TRUCK PROBES







PROVEN & DEPENDABLE™

WWW.GRAINSYSTEMS.COM

TRUCK PROBES

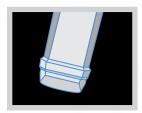
CONSISTENT SAMPLING

InterSystems' Truck Probes provide representative and repeatable samples of grain, pellets, chips, flakes, granules and powders from trucks, rail cars, ships, tubs and other vessels. The heavy carbon steel stand, mast and boom support the double-wall steel sample probe, powered by a rugged hydraulic unit.

Models include 3, 5, 7.5 and 10 horsepower units with available booms extendable up to 16 ft. and compartmentalized or core type tips used to obtain samples. Compartmentalized tip probes fill the chambers by gravity. The interior cylinder rotates, closing the ports in the first chamber and allowing material to flow by gravity into the second chamber. During retraction or while the probe is still in the load, material flows to the bottom of the second chamber and is pneumatically drawn through a third chamber for delivery to a collection cabinet in the probe station. A core type sample probe extracts a vertical cylinder of material from the vessel without pulling dust or fines from the surrounding mass. The sample is then pneumatically transported to the collection point. The sample probe is mounted on a swivel stand and boom which are hydraulically powered in three axes.

InterSystems' complete Truck Probe system includes a vacuum system, collection cabinet, telescoping boom, hydraulic power unit, and controls. Probes for rail cars are available as well as mega probes which offer longer extendable booms, long-range sample delivery units and excess return systems.

COMPARTMENTALIZED TIP



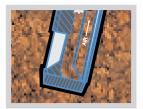
Compartmentalized Tip Illustration



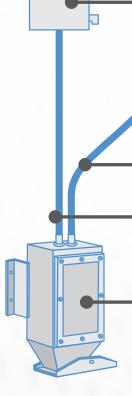
3 7/8" x 7/8" material ports open, filling the compartmentalized chambers by gravity as with a hand probe



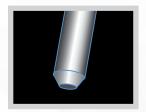
The interior cylinder rotates, closing the ports in the first chamber and allowing material to flow by gravity into the second chamber



During retraction, or while the probe is still in the load, material flows to the bottom of the second chamber and is pneumatically drawn through a third chamber for delivery to a collection cabinet in the probe station



CORE TIP



Core Tip Illustration

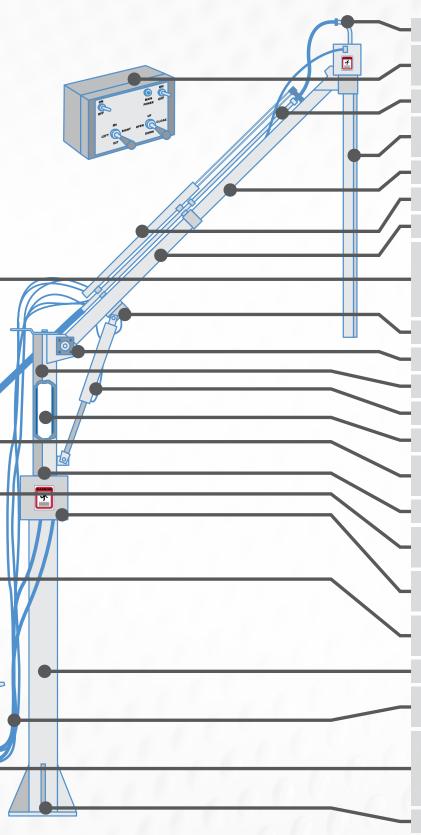


Air and material to sample container





FEATURES



Steel Elbow - 1.5" 90° steel (not used on core tip model)

Controls - joystick, with separate power and vacuum switch (optional handheld)

Telescoping Sample Line

Probe Tip - 7' core or compartmentalized (shown), optional 9' on 5 HP

Inner Boom - ASTM A500 structural tubing

Hydraulic Cylinder - for extending boom

Outer Boom - ASTM A500 structural tubing

Vacuum System - two-stage by-pass tangential vacuum motor with enclosure 104 CFM, 110" water, 120V, 1PH, 13A (other systems available based on conveying distance)

Cylinder Pivots - Ryertex bushings for extended life

Flange Bearings - for anti-friction movement

Pivot Tube Assembly - ASTM A513 DOM outer tube

Hydraulic Cylinder - up and down operation

CF 1045 Shaft

Sample Hose - 1.5" I.D. industrial tubing with smooth interior wall (some applications may require aluminum tubing)

Low Friction Ryertex bushing - for smooth rotation

Vacuum Line - connects collection cabinet to vacuum system

Hydraulic Motor - with flow controls and heavy duty chain and sprocket

Collection Cabinet - with filtration screen and heavy duty door. Allows fast, visual inspection of sample

Base Structure - ASTM A500 structural tubing

Hydraulic Hose - reinforced rubber with high pressure steel fittings

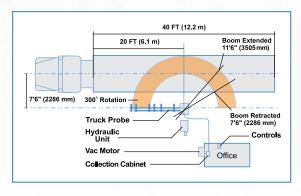
Hydraulic Power Unit - factory assembled, wired and tested complete with valves, 15 gallon reservoir, 5.6 GPM direct pump, motor and hinged access door. Shipped with oil rated for -40° F.

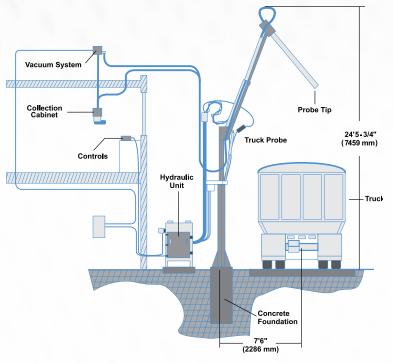
Base Mounting Plate - reinforced steel plate with gussets

TRUCK PROBES

TRUCK PROBE: 3 HP

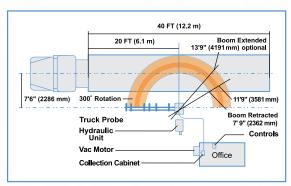
OPERATING RADIUS

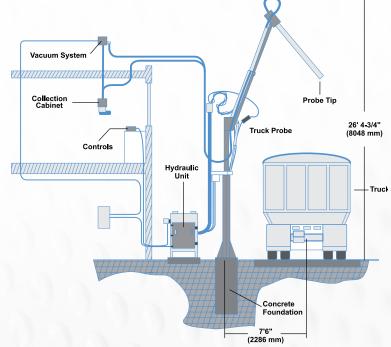




SUPER TRUCK PROBE: 5 HP

OPERATING RADIUS



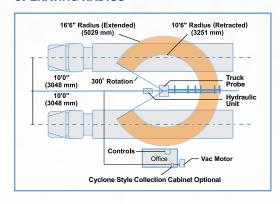


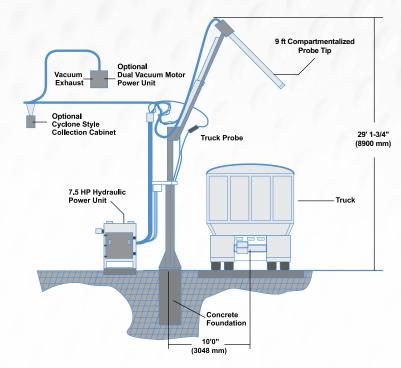


LAYOUT DETAILS

MEGA TRUCK PROBE: 7.5 HP

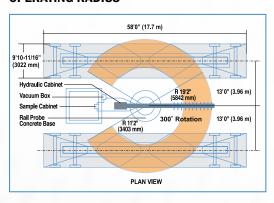
OPERATING RADIUS

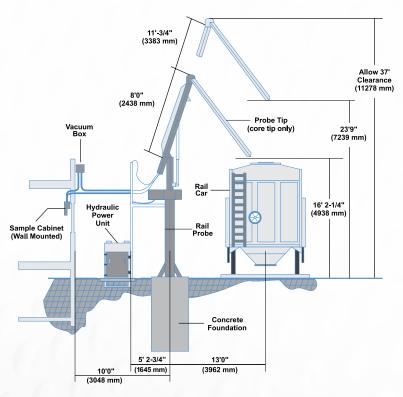




RAIL

OPERATING RADIUS

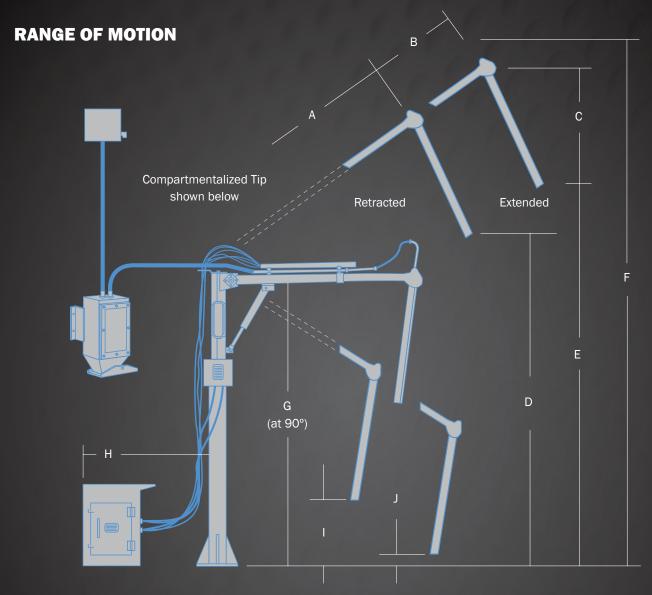




HYDRAULICS / STRUCTURE

	3 HP PROBE	5 HP SUPER PROBE	7.5 HP MEGA PROBE	RAIL / TRUCK PROBE								
HYDRAULICS												
ELECTRICAL	3HP, TEFC, 230/460V, 9.6/4.8 amp, 3PH	5HP, TEFC, 230/460V, 15.2/7.6 amp, 3PH	7.5HP, 230/460V, 22/11 amp	10HP, 230/460V, 28/14 amp								
OPTIONAL	3HP, TEFC, 115/230V, 34/17 amp, 1PH	5HP, TEFC, 115/230V, 56/28 amp, 1PH	10HP, 230V, 1PH	None								
POWER UNIT	Gear pump, direct drive, 750 psi, 5.6 GPM, 15 gal reservoir in a 22"x32"x53" Nema 1 enclosure	Gear pump, direct drive, 1250 psi, 5.6 GPM, 15 gal reservoir in a 22"x32"x53" Nema 1 enclosure	Gear pump, direct drive, 1800 psi, 5.6 GPM, 15 gal reservoir in a 22"x40"x55" Nema 1 enclosure	Gear pump, direct drive, 1300 psi, 11 GPM, 30 gal reservoir in a 22"x40"x52" Nema 1 enclosure								
CONTROLS	115V, 20 AMP, 1PH Dual vac: add'l 115V, 15 amp, 1PH	115V, 20 AMP, 1PH Dual vac: add'l 115V, 15 amp, 1PH	115V, 20 AMP, 1PH Dual vac: add'l 115V, 15 amp, 1 PH	115V, 20 AMP, 1PH Dual vac: add'l 115V, 15 amp, 1 PH								
VACUUM	Two-stage by-pass, 1PH, 104 CFM, 110" water, 13 amp	Two-stage by-pass, 1PH, 104 CFM, 110" water, 13 amp	Two-stage by-pass, 1PH, 104 CFM, 110" water, 13 amp	Two-stage by-pass, 1PH, 104 CFM, 110" water, 13 amp								
STRUCTURE												
INNER BOOM	3.5"x3.5"x.25" wall	4.5"x4.5"x.375" wall	4.5"x4.5"x.25" wall	9"x7"x.25" wall								
OUTER BOOM	4"x4"x.1875" wall	5"x5"x.1875" wall	6"x6"x.375" wall	10"x8"x.375" wall								
PIVOT TUBE	5"O.D.x.25" wall outer tube 4"O.D. CF 1045 shaft	7.75"O.D.x.375" wall outer tube 5"O.D. CF 1045 shaft	7.75"O.D.x.375" wall outer tube 6"O.D. CD 1045 shaft	10"O.D.x.5" wall outer tube 8"O.D. CD 1045 shaft								
BASE	8"x8"x.375" wall Ryertex tee bushing; 1" pivot pin	10"x10"x.625" wall Ryertex tee bushing; 1.25" pivot pin	10"x10"x.625" wall Pivot tube sealed lower bearing; 1.375" pivot pin	16" round Sch. 40 pipe Ryertex tee bushing; 2" pivot pin								
CONCRETE FOUNDATION	24" sq. x 60" deep	30" sq. x 72" deep	36" sq. x 72" deep	5' dia. x 120" deep								





MODEL	А	В	С	D	E	F	G	Н		J
3 HP (FEET)	7'0"	4'0"	6'11"	11'6"	15'2"	24'2"	11'8"	2'4"	0.0	0.0
3 HP (METERS)	2.13	1.22	2.11	3.51	4.62	7.37	3.57	0.7	0.0	0.0
5 HP (FEET)	7'0"	4'0"	7'1"	13'2"	16'11"	26'0"	13'8"	2'4"	2'0"	6"
5 HP (METERS)	2.13	1.22	2.16	4.01	5.16	7.92	4.18	0.7	0.61	1.83
7.5 HP (FEET)	10'6"	6'0"	7'6"	14'6"	19'11"	29'2"	13'8"	2'4"	1'8"	0.0
7.5 HP (METERS)	3.2	1.83	2.29	4.42	6.07	8.89	4.18	0.7	0.52	0.0
RAIL (FEET)	11'2"	8'0"	10'8"	16'2"	23'9"	37'0"	16'6"	2'4"	3'4"	1'9"
RAIL (METERS)	3.4	2.44	3.26	4.93	7.24	11.28	5.03	0.7	1.0	0.53



40-SERIES™ GRAIN BIN

When determining the best system for your operation, we know that what's protected inside the bin is what counts most. Each GSI bin is efficiently designed to handle maximum loads for unmatched strength. All GSI bins are constructed using the highest-strength steel available.



TOWERS AND CATWALKS

GSI offers a full line of structures to support material handling equipment.

Built to perform for the long haul, GSI's all new QuickBolt™ Towers and Catwalks are engineered to your facility's layout, taking wind, seismic and snow loading into consideration. GSI structures feature bolt-up assembly and hot-dipped galvanized finish.



ZIMMERMAN TOWER DRYERS

Not all tower dryers are created equal. What sets Zimmerman dryers apart is over 50 years of innovative design expertise and industry proven drying principles. The result is an easy-to-operate, easy-to-maintain, durable, fuel-efficient grain dryer, supported by an expert dealer network.



PREMIUM TRAINING, SERVICE AND SUPPORT

InterSystems reaches a worldwide market and numerous industries with expertise in the manufacturing of material handling products and industrial sampling systems. Purchased by GSI in 2014, InterSystems is based in Omaha, Nebraska and operates out of a 200,000 square foot state-of-the-art manufacturing facility. InterSystems is ISO 9001 and 14001 certified.



WWW.GRAINSYSTEMS.COM



© 2025 Grain & Protein Technologies.
All rights reserved. GSI reserves the right to change designs and specifications without notice.