

HK INSTRUMENT SYSTEMS

Pittsburgh, PA

CREAM CHEESE PRODUCTION

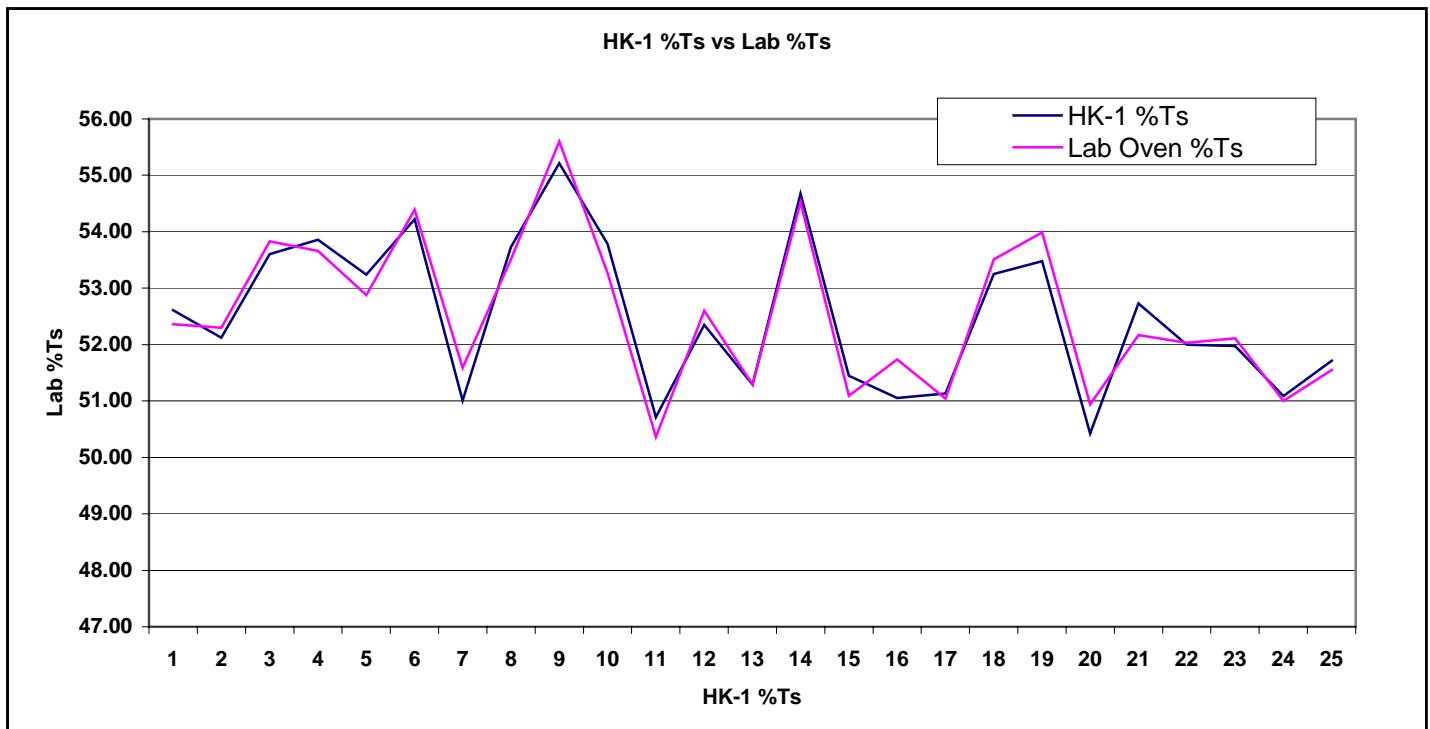
APPLICATION: TO MEASURE THE %TOTAL SOLIDS OF A CREAM CHEESE PRODUCT DURING PRODUCTION. LOW OR HIGH FAT, LOW OR HIGH MOISTURE POSSIBLE.

INSTALLATION: THE MICROWAVE SENSORS ARE ALWAYS INSTALLED WITH A **PROPRITARY 3A SANITARY SPOOL PIECE** WHICH WILL BE MOUNTED VERTICALLY. TEMPERATURE COMPENSATION WILL ALWAYS BE INSTALLED.

TESTING: AN EXAMPLE OF A CREAM CHEESE PRODUCT IS DESCRIBED BELOW. SAMPLES WERE COLLECTED AND DRIED IN A LAB OVEN TO DETERMINE % TOTAL SOLIDS BY LOSS OF WEIGHT. READINGS OF THE HK-1 MICROWAVE INSTRUMENT SYSTEM WERE RECORDED EACH TIME A SAMPLE WAS COLLECTED.

RESULTS: CORRELATION BETWEEN LAB SAMPLES AND MICROWAVE READINGS IS EXCELLENT FOR THE ENTIRE MEASUREMENT RANGE. THE R-SQUARED VALUE IS 0.93.

LAB OVEN VS MICROWAVE



SAMPLE NUMBER

CONCLUSIONS: THE HK-1 MICROWAVE INSTRUMENT SYSTEM IS AN EXCELLENT TOOL THAT CAN BE USED TO MONITOR AND CONTROL THE %TOTAL SOLIDS OF ANY CREAM CHEESE PRODUCT.