



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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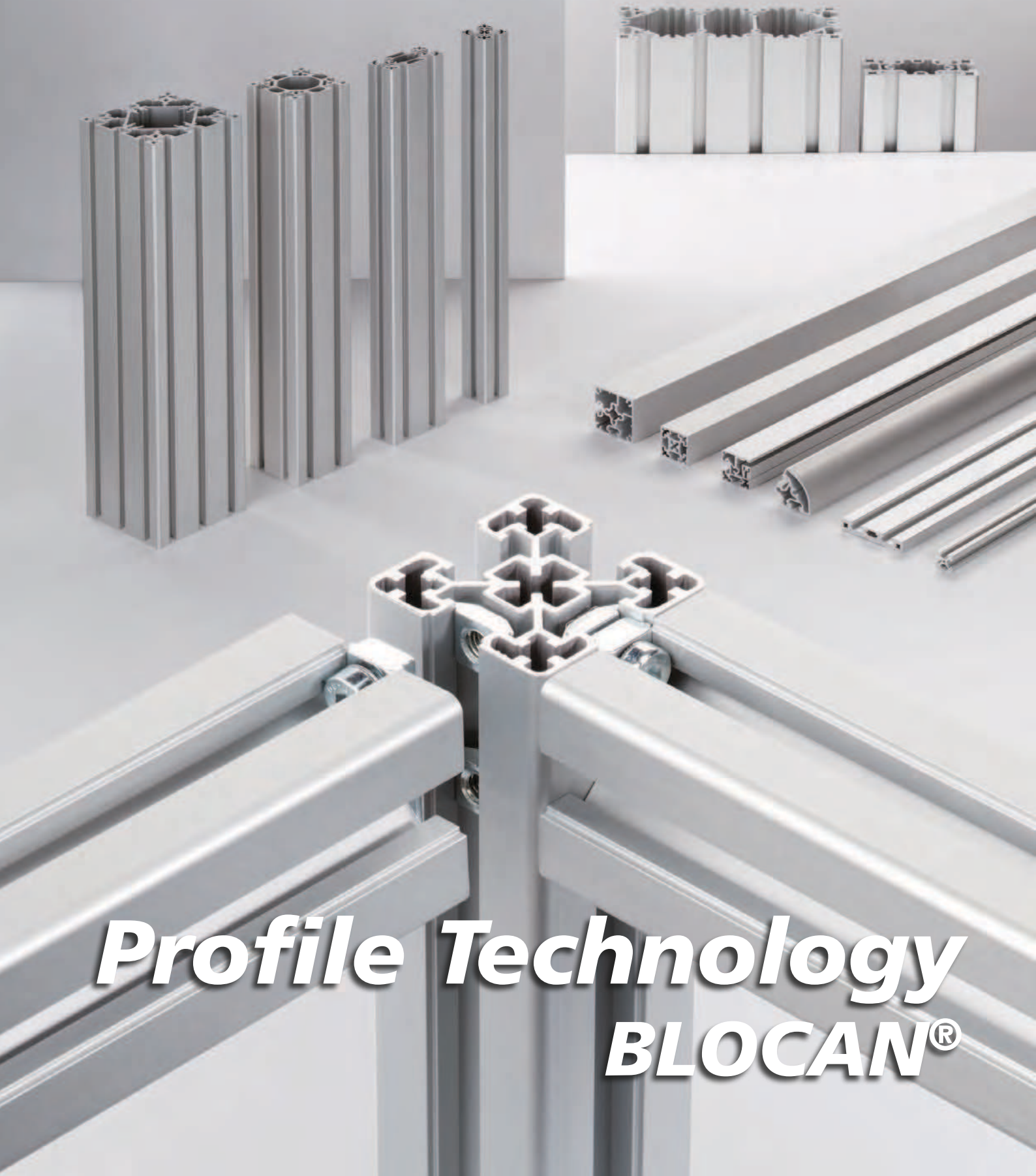


R RENOWNED
KNOW-HOW
Automation Technology



RK ROSE+KRIEGER

A Phoenix Mecano Company



Profile Technology ***BLOCAN®***

How to use this catalogue

Depending on your level of experience, we suggest you proceed as follows:

If you are new to profile technology

Please use our selection guide from page 9 onwards.
We will guide you to the right product for your particular application.

If you know all about profile technology

You will know exactly what you require and can go straight to the right product category, where you will find a product overview on the first page.

Specific search

If you are looking for a specific product, we suggest you start in our index on the last pages of this catalogue.

If you have any questions, do not hesitate to contact one of our product consultants.



Introduction

- About us
 - Service
 - Our products
 - Level of service
- from page 4

Profile Technology selection guide

from page 9

- High-calibre combinations (What is Profile Technology?)
- Three steps to your recommended product (How do I find the right product?)

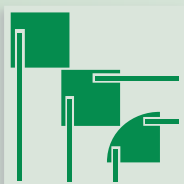


Structural profiles

from page 22

With slots on all sides

- Stable, versatile structures



Functional profiles

from page 172

Visible, frame, special profiles

- Added visual and functional value



Heavy duty profiles

from page 374

- Heavy loads with maximum stability

Safety guards

from page 406

RK Easywork

from page 464

- Assembly workstation system

Appendix

from page 478

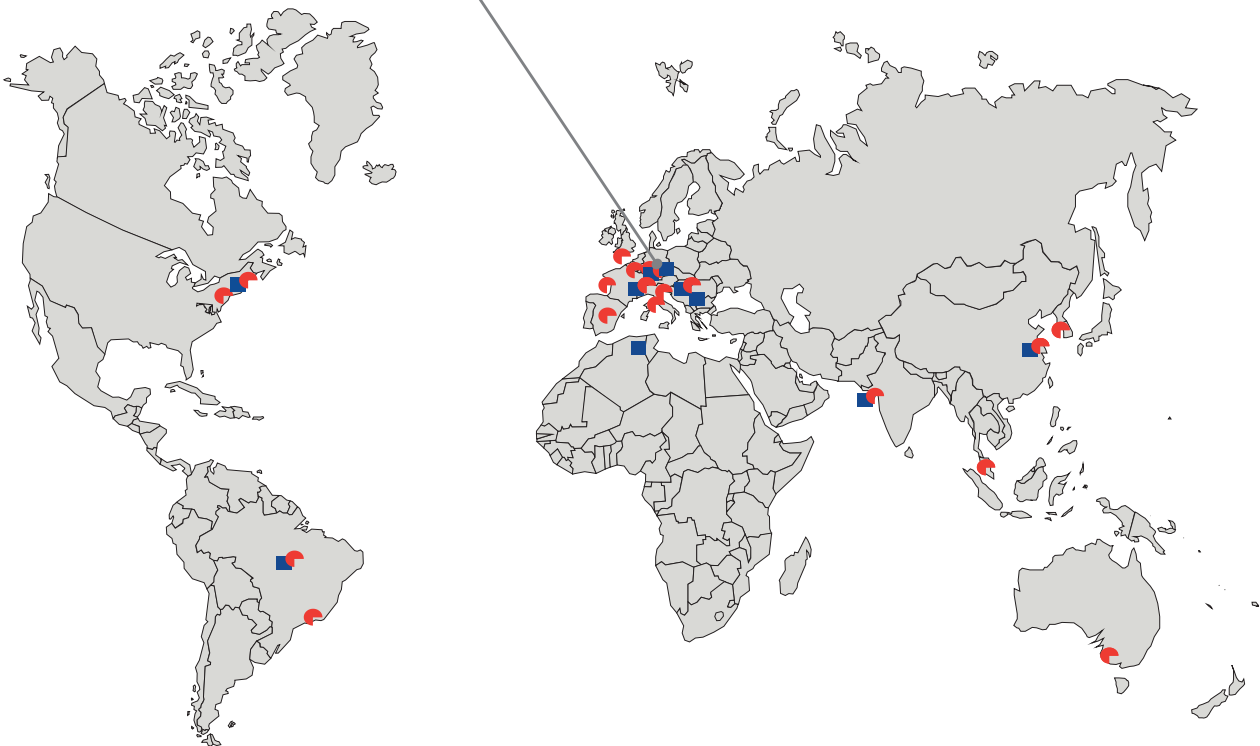
- Tools
- Application examples
- Fax enquiry
- Index

About us

As a subsidiary of the global Phoenix Mecano AG, we offer an unrivalled range of products in the field of linear, profile, connecting and module technology. With decades of experience and expertise in a huge range of industrial applications, you need look no further for a highly competent partner. From the first point of contact through to delivery, we focus entirely on your requirements. Individual advice and short delivery periods are two central priorities of our customer-focused corporate philosophy. We want our customers to share in our success and look forward to being your strategic partner.



Head Office: Germany, Minden / Westph.
✓ Company sales representatives
✓ Distributors and system partners



Available around the globe.

- ✓ Profit Centre within Phoenix Mecano
- ✓ Sales and system partners

- = Production facilities
- = Distribution companies



RK ROSE+KRIEGER

A Phoenix Mecano Company

Our product ranges

LINEAR TECHNOLOGY

- ✓ Linear axes
- ✓ Manual guide units
- ✓ Electric cylinders
- ✓ Lifting columns
- ✓ We can move loads for you of up to 3 t and 12 m dynamically, reliably and with great precision

Movement and positioning



CONNECTING TECHNOLOGY

- ✓ Fittings for the secure clamp connection of round and square tubes
- ✓ Elements made of aluminium, stainless steel and plastic
- ✓ Sizes from 8 mm to 80 mm

Clamp and release solutions



PROFILE TECHNOLOGY

- ✓ The tried and tested BLOCAN® aluminium assembly system, with profiles offering cross-sections from 15 mm to 320 mm, for a broad spectrum of applications
- ✓ Connecting technology with an unsurpassed combination of flexibility and reliability

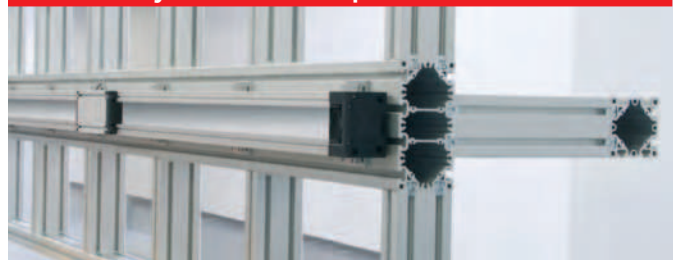
Mix'n'match



MODULE TECHNOLOGY

- ✓ We develop, manufacture and assemble
- ✓ Machine frames
- ✓ Workstations
- ✓ Machine guards
- ✓ Multidimensional linear axis modules
- ✓ Complete drive solutions

Consultancy services and optimisation

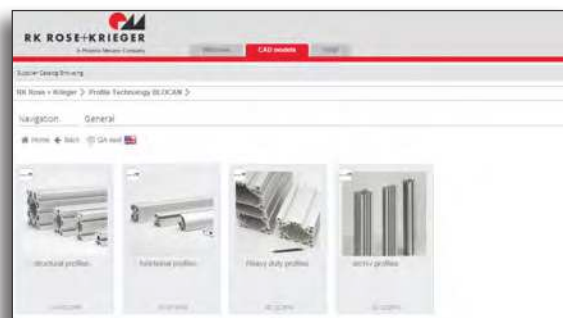


What we can do for you

We help you make the right choice:

CAD component library

To help you design your products, we give you free access to the component data stored in our Rose+Krieger component library (drawings, technical descriptions), where you can choose between around 60 different file formats (2D/3D). The link to our component server can be found on our web site at: www.rk-rose-krieger.com/deutsch/service/cad-daten.html



In-house RK product consultancy

The RKinfovan – our showroom on your doorstep. With more than 20 presentation boards containing exhibits and functional samples and a range of applications from the world of drive and linear technology, our infovan provides a complete cross-section of the RK products currently available.

Our Key Account managers and sales consultants are happy to visit you on site and help you draw up practical solutions.



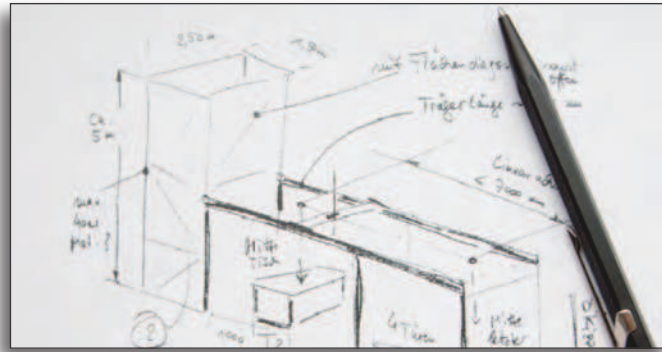
RK website: www.rk-rose-krieger.com

At our website you will find a wealth of information on our company and our products. You will also find the details of company contacts in your area and the latest catalogues (PDF format) available to download.



If you want to focus your resources on other tasks and are looking for an expert partner you can rely on, our specialists will work closely with you to develop tailor-made solutions. If you wish, we can also assemble and commission the units on site.

You make a sketch of your requirements.



Our product specialists will develop a solution for you.



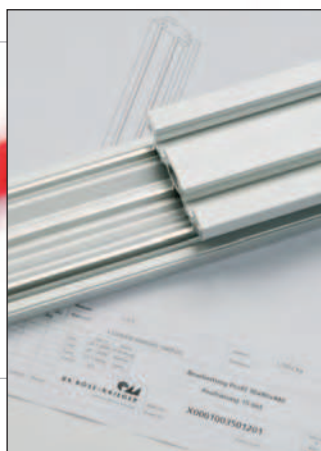
We can deliver your turnkey solution or assemble and commission it for you on site.



Level of service

You decide...

100%



Different models, modified standards

Our expertise at your fingertips. Our expert consultants can recommend the optimum products modified to your requirements.



Customised developments

Are you looking for something completely new? Then we will team up with you to develop it.



Modules and systems

You require your skills and time for other tasks and are looking for a partner you can rely on.

Catalogue items

If you know what you want and take the time to browse our catalogue, you are sure to find what you're looking for in our standard range.

...what level of service you require

0%

We offer

- ✓ A broad range of compatible products
- ✓ 40 years of experience in numerous industries
- ✓ Expert advice for all your requirements
- ✓ Quality – because we deliver what we promise





Contents

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How to find the right product ...	p. 11
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RK Easywork assembly workstation system	p. 21

Selection guide

High-calibre combinations

The true calibre of a profile is characterised not by the profile itself but in the connection of the profiles to one another. Our years of application experience have enabled us to develop an industrial aluminium profile system that leaves almost nothing to be desired. Boundless creativity, maximum flexibility and proven reliability offer a broad spectrum of possible solutions for the task in question. You can utilise all the benefits of our system – in particular the option for connection of profiles without the need for mechanical machin-

ing. A system is the sum of all its parts, and a successful system is based on strong individual parts.

And to help you select the most suitable range of products for your requirements quickly and easily, we have developed a system that is strictly task-oriented. Within the selected range, you can then determine the ideal size and model based on your performance requirements.

And if you need any further help, we are only too happy to assist.

No need for drill holes...



these are held together without!



The three steps to your product recommendation

Step 1:



Your application takes centre stage

- Stable, versatile structures
- Added visual and functional value
- Heavy loads with maximum stability

Step 2:



Which dimension do you need?

- Stability
- Section modulus
- Mass optimization

Step 3:

Which function do you need?

- Configuration (square, rectangular, rounded, angular)
- Number of slots
- Easy assembling
- Additional functions: visible design or frame profiles

...follow our system and the terms are self explanatory.



Stable versatile structures

Features:

- ✓ Fixing slots on all sides
- ✓ Unlimited applications
- ✓ Minimal design effort
- ✓ Cost optimisation



Structural profiles

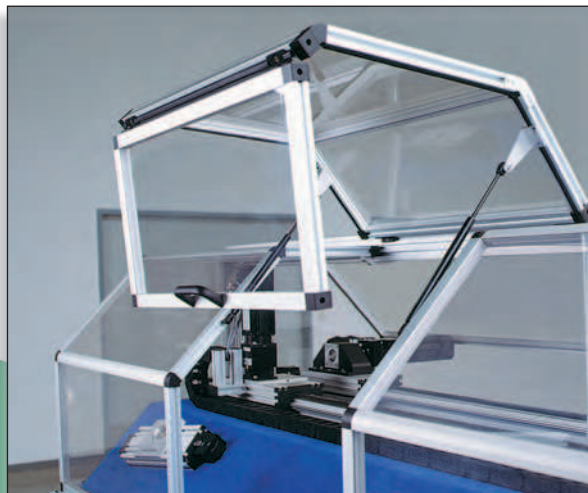
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Your app
takes cent



Functional profiles

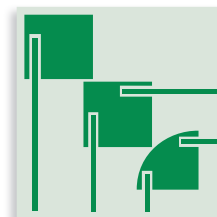
continued on page 16



Additional visual and functional benefit

Features:

- ✓ Attractive design
- ✓ Many additional functions
- ✓ Flexible



lication re stage

Heavy Duty profiles

continued on page 18



Heavy duty with highest stability

Features:

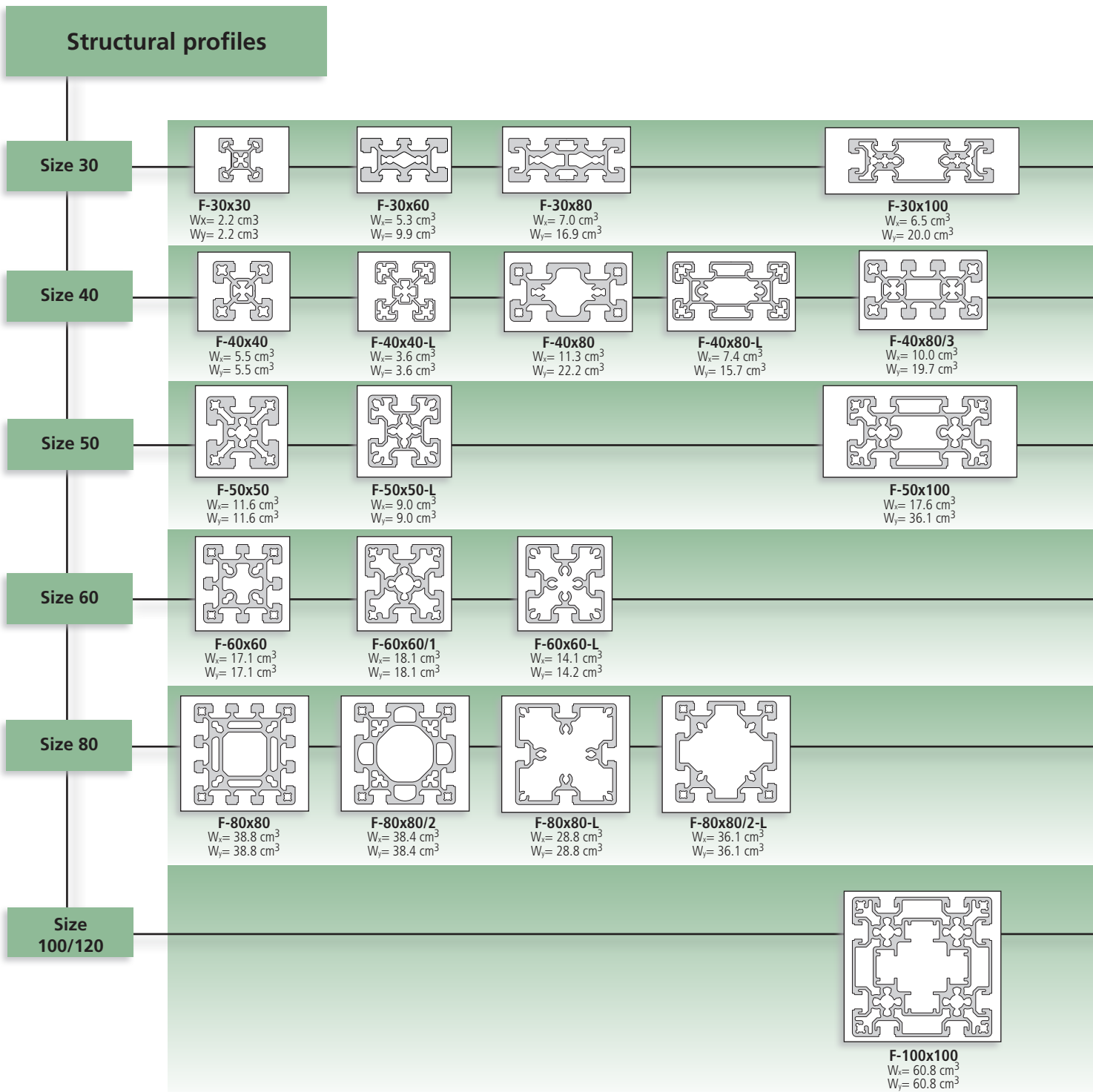
- ✓ High dynamic
- ✓ Large structures
- ✓ Easily transportable

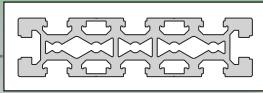




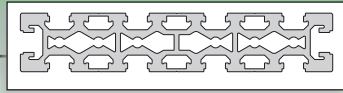
A variety of profile geometries and sizes allows optimal adaptation to prevailing technical and economic conditions. The Structural profiles set their focus on optimal connection options (slots on all sides) and the associated unlimited application options. The BLOCAN® Profile System, which is made from aluminium, offers consistent flexibility

and cost-efficiency. By adapting the relevant profile size to the load to be borne, it is possible to create a technically correct design which is also optimally cost-effective. With such a broad spectrum of profile cross-sections and a comprehensive range of accessories, no task is beyond the realms of possibility.

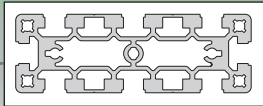




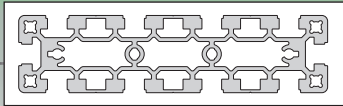
F-30x120
 $W_x = 10.2 \text{ cm}^3$
 $W_y = 36.6 \text{ cm}^3$



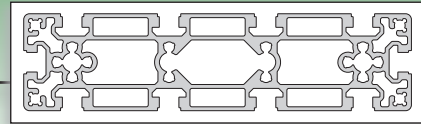
F-30x160
 $W_x = 13.3 \text{ cm}^3$
 $W_y = 64.1 \text{ cm}^3$



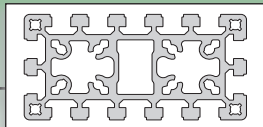
F-40x120
 $W_x = 14.7 \text{ cm}^3$
 $W_y = 42.2 \text{ cm}^3$



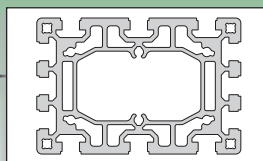
F-40x160
 $W_x = 19.9 \text{ cm}^3$
 $W_y = 72.4 \text{ cm}^3$



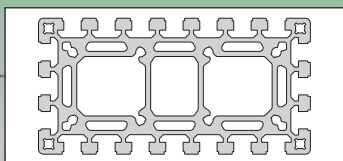
F-50x200
 $W_x = 32.1 \text{ cm}^3$
 $W_y = 122.4 \text{ cm}^3$



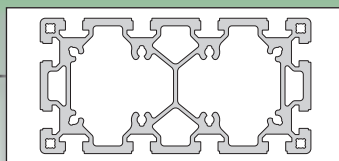
F-60x120
 $W_x = 31.5 \text{ cm}^3$
 $W_y = 62.0 \text{ cm}^3$



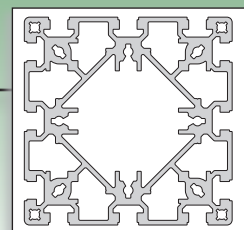
F-80x120
 $W_x = 60.6 \text{ cm}^3$
 $W_y = 83.5 \text{ cm}^3$



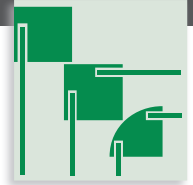
F-80x160
 $W_x = 77.4 \text{ cm}^3$
 $W_y = 140.9 \text{ cm}^3$



F-80x160-L
 $W_x = 72.8 \text{ cm}^3$
 $W_y = 128.1 \text{ cm}^3$



F-120x120
 $W_x = 110.8 \text{ cm}^3$
 $W_y = 110.8 \text{ cm}^3$



Rather than merely offering the Structural profiles (with slots on all sides), a modern aluminium profile system should also be able to offer a range of profiles which is functional and visually attractive. Without losing sight of RK Rose+Krieger's philosophy (connection without machining), we have incorporated a series of functional and special profiles made from al-

uminium into our product portfolio which fulfil this requirement. We have divided the so-called "functional profiles" into three sub-categories. Depending on the profile geometry, the visible, frame and special profiles can be assembled using the appropriate connecting technology, and no further machining of the profiles is required whatsoever. Cut

the profiles to length and assemble, and reduce the effort required for planning and assembly to a minimum in the process!

Visible design profiles

Size	Profile	W_i	W_j
Size 30	F-G 30x30	2.1 cm ³	2.1 cm ³
	F-GG 30x30	2.1 cm ³	2.1 cm ³
	F-2G 30x30	2.2 cm ³	2.4 cm ³
	F-3G 30x30	2.2 cm ³	2.4 cm ³
	W 30-30	1.5 cm ³	1.8 cm ³
	W 30-45	1.4 cm ³	1.7 cm ³
	W 30-60	1.8 cm ³	1.9 cm ³
	W 30-90	2.9 cm ³	2.9 cm ³
	F-R 30	1.2 cm ³	1.2 cm ³
Size 40	F-G 40x40	4.8 cm ³	4.9 cm ³
	F-GG 40x40	4.8 cm ³	4.8 cm ³
	F-2G 40x40	4.6 cm ³	4.7 cm ³
	F-3G 40x40	4.8 cm ³	4.9 cm ³
	F-G 40x80	10.4 cm ³	20.6 cm ³
	F-GG 40x80	10.7 cm ³	22.0 cm ³
	4G-40x40	5.2 cm ³	5.2 cm ³
	4G-40x80	9.3 cm ³	19.6 cm ³
	W 40-30	3.7 cm ³	4.2 cm ³
	W 40-45	3.4 cm ³	4.2 cm ³
	W 40-60	4.2 cm ³	4.6 cm ³
	W 40-90	7.4 cm ³	7.4 cm ³
Size 50	F-G 50x50	8.6 cm ³	8.9 cm ³
	F-GG 50x50	8.4 cm ³	8.7 cm ³
	F-2G 50x50	8.3 cm ³	8.7 cm ³
	F-3G 50x50	9.0 cm ³	9.1 cm ³
	SP-50x50	8.2 cm ³	8.3 cm ³
Size 60	F-G 60x60	12.6 cm ³	12.7 cm ³
	F-GG 60x60	12.5 cm ³	12.8 cm ³
	F-2G 60x60	12.1 cm ³	13.0 cm ³
	F-3G 60x60	11.9 cm ³	13.7 cm ³
Size 80	F-G 80x80	34.8 cm ³	33.0 cm ³
	F-GG 80x80	34.1 cm ³	34.1 cm ³
	F-2G 80x80	33.3 cm ³	35.0 cm ³
	F-3G 80x120A	52.8 cm ³	77.9 cm ³



Frame profiles

Size 30

KL 30x30-3 W _i = 1.6 cm ³ W _y = 2.1 cm ³	KLD 30x40 W _i = 2.7 cm ³ W _y = 2.5 cm ³	KLE 30x30 W _i = 2.0 cm ³ W _y = 2.0 cm ³	KLW 30x15 W _i = 1.4 cm ³ W _y = 1.9 cm ³	KLW 30x30 W _i = 3.1 cm ³ W _y = 4.4 cm ³	KLW 30x45 W _i = 1.2 cm ³ W _y = 1.8 cm ³	KLW 30x60 W _i = 1.7 cm ³ W _y = 1.5 cm ³	KLW 30x90 W _i = 2.7 cm ³ W _y = 4.1 cm ³
ESP 30 W _i = 1.4 cm ³ W _y = 1.8 cm ³	ESP 30/2 W _i = 1.5 cm ³ W _y = 1.8 cm ³					STP 30 W _i = 6.1 cm ³ W _y = 3.7 cm ³	

Size 40

KL 40x40-3 W _i = 3.8 cm ³ W _y = 4.6 cm ³	KLD 40x40 W _i = 4.1 cm ³ W _y = 5.5 cm ³	KLE 40x40 W _i = 4.6 cm ³ W _y = 4.6 cm ³	KLW 40x15 W _i = 1.1 cm ³ W _y = 1.7 cm ³	KLW 40x30 W _i = 2.6 cm ³ W _y = 3.9 cm ³	KLW 40x45 W _i = 2.4 cm ³ W _y = 2.4 cm ³	KLW 40x60 W _i = 3.8 cm ³ W _y = 3.3 cm ³	KLW 40x90 W _i = 5.8 cm ³ W _y = 5.8 cm ³
ESP 40 W _i = 2.7 cm ³ W _y = 3.5 cm ³	ESP 40/2 W _i = 3.0 cm ³ W _y = 3.6 cm ³					STP 40 W _i = 9.7 cm ³ W _y = 6.1 cm ³	

Special profiles

Size 15

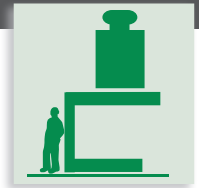
15x40 W _i = 1.3 cm ³ W _y = 3.3 cm ³	15x60 W _i = 1.9 cm ³ W _y = 7.0 cm ³	15x80 W _i = 2.5 cm ³ W _y = 11.9 cm ³	15x120 W _i = 3.6 cm ³ W _y = 25.8 cm ³	15x160 W _i = 4.8 cm ³ W _y = 44.9 cm ³

Size 20

F-20x20 W _i = 0.8 cm ³ W _y = 0.8 cm ³	F-20x40 W _i = 1.3 cm ³ W _y = 2.7 cm ³	F-R 20 W _i = 0.6 cm ³ W _y = 0.5 cm ³	F-G 20x20 W _i = 0.8 cm ³ W _y = 0.7 cm ³	F-GG 20x20 W _i = 0.7 cm ³ W _y = 0.7 cm ³	KL 20x20 W _i = 0.8 cm ³ W _y = 0.8 cm ³	KLD 20x40 W _i = 0.7 cm ³ W _y = 0.8 cm ³	KLE 20x20 W _i = 0.6 cm ³ W _y = 0.7 cm ³

Size 40

2x40 W _i = 7.9 cm ³ W _y = 11.3 cm ³	3x40 W _i = 8.8 cm ³ W _y = 14.1 cm ³	8x40 W _i = 27.6 cm ³ W _y = 27.6 cm ³



If machine structures are required to be extremely stable, they are made from steel ...!

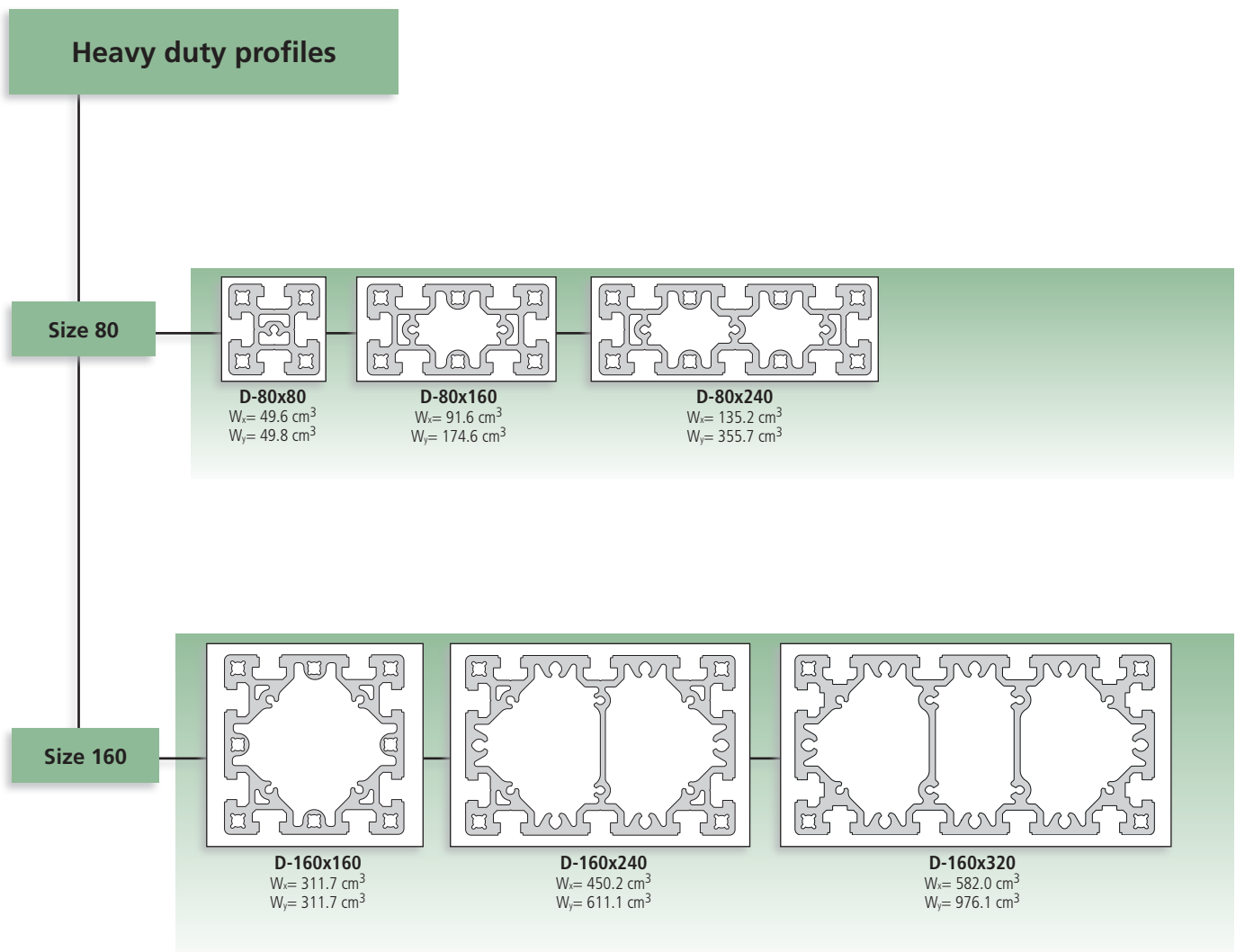
This piece of construction wisdom is now well out of date.

The BLOCAN® aluminium heavy duty profiles with a slot width of 18 mm combine with the press mount connector (patent pending) to offer many advantages in the classic field of mechanical engineering. The effective connecting technology without the need for machining, in addition to the high stability and low weight of the profiles increase the adaptability of the structure and reduce the total costs.

The demands of design engineers for flexible and light systems can no longer be fulfilled using steel as a material. Use of aluminium outside of its established stronghold in the automotive industry is increasing. The mechanical engineering industry also benefits from the innovative aluminium profile technology. In the past, the limitations of aluminium were always demonstrated when the stability of the overall structure had to fulfil particularly high requirements. With the new BLOCAN® heavy duty profiles, this is no longer a problem. The 320x160 profile is almost on a par with an IPE 360 double T-girder, even though it has smaller dimen-

sions and weighs 35% less.

The aluminium profiles in the dimensions 80x80, 80x160, 80x240, 160x160, 160x240 and 160x320 mm offer a very high bending and torsional stiffness despite their low net weight. Therefore, even large portal systems and machine frames, which until now were the preserve of steel structures, can be realised in a lightweight design made from aluminium profiles.

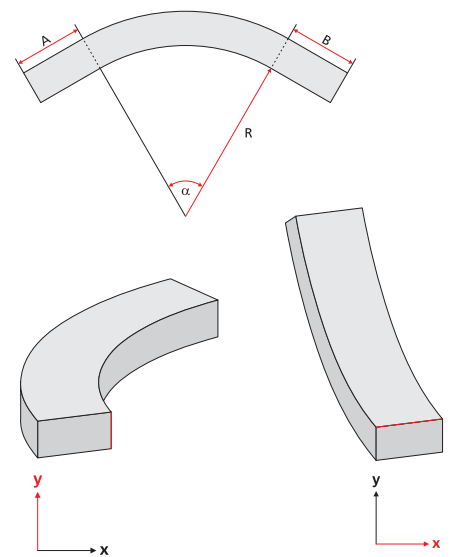
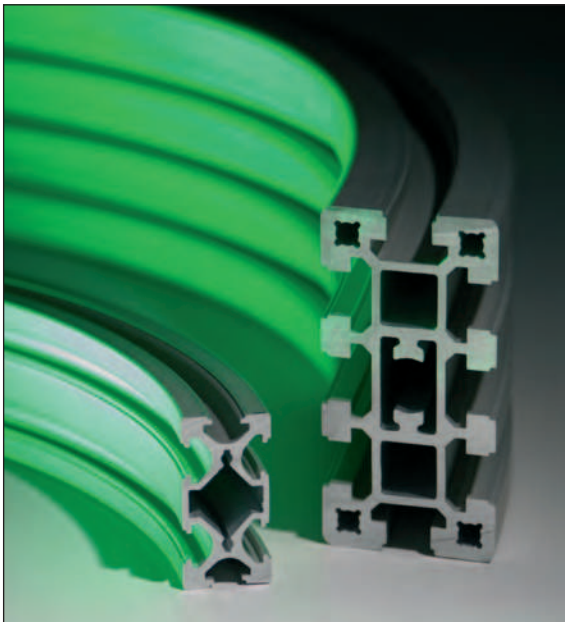


Bent BLOCAN® profiles

Bent aluminium extruded profiles allow for smaller and lighter structures. Not only that, they are being used more and more in mechanical engineering for functional and visual reasons. However, these applications call for high-precision radii and radius distributions while avoiding cross-sectional deformation.

Thanks to the CNC-controlled bending process, the profile geometry remains intact, thus allowing slot stones to be used. However, for face-to-face fixing, a straight section of 20 mm must be allowed for the fixing screws. Anodised profiles are used as standard. However, small cracks may appear

in the anodised layer of the curved sections. For this reason, we recommend anodising after bending if the aesthetic requirements are high and the radii are extremely small.



Profile	Bending axis	R_{min}
F-20x20	X Y	250
F-20x40	X	250
F-20x40	Y	250
F-R 20x20	X Y	250
F-G 20x20	X Y	250
KL 20x20	X Y	250
30x30	X Y	250
ESP 30x30	X Y	250
F-R 30x30	X Y	250
KL 30x30	X Y	250
40x40	X Y	250
40x80	X	500
40x80	Y	500
ESP 40x40	X Y	250
KL 40x40	X Y	250
F-80x80-L	X Y	500

Further profiles available on request

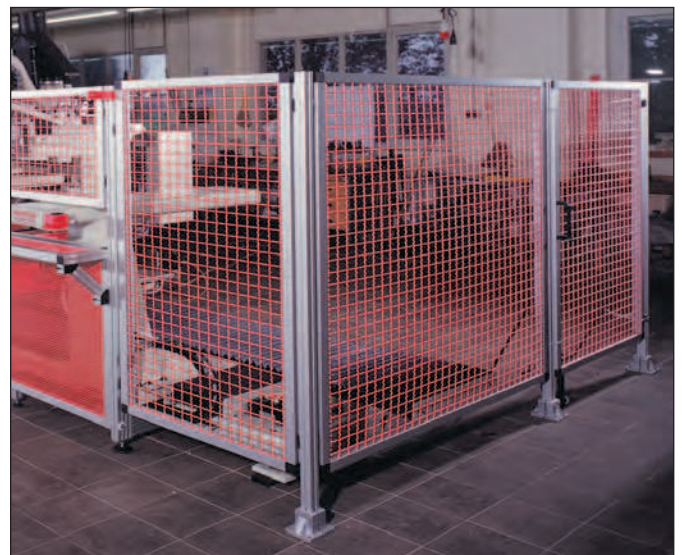
Parameters required to make an enquiry/place an order:

- Profile types
- Bending axis
- Dimension A
- Dimension B
- Radius R
- Angle

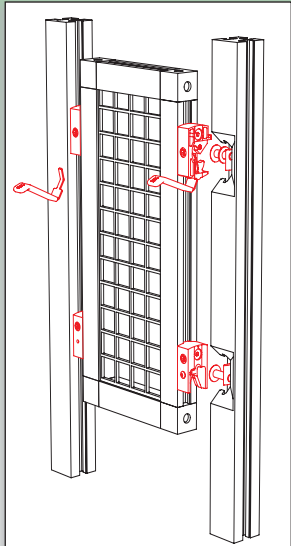
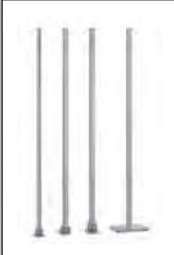





Safety guards

Safety with visual appeal

Due to the ever increasing automation of manufacturing processes and equipment, the protection of people from sources of danger is growing in importance. The BLOCAN® safety guard has a grid design and therefore reduces the effort required from the user in planning, construction and assembly to a minimum. The RK protection system complies with the new Machinery Directive 2006/42/EC. Using special Click & Safe connection elements, the safety guard elements are fixed quickly and securely to pillars made from BLOCAN® aluminium profiles which fulfil the legal requirements for safety devices.



Overview of elements

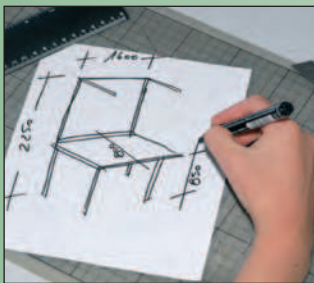
Pillars	Screen A	Screen B	Screen C	Click & Safe ...the quick and easy safety guard 
				
Hinged door	Double-wing hinged door	Sliding door	Lifting door	
				

RK Easywork workstation system

For configurable workstation systems developed to meet ergonomic and task-specific requirements.

With the RK Easywork selection tool, a complete assembly work table can be configured online to meet ergonomic and task-specific requirements. Step by step, the selection tool guides you through all of the options on the way to creating your ideal workstation. Additional lighting, holders for grab containers, foot rests, standing chairs and ESD accessories are all available, along with other useful devices. The RK Easywork workstation system is based on RK Rose+Krieger's complete modular system. BLOCAN® Structural profiles made from aluminium and the electrically driven lifting columns offer a perfect combination for the creation of high-quality table concepts. Customers can choose between the simplest static tables or electrically height-adjustable work tables and configure their own combinations.

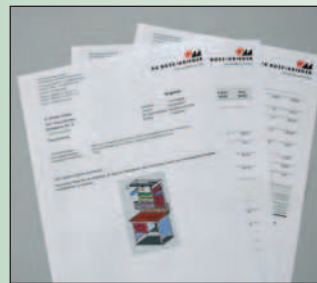
Step 1:
Calculate the dimensions



Step 2:
Select workstation online



Step 3:
We prepare a detailed
quotation

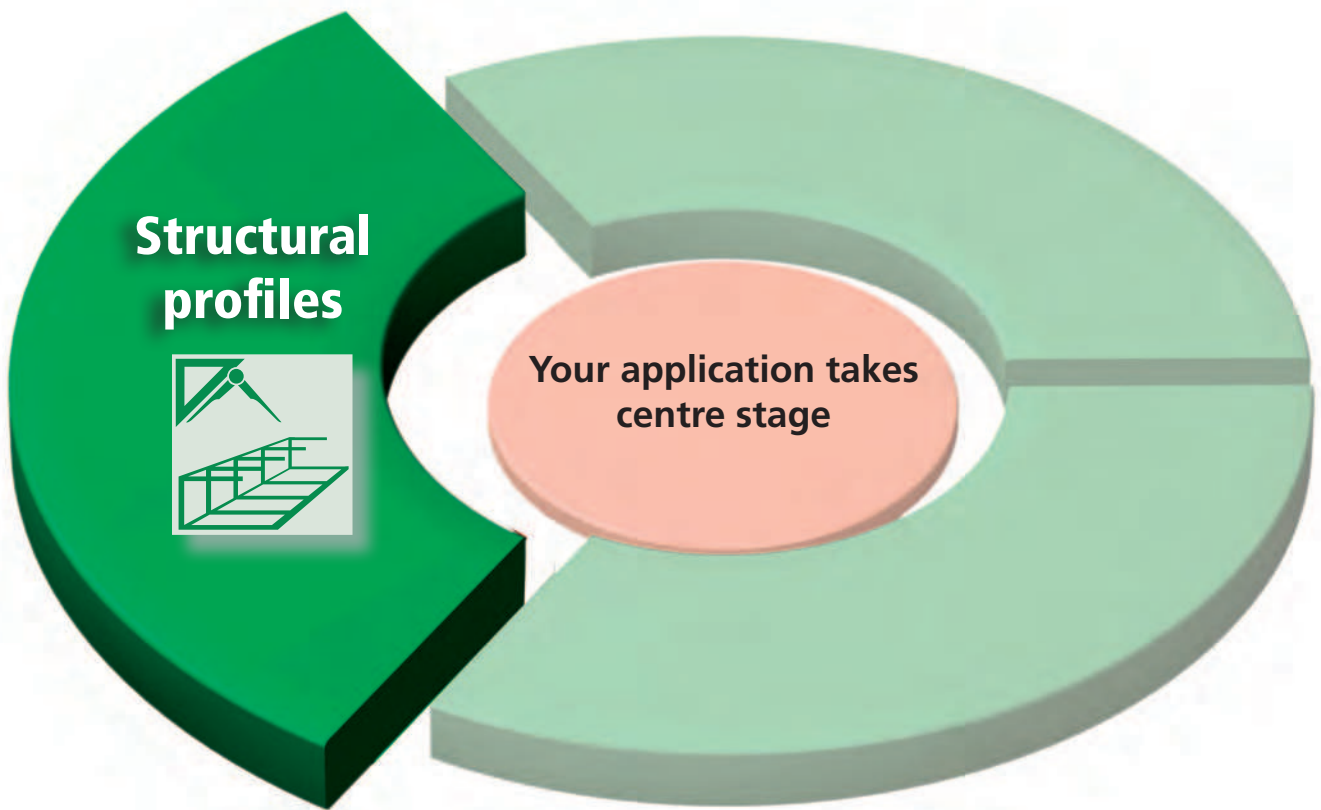


Step 4:
We deliver a fully
equipped worksta-
tion



The basic types





Features:

- ✓ Fixing slots on all sides
- ✓ Unlimited application options
- ✓ Minimal effort required in construction
- ✓ Cost optimisation



Stable, versatile structures

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Connection techniques p. 47

Slot stones / screws and accessories p. 85

Profile covers p. 97

Panels and accessories p. 105

Feet / castors and accessories ... p. 122

Fittings p. 138

Conveying elements p. 158

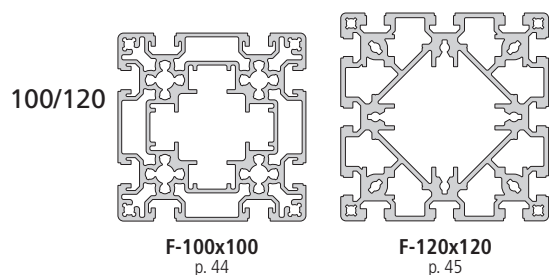
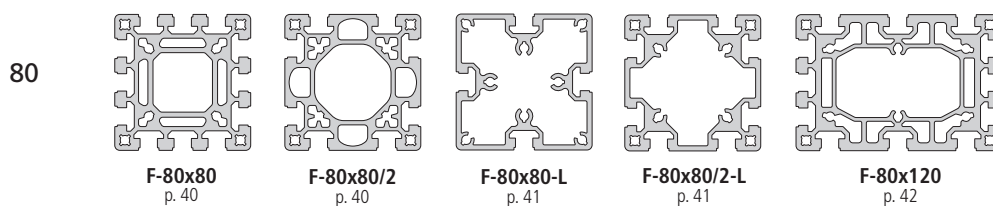
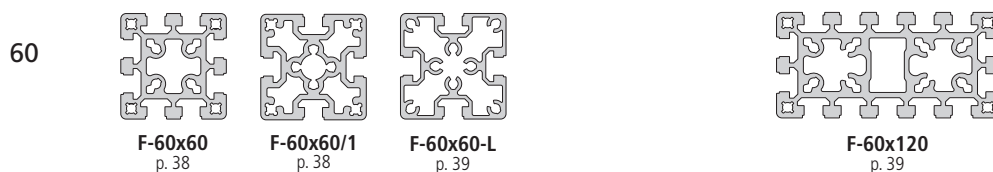
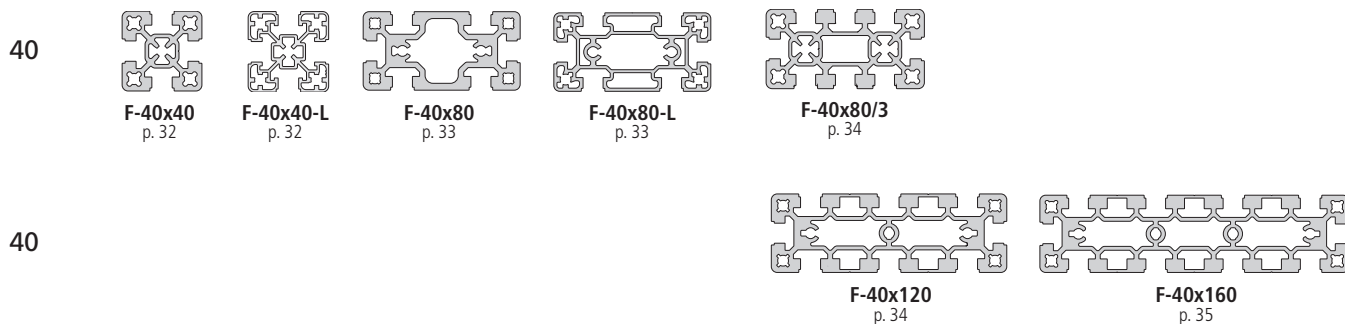
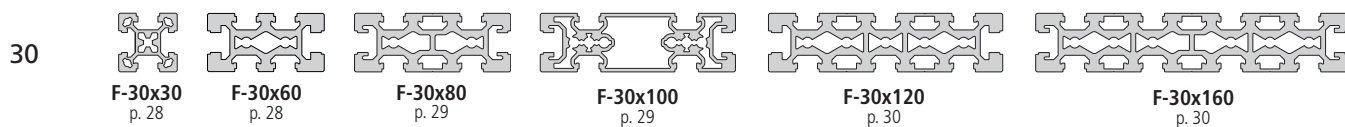
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Structural profiles

Structural profile overview

Sizes





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Connection techniques

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Applications

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