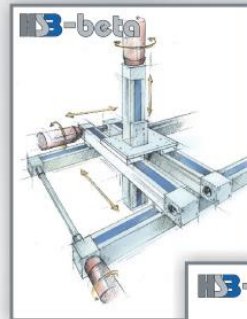
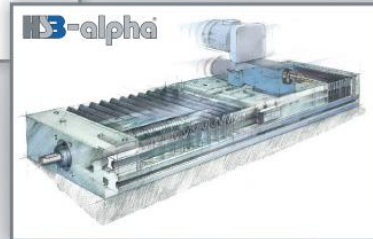


Mechanical Linear Drive



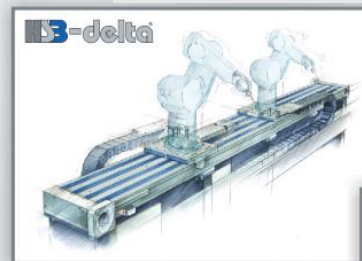
Linear Tables



Ball Screw Drive



Compact Module



Portal Linear Drive



Portal Linear Drive

PRODUCT LINES

Linear Tables

HSB-alpha[®]
Mechanical Linear Drive

HSB-beta[®]

Compact Module

HSB-delta[®]

Portal Linear Drive

HSB-gamma[®]

Portal Linear Drive

HSB-sigma[®]

Ball Screw Drive

HSB-kgf[®]

- CUSTOMER-SPECIFIC NEW DEVELOPMENTS
- SUITABLE FOR USE IN CLEAN ROOMS
- STEEL COVER BAND
- DOUBLE STROKE DRIVES
- ATEX DESIGNS
- WIDE RANGE OF PRODUCTS
- RIGHT-LEFT VARIANTS
- CORROSION-RESISTANT DRIVES
- HANDLING SYSTEMS

COMPANY HISTORY

2014 – 2015	Expansion of office area to approx. 750 m ² . Setting up of an separate workshop for our trainees. Perception of new gantry drives HSB-sigma®. 82 employees
2012 - 2013	Expansion of production area to approx. 3600 m ² . Expansion of our high rise rack to 481 racks. Expansion of our fully automatic manufacturing cell by expansion of Fastems pallet rack system up to 72 machine pallets and 108 material pallets and integration of an additional horizontal processing centre Heller H2000.
2010 - 2011	Expansion of product range of gantry drives HSB-gamma® and expansion of our own production. Start of development of ball nuts HSB-kgt®.
2008	Integration of a fully automatic manufacturing cell comprising 2 Heller horizontal processing centres and a Fastems pallet rack system with 30 machine pallets and 50 material pallets. Certification in accordance with DIN ISO 9001:2008. 72 employees
2007	Expansion of premises to 2700 m ² . High-rise rack with 340 racks and 6 exit stations. 62 employees
2006	Start of cooperation with Schunk GmbH & Co. KG (Lauffen am Neckar).
2005 - 2006	Expansion of product range of portal linear drives HSB-delta® and expansion of our own production. Installation of a high rise rack with 170 racks for 2000 kg per rack.
Oct. 1, 2005	Move to own new production site with an address at In Laisen 74, Reutlingen, with approx. 1700 m ² production area and 600 m ² office space.
1999 - 2005	Expansion of product range and production possibilities to approx. 1300 m ² production area and office space. Certification in accordance with DIN ISO 9001:2000. 30 employees
Jan. 1, 1999	Move to own production site (850 m ²) at Lembergstrasse 46, Reutlingen.
1995 - 1998	Development and manufacture of mechanical linear units HSB-beta® and linear tables HSB-alpha®. 10 employees
1993 - 1995	Special purpose machinery and subcontracting with 2 employees.
Aug. 16, 1993	Foundation of HSB Automation GmbH.



Linear Tables

HSB-alpha[®]

With table widths of 155, 225, 325 and 455 mm, vertical loads F_z of up to 120000 N and transverse moments M_x of up to 12000 Nm are possible.

Our impressive range offers the optimum linear axis for every task, even at high loads.

Powerful and flexible

Alpha linear tables are designed for use with high forces and load moments. The power packs can be easily combined to form X-Y systems by means of prepared keys and keyways.

When performance is what counts

- Solid aluminium profiles, anodised, with processed stop edge and bed / base area
- Easy adjustment via stop edge, keys and keyways
- Clean cover of bellows

- High-quality rail guides, arranged in parallel
- Drive with ball screws, single or double nut, spindle support system integrated for high rotational speeds
- Attached, movable limit or reference switch
- Attachment via T-grooves or through bores with flat countersink
- Motor mounting and clutches, deflection belt drives with different drive ratios
- Customer-specific solutions

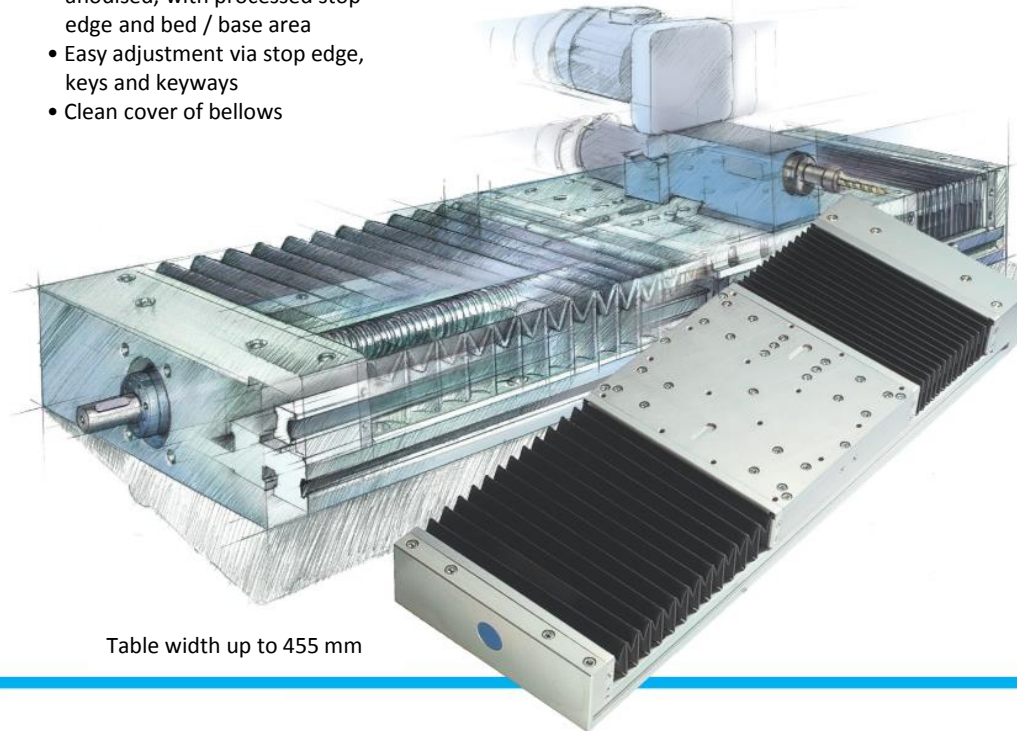


Table width up to 455 mm



The mechanical linear drives from HSB form a complete range with modular structure.

A wide range of profiles in variable lengths and 11 unit sizes – with up to 25000 N feed force (Fx) – opens up unique utilisation possibilities.

Fully on the move, in every respect

We are your competent partner for mechanical linear drives with integrated guides in a closed profile. Roller guides or rail guides are available. Drive is via toothed belt or ball screw.

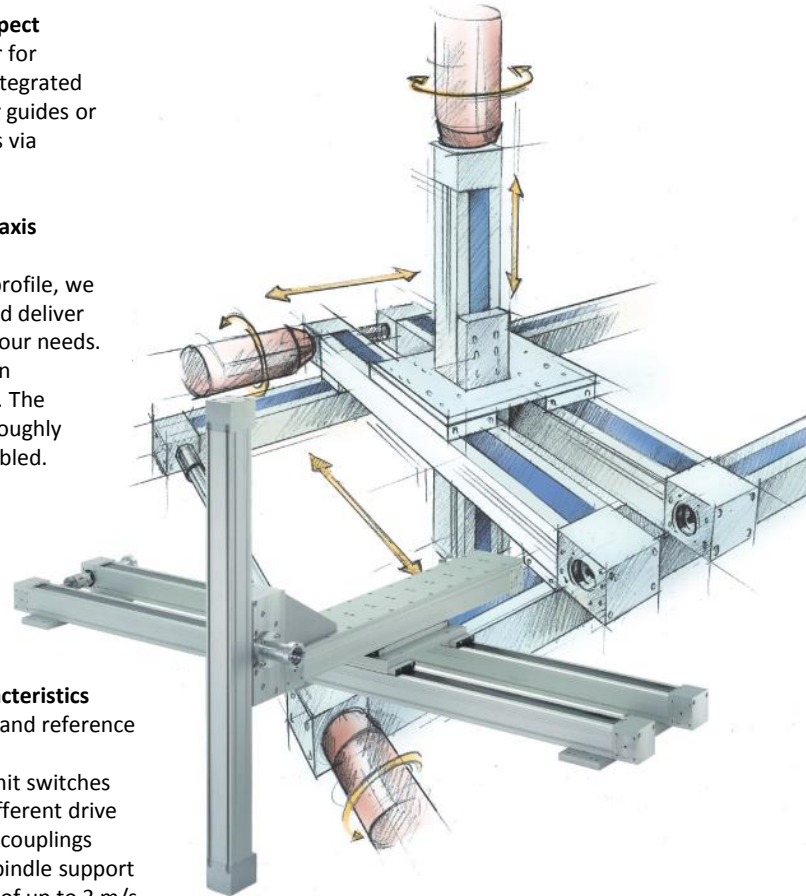
Directly to the ready-to-install axis system

You define your requirements profile, we take care of project handling and deliver the solution that is tailored to your needs. The interfaces are determined in collaboration with the Principle. The desired axis system will be thoroughly tested and delivered pre-assembled.

Convincing performance characteristics

- Installation of inductive limit and reference switches
- Attachment of mechanical limit switches
- Deflection belt drives with different drive ratios, motor mountings and couplings
- Ball screws with integrated spindle support system for traversing speeds of up to 3 m/s, also with long lengths
- Mounting elements made from aluminium
- Clean room applications from class 10

Thanks to a wide product range and extensive know-how, we offer the right axis for every application: ready to install and with components perfectly tuned to one another.





HSB is extending the already extensive product range with the compact modules of the Delta 90*, 110, 145, 200 and 240 model series. The robust power packs have two rail guides arranged in parallel. The profile is post-processed and opens up new fields of application due to the higher levels of precision.

Highlights

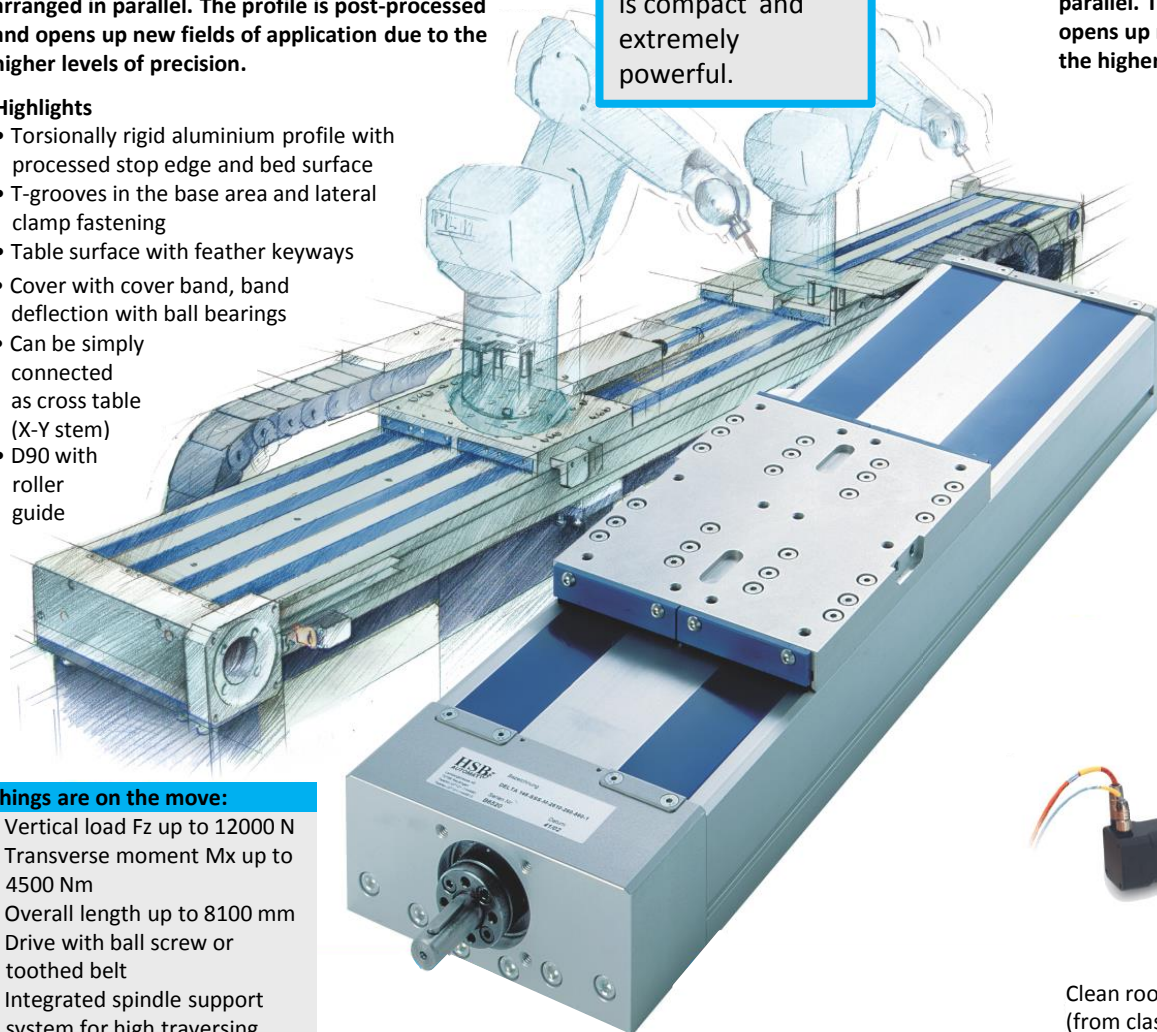
- Torsionally rigid aluminium profile with processed stop edge and bed surface
- T-grooves in the base area and lateral clamp fastening
- Table surface with feather keyways
- Cover with cover band, band deflection with ball bearings
- Can be simply connected as cross table (X-Y stem)
- D90 with roller guide

The range of mechanical linear drives from HSB has been greatly expanded. The Delta model series is compact and extremely powerful.

Modular system cross tables

High quality cross tables can easily be created in a modular system with our compact modules. They are based on the Delta model series, which has two integrated rail guides arranged in parallel. The profile is post-processed and opens up new fields of application due to the higher levels of precision.

HSB linear drives of the Delta model series allow the easy assembly of precise X-Y systems. They are full of power and have very compact dimensions.



Things are on the move:

- Vertical load Fz up to 12000 N
- Transverse moment Mx up to 4500 Nm
- Overall length up to 8100 mm
- Drive with ball screw or toothed belt
- Integrated spindle support system for high traversing speeds
- Limit switch and reference switch attached

Large dimensions with technical refinements

- Axis widths 90/110/145/200 and 240 mm
- Vertical load Fz up to 12000 N
- Transverse moment Mx up to 4500 Nm
- Overall length up to 8100 mm
- Torsionally rigid aluminium profile, stop edge and bed surface processed
- Short block dimension, cover with cover band, band deflection with ball bearings
- T-grooves in the base area and lateral clamp fastening

Precise movement guaranteed

- Drive with ball screw or toothed belt
- Integrated spindle support system for high traversing speeds of up to 3 m/s
- Movable limit or reference switch attached
- Precise adjustment via feather keys and feather keyways
- Motor mounting and clutches, deflection belt drives with different drive ratios



Cross table Delta 240-SSS

Clean room applications (from class 10) are possible, as are numerous customer-specific solutions.

Portal Linear Drive

HSB-gamma®

HSB is advancing into new dimensions with the new portal linear drives of the Gamma model series, which can be supplied in unit sizes 90, 120, 160, 220 and 280.

Modular system handling portals

Our portal linear drives can be easily combined into handling portals via the modular system.

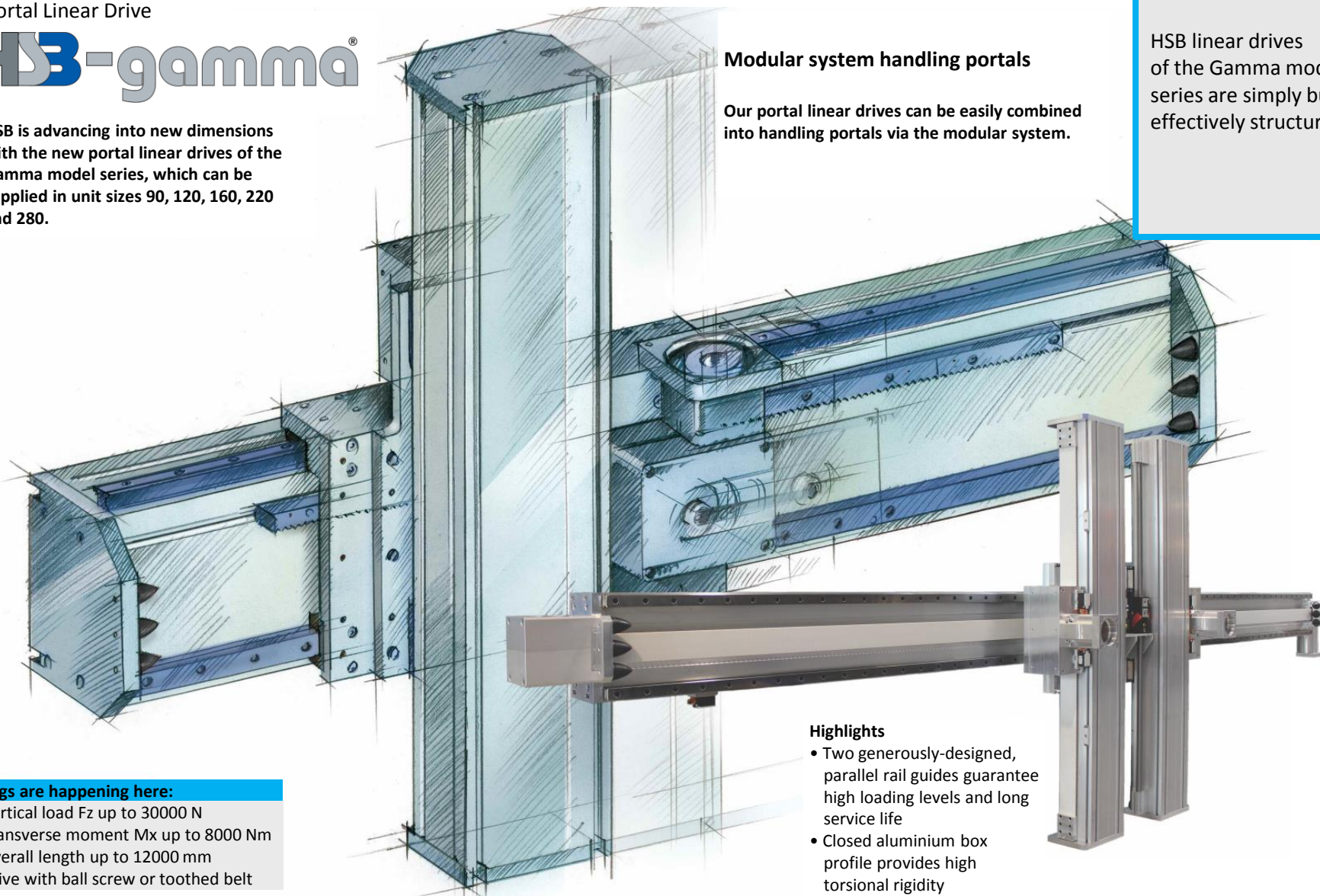
HSB linear drives of the Gamma model series are simply but effectively structured.

Things are happening here:

- Vertical load F_z up to 30000 N
- Transverse moment M_x up to 8000 Nm
- Overall length up to 12000 mm
- Drive with ball screw or toothed belt

Highlights

- Two generously-designed, parallel rail guides guarantee high loading levels and long service life
- Closed aluminium box profile provides high torsional rigidity
- Total length in one unit up
- Rack-and-pinion drive incl. attached high performance servo gear



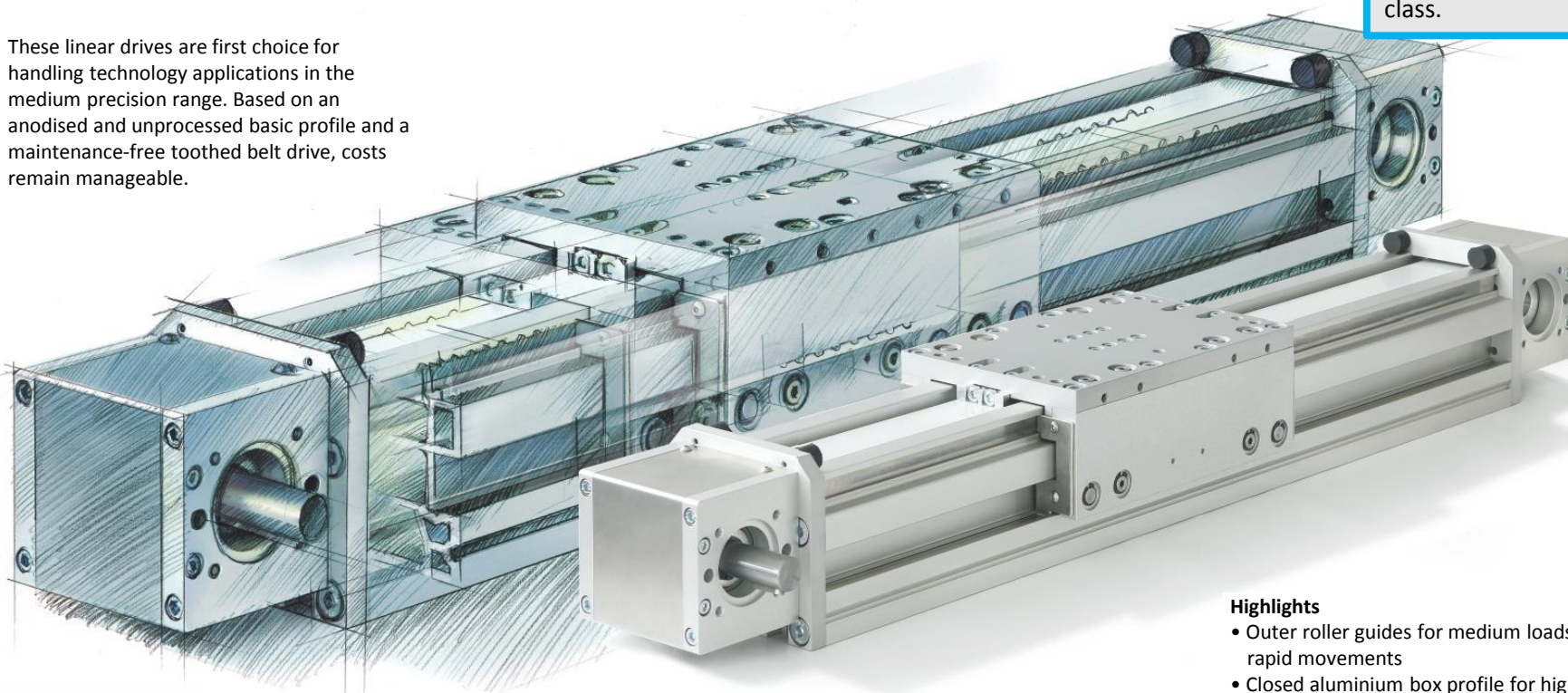
Portal Linear Drive



With the new portal linear drives of the Sigma model series, which can be supplied in sizes 70, 90, 120 and 160, HSB is expanding the modular handling system by dynamic drives with proven roller guides.

These linear drives are first choice for handling technology applications in the medium precision range. Based on an anodised and unprocessed basic profile and a maintenance-free toothed belt drive, costs remain manageable.

HSB linear drives of the Sigma model series are the logical supplement to the Gamma model series, with proven roller guides for applications in the medium precision class.



Things are on the move:

- Vertical load F_z up to 6000 N
- Transverse moment M_z up to 500 Nm
- Overall length up to 8000 mm
- Drive via toothed belt
- Proven roller guide for high traversing speeds

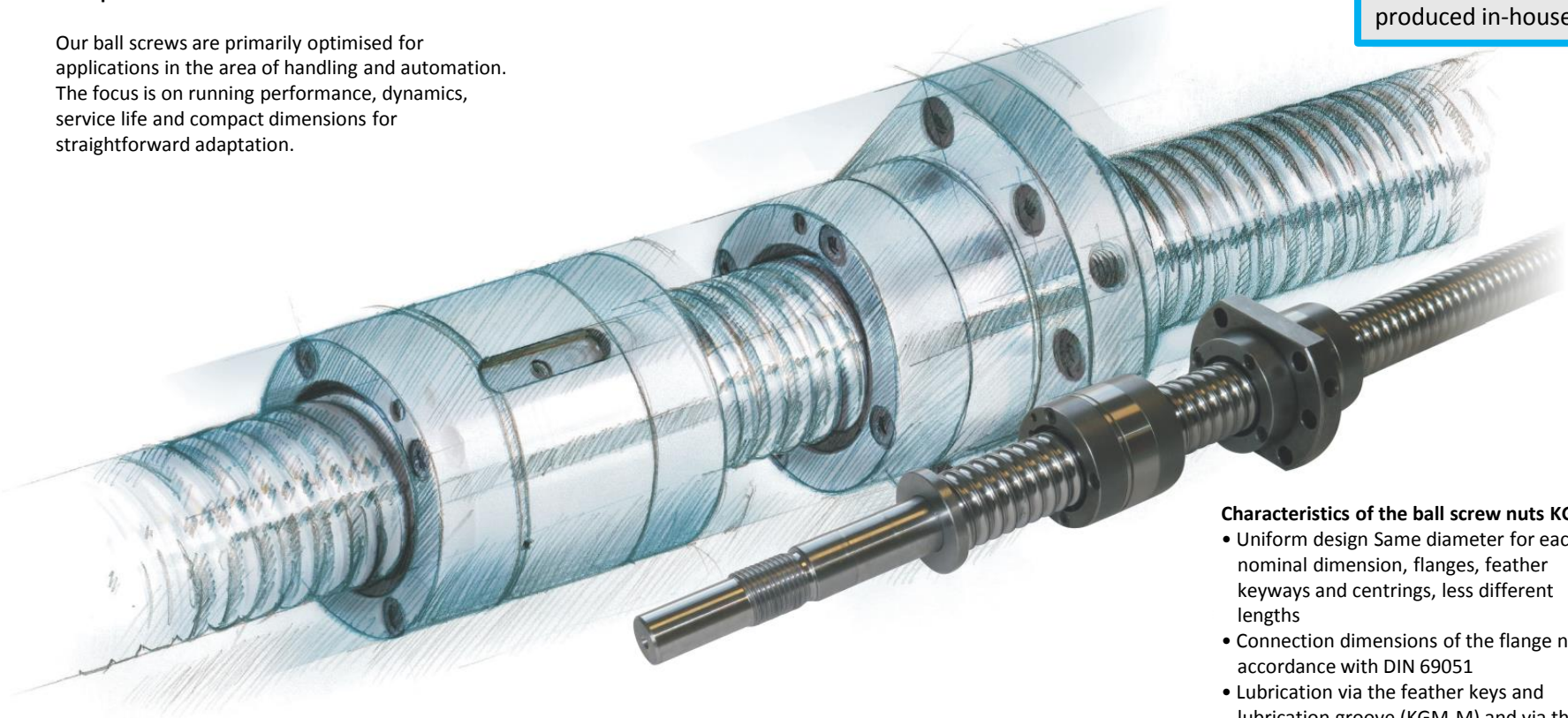
Highlights

- Outer roller guides for medium loads and rapid movements
- Closed aluminium box profile for high torsional rigidity
- Total length in one unit up to 8000 mm
- Maintenance-free toothed belt drive

Ball screws from HSB Automation GmbH
Nominal diameter 12, 16, 20, 25 and 32,
with pitches of 5-60 mm.

Our ball screws are primarily optimised for applications in the area of handling and automation. The focus is on running performance, dynamics, service life and compact dimensions for straightforward adaptation.

Our high-quality ball screws are composed of ball screw spindles from reputable manufacturers (some being specially produced for HSB) and ball screw nuts that are produced in-house.



This is what it is all about:

- Dynamic load rating up to 33.1 kN
- Rotational speeds of up to 4500 rpm (standard 3000 rpm)
- Standard spindle length of up to 5600 mm
- Nominal diameter 12-32 mm
- Nominal pitches 5-60 mm
- Pitch precision T7 - T5

Characteristics of the ball screw nuts KGM

- Uniform design Same diameter for each nominal dimension, flanges, feather keyways and centring, less different lengths
- Connection dimensions of the flange nuts in accordance with DIN 69051
- Lubrication via the feather keys and lubrication groove (KGM-M) and via the flange (KGM-F)
- Newly developed cover deflection with optimised geometry for high levels of dynamism, high rotational speeds and quiet running
- Made of the best materials and to the highest precision for optimum running characteristics and high load ratings

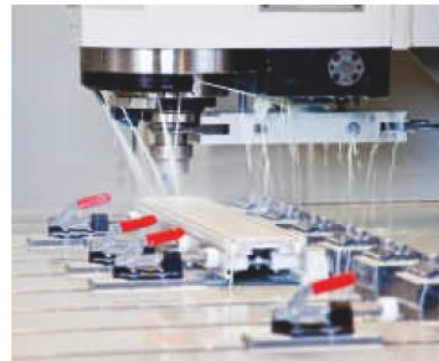
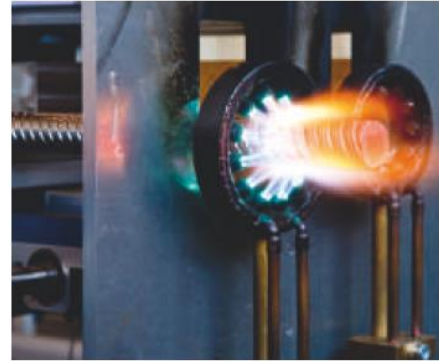
HSB COMPANY PHILOSOPHY

HSB Automation is a company that thinks globally but at the same time has deep roots in its home region of Reutlingen. Unrestricted sustainable reliability, esteem and grown trust characterise the relationship between **HSB** and its generally long-standing customers, suppliers and employees.

“Reliable, direct, down-to-earth – and the right idea at the right time.” With these words, Uwe Heißel, Managing Director and owner of **HSB Automation GmbH**, summarises the philosophy of his company. It is based upon sustainable commitment and consistent future-orientation: “Our success factors are the highest quality, precision, durability, delivery and deadline reliability, innovation and the permanent implementation of documented improvement measures.”

In order to guarantee rapid processes in the acceptance and processing of orders, the latest technology and consistently flat hierarchies characterise the Reutlinger high-tech company.

The focus is on customer satisfaction. Development, examination and production of good quality in accordance with the requirements of the market takes place with strict observation of the **HSB basic principles** of absolute flexibility, capacity planning and cost transparency. On the market, **HSB** attaches great value to offering its services at reasonable terms and with a balanced price-performance ratio.



BASIC PRINCIPLES

Management:

To promote motivation and enjoyment at work by involving employees in the company goals and transferring far-reaching responsibilities.

Experience:

We have many years' experience in the construction of mechanical linear units and handling equipment.

Qualification:

Extensively trained specialist staff and efficient production methods guarantee first-class work.

Development and design:

"There's no such thing as it can't be done." We achieve everything for our customers that is technically possible and commercially expedient.

Quality:

This is natural for us, and extends throughout all work processes.

Equipment:

Our machine park is optimally equipped with the latest CNC-controlled processing centres. These guarantee a high degree of flexibility and short delivery times.

Continuity:

Long-standing regular customers value our reliability. This makes **HSB** Automation GmbH a safe partner.

Costs:

From procurement to delivery, we take care to ensure a good price-performance ratio and we pass on these benefits to our customers.

Flexibility and innovation:

React quickly, deliver on time, respond individually to customer wishes, provide competent advice, remain flexible – these are the best guarantee of success for a medium-sized company. We think and work in an innovative and solution-orientated manner.

Safeguarding the future:

Our long-term goal is to maintain and create jobs and to increase competitiveness with our customers.

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