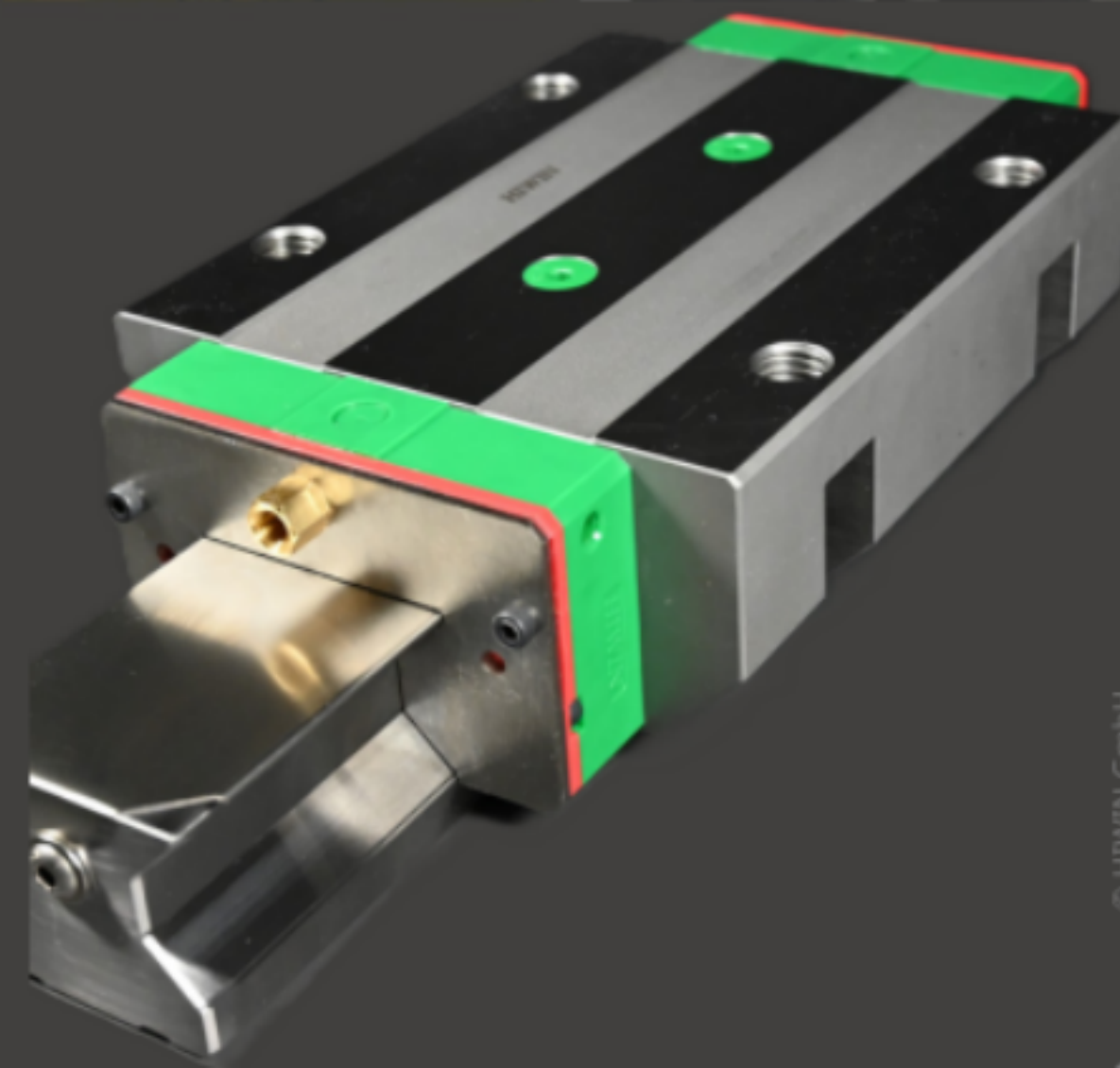


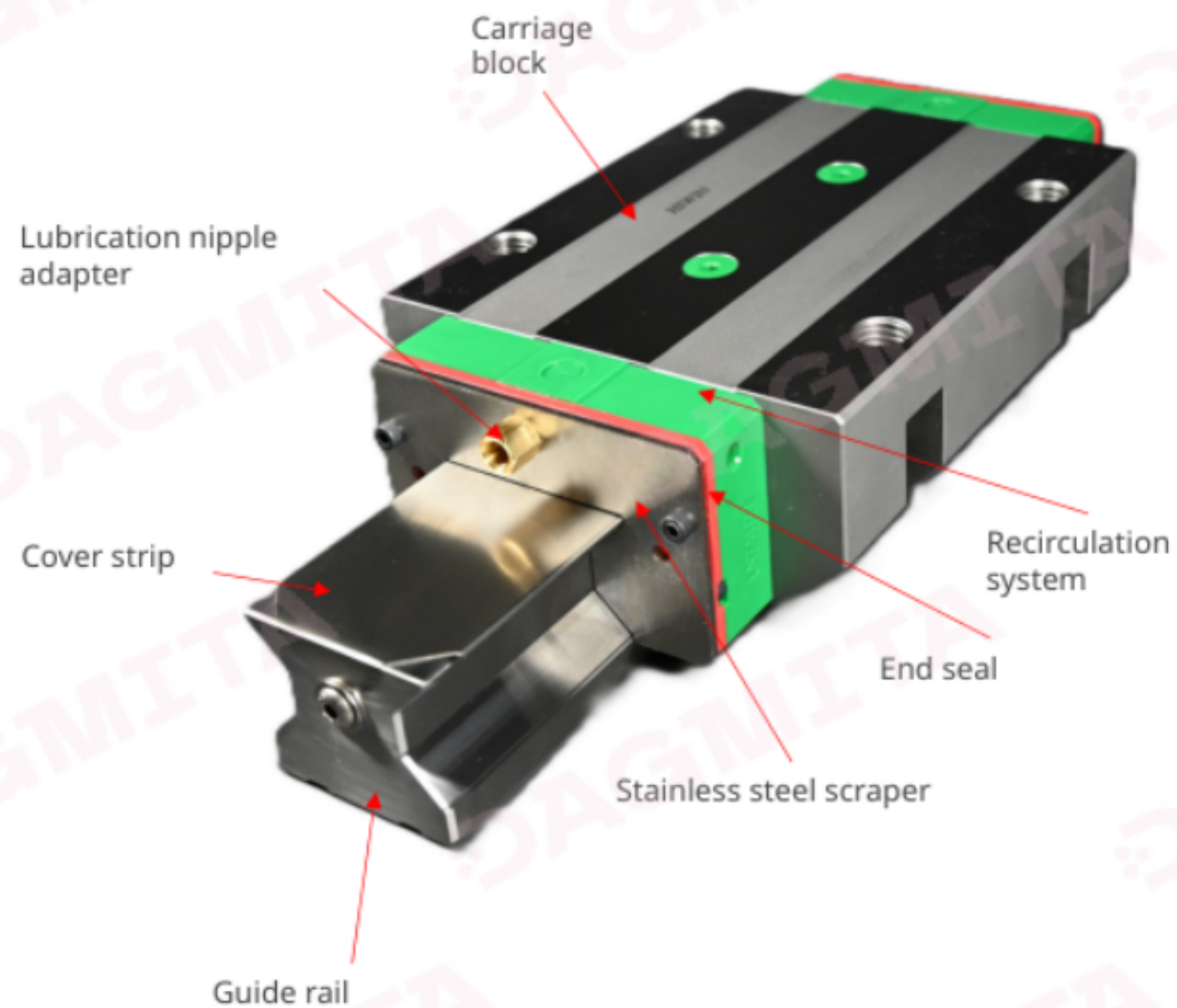
HIWIN®



UR-NEXT-GENERATION ROLLER LINEAR GUIDE SERIES



Structure of the UR series

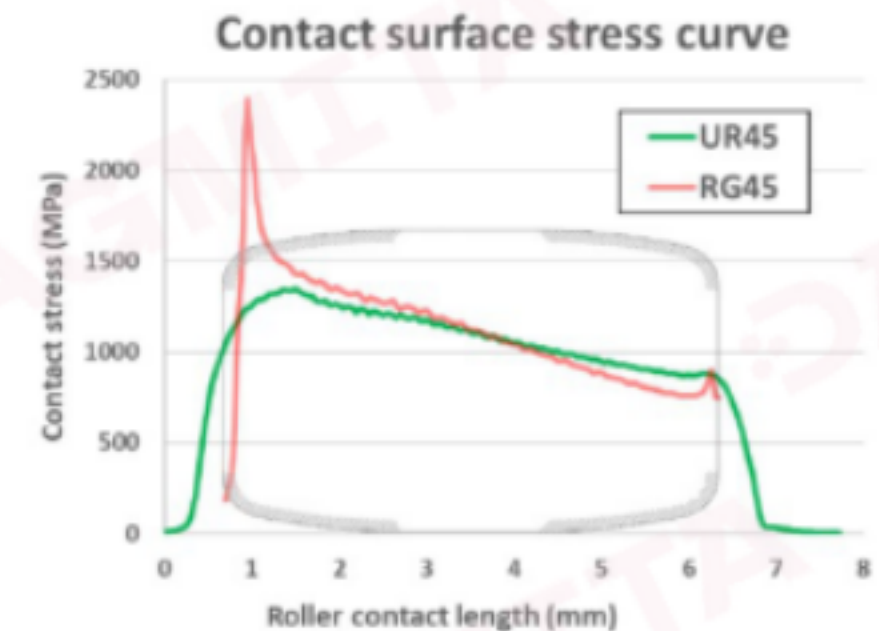
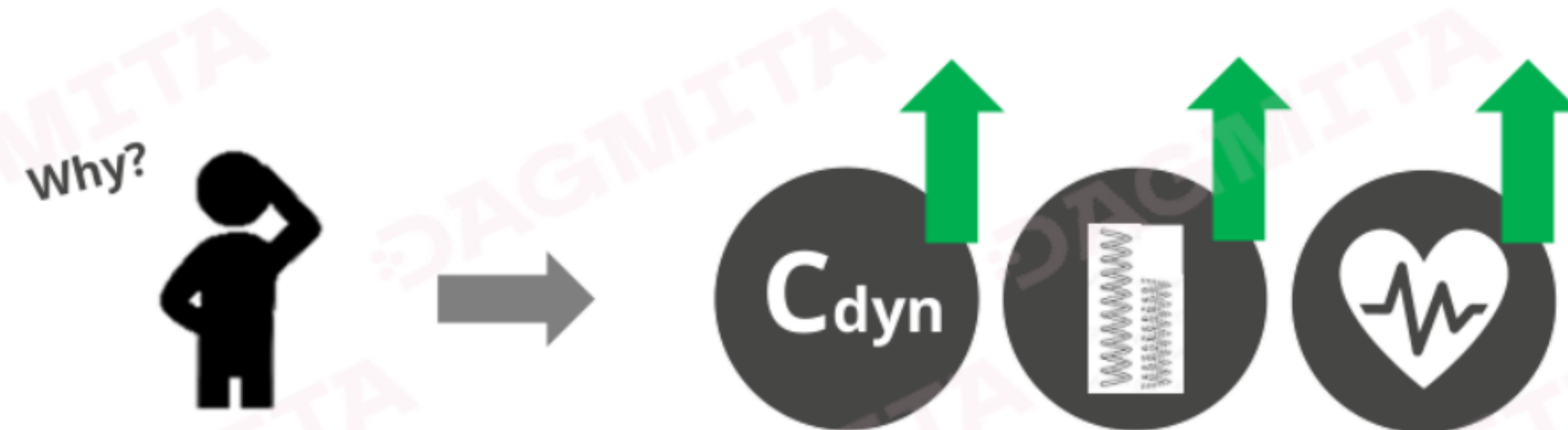
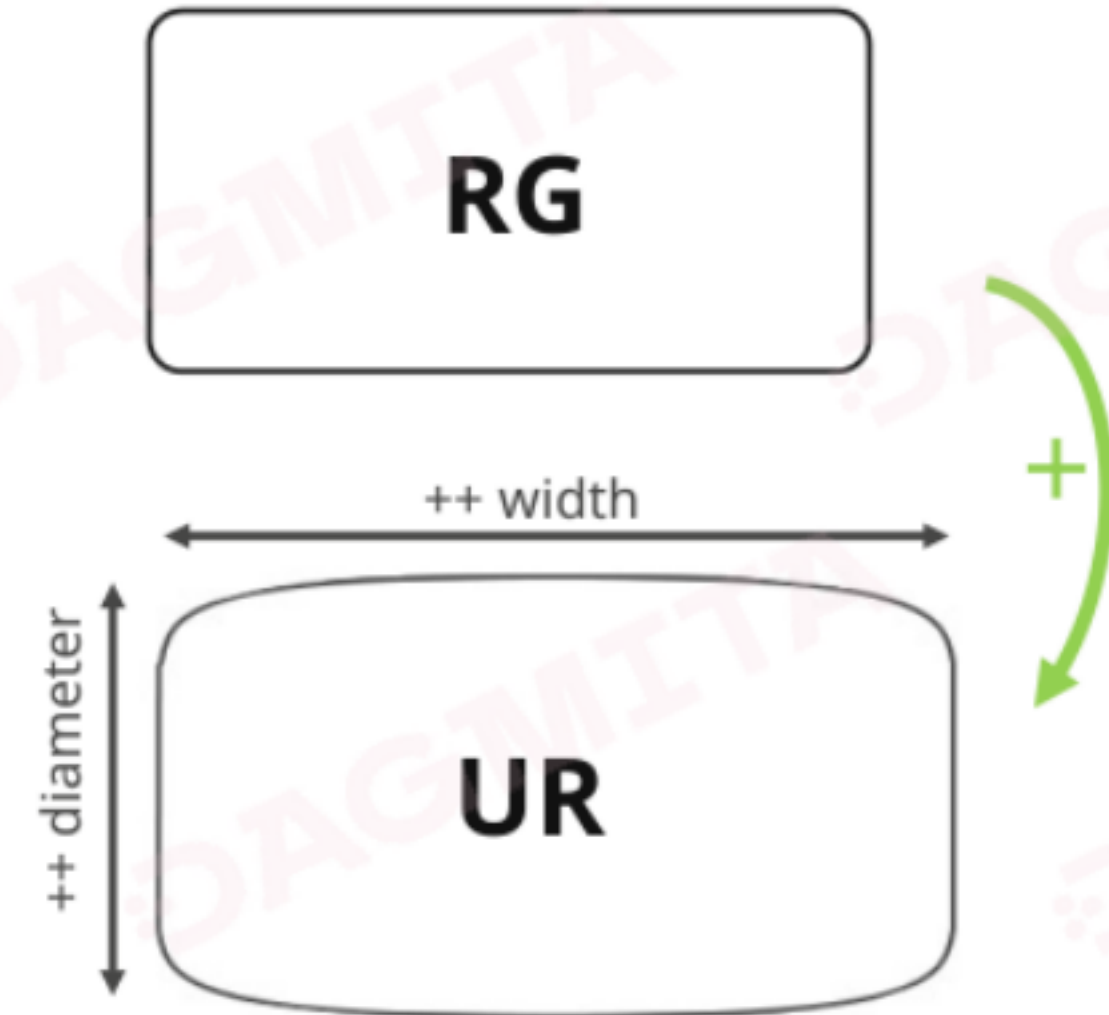


Rolling elements in the UR series

- Improved rolling element geometry
- Increased rolling element width and diameter
- Larger contact surface

+ Curved contact surface/ crowned profile

=> Ideal force distribution/ reduced pressure peaks on rolling elements



Maximum load capacity and reliability

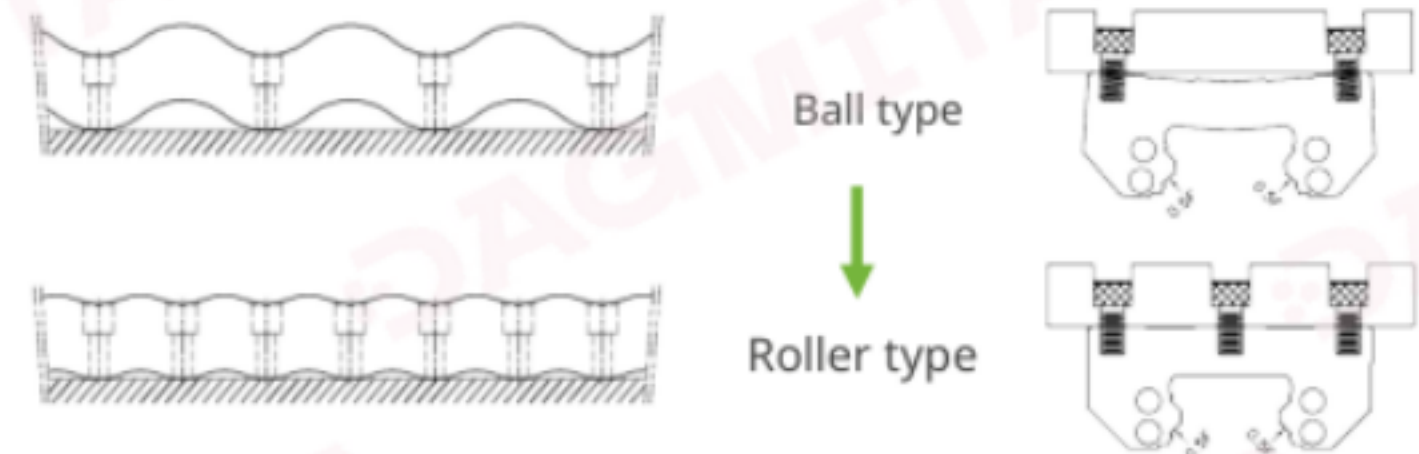
- Higher load capacity and longer service life
- Easy maintenance due to a lower failure rate
- Operational reliability (failure-free operation)



$$L = \left(\frac{C_{dyn}}{P} \right)^{10/3} \times 100 \text{ km}$$

The dynamic load rating is used in the service life calculation with an exponent of 10/3

- As with all our roller guideways, the number of mounting holes is doubled, with additional central block mounting holes
- ++ Higher permissible force transmission through the guideway
- ++ Increased running accuracy



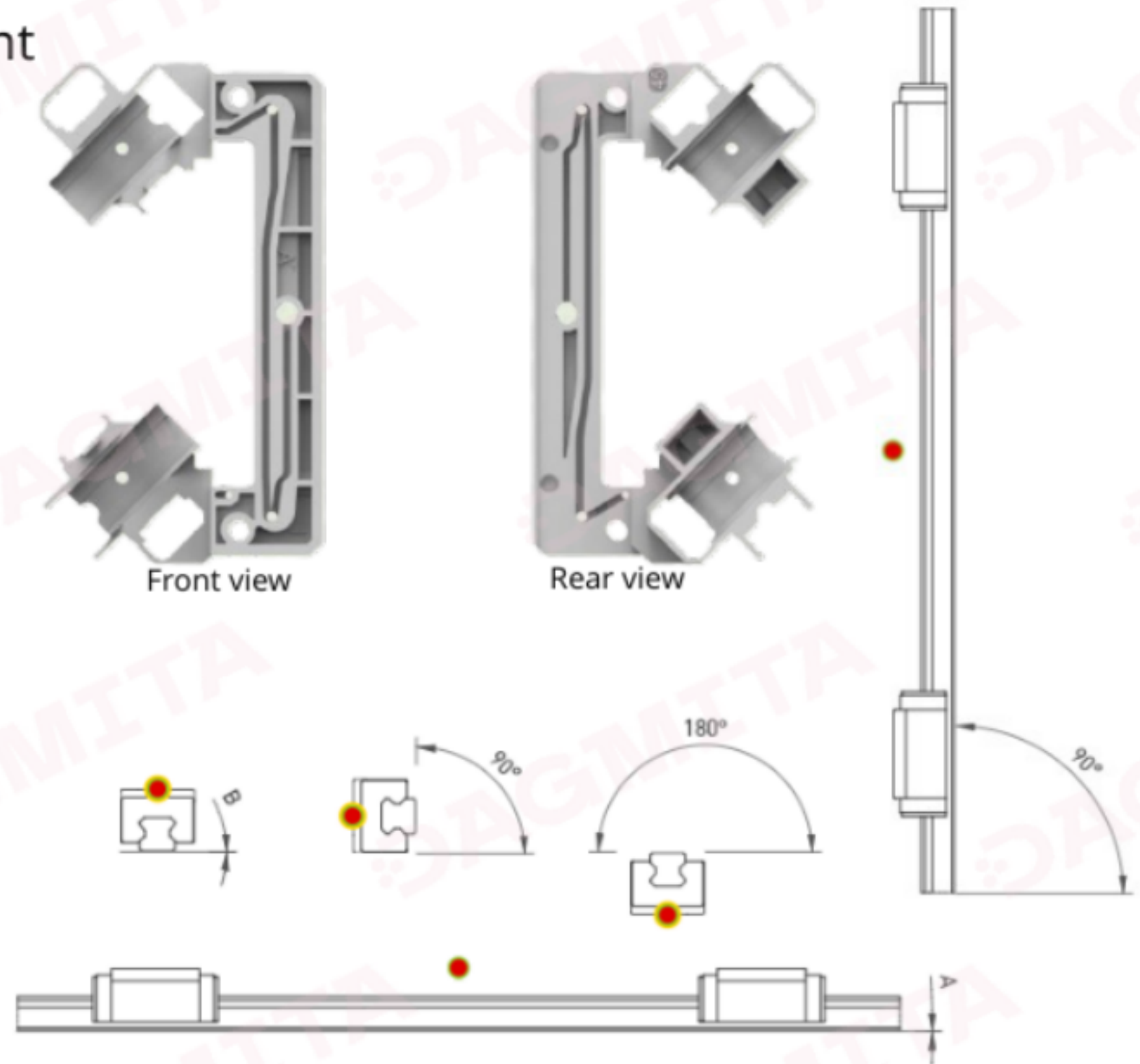
Maximum rigidity

- The larger contact area provides greater rigidity and higher moment load capacity
- Improved vibration behavior
- Improved operating characteristics
- Form accuracy
- Machined surface quality
- Impact resistance
- Longer service life



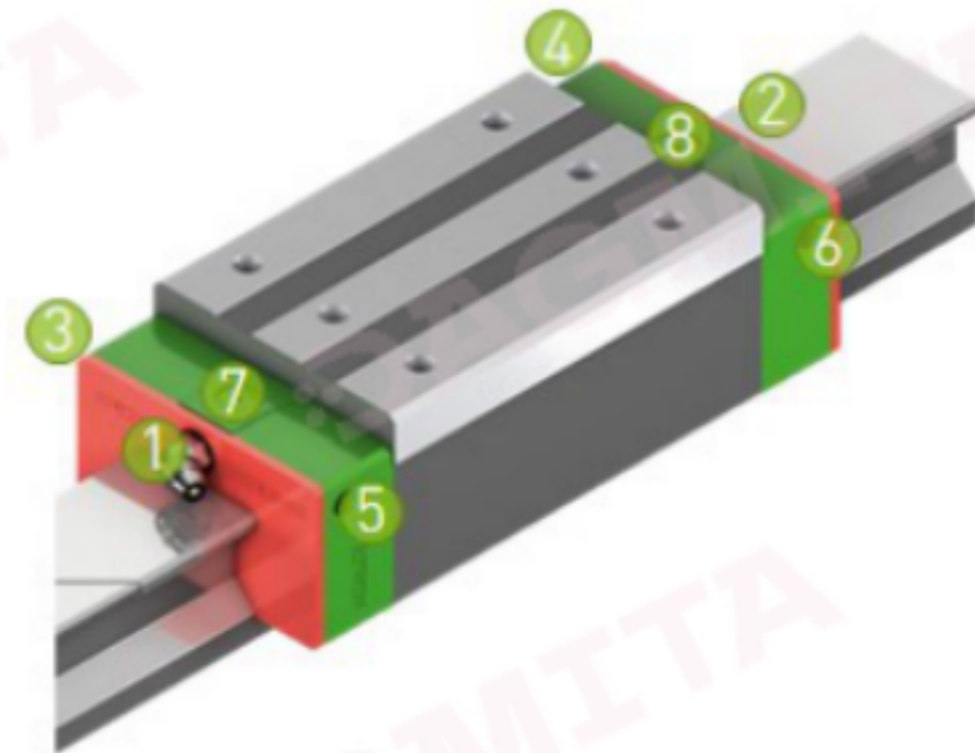
Patented 360° lubrication channel arrangement

- NEW two-layer lubrication channel geometry ensures reliable lubrication of all rolling elements
- Suitable for wall mounting with oil lubrication
- Reliable design
- Easy maintenance
- Reduced lubricant consumption



Lubrication system information

- 8 ports for positioning the lubrication nipple
- Lubrication nipple adapter, suitable for oil or grease lubrication
- Adapter for manual or automatic lubrication



Lubrication nipple



Automatic lubrication nipple



Adapter



Sealing system

Without rail cover strip

Standard



SS: Standard seal with integrated bottom seals
(low contamination level)

Optimal



SW: Double-lip seal+ plastic seal
inside the block (fine
dust/particles)

With rail cover strip

Optimal



SW: Double-lip seal+ plastic seal
inside the block (fine
dust/particles)



ZZX: Standard seal with integrated bottom seals +
stainless steel scraper
(low contamination level + chips)



ZWX: Double-lip seal+ plastic seal inside
the block + stainless steel scraper
(fine dust/particles + chips)



ZWX: Double-lip seal+ plastic seal inside
the block + stainless steel scraper (fine
dust/particles + chips)

Without scraper

With scraper

Sealing system

✓ Fine-dust resistance tests conducted (fine wood chips)

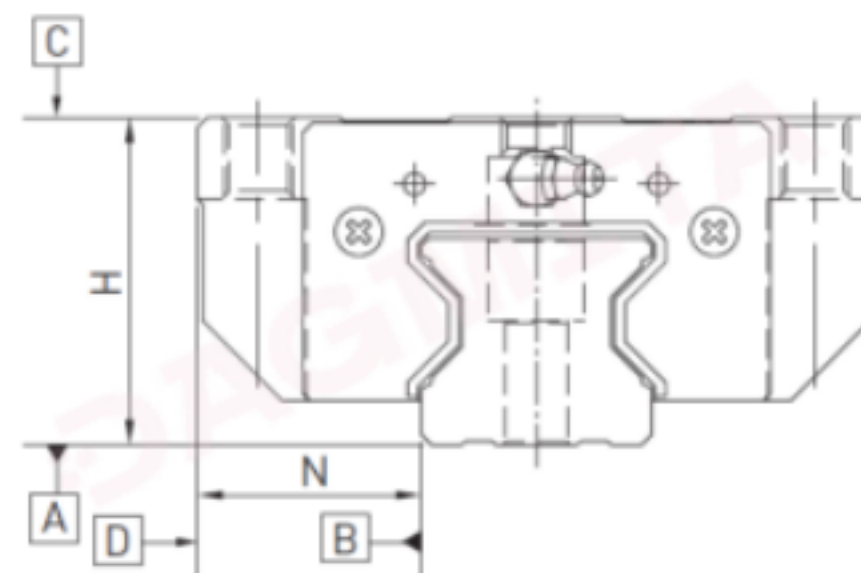
Durability test with coolant and metal chips



Accuracy classes (H, P, SP, UP)

-  - Blocks and guide rails in accuracy class H and P are available from stock in Offenburg (Germany)
-  - Blocks and guide rails in accuracy class SP and UP are available from stock in Taiwan

35, 45, 55	High	Precision	Super Precision
	(HN)	(PN)	(SPN)
Dimensional tolerance of height H	± 0.04	± 0.02	± 0.01
Dimensional tolerance of width N	± 0.02	± 0.01	± 0.007
Variation of height H	0.015	0.007	0.005
Variation of width N	0.015	0.007	0.005





Maximum load capacity and rigidity

Static load capacity increased by 20%

- Improved machining
- Form accuracy
- Surface quality
- Impact resistance
- Vibration behavior

Maximum reliability

Service life increased by 70%

Innovative lubrication channel routing system

- Easy maintenance
- Suitable for wall mounting with oil lubrication
- Reduced lubricant consumption
- Simplified design

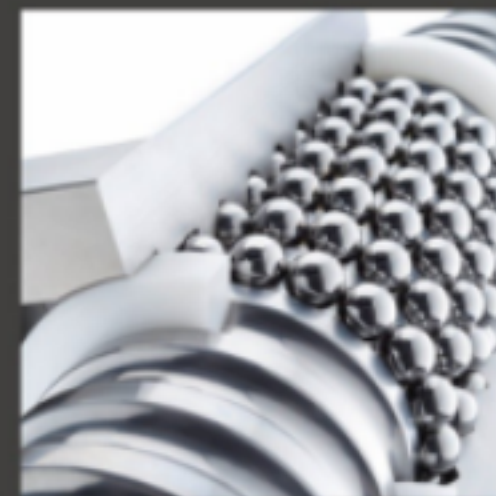
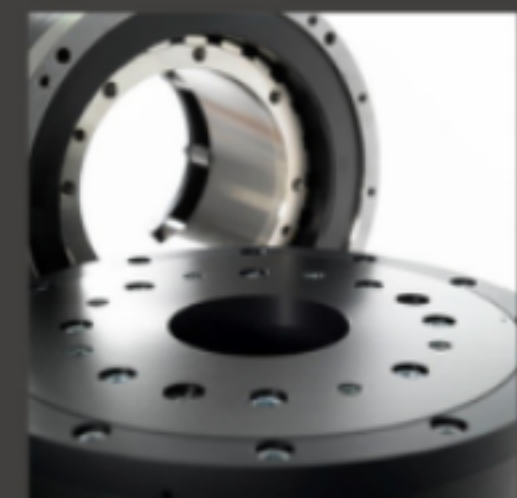
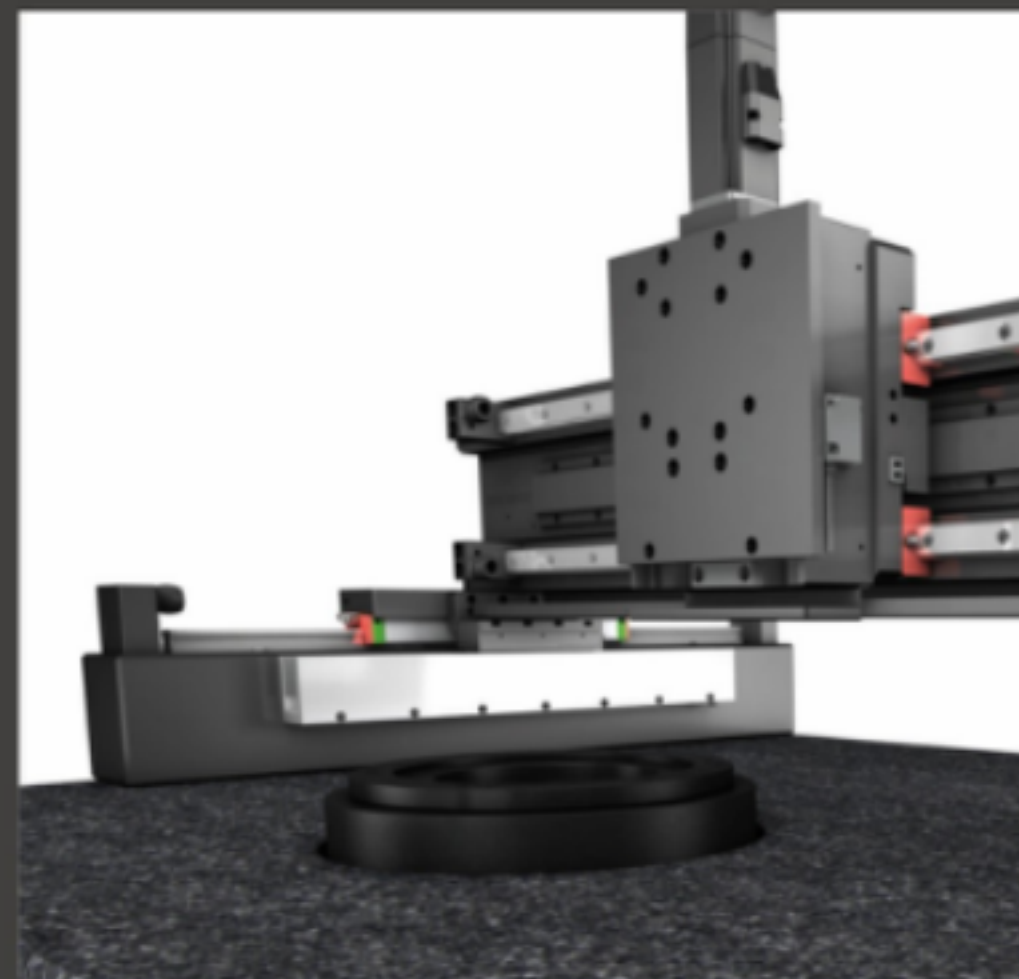
Dirt-resistant sealing systems

- Double-lip seal option
- 3 mm thick stainless steel scraper to protect the carriage block

Applications:

- Machine tools
- Injection moulding machines
- Woodworking machines
- Measurement technology
- Pressing, stamping, bending
- Heavy-load handling





HIWIN REPRESENTATIVE IN LITHUANIA

DAGMITA