

AGRICULTURAL COMBINATION SOIL OUTFITS



Code 5010-01

Model STH Series

Macronutrients & pH

Model STH-4 · Code 5029 · LQ [10]

Reagent Refill · Code R-5029 · LQ [5]

Macronutrients, pH, Humus, Calcium, & Magnesium

Model STH-7 · Code 5061 · LQ [12] | Reagent Refill · Code R-5061 · LQ [6]

Macronutrients, pH, & Humus

Model STH-5 · Code 5007 · LQ [12] | Reagent Refill · Code R-5007 · LQ [6]

Macronutrients, Micronutrients, & pH

Model STH-14 · Code 5010-01 · LQ [20] | Reagent Refill · Code R-5010-01 · LQ [10]

The Model STH Combination Soil Outfits have offered simplified methods for determination of available nutrients found in agricultural soils for over 50 years. Since the original introduction, based on **Morgan soil test methods**, reagent systems have been updated with new advancements. A series of chemical tests use standardized reagents to produce color reactions measured against laminated color charts. All STH outfits come in lightweight carrying cases with components securely mounted in removable trays. This provides flexibility for the in-house specialist who also wants to make quick problem determinations in the field. Colorimetric test methods are used for most test factors. Tests for calcium, sulfate and chlorides are based on turbidity measurements. Potassium analysis also employs a turbidity measurement, using a unique reading device designed in LaMotte laboratories to read directly in pounds per acre. A single extraction procedure, using Morgan Universal Extraction Solution, provides the liquid soil extract for all the nutrient tests with the exception of chloride, which is extracted with demineralized water. The Humus Screening Test, performed on a soil sample-demineralized water suspension, employs five color standards for rapid measurement of humus content of the soil. Soil pH is determined colorimetrically, using pH indicators and color charts covering the range of pH 3.8 to 9.6. The STH outfits also include simplified procedures for screening nitrates, phosphorus and potassium in plant tissues. Complete reagent refill packages are available for each STH outfit. Kits includes instructions, a soil management handbook and a pad of soil analysis report forms. The **LaMotte Soil Handbook** contains general information on interpretation of test results for determination of lime and fertilizer requirements.

See back page for
Shipping Codes &
Weights chart.

STH-4 · CODE 5029

Test Factor	Tests	Range*
pH	100	pH 3.8-9.6
Nitrate Nitrogen	50	10-150 lbs/acre
Phosphorus**	50	10-200 lbs/acre
Potassium	50	100-400 lbs/acre

STH-5 · CODE 5007

Test Factor	Tests	Range*
pH	100	pH 3.8-9.6
Nitrate Nitrogen	50	10-150 lbs/acre
Phosphorus**	50	10-200 lbs/acre
Potassium	50	100-400 lbs/acre
Humus [Organic Matter]	50	L-H 1½%-8%

STH-7 · CODE 5061

Test Factor	Tests	Range*
pH	100	pH 3.8-9.6
Nitrate Nitrogen	50	10-150 lbs/acre
Phosphorus**	50	10-200 lbs/acre
Potassium	50	100-400 lbs/acre
Humus [Organic Matter]	50	L-H 1½%-8%
Calcium	50	150-2800 ppm
Magnesium	50	L-H 5-150 ppm

STH-14 · CODE 5010-01

Test Factor	Tests	Range*
pH	100	pH 3.8-9.6
Nitrate Nitrogen	50	10-150 lbs/acre
Phosphorus**	50	10-200 lbs/acre
Potassium	50	100-400 lbs/acre
Humus [Organic Matter]	50	L-H 1½%-8%
Calcium	50	150-2800 ppm
Magnesium	50	L-H 5-150 ppm
Ammonia Nitrogen	50	L-H 5-150 ppm
Manganese	50	L-H 4-40 ppm
Aluminum	50	L-H 5-125 ppm
Nitrite Nitrogen	50	1-50 ppm
Sulfate	50	50-2000 ppm
Chloride	50	25-500 ppm
Ferric Iron	50	5-125 lbs/acre

See page 5 for unit conversion factors

† For non-alkaline soils. Code 5090 Phosphorus Auxiliary package recommended for alkaline soils.