Agricultural Outfits

MODEL AST SERIES

ADVANCED AGRICULTURAL SOIL TESTING OUTFITS

AST-5 • CODE 5410

Test Factor	Tests	Range*
pH	100	pH 4.5-8.0
Nitrate Nitrogen	100	2.5-100 lbs/acre
Phosphorus	100	15-150 lbs/acre
Potassium	100	L-H 120-200 lbs/acre
Humus (Organic Matter)	100	L-H 1a%-8%

*See page 5 for unit conversion factors

AST-15 • CODE 5412-01

Test Factor	Tests	Range*
pH	100	pH 4.5-8.0
Nitrate Nitrogen	100	2.5-100 lbs/acre
Phosphorus	100	15-150 lbs/acre
Potassium	100	L-H 120-200 lbs/acre
Humus (Organic Matter)	100	L-H 1a%-8%
Calcium	100	0-5,000 ppm
Magnesium	100	0-120 ppm
Ammonia Nitrogen	100	10-80 lbs/acre
Manganese	100	L-H 4-40 ppm
Aluminum	100	L-H 5-125 ppm
Nitrite Nitrogen	100	0.5-25 lbs/acre
Sulfur	100	0-100 ppm
Chloride	100	0-1000 ppm
Ferric Iron	100	2.5-5.0 ppm
Copper	100	0.25 ppm/drop

*See page 5 for unit conversion factors

MACRONUTRIENTS, pH, & HUMUS
Model AST-5 • Code 5410 • HF (15)
Reagent Refill • Code R-5410

MACRONUTRIENTS, MICRONUTRIENTS, & pH
Model AST-15 • Code 5412-01 • HF (21)
Reagent Refill • Code R-5412-01

This line of combination soil analysis outfits offers the finest visual color matching system available to today's agronomist. Technically advanced reagent systems and unique extraction procedures based on the Mehlich I extraction provide fast, simple and extremely accurate soil testing. Soil nutrients are drawn from the test sample, providing a clear liquid extract. The addition of an indicator reagent to the clear extract produces a color reaction in direct proportion to the nutrient concentration in the test solution. The developed color is read against permanent, translucent color standards provided in the Octa-Slide Comparator. The result is a simple and distinct color match over a broad test range. Tests for calcium, magnesium and chloride are performed with an easy-to-use Direct Reading Titrator. Reagent is dispensed into the soil extract until an endpoint color change is reached, then results are read directly from the titrator in parts per million. Measurement of potassium is conducted with a unique turbidity tube system. Copper is determined by means of a drop count method, and humus is measured against a color chart index with five color standards. The AST outfits also include simplified procedures for screening of nitrates, phosphorus and potassium in plant tissues. Both Model AST outfits are furnished in rugged, lightweight carrying cases with components securely mounted in removable foam-lined trays. This format permits easy conversion from an in-store lab to service in the field. Each kit includes simplified and complete instructions, a pad of soil analysis report forms, instructions for collecting representative soil samples and a copy of the LaMotte Soil Handbook. This handbook contains charts with data on the nutrient needs of various crops. It also contains general information on using soil test results to determine actual lime and fertilizer requirements for optimal plant growth. Available in two models. See charts at left.