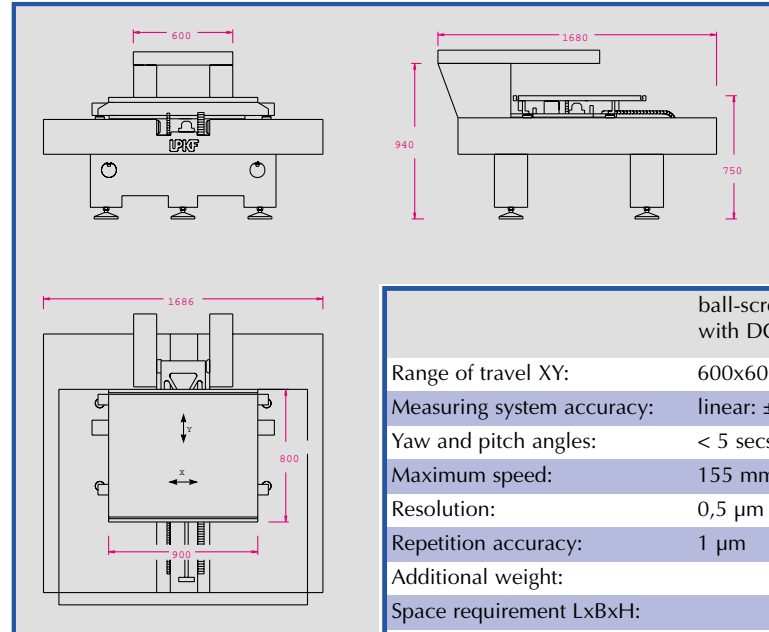


Technical Parameters



| | ball-screw spindle with DC motor | DC linear motor |
|----------------------------|----------------------------------|------------------------------|
| Range of travel XY: | 600x600 mm ² | 600x600 mm ² |
| Measuring system accuracy: | linear: ± 3 µm | linear: ± 3 µm |
| Yaw and pitch angles: | < 5 secs | < 5 secs |
| Maximum speed: | 155 mm/sec | 155 mm/sec |
| Resolution: | 0,5 µm | 0,5 µm |
| Repetition accuracy: | 1 µm | < 1 µm |
| Additional weight: | | max. 50 kg |
| Space requirement LxBxH: | | 1,5 x 1,7 x 0,8 m |
| Total weight: | | ca. 2,25 t |
| Temperature conditions: | | 20°C ±0,5°C |
| • Temporal change: | | max. 0,5°C / h |
| Air humidity: | | max. 80 % |
| Compressed-air supply: | | regulated: 6,1 bar ± 0,2 bar |
| • Oil residue: | | < 7 mg/m ³ |
| • Solid particles: | | < 3µm |
| • Moisture: | | 5,953 g/m ³ |
| Air consumption: | | ca. 1000 l/h |

Adaptation to OEM and specific applications is made in consultation with the customer. A report compiled by laser-interferometer gives a precise statement of the guiding and positional accuracy.

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LPKF-Products

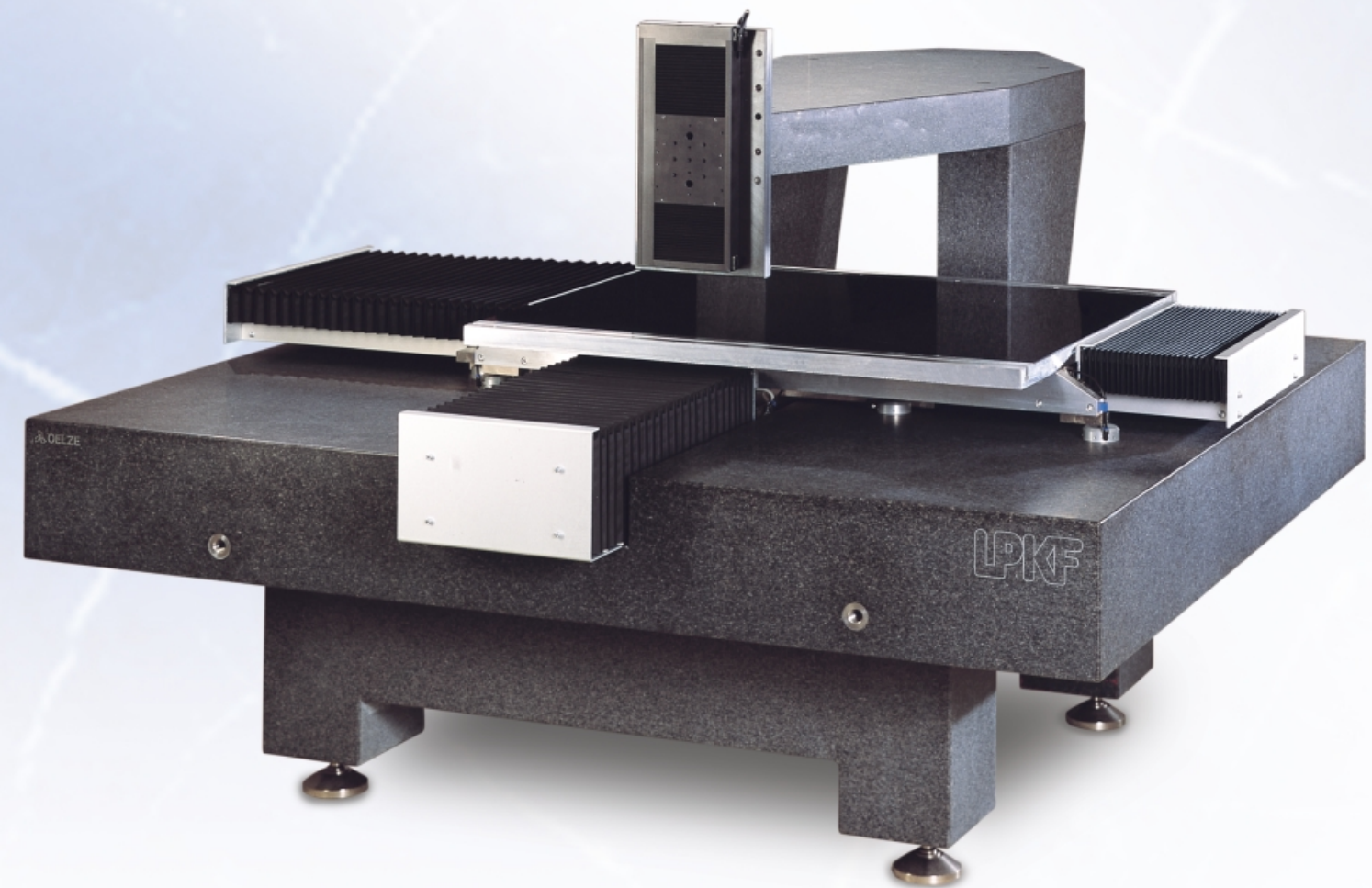
Präzisionsantriebe / Precision Drives

Steuerungen / Control Systems / Software

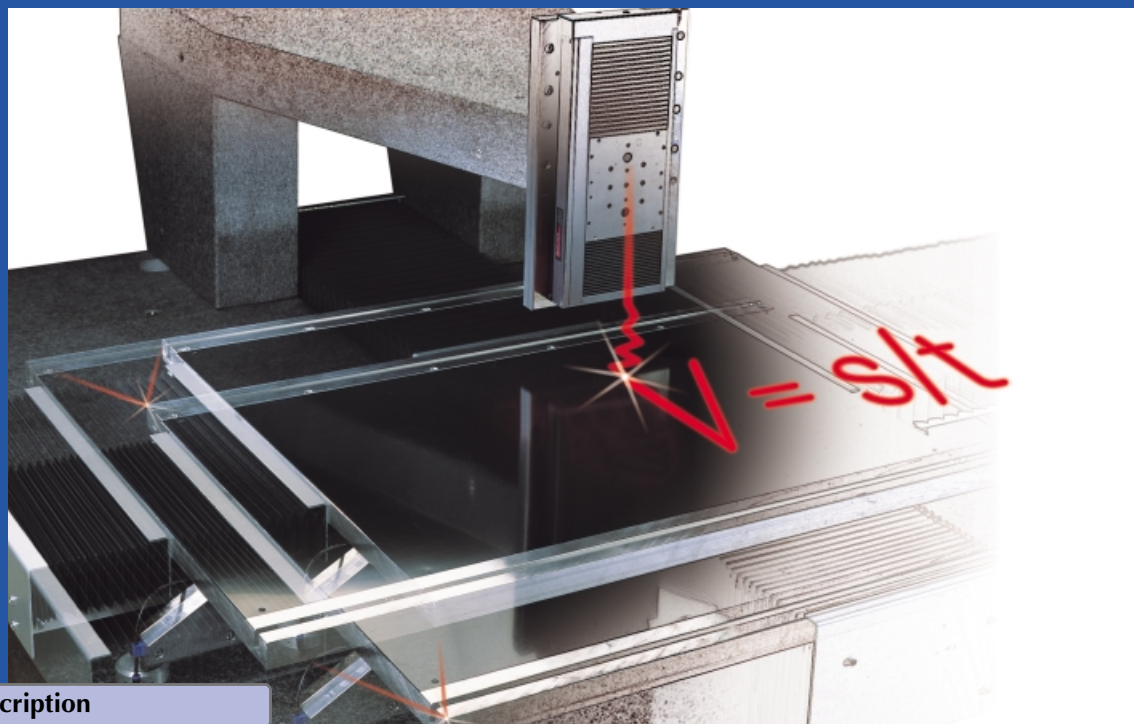
Meßtechnik / Measurement Engineering

Sondersysteme / Special Systems

Precision table with air bearings for positioning and measuring tasks in the micrometer range



Highest accuracy over 600 x 600 mm²



General Description

The LPKF XY 60/60 G is a positioning table with air bearings which has been specifically designed to meet the exacting requirements of metrology and laser structuring. The perfected design enables structures from the macro- to the micro-range to be processed or checked within an area of 600 x 600 mm². It allows a specific position to be reached with precision, and, in addition, the movement pathways follow predetermined paths with micrometer accuracy.

Application

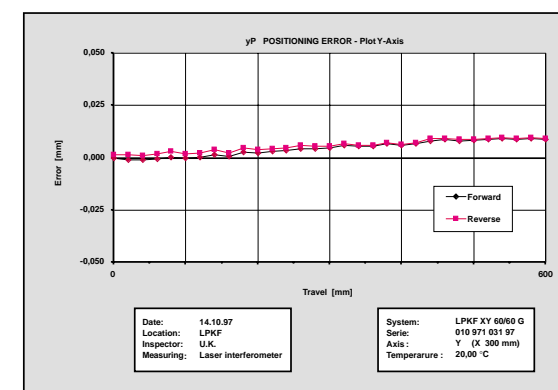


- Structuring flat objects, e.g. laser cutting and engraving, photo-templates amongst many other uses.
- Sensitive assembly platform and handling system
- Positioning device for quality control, e.g. with optical inspection system

Options

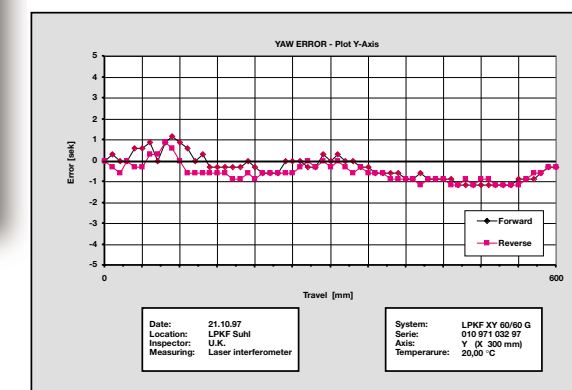
- Brushless DC linear induction motors
- Spindles with DC servomotors or stepping motors
- Linear scales or rotatory encoder
- Extension bellows

Construction



This design guarantees great positional accuracy and minimal yaw, pitch and rolling errors, together with excellent path performance.

The cross table has a monolithic granite base. Both axes are guided with air bearings along lapped paths and glide on the same, extremely flat granite surface.



Control System



The LPKF "MotionSystem" is a positioning control system for stepping motors and highly dynamic servomotors. The modular construction ensures that it can be used for many different applications. Up to 6 axes can be synchronously controlled with high path precision. Comprehensive driver software enables the working process to be planned with ease.

Extensions

- Z-axis
- Rotating / swivelling unit (see figure)
- Granite extension arm unit and portal unit
- Multiple axis alignments

