

COMAPARISON OF 3D SCANNER WITH ULTRASONIC AND RADAR

FEATURE	3D SCANNER	NON CONTACT RADAR	ULTRASONIC
NUMBER OF ANTENNAS	3 TRANSRECEIVERS	1 TRANSRECEIVERS	1 TRANSRECEIVERS
SCANNING DIAMETER	COMPLETE	POINT LEVEL	POINT LEVEL
BEAM ANGLE	30-70 DEG	4-6 DEGREE	4-8 DEGREE
MULTIPOINT SCANNING	YES	NO	NO
LEVEL ERROR	0.02%	10-15%	10-15%
TRUE VOLUME	YES	NO (ONLY % BASED ON LEVEL)	NO (ONLY % BASED ON LEVEL)
SILO SHAPE FOR VOLUME	ANY SHAPE	% CAN BE USED ONLY FOR CYLINDER	% CAN BE USED ONLY FOR CYLINDER
MASS	YES FOR FIXED AS WELL AS VARIABLE DENSITY	NO	NO
3D SURFACE VISUALIZATION	YES	NO	NO
VOUME ERROR	LESS THAN 3% OF TOTAL	-	-
RELIABLE FOR WIDE SILOS	YES	NO	NO
WARE HOUSE, OPEN BINS, OPEN YARDS	YES (ONLY SOLUTION AVAILABLE)	NO	NO
NON CONTACT CONTINOUS MEASUREMENT	YES	YES	YES
HIGH MEASURING RANGE	YES	YES	YES
AFFECT BY DUST	NO AFFECT (DUST PENETRATING)	NO EFFECT	INACCURATE IN DUSTY CONDITION
NITROGEN PURGE REQUIREMENT	NO (SELF CLEANING ABILITY)	YES (IF MOIST AIR COMES THEN CRUSTING AND DAMAGE)	DOESNOT WORK IN DUSTY ENVIRONMENT
WORKING WITH ALL SOLID MATERIALS INCLUDING LOW DIELECTRIC	YES	NO	YES
SHOWING MATERIAL BUILD UP ON WALLS	YES	NO	NO
SELF CLEANING ABILITY	YES	NO	NO