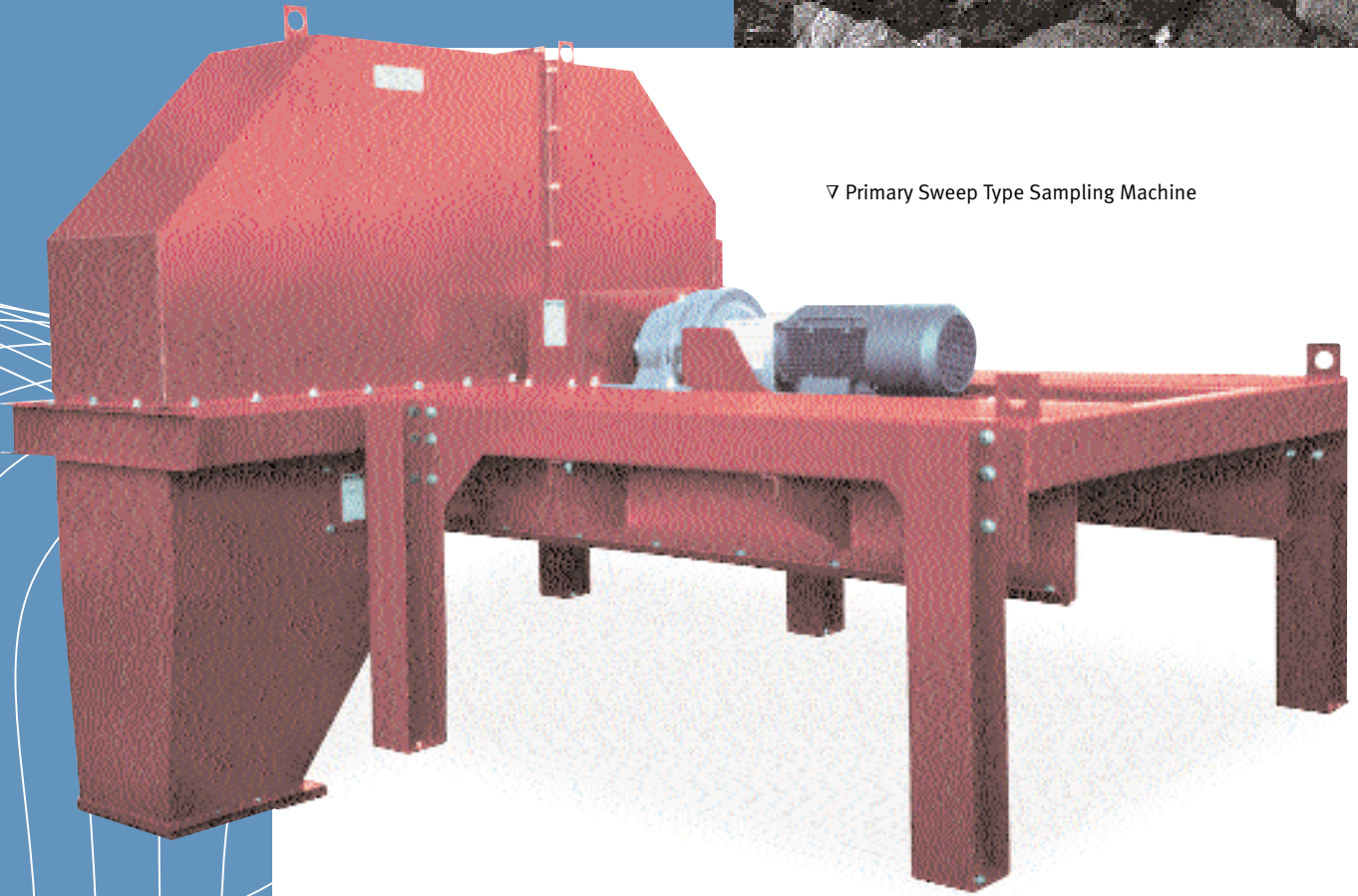


Ramsey Primary Sweep Type Sampling Machine



▽ Primary Sweep Type Sampling Machine

An economical, simple means to procure representative samples.

The Ramsey Model SWAX-7000 Sweep Type Sampling Machine offers an economical, simple means to procure a representative sample directly from a main stream of material. Direct increments are obtained from in-motion, horizontal or inclined conveyors.

With over 700 units in service worldwide, the SWAX-7000 Sampler can be used as a stand-alone sampling device to extract a cross belt cut to a sample container, or as a primary (first stage cutter) in a multistage mechanical sampling system.

The Sweep Type Sampling Machine has been subjected to rigorous, in-the-field testing, teaming with an extensive research and development program.

The Model SWAX-7000 machine meets ASTM & ISO Specifications. Parts and service on all Ramsey sampling equipment are available on short notice from Minneapolis, Minnesota.

The Model SWAX-7000 machine is ideally suited for sampling of coal, limestone, sand, crushed rock, gravel, ferrous and non-ferrous ores. Because of installation

ease, the Sweep Type sampler is easily retrofitted to existing bulk material belt conveyor systems. Backed with over 40 years experience in engineering and manufacturing, Ramsey sampling systems are recognized worldwide as the finest available.

For complete information on this and other sampling systems and equipment available, please request Catalog No. 100.000.

Features and Benefits

Self-Contained Sampling Unit (S.C.S.U)



Self-Contained Sampling Unit (S.C.S.U.)
Low Capacity Shown

The Ramsey S.C.S.U. provides a modular approach to sampling. It's available with all required equipment (except the primary sampler itself), pre-mounted and wired, and ready to hoist into place onto a concrete pad. The S.C.S.U. and Sweep Type Model SWAX-7000 Primary Sampler can be placed at any convenient location along a suitable conveyor. It does not require an expanded transfer tower or expensive sampling tower, which minimizes installation costs. Optional equipment available: roof with trusses, hinged side panels (insulated or non-insulated), ventilation fan, and heating.

Features

- Utilizes Primary Sweep Type Sampling machine
- Completely pre-assembled structure for ease of mechanical installation
- Equipment completely pre-wired to PLC control panel and motor control center (Optional)
- Full range of options including a totally enclosed module, heat and ventilation

- Compact design is well-suited for low headroom installations.
- Ease of installation results in modest installation costs. Mounts directly to existing or new conveyors. No transfer point is required.
- Rigid construction of tubular structural steel maintains positive alignment.
- Direct drive for positive stopping whether the belt is loaded or empty.
- Skirtboards on sampler prevent material spillage.
- Cost efficient. Small primary increment means smaller, less expensive equipment in the reduction stages of system.
- Non-contact proximity switches for start-stop control.
- Replaceable steel brushes and urethane wiper assure fines will be removed and included in representative sample.
- Samplers counterweighted to eliminate high eccentric loading on 36" and larger belts.

System Operation

At pre-determined intervals, the Ramsey Model SWAX-7000 sampler rotates a full 360° through material on a moving belt. A complete cross section primary increment is taken. The sample is directed down a chute onto a primary belt feeder. The feeder meters the material into the crusher. The crusher reduces the product to required size without the loss of fines, while keeping moisture loss at a predictable and repeatable level. The sample is then split using a secondary sampling machine. These machines are selected to meet each sampling requirement.

Finally, the sample is collected in a dust/moisture-tight container. The reject material from the sampling system is returned to the mainstream of material.

Several methods are available as dictated by operating requirements: gravity fall, screw conveyor, belt tube conveyor, or bucket elevator.

Self-Contained Sampling Unit (S.C.S.U.) (Low-Medium flow)

Primary Sampling Machine

Primary Sweep type illustrated in conjunction with self-contained unit.

Primary Belt Feeder

Exclusively used to insure uniform flow and to reduce dust and plugging problems.

Sample Crusher

The sample crusher is designed to reduce the product to required size.

Secondary Sampling Machine

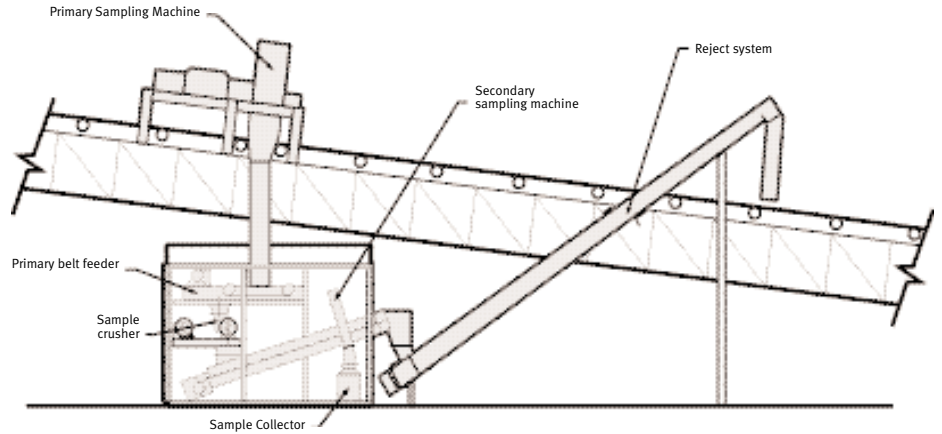
The secondary sample reduction is handled by the Model SWAX-7000 Sweep Type Sampler.

Sample Collector

The collected material is contained in a dust/moisture-proof collector.

Reject Systems

The collected material is returned to the mainstream by a tube conveyor, as illustrated. Many options are available, depending on operating requirements.



Compact design is ideally suited for low headroom installations. Enclosed equipment completely pre-wired to PLC control panel and motor control center is available.

30AB Hi-Flow Module (S.C.S.U.)

Primary Sampling Machine

Primary Sweep type illustrated in conjunction with self-contained unit.

Primary Belt Feeder

Exclusively used to insure uniform flow and to reduce dust and plugging problems.

Sample Crusher

The sample crusher is designed to reduce the product to required size.

Secondary Sampling Machine

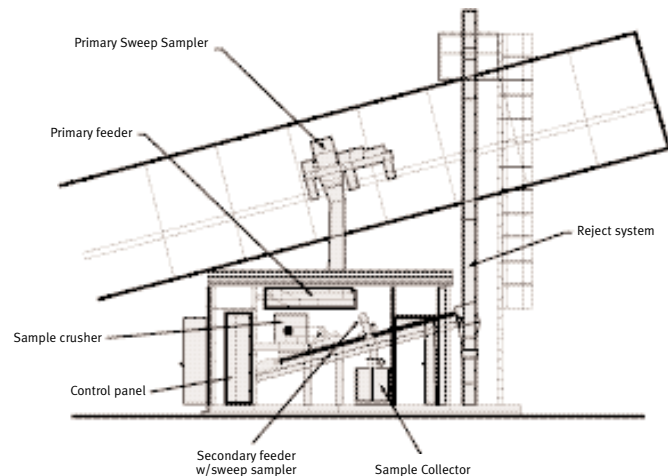
The secondary sample reduction is handled by the Model SWAX-7000 Sweep Type Sampler.

Sample Collector

The collected material is contained in a dust/moisture-proof collector.

Reject Systems

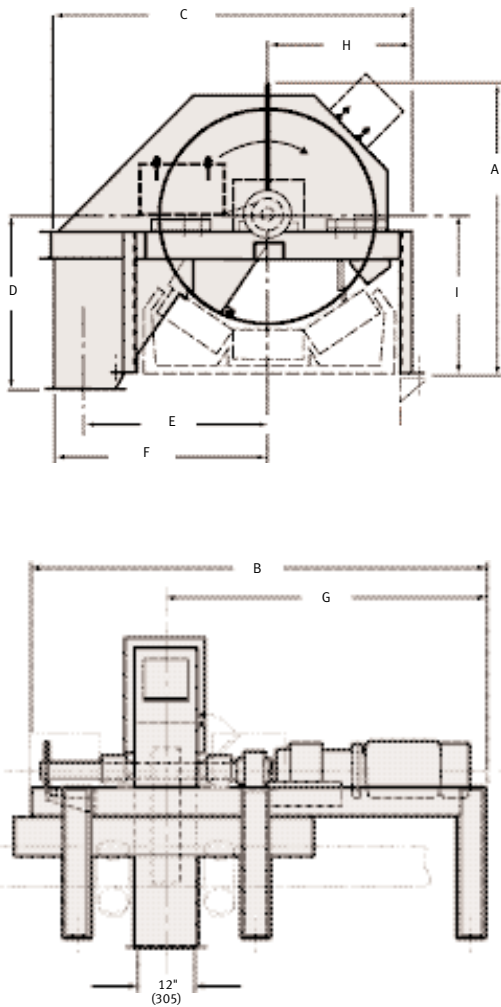
The rejected material is returned to the mainstream by a bucket elevator, as illustrated. Many options are available, depending on operating requirements.



- Note:
1. A bucket elevator is shown for returning the reject to the belt. Other options are available.
 2. All system electrical is to be NEMA 4 standard. NEMA 9 is optional.
 3. MCC and control panel are NEMA 12 in an isolated weather protected room.
 4. Factory wiring of module equipment is optional.

Compact design is ideally suited for low headroom installations. Enclosed equipment completely pre-wired to PLC control panel and motor control center is available.

Specifications



Belt Width	Dimensions									Net Weight Pounds/KG
	A	B	C	D	E	F	G	H	I*	
18"	33.00 838.20	99.00 2514.60	45.50 1155.70	22.00 558.80	21.00 533.40	24.00 609.60	63.00 1600.20	17.00 431.80	18.00 457.20	800.00 362.88
24"	42.69 1084.33	99.00 2514.60	57.94 1471.68	27.56 700.09	25.00 635.00	29.00 736.60	63.00 1600.20	22.00 558.80	13.44 341.38	1000.00 453.60
30"	50.69 1287.53	104.75 2660.65	68.00 1727.20	33.56 852.49	33.00 838.20	39.00 990.60	64.50 1638.30	24.00 609.60	26.44 671.51	1700.00 771.11
36"	56.13 1425.58	115.25 2927.35	72.94 1852.61	37.50 952.50	36.00 914.40	42.00 1068.80	75.00 1905.00	29.00 736.60	29.88 758.83	1900.00 861.83
42"	62.88 1597.03	131.81 3348.04	74.00 1879.60	39.63 1006.48	39.00 990.60	45.00 1143.00	84.63 2149.48	32.00 812.80	33.63 854.08	2150.00 975.23
48"	71.56 1817.69	131.19 3332.16	84.00 2133.60	38.13 968.38	42.00 1066.80	48.00 1219.20	84.00 2133.60	33.00 838.20	36.69 931.86	2300.00 1043.27
54"	84.31 2141.54	149.88 3806.83	97.94 2487.61	47.31 1201.74	49.00 1244.60	55.00 1397.00	98.63 2505.08	37.50 952.50	39.94 1014.41	2500.00 1133.99
60"	82.75 2101.85	151.88 3857.63	104.25 2647.95	50.00 1270.00	51.00 1295.40	60.00 1524.00	100.63 2555.88	42.00 1066.80	43.13 1095.38	4500.00 2041.19
72"	95.81 2433.64	151.88 3857.63	126.38 3209.93	61.00 1549.40	64.00 1625.60	73.00 1854.20	100.63 2555.88	51.50 1038.10	49.44 1255.71	5500.00 2494.78
84"	114.63 2911.60	153.38 3895.85	134.50 3416.30	73.75 1873.25	68.00 1727.20	77.00 1955.80	102.37 2600.20	55.50 1409.70	59.94 1522.48	6500.00 2948.38
96"	141.12 3584.45	153.38 3895.85	146.50 3721.10	80.12 2035.05	74.00 1879.60	83.00 2108.20	102.37 2600.20	61.50 1562.10	66.25 1682.75	7500.00 3401.98

Note: 1. Dimensions are approximate. They will be confirmed at time of order.
 2. For belt sizes smaller or larger than shown, consult factory.
 * Dimensions dependent on idler height.

Product Size Sampling System

