



SUZHOU NIUMAG
ANALYTICAL INSTRUMENT CORPORATION



PQ001-12-040V Oil & Moisture Content NMR Analyzer

PQ001-12-040V NMR oilseed analyzer is well designed for oil seed content testing. It provides you with the most professional and best match analytical solutions with small size, high precision, good repeatability, good stability and performance ratio.

Specifications

- Magnet: Permanent; $0.28 \pm 0.05T$
- Probe: $\varnothing 40$ mm
- Magnet temperature: $25-32^{\circ}C (\pm 0.02^{\circ}C)$
- Max Volume: 37 ml

Function

- Simultaneous determination of oil and moisture content in seeds:
Oil range: 0.1% - 100%
Moisture range: 0.1% -100%
- Scope: Olive, Rapeseed, Sunflower, Corn, Cotton, Soybean, Peanut, etc

Feature

- Accuracy: Deviation less than 0.5 % (Reference Soxhlet method)
- Repeatability: $RSD \leq 0.05 \%$

● Advantage

- Rapid
- Non-destructive
- Solvent-free
- No sample preparation
- Guided software
- Low Maintenance



Application index

1. Minimum detection: 10 mg (water);
2. Max measure height: 30 mm;
3. Range of water content: 0.03%~100%;
4. Range of oil content: 0.03%~100%;
5. Range of seeds' water content: 0.03%~15%;
6. Accuracy: RD<2% (compared with Soxhlet extraction) ;
7. Accuracy: RD<5% (compared with oven drying) ;

Case study

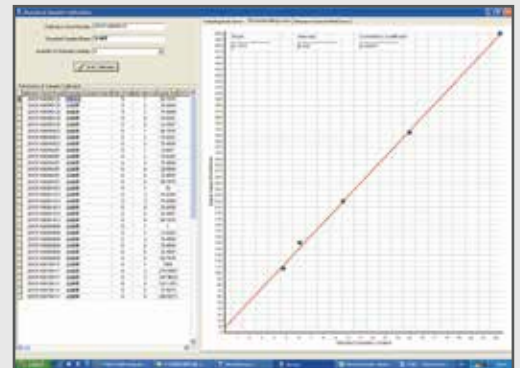
Oil content(NMR VS. Soxhlet Extraction)

| NO. | 1# | 2# | 3# | 4# |
|-----------------------|-------|-------|-------|-------|
| NMR(%) | 45.87 | 46.53 | 45.57 | 45.96 |
| Soxhlet Extraction(%) | 46.35 | 46.13 | 46.27 | 46.53 |
| RD(%) | 1.04 | 0.87 | 1.51 | 1.23 |

Water content(NMR VS. Oven Drying)

| NO. | 1# | 2# | 3# | 4# |
|-----------------------|------|------|------|------|
| NMR(%) | 6.41 | 6.37 | 6.6 | 6.42 |
| Soxhlet Extraction(%) | 6.68 | 6.51 | 6.41 | 6.51 |
| RD(%) | 4.04 | 2.15 | 2.96 | 1.38 |

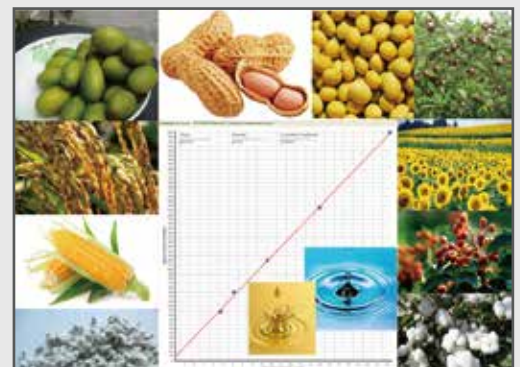
NMR Oil and Moisture Measurement Software®



Calibration of Oil/Moisture Content



Data Query



Determination of oil and/or moisture content

SUZHOU NIUMAG CORPORATION

Add: Floor 1-2, Building 2, Suzhou Software Technology Park, No.78, Keling Rd, Suzhou, Jiangsu, China
Tel : +86-512-62393560 Email: info@niumag.com Web: www.nmralyzer.com

Korea South

Add: 3F, A-316, 212 Olympic-ro, Songpa-gu, Seoul 05553 Rep of Korea
Tel : +82-2-2145-4360 Email: jkbhang@jktac.co.kr

Web: www.jktac.com