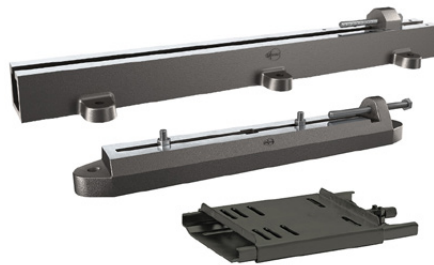


# Product and service overview



Belt drives

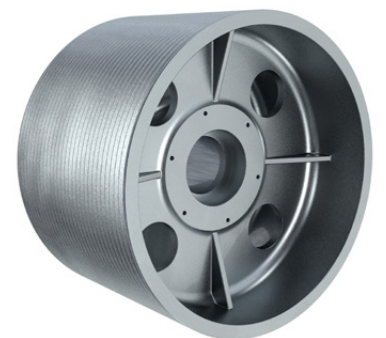
Motor mounting systems, clamping technology

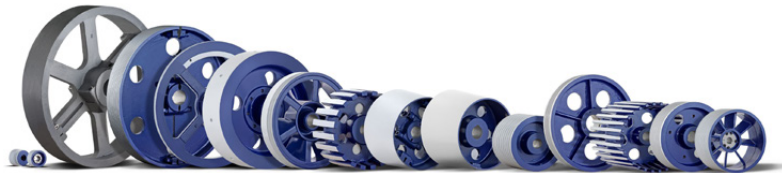


Supplies and measurement equipment



Custom castings





## Drive components made from a drawing without model set-up - This saves you time and money!

Thanks to our unique, flexible moulding technology, we are able to produce all disc geometries from cast materials at short notice and at low cost. As a matter of principle, we do not require any specific pattern equipment made of wood, plastic, aluminium, Exportit (Styrofoam) or similar. Even later change requests or adaptations can be realised completely cost-neutrally.

### V-belt pulleys

- For drive powers up to 1.000 kW
- Optimized for maximum peripheral speed
- Application-specific geometry as required
- Pulleys available with arms, plate or solid design
- Production up to 6 t unit weight and  $\varnothing$  2,800 mm
- Balancing according to DIN 21940-11 in all quality levels
- TL standard pulleys up to  $\varnothing$  1.250 mm -10 x SPC supplied from stock



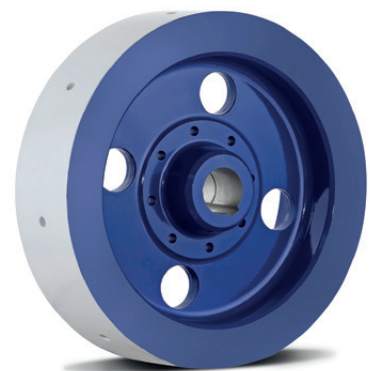
### Flat belt pulleys

- Spherically turned pulleys according to DIN 111
- Pulleys available with arms, plate or solid design
- Friction coatings of rubber, silicone and polyurethane
- Production up to 6 t unit weight and  $\varnothing$  2,800 mm
- Balancing according to DIN 21940-11 in all quality levels
- Stocking of TL standard pulleys up to  $\varnothing$  630 x 200 mm



### Flywheels

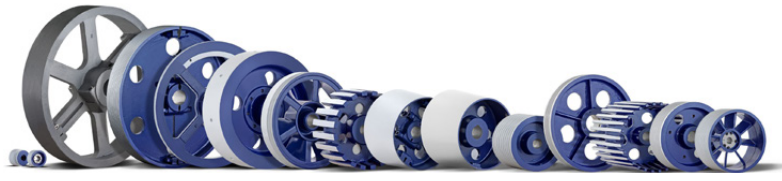
- Geometries up to  $\varnothing$  2,800 mm
- Pulley width up to 750 mm
- Up to 6 t unit weight
- Specific design according to weight and mass inertia
- Various shaft-hub-connections (also with friction clamping)
- Conical hubs also available
- All common materials supplied



### Divided pulleys

- Versions as V-belt, flat or toothed belt pulley
- Depending on requirements as arm or base pulley
- Also available with clamping hub
- For circumferential speeds up to 30 m/s in gray cast iron
- Easy assembly and disassembly





**Drive components made from a drawing without model set-up - This saves you time and money!**

No costs for models. No waiting time for models.  
Fast, flexible, good value - LÜTGERT.

### Toothed belt pulleys

- Production up to  $\varnothing$  2,000 mm
- All common tooth profiles
- Geometry individually according to customer drawing



### Belt and grid pulleys | Bar drums for bucket elevators

- Production up to  $\varnothing$  355 - 1,000 mm and rim widths up to 500 mm
- Ready drilled and grooved according to customer requirements
- Common dimensions with pilot bore available from stock
- Incl. various rubber coatings according to requirements
- Galvanically nickel-plated on request, food-safe



### Aluminium pulleys

- Low own weight and high strength
- Produced ready for assembly according to customer specifications
- Also available as rope sheaves



### Steel welded constructions

- Geometries up to 6 t unit weight and  $\varnothing$  2,500 mm
- Available in all common weldable materials
- Customised geometry
- Design based on centrifugal force or moment of inertia
- Shaft-hub connection ready drilled with groove and set screw, alternatively with Taper-Lock bush or clamping set



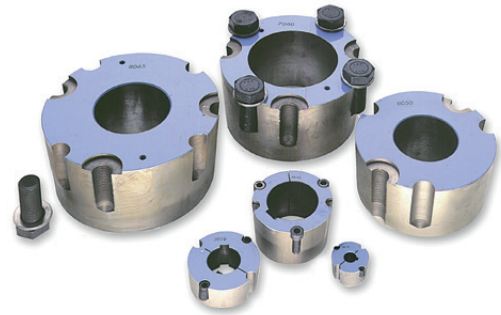
## Customer designed castings

- Casting and mechanical processing from one source
- Single parts and batch series according to customer specifications
- Customer-specific parts in all designs
- Unit weights from 1 kg to 6,000 kg
- Cost optimization with international partners
- Smart concepts for storage and logistics



## Taper Lock clamping bushes (TL)

- Optimized shaft-hub connection for all designs and pulley types  
common stocking ring of bush sizes: 1008 | 1108 | 1210 | 1610  
1615 | 2012 | 2517 | 3020 | 3030 | 3535 | 4040 | 4545 | 5050
- Short leadtime from our own production: 6050 | 7060 | 8065 | 10085
- Special design available (metric thread): Design with cylindrical bore and keyway and frictional connections (tempered steel) available



## V-belts / Drive belts

- V-belts, flat belts, power belts and timing belts of all leading producers
- High performance and high belt speeds
- High synchronisation accuracy at constant operating conditions
- Reverse direction of rotation possible
- Insensitive for short-term overload (sliding slip)
- On request also electrically conductive, same set etc.
- We select your custom-made drive: economical, low-cost and with long endurance



## Belt tension measuring device

- Non-contact, acoustic measurement
- LCD display
- Background noise suppression
- Measuring accuracy 10-400 Hz  $\pm$  1%
- Measuring accuracy 400-600 Hz  $\pm$  2%
- Ambient temperatures from -20°C to +60°C possible
- Can be used with all tensioned materials
- Also available as a set with laser measuring device in a hard case



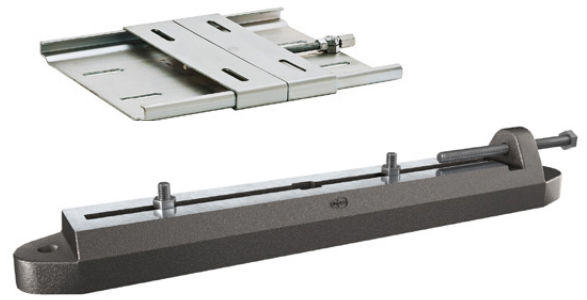
## Alignment laser for pulleys

- Compact and practical design
- Time-saving and accurate measuring method
- Measurement of parallel and angular misalignment
- Robust, anodised aluminium case
- Powerful, focusable line laser
- Measuring pins with magnet
- Applicable on all materials due to adhesive pads
- Can also be used for other drives (e.g. chain drives)



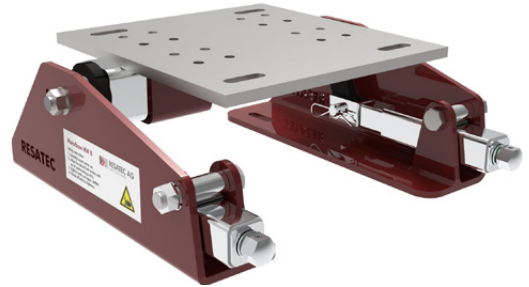
## Motor mounting and slide systems

- Motor slide rails made of cast iron according to DIN 42923 or light version
- Motor slide rails WEN for heavy drives
- Motor slide rails made of steel
- Motor slide base with single and split plate
- Special solutions for mobile and stationary systems



## Motor bases

- For friction belt drives of 7.5 to 200 kW electric engines
- V-belt replacement time reduced by 50%
- Up to four times longer belt life due to correct tensioning
- Less interruptions in operation and protection of pulleys, bearings and motor shafts
- Less energy consumption due to optimally tensioned V-belts
- All parts galvanised
- Maintenance-free



## Rubber suspension units, oscillating mountings, tensioner devices

- Universal, elastic bearing supports for machine components
- Reduction of vibrations and shocks
- Isolation of oscillations and noises
- Belt and chain tensioners
- Rubber spring elements can perform several functions at the same time i. e. cushioning, absorbing, tensioning and oscillating



## Foundation blocks acc. to DIN 799

- Ready to install with screw and washer
- Form A: Standard form without lateral cast lug
- Form B: With lug for thread and adjusting screw
- High damping characteristics due to the cast material
- Isolation of the plant from vibrations
- Highest casting quality for safety and stability
- Optional plant layout by pre-assembling of the foundation blocks
- Available from stock in all sizes



## Shafts and rolls

- Available in all configurations
- Available with spigot, thread, milled surfaces, end bores
- Work rolls (skin pass rolls, scale breaking rolls, feed or back-up rolls)
- Straightening rolls (intermediate rolls, draw-in or stretching rolls)
- Highest precision in turning, drilling, milling and grinding operations
- High dimensional accuracy with simultaneous adherence to shape and position tolerances



## Foundry

- No model costs for rotation-symmetric castings
- Gray cast iron (EN-GJL), Spheroidal graphite iron (EN-GJS), Steel cast (GS), Aluminium and other materials available
- Professional smelting facility
- Permanent quality analysis - continuous quality control
- In house sheet metal and steel fabrication



## In house manufacture and sub contract machining

- CNC turning and milling
- Balancing technology according to DIN 21940-11 in all quality levels
- Quality assurance with modern measurement technology
- Surface finishing, painting



## Engineering / Drive design

- Designing and development of optimal drive solutions
- 3D-CAD-system (SolidWorks / STEP, IGES)
- Optimisation of efficiency and lifetime
- FEM-Simulations for iterative drive optimization
- Providing of technical documentation and certificates
- Test rig trials for optimised geometry

