

HALFEN
YOUR BEST CONNECTIONS
IHRE BESTEN VERBINDUNGEN



interlift 2017

Fastening Technology for the Lift Industry

Dirk Borgstede
20. October 2017

Safely to the very top!

Agenda

1. HALFEN
2. Market requirements
 1. Safety
 2. Reliability
 3. Efficiency
3. Form meets Function – DETAN tension rod systems
4. Service
5. Q & A

Global Focus



HALFEN

- Head Office: Langenfeld (Germany)
- ~ 1100 employees
- ~ 200m € turnover
- 5 plants
- 15 sales units
- > 50 distributors

Safely to the very top!

Product range



Cast-in channels



Threaded inserts



Framing systems



*Modular pipe
support systems*



Tension rod



Lifting anchors



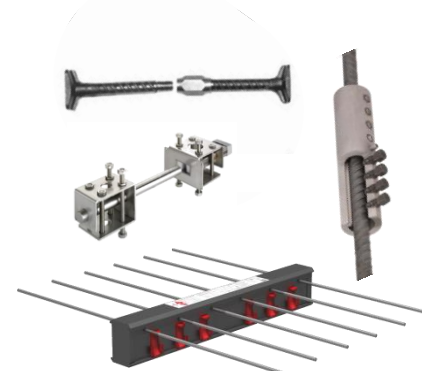
Brickwork facade



Natural stone facade



Concrete facade



Reinforcement syst.

Safely to the very top!

What is important to you?

➤ Safety

- During daily service
- Installation & maintenance

➤ Reliability

- Consistently high product quality
- Static, dynamic & seismic performance
- Global approvals

➤ Efficiency

- Installation of fastening products
- Installation of the lift components

Installation of channels

- Increasingly high reinforcement density and concrete grades



- **Anchor spacing of HALFEN cast-in channels can be configured project specific to suit rebar grid!**

Installation of channels

➤ Alternative: Post-drilled anchors



➤ But: High number of mis-hits and material wear

Installation of lift components

- Precise adjustment of guide rails

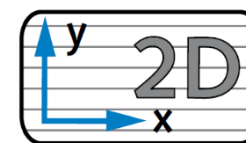
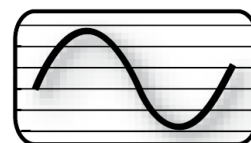


- Important for speeds up to 10 m/s

Safely to the very top!

Selection of the right cast-in channel

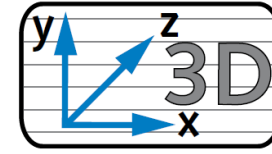
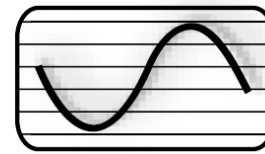
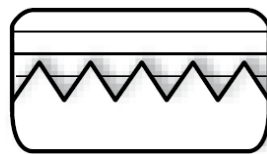
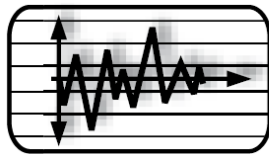
- **Hot-rolled cast-in channels HTA-CE and framing channels HM** are ideally suited for **static and dynamic loads** arising from normal service use.



- Low to moderate longitudinal loads – **2D***
- European approval ETA (*HTA-CE*)
- Chinese approval CABR (*HTA-CE*)
- US-approval ICC-ES (*HTA-CE*)

Selection of the right cast-in channel

- For regular and exceptional **longitudinal loads** (i.e. from seismic acceleration) we recommend the use of **hot-rolled, serrated channels HZA and HZM**



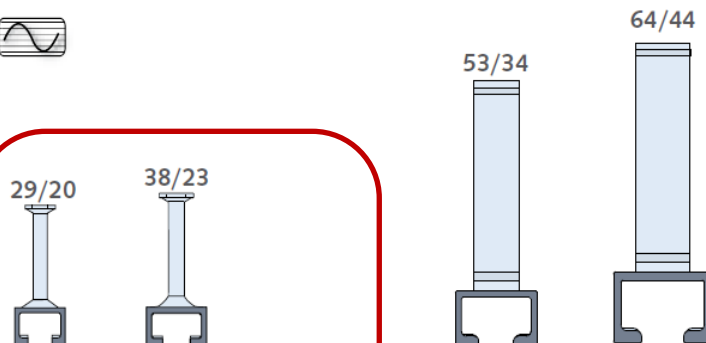
- Mechanical interlock between channel and T-bolt – **3D**
- Highest dynamic capacity
- National approval DIBt (*HZA*)
- US-approval ICC-ES (*HZA*)

HALFEN range of cast-in channels

Tragfähigkeiten für Halfenschienen warmgewalzt, gezahnt



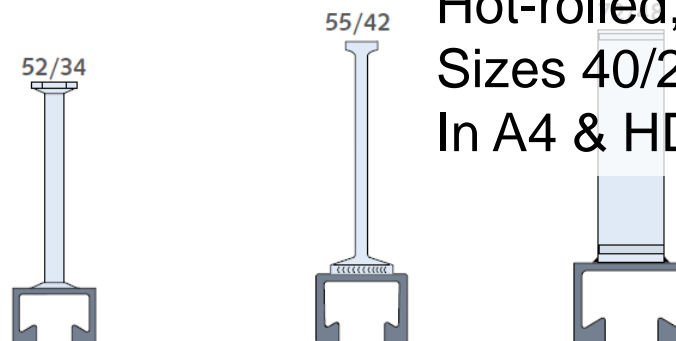
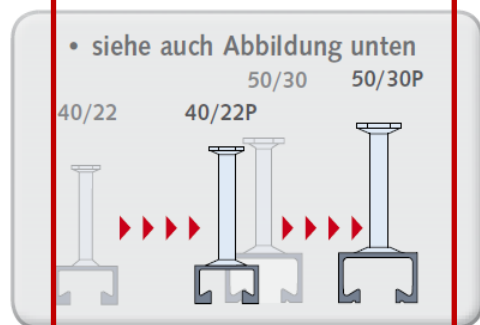
Standard in
lift industry



HZA cast-in channel

Hot-rolled, serrated
Sizes 29/20 – 64/44
In A4 & HDG

Tragfähigkeiten für Halfenschienen warmgewalzt



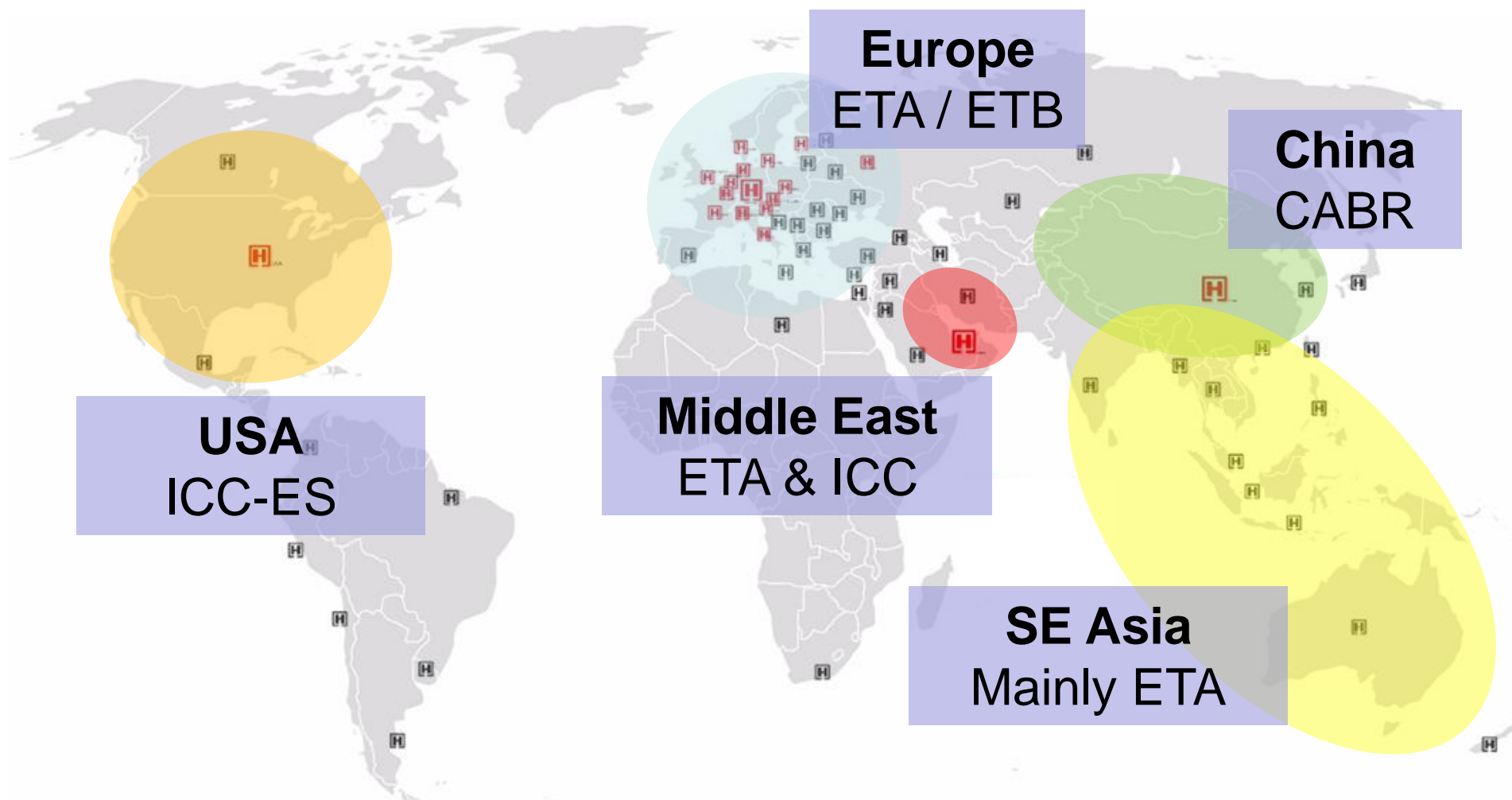
HTA-CE cast-in channel

Hot-rolled, smooth
Sizes 40/22 – 72/48
In A4 & HDG



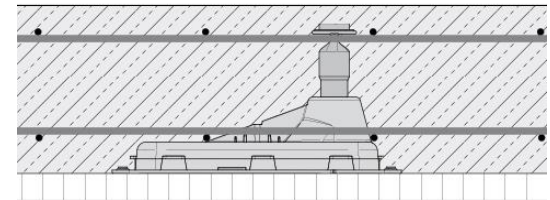
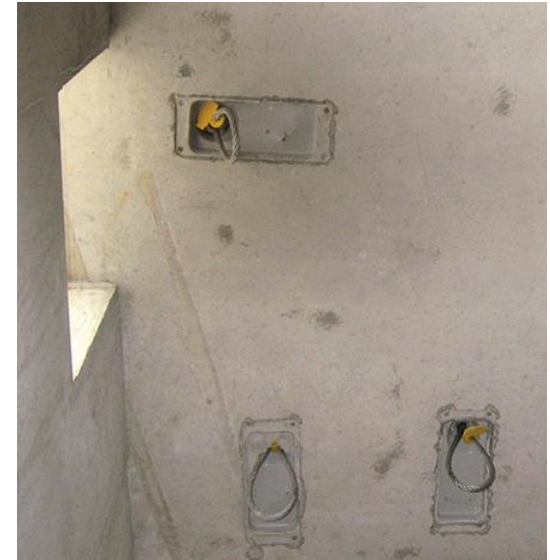
Safely to the very top!

Global approvals



HALFEN HLX Lift-Box

- Fastening points for loads, maintenance equipment, tools & hoists needed during initial installation



Features & benefits:

- Design acc. EU Machinery Directive
- Pre-assembled – simple installation
- Slab thickness $\geq 150\text{mm}$, placed in concrete cover

HALFEN PSA Anschlagpunkt

- Connection points for personal safety equipment



- Tested acc. DEGUUV requirements to CEN/TS 16415

Applications:

- Maintenance in lift shafts, on masts and towers
- Roofing & facade - work

Form meets Function

DETAN tension rod systems

- Innovative and delicate structures
- Meets highest demands in terms of appearance and quality



Safely to the very top!

DETAN tension rod systems

- Realization of complex, aesthetically demanding constructions
- European Technical Approval ETA
- Available in steel (10 – 95 mm) and stainless steel (6 – 30 mm)
- Project specific configuration



Form meets Function

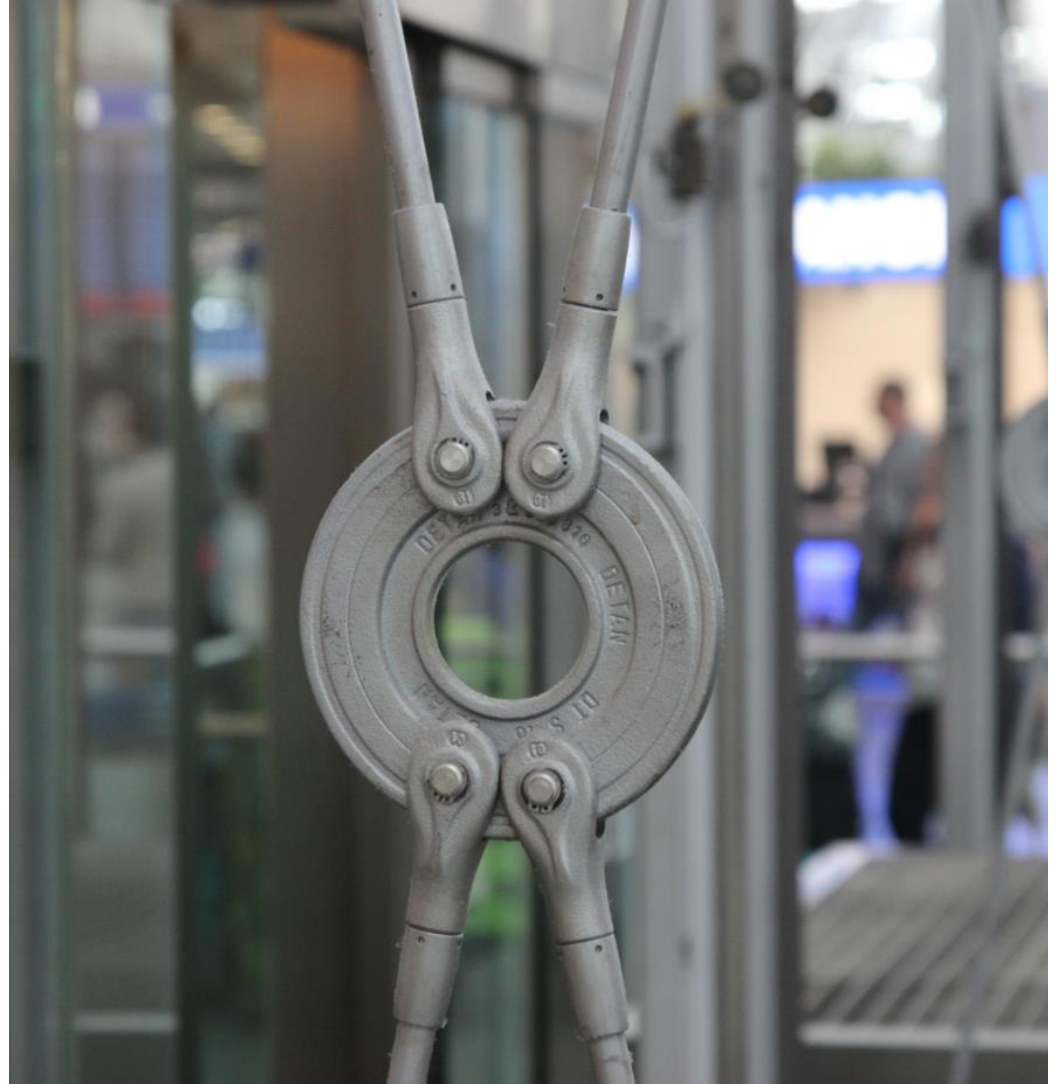
Clean details

- Connection between fork and connection plates



Safely to the very top!

Form meets Function



Safely to the very top!

Service

- Local technical support
- Central support (RDE)

- CAD & BIM libraries
- Design software
- Development of individual, economical solutions
- ***‘Value Engineering’***



HALFEN
YOUR BEST CONNECTIONS
IHRE BESTEN VERBINDUNGEN



HALFEN GmbH – Liebigstr. 14, 40764 Langenfeld, Germany – Phone +49 (0) 2173 970 0 – www.halfen.com

***Thank you
for your attention!***

*Dirk Borgstede
20. October 2017*

Safely to the very top!