

**New**

# HEKO UR400

## Ultra Resistance Chain

*Maximum breaking strength. Extended service life.*  
*Exclusive **HEKO** technology*



**HEKO** | **GROUP**  
CONVEYOR SOLUTIONS

# A CHAIN LIKE NO OTHER

**HEKO** sets new standards with its new chain quality UR400.

Engineered for the highest demands.



## Increased Fatigue Strength

The **HEKO UR 400** features a ductile edge that enables significantly higher breaking strength despite the increased case hardening depth. This also leads to a sustainable improvement in fatigue strength during operation.



## Improved Wear Protection

The in-situ hardening is applied specifically to the areas where particularly high hardness is required – the chain joint. This significantly enhances wear protection.



## Extended Service Life

Optimised wear protection extends service life by up to 30 % with comparable breaking stress.



## Exclusively at HEKO

This heat treatment technology is used exclusively at **HEKO**. The carburising process takes place in a vacuum, followed by quenching in helium – ensuring highest precision and maximum component quality.



## Quality, Quantified

Parameters	HEKO 400E	HEKO 5	Heko 350E	HEKO 400LL	HEKO UR400
Surface hardness in delivery condition	825 HV1	825 HV1	825 HV1	825 HV1	750 HV1
Surface hardness under operational stress	< 825 HV1	< 825 HV1	< 825 HV1	< 825 HV1	850 HV1
Carburisation depth	0,09 x D	0,10 x D	0,14 x D <sub>6)</sub>	0,16 x D	0,20 x D <sub>7)</sub>
Case hardening depth (CHD550)	0,05 x D	0,06 x D <sub>4)</sub>	0,09 x D <sub>5)</sub>	0,10 x D	0,12 x D <sub>8)</sub>
Breaking stress	450 N/mm <sup>2</sup> <sub>1) 2)</sub>	370 N/mm <sup>2</sup> <sub>3)</sub>	350 N/mm <sup>2</sup> <sub>1)</sub>	400 N/mm <sup>2</sup> <sub>1)</sub>	400 N/mm <sup>2</sup> <sub>1)</sub>

1) Tolerance 10% 2) up to 3)  $\phi \geq 30$  mm: Tolerance 20% 4)  $\phi \geq 30$  mm: 0,05 x D 5)  $\phi = 30$  mm: 0,08 x D /  $\phi = 34$  mm: 0,075 x D /  $\phi = 36 - 42$  mm: 0,07 x D 6)  $\phi = 30$  mm: 0,12 x D /  $\phi = 34$  mm: 0,115 x D /  $\phi = 36 - 42$  mm: 0,11 x D 7)  $\phi = 26 - 30$  mm: 0,18 x D /  $\phi = 34$  mm: 0,16 x D /  $\phi = 36$  mm: 0,15 x D /  $\phi = 38$  mm: 0,14 x D 8)  $\phi = 26 - 30$  mm: 0,11 x D /  $\phi = 34$  mm: 0,095 x D /  $\phi = 36$  mm: 0,09 x D /  $\phi = 38$  mm: 0,085 x D

## The Innovation

The new **HEKO UR400** quality makes targeted use of the effect of stress-induced structural transformation. Under high loads, the material hardens precisely in the areas experiencing the greatest stress.

## The Result:

- Hardness develops precisely where it's required
- The edge remains ductile – for maximum fracture toughness
- The core retains its elasticity

This creates an innovative structure with an optimal combination of **hardness**, **toughness**, and **fatigue strength**.

**HEKO UR400**  
The exclusive *HEKO* technology



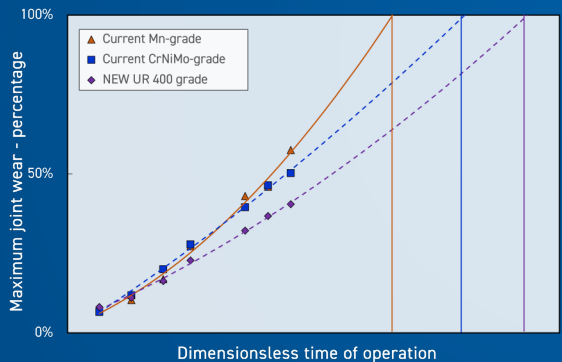


## Reliable in the Harshest Conditions

The new **HEKO** chain quality demonstrates its full potential even under the most extreme loads. It stands up reliably in demanding applications, proving exactly what it was built for.

Example: Sand Bucket Conveyor

- Chain 26 x 91
- Centre distance 18,9 m
- Conveying capacity 150 t/h



# WE MOVE INDUSTRIES



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