

-- Most suitable for analysis of encoder magnet for ABS and EPS used as car component--

Magnetic Characteristic Analysis System Apparatus for Magnetic Encoder



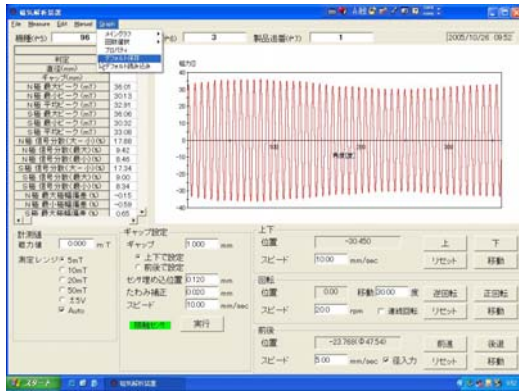
- The principal feature of this apparatus development is research and development / performance evaluation of ring-shaped magnetic encoder magnet.
- Cover all necessary evaluation item and analysis features completely by exclusive development software.
- Distinguished repetition reproducibility by very high machine accuracy
- Circumferential direction measurement is super high resolution of maximum 324,000 point / lap.
- Adopt the high-performance gauss meter which developed exclusively for this apparatus.
- Realize very high A/D conversion accuracy by our original noise suppression circuit
- Can use Hall sensor and MR sensor used as car component. (Option)
- Can use it in high-temperature environment. (Option)



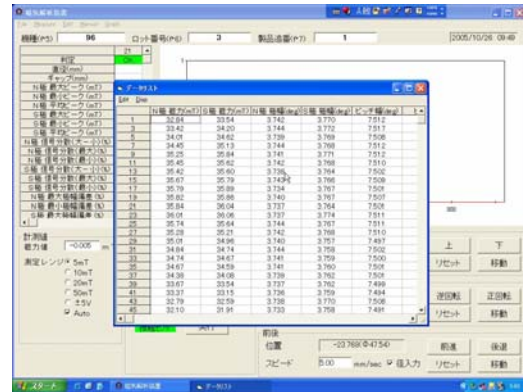
Product Outline

1. Number of measurement point
Maximum 324,000 point / lap (use 81,000 pulse optical encoder with 4 multiply)
2. Number of the possible measurement poles
Maximum 500 pole (N × 250 pole, S × 250 poles. Can change it by option)
3. Deflection of pivot point / Horizontal adjusting
Rotating stage of three point support type with three micrometers, Scroll chuck
4. Adjusting of deflection of pivot point
With above stage, deflection of pivot point and horizontal adjusting within 2μm is possible.
5. Chuck method of sample
Hand-operated set by scroll chuck
6. Measuring gap automatic setting mechanism
Probe go ahead automatically → With touch sensor mechanism, probe detects the position which touched sample softly → Stop the position as reamer origin position automatically (gap : 0 mm) → Probe reverses automatically with the arbitrary measuring gap value which set by software
7. Number of the data samplings
Maximum 324,000 data / lap
8. Measurement time
Maximum rotating speed is 2 rotate / second (Recommended value is 1rotate / second)
9. Measurement magnetic force range
5 / 10 / 20 / 50mT (N pole : + S pole : -)
Resolution : 0.01mT (Range 5 / 10 / 20mT), 0.1mT (Range 50mT)
10. A/D converter accuracy and Data reproducibility
±1% + 0.01mT (Range 5 / 10 / 20mT)

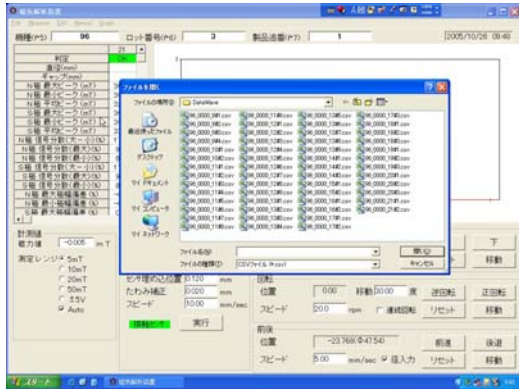
Basic display image (test result + ripple)



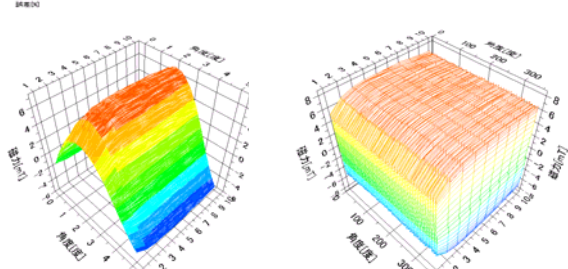
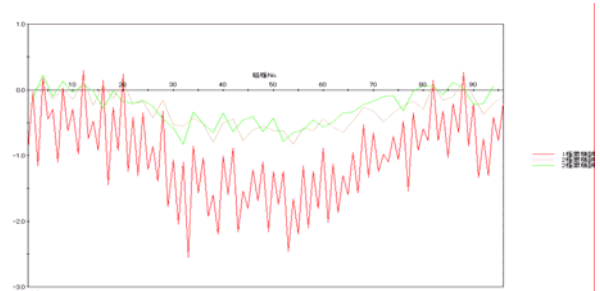
Data output display image (can paste output data to Excel)



Ripple data read (write) in CSV format display image



Accumulated pole pitch error and Single pole pitch error



3D graph
(Circumferential and radial direction)

We do design and manufacture of custom-built evaluation system apparatus that suitable for your requirement specification and application. Please feel free to inquire.



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