2018



reddot award 2018  
winner

# Easily implemented: three applications

We have developed a fixing system that you can use to implement a total of three applications: lift systems, doors and pull-outs. Cabinetry impresses with thin fronts and proven Blum functionality – in all living areas.

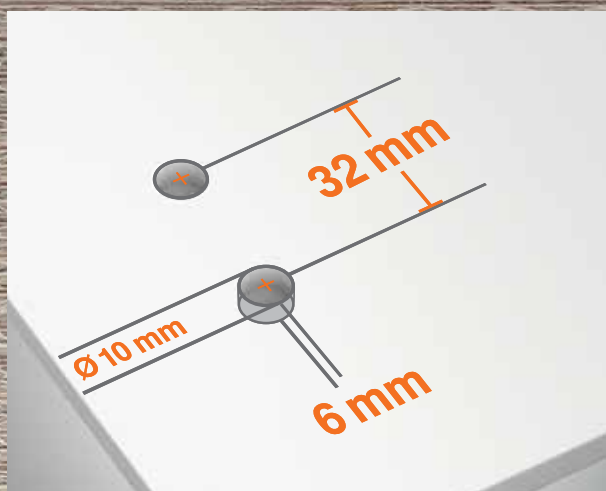






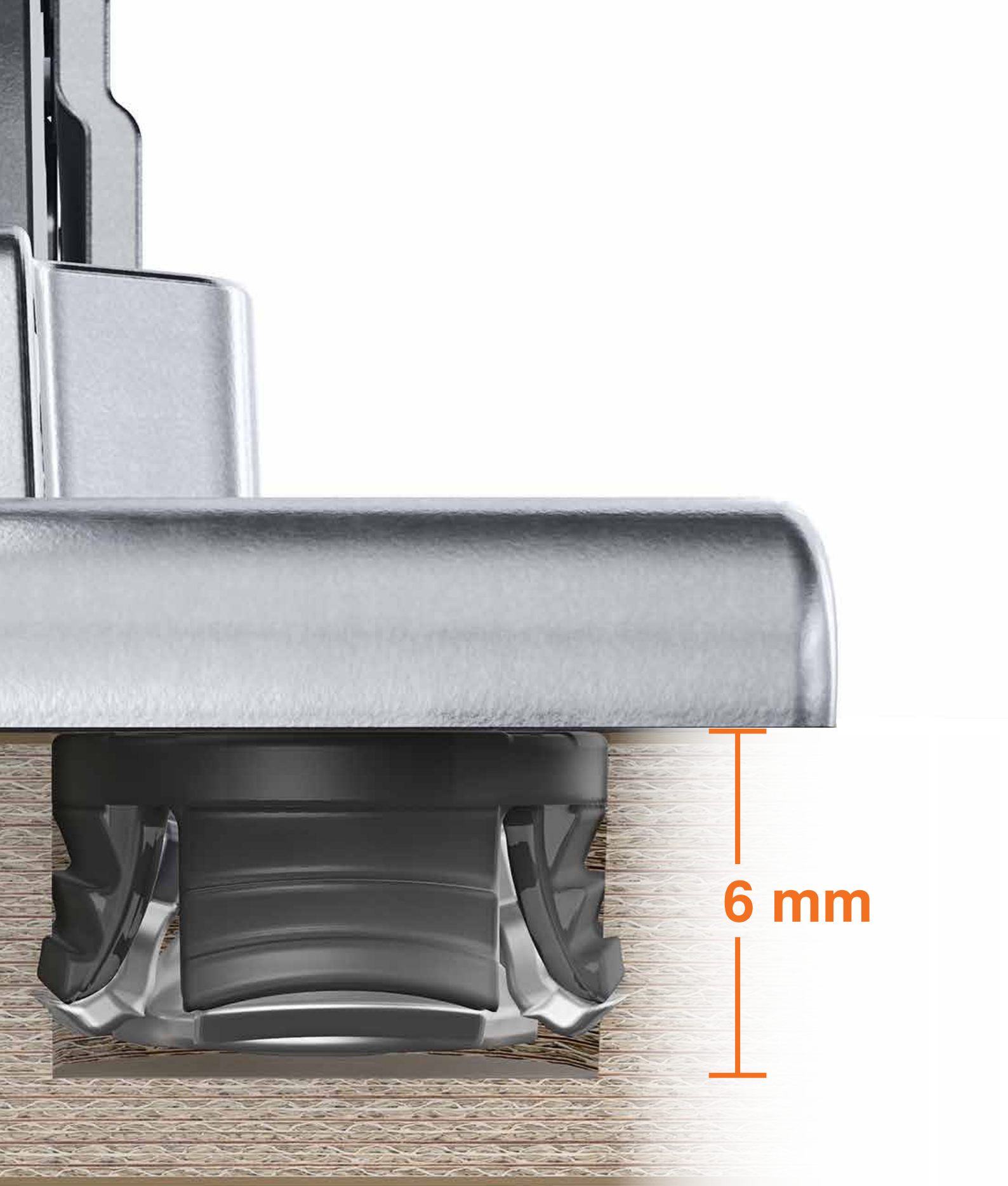
# An easily assembled system

Our new products for thin fronts are based on EXPANDO T. A steel pull-in anchor ensures a secure fit for harder materials while plastic jaws secure the fit for softer materials. EXPANDO T is fixed in a drilling with a diameter of 10 mm and a drilling depth of just 6 mm.



## Assembly without boss drilling

EXPANDO T is fastened in a drilling with a diameter of 10 mm and a drilling depth of just 6 mm. There is no need for any boss drilling – which is a major plus when using hard materials.




# Assembly made easy

Lift system, door and pull-out – with the new fixing system all cabinetry with thin fronts will have one thing in common: assembly and adjustment are simple and convenient. Drill, insert, secure with screws, and that's it.




With the new fixing mechanism from CLIP top BLUMOTION for thin doors, we have succeeded in integrating the BLUMOTION functionality into hinges – without any need for a hinge boss. Cabinetry with inner pull-outs can be implemented with this hinge because of zero-protrusion.





Chosen lift system types –  
AVENTOS HK top, HS and HL –  
can be implemented with the fix-  
ing system for thin fronts – with  
an unchanged fixing position.



The narrow design of  
LEGRABOX drawers and pull-  
outs is accentuated to full effect.  
Because of identical fixing  
positions it takes very little time  
to assemble the front.



 **blum**<sup>®</sup>

# Easily combined materials

Our fixing system EXPANDO T for thin fronts from 8 mm is suitable for many materials and even allows for exceptional design ideas. Surprise your customers with customised cabinetry.



MDF



MDF



MDF



Veneered chipboard



Veneered chipboard



HDF



HPL



HPL



Mineral composite



Mineral composite



Concrete



Quartz composite



Natural stone



Cement fibre board



Ceramic



Ceramic











**CLIP top BLUMOTION for thin doors**  
EXPANDO T for hinged doors with materials 8-14 mm



**CLIP top BLUMOTION for thin doors**  
Zero-protrusion allowing for inner drawers and pull-outs











**AVENTOS HS**  
EXPANDO T  
fixing system for  
overhead cabinets  
with thin front  
materials.



# An easily available range

A single fixing system for three applications with thin fronts makes product selection and ordering significantly easier. Implement different lift system types, LEGRABOX pull-outs with different heights as well as conventional door applications – with few components.




- **Fixing system EXPANDO T** pre-assembled
- for various materials
- for fronts of 8 mm or thicker
- for 3 different applications (lift systems, doors, pull-outs)

## Order Specification


### Lift systems

#### AVENTOS front fixing bracket

		
	for HK top, HS and HL	<b>20S42T1</b>
	Standard Blum AVENTOS fixing positions apply	


### Box systems

#### LEGRABOX front fixing bracket

		
	M	<b>ZF7M70T2</b>
	K	<b>ZF7K70T2</b>
	Standard Blum LEGRABOX fixing positions apply	


### Hinge systems

#### CLIP top BLUMOTION for thin doors

	CLIP top BLUMOTION 110° for thin doors	<b>71B453T</b>
	CLIP top 110° unsprung for thin doors	<b>70T453T.TL</b>
	Cover cap for thin door hinge - Blum	<b>70.4503.BP</b>
	<b>CLIP top BLUMOTION 110° hinge for thin doors - Onyx black</b>	<b>71B453T</b>
	<b>Cover cap for thin door hinge - Onyx</b>	<b>70.4503</b>
	For planning information see pages 20 - 21.	

### Other

#### EXPANDO T – single

		
		<b>70T4532T</b>

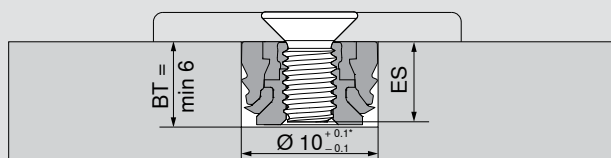
### Special drill bits

#### EXPANDO T - Drill bits for mineral composites and HPL

	L/H ø10mm Red, 57mm length	<b>M01.ZB10.T3</b>
	R/H ø10mm Black, 57mm length	<b>M01.ZB10.T2</b>



## Drilling depth



BT Drilling depth

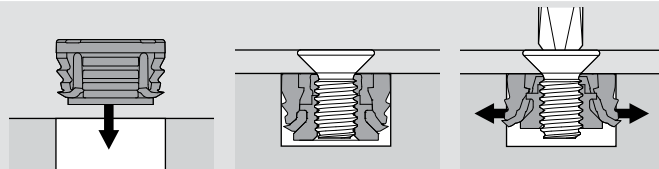
ES Screw penetration depth

ES min = 4 mm, ES max = BT - 0.5 mm

\* For stone and ceramic +0.2/-0.1 mm

Screws with M4 thread have to be used for EXPANDO T single.

## Assembly of EXPANDO T



## Area of application and assembly recommendation

Materials tested by Blum	Minimum tightening torque (Nm)
Chipboard (transverse tensile strength > 0.4 N/mm <sup>2</sup> )	1.5
MDF (transverse tensile strength > 0.6 N/mm <sup>2</sup> )	1.5
HDF	2
HPL	2
Mineral composites	2
Granite stone – Nero Assoluto	3
Artificial stone – quartz composite	3
Ceramic plates	3

EXPANDO T is suitable for fixing Blum fittings to thin front materials. With sufficient stability and strength, front materials of 8 mm and thicker may be used.

## Further information

Visit **blum.com** to learn more about our new EXPANDO T fixing system for doors, lift systems and pull-outs.

## Disclaimer of liability

Blum accepts no liability for the use of EXPANDO T in combination with materials not listed or fittings from other manufacturers.

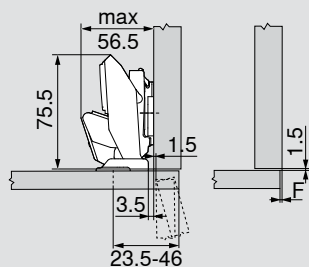
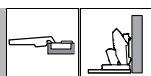
It is recommended that the assembly be carried out by an experienced furniture manufacturer.

# CLIP top BLUMOTION 110° for thin doors

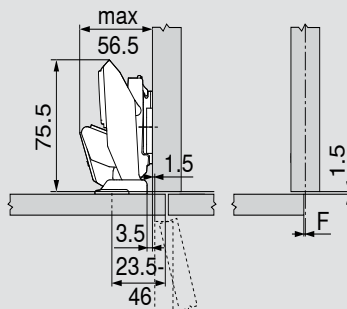
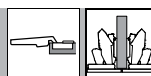


## Planning

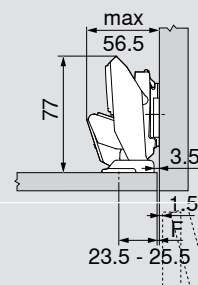
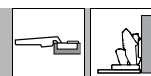
### Overlay application



### Dual application



### Inset application



Mounting plate fixing position set back by door thickness + 1.5mm

Hinge dimensions and gap calculation based on factory setting (mounting plate spacing = 0 mm)

#### Fixing position

MD	Front overlay FA (mm)																	
	-3.5	-3	-2.5	-2	-1.5	-1	2.5	4	5.5	7	8.5	10	11.5	13	14.5	16	17.5	19
0	23.5	24	24.5	25	25.5	26	29.5	31	32.5	34	35.5	37	38.5	40	41.5	43	44.5	46
3	26.5	27	27.5	28	28.5	29	32.5	34	35.5	37	38.5	40	41.5	43	44.5	46		
6	29.5	30	30.5	31	31.5	32	35.5	37	38.5	40	41.5	43	44.5	46				
9	32.5	33	33.5	34	34.5	35	38.5	40	41.5	43	44.5	46						
MD		Mounting plate spacing (mm)																
The minimum gap is always 0 mm.																		

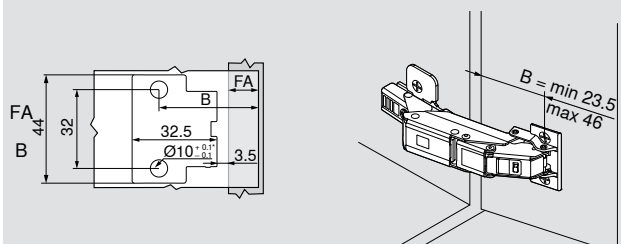
The minimum gap is always 0 mm.

#### Mounting plate distance for cabinet/door thickness

Cabinet side panel thickness (mm)		Door thickness (mm)						
		8	9	10	11	12	13	14
	15							
	16							
	17							
	18							
	19							
	20							
	21							

MD 0 mm possible  
MD 3 mm required  
MD 6 mm required

#### Fixing position/drilling pattern EXPANDO T



FA Front overlay

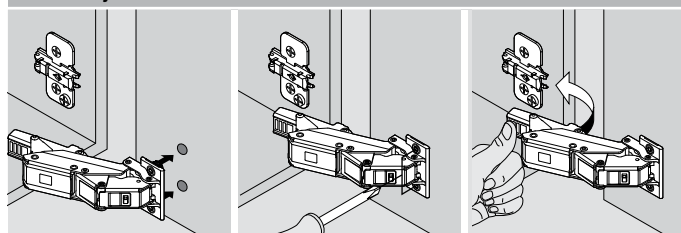
MD Mounting plate spacing (mm)

B Fixing position

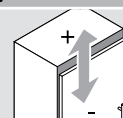
$B = FA + 27\text{mm} + MD$

\* +0.2/-0.1 mm for stone and ceramic

#### Assembly

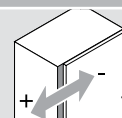


#### Adjustment

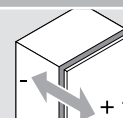


max.  $\pm 3.0$  mm

See mounting plates



$\pm 2.0$  mm



+ 3.0 mm

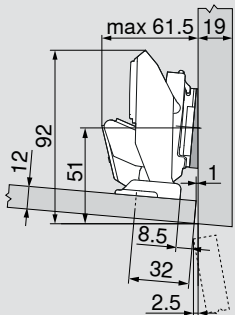

- 2.0 mm

## Planning angled applications



## CLIP top BLUMOTION 110° for thin doors

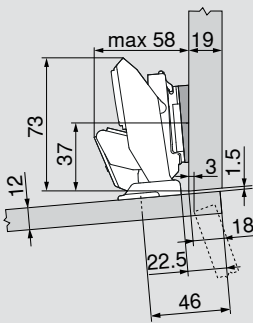




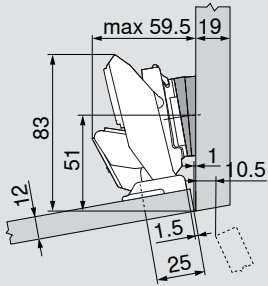

WA	Angled -5°	WA	Angled 10°			
	№ 114		№ 115	№ 116	№ 117	
	№ 110		№ 111	№ 112	№ 113	
WA angled application						



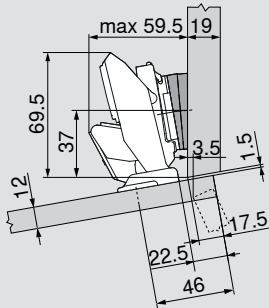
№ 112		
-5°		
		
min. 20		
Description	Space (mm)	Part no
Mounting plate	0	173H7100
Angled spacer	-5°	171A5500

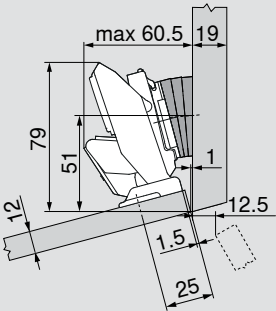
№ 108 -5°		
Description	Space (mm)	Part no
Mounting plate	0	173H7100
Angled spacer	-5°	171A5500

№ 113		  min. 20
5°		

№ 109		
5°		
		
min. 20		
Description	Space (mm)	Part no
Mounting plate	0	173H7100
Angled spacer	+5°	171A5010

№ 114		
10°		
		
		
min. 25		
Description	Space (mm)	Part no
Mounting plate	0	173H7100
Angled spacer	+5° x 2	171A5010

№ 110		  min. 25
10°		
		
Description	Space (mm)	Part no
Mounting plate	0	173H7100
Angled spacer	+5° x 2	171A5010

№ 115		
15°		
Description	Space (mm)	Part no
Mounting plate	0	173H7100
Angled spacer	+5° x 3	171A5010

№ 111		
15°		
min. 30		
Description	Space (mm)	Part no
Mounting plate	0	173H7100
Angled spacer	+5° x 3	171A5010

# The company Blum

Founded over 60 years ago by Julius Blum, Blum is a family-owned company that operates on an international scale. Its strategic business segments include lift, hinge and pull-out systems. All our product developments focus on perfecting motion.

[www.blum.com](http://www.blum.com)







### Blum in Austria and around the world

The company has eight plants in Vorarlberg, Austria, additional production sites in Poland, the USA and Brazil and 31 subsidiaries/representative offices. Blum supplies more than 120 markets. The Blum Group employs 8,000 people in total, 6,000 of whom work in Vorarlberg.



### Global customer benefits

"Whether manufacturer, distributor, fitter or kitchen user – everybody should personally enjoy the benefits of Blum products" – that is Blum's philosophy on global customer benefits.



### Innovations

To support customers with innovative fittings solutions and secure long-term success for the company, we need to consistently invest in research and development, in plants and facilities and in employee training. With more than 2,100 granted patents worldwide, Blum is one of Austria's most innovative companies.



### Quality

Blum's comprehensive concept of quality does not only apply to products. Services and collaboration with customers and partners should also meet the same quality requirements.



### Environment

At Blum, we believe that responsible ecological behaviour has long-term economic benefits. The longevity of products is just one of many important aspects. Other important measures include the use of environmentally friendly processes, the intelligent use of materials and prudent energy management.



### DYNAMIC SPACE

Good workflows, optimum use of storage space and top quality motion are important features of a practical kitchen. Blum's ideas for practical kitchens are designed to bring function, convenience and ergonomics to furniture interiors.





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**ISO 9001**  
Certified Quality  
System



**ISO 14001**  
Certified Environmental  
System



**ISO 50001**  
Certified Energy  
System

