

KNM 2X | 4X | 6X | 9X



KAPP NILES

Measuring machines for spur and helical gears, rotors, bevel gears, gear tools, shafts etc.



Highly precise measurement
of gears up to 1,250 mm
in the lab or on the shop floor –
no separate base required

Highlights of the highly precise KNM 2X | 4X | 6X | 9X

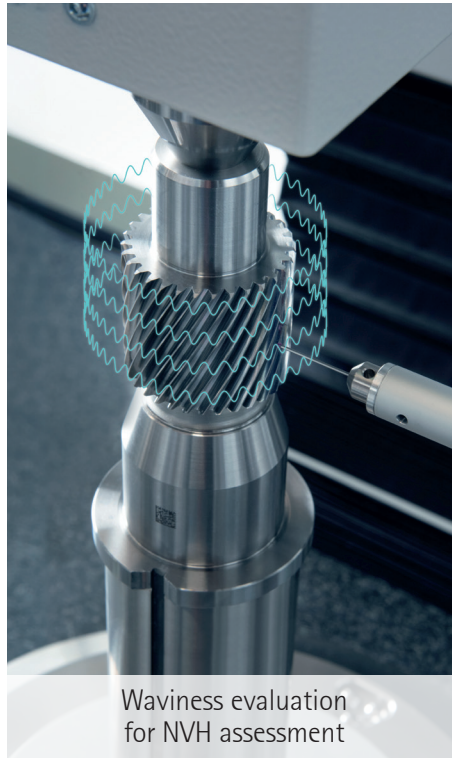
- Machine structure with outstanding intrinsic accuracy and thermal stability - all linear axes made of granite with air bearings
- Air spring system to absorb vibrations - no separate, vibration-damping or separate bases needed
- State-of-the-art drive technology (linear motors) for X, Y and Z axes, placed close to the center of gravity
- Highly precise air bearing rotary table with direct drive
- "Smart" tailstock, motorised positionable (applies to 2X | 6X | 9X)
- "Smart" Quick Change Clamping System
- Flexible positioning of electrical cabinet
- State-of-the-art KNM C5 controller
- Temperature compensation for machine and workpiece
- Computer Aided Accuracy (CAA) technology for all linear axes



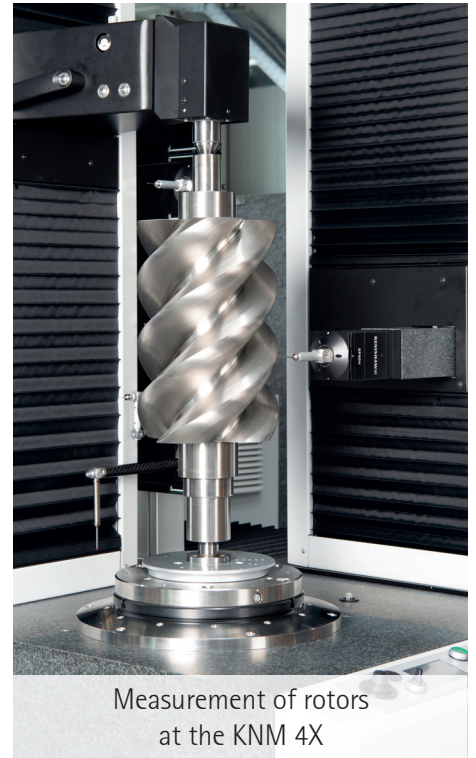
„Smart“ tailstock and Quick Change Clamping System at the KNM 2X

Groundbreaking, easy to use Software

- Evaluation software for all kind of gears, gear tools, worms, worm gears, rotationally symmetrical components as well as dimensional, form and position measurements
- Waviness evaluation directly integrated into the measurement process for NVH assessment of gears (kngear-waviness)
- Enhanced KN Rotor software package for compressor rotor measurements
- Clear operator guidance
- Plausibility check



Waviness evaluation for NVH assessment



Measurement of rotors at the KNM 4X

	max. workpiece diameter [mm]	max. workpiece length internal / external [mm]	counter support L / D [mm]	rotary table diameter [mm]	max. workpiece weight [kg]
KNM 2X	300	450	480 / 300	200	80
KNM 4X	450	400 / 650	850 / 450	300	500
KNM 6X	750	400 / 850	1,000 / 700	300	500
KNM 9X	1,250	400 / 1,020	1,200 / 1,000	800	1,500