

Dear customers and business partners,

The employees and management of HALFEN are pleased that you are taking the time to read this brochure and find out more about us. This brochure has been developed according to our work philosophy: "Customer focused action instead of empty words."

We are looking for close contact with our customers, so we can understand what you really need - which is the basis of the ongoing development and expansion of our range. We know that you need products and services that you can be sure of. Quality, reliability and price - products and services you can trust. Confidence is, of course, crucial both for your business and ours. You too can retain customer confidence by providing products and services on time of the highest quality. However, to maintain product reliability in the long term is more difficult to ensure. With today's global exchange of goods and cost pressures not all companies can match us.

The quality of raw materials and the controlled production process are essential. We are passionate about this and will not cut corners – not today, not ever! Our products bear a great deal of responsibility, for example – when transporting heavy concrete elements.

So, we always guarantee the highest quality materials, high grade manufacture in our own monitored factories, an excellent engineering service, and the proven product reliability of a global brand.

Your confidence is our most important asset. Therefore, HALFEN products and services are synonymous with economy, safety and reliability – for you and your company.

We hope you enjoy reading this brochure.

Regards

HALFEN Management and Employees





A reliable partner.

HALFEN Company.

With over 1,300 employees, with subsidiaries in 15 countries, six Sales Offices and more than 20,000 products HALFEN is one of the most successful concrete anchoring, façade fixing systems suppliers in the world. We offer our customers the highest quality products for building pre-cast concrete elements, commercial and residential construction, as well as civil engineering and for transport and infrastructure buildings. Our brands including

"HALFEN", "DEHA" and "FRIMEDA" are among the market leaders.
We want to maintain this position and grow it internationally.

Since the company was founded in 1929, our aim has been to provide bespoke, innovative and costeffective solutions. We do this with passion and competence, along with the highest levels in technology, quality and safety.

HALFEN innovations have been, and

continue to be revolutionary for the

whole industry. In the future too, we want to play a part in shaping progress. That is why we invest in research and development.

The high demands we set ourselves are also reflected in our relationships with employees, customers and suppliers: our dealings at all levels are characterised by trust, respect and reliability. We are looking for long-term international growth – and we will only achieve that by consistent cost management,

professional operation and not least by confirming the trust placed in us and our products.

As an international company, we are aware of our global, local and social responsibility. These are obligations that we actively take very seriously.

with DETAN tension rods and
Millennium Bridge (foreground) with
BRA parapet anchor brackets





Cast-in channels, reinforcement systems, façade fixing systems, framing systems



Lifting anchor systems, concrete façade and tension rod system



Lifting anchor systems



Burj Al Arab (Dubai) with HALFEN cast-in channels

Securing façades, lifts and services. The intelligent fixing alternative to drilling and welding.

They simply do the job!

Use HALFEN channels to secure heavy loads without welding and drilling.

Many originals come from
HALFEN – like the HALFEN channel,
the product the company built its
success on.

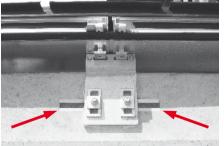
The HALFEN channel was developed at the start of the 20th century for the rapidly expanding concrete construction industry. Nowadays, there is a comprehensive range, which can be used to solve almost any fixing problem. Even with the smallest components, loads can be set safely into the concrete in any direction.

Also, we continue to develop HALFEN channel even further, in discussion with our customers: the newest generation, "Dynagrip", excels in its loading capacity in all directions.



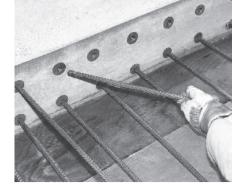


Adjustable, fixed lift guide channel



Curtain wall façade anchored onto concreteembedded HALFEN cast-in channels





HBS-05 reinforcement screw connection

Minimal waste.

Reinforcing efficiently with HALFEN calculation software.

Building efficiently means using the latest construction procedures, easy assembly products and the latest software from HALFEN.

The latest technological developments are highly important in the selection and use of reinforcing elements. We offer all our customers user friendly reinforcing products with the highest level of quality and safety as standard.

Rebend and screw connections, shear reinforcements, adjustable column shoes, reinforcing couplings and insulated balcony connections from the HALFEN delivery programme provide daily cost reductions on building sites.

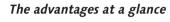


(Above) HDB shear elements are placed after reinforcement work

(Below) HBT rebend connection for connecting a concrete wall to a column

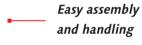






Products for the latest construction methods

In line with latest technology



Products are approved by
—— building authorities
and/or type tested

Safety from both internal and external quality control

HALFEN software ensures
optimum reinforcing connections for reinforced concrete
components



balcony connection

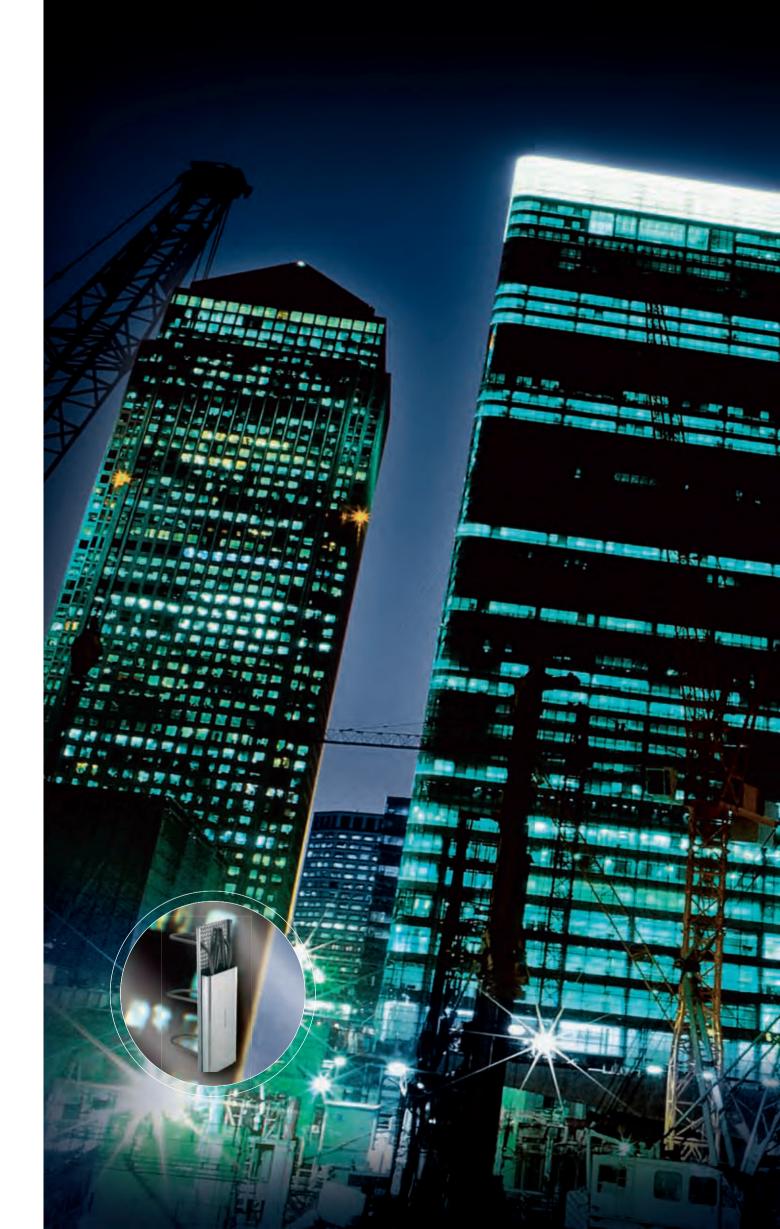
HBS-05 screw connections



Canary Wharf (London) Tower blocks with HBT rebend connection

HCC column shoe

The floor slabs were connected to the central cores using the HBT rebend system





Some things have to carry the responsibility.

The original lifting anchor systems from HALFEN.

We offer our customers solutions tailored to their special requirements. These include DEHA HD anchors with screw thread and patented socket protection, DEHA spherical head anchors for crane rope quick release, and FRIMEDA rapid lift systems that can also be unlocked by remote control.

HALFEN factories use only high grade steel for manufacturing lifting anchors. This steel is especially suitable for impact loads and use in low temperatures.

The HALFEN quality management system guarantees particular care in the selection of material for all products.

This is another reason why we are the world market leader in lifting and transporting systems for pre-cast concrete elements.



The advantages at a glance

High safety level
through use of high
grade steel

Systems adapted to customer requirements

Compatible system
— parts: mismatching
made impossible

A few anchor types cover large load ranges

Bridge over the Öresund (Sweden) with FRIMEDA rapid lift systems

The reinforced concrete production part supports for the railway route in this bridge were lifted using FRIMEDA anchors



Lifting anchors with recess formers



Railway route element with cast-in lifting anchors



Under-tensioning of glass façade elements with DETAN tension rods

It's what's underneath that counts.

By using HALFEN fixing systems, you ensure the safety of impressive building façades.

Multiplex Cinema (Dresden)
with DETAN tension rod system
The perfect solution for fine façade
support structures

Architectural visions become reality with HALFEN adjustable products – they offer almost unlimited design opportunities. With the DETAN tension rod system, for example, it is possible to manufacture elegant supporting structures.

The company HALFEN has a unique portfolio of leading brands including FRIMEDA and DEHA – supplying fixing technology for curtain wall,

faced brickwork, natural stone and concrete façades. HALFEN products have supported the façades of the tallest buildings in the world.

We use our experience gained from several thousand international projects for the continual expansion of our façade technology range.



HK4 brickwork support



Pre-cast panel anchors

F

HALFEN body anchor

The advantages at a glance

Fixing systems for modern designs

---- Fully adjustable

Optimum corrosion protection

Type tested or approved by building authorities

____ The experience of a market leader

Safety through optimum durability



Chemical plant with Powerclick

Having few system parts significantly reduces hassle with construction and ordering

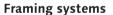
Quick and safe without welding.

Framing channels and Powerclick – the revolution in pipeline construction.

Powerclick

Even in the framing industry, innovations from HALFEN have considerably eased work on the building site: with the HALFEN Powerclick system, custom-made for industrial pipeline construction. Supporting structures are now achievable in a whole new way:

The few standard components are multi-functional and can easily be assembled on any structure imaginable. Furthermore, the defined load transfer ensures the highest possible level of safety.



For non-concrete applications (plant construction, steel construction, machine construction, solar equipment, water treatment) the HALFEN assembly channels and bolts offer the greatest possible flexibility.

> Assembly channels with slotted holes and HALFEN bolts



4. The beam clamp



1. The framing channel



2. The fixing plate







Pipe support with Powerclick assembly system

The advantages at a glance

Four parts cover

all requirements

Non-welded assembly

Quick, flexible and

Primary construction can

be changed at any time

economical

Optimum corrosion protection

Application of framing channels

International success.

The structure of HALFEN.

Today, HALFEN is an international company with a turnover of over 240 million Euro. We produce our products in two factories in Germany and in one factory in Poland. This gives us an optimum distribution of unit labour costs, depending on the grade of production engineering. In 15 countries, we support our customers through our HALFEN country organisations and our products are sold in over 35 countries – thanks to the support of our sales partners.

However, we know that success has to be earned afresh every day. Having a customer focused sales organisation, quick and flexible logistics and internationally available products, the basic foundations for the future success of HALFEN have been laid.

We pay intensive attention to the interests of our customers and ensure that the international HALFEN brands are constantly developing. To find your international contact partner, please visit us online at www.halfen.com.



Langenfeld / Germany



Artern / Germany



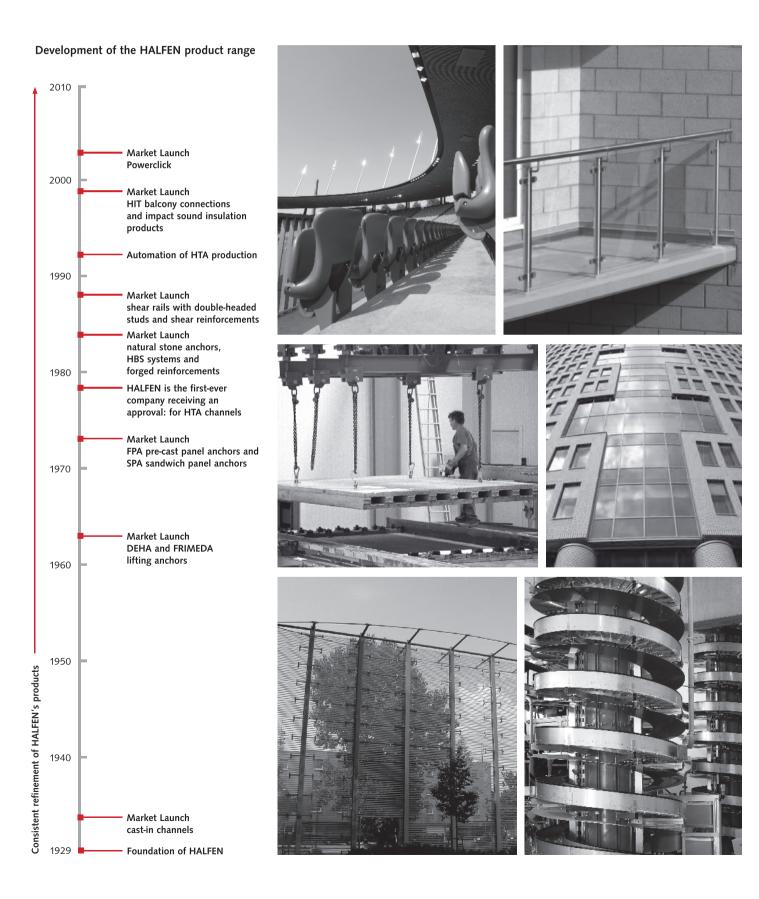
Nowe Skalmierzyce / Poland





The success factors.

Development of the HALFEN product range.





Always there for you.

Are you looking for specific information about HALFEN in certain countries?

Our website provides you with all the necessary news and facts: everything about us and our international subsidiaries or partners. Please contact us at www.halfen.com





HALFEN – provide safety, reliability and efficiency for you and your customers.