The N/protein content is a determining factor concerning the quality of animal feed. It must be measured accurately in order to assess the nutritional quality. The rapid N exceed is a fully automated analyzer for fast, precise and environmentally friendly analyses of N/Protein. The innovative EAS REGAINER® technology allows the analysis of several thousands of samples with minimum maintenance. This results in a reduction of the costs per analysis with more than a factor two compared to similar instruments on the market.

The samples were finely ground and weighed into tin boats. Analyses were run using a standard method implemented in the instrument software with a total analysis time of about 5 minutes. All samples have been analyzed ten times. A protein factor of 6.25 was applied to calculate the average protein content. The average difference between two successive analyses has been calculated to compare to international standard ISO 16634-1 (diff. N < 0.1%) and the relative standard deviation (RSD) to compare to international standard AOAC 990.03 (RSD < 2%).

The results demonstrate the excellent analytical performance of the rapid N exceed. All samples could be analyzed well within the required precision of the international standards ISO 16634-1 and AOAC 990.03.

The rapid N exceed offers fast N/protein determination with minimal maintenance, resulting in a high sample throughput, ideal for applications in industrial quality control in the animal feed industry.