



LIW SYSTEM FOR STICKY FRUIT

Combining the Proven Technologies of the QUADRO[®] Comil[®] and the ARBO KDA-DV/100RU Vibratory Tray Feeder

BACKGROUND/REQUIREMENT:

Several large breakfast cereal manufacturers and bakeries approached ARBO with applications to feed dried, sugared and oil coated raisins. The raisins are purchased in boxes of about 12" x 8" x 6" (30 cm x 20 cm x 15 cm) and tended to pack and stick together. In order to feed these raisins to the cereal or bakery mix, the raisins needed to be in singular, free flowing form. This requirement eliminates all screw feeders.

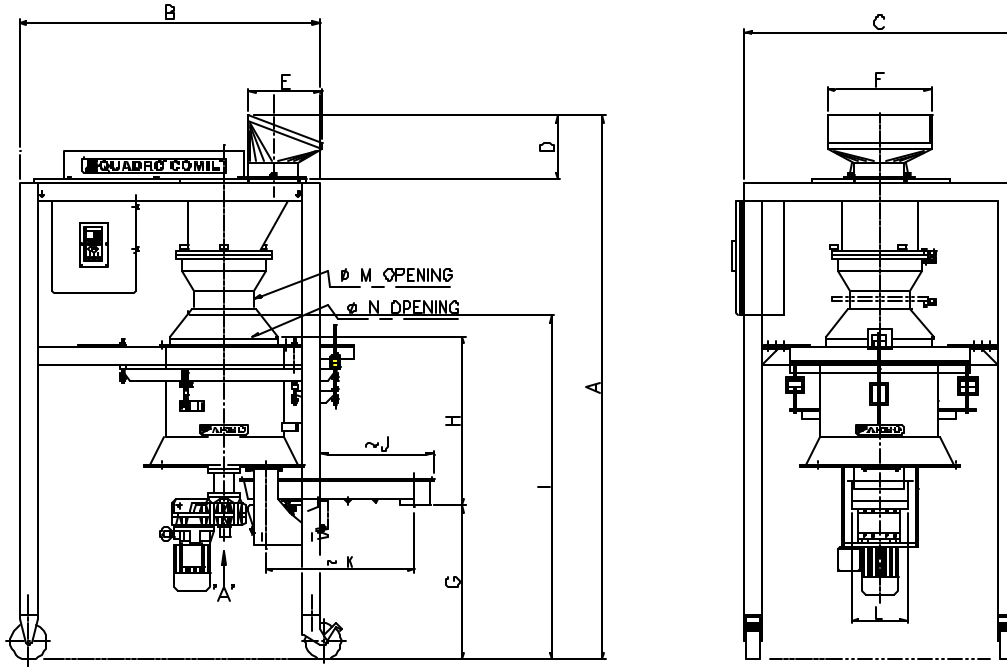
SOLUTION:

The Quadro/ARBO Feed System separates the raisin blocks without damage and gently feeds the raisins into the process.

PERFORMANCE:

The boxes of raisins were fed easily into the inlet of the Quadro[®] Comil[®] Model 196. The Comil was equipped with a special Raisin Impeller and Screen. The Comil gently separated the raisins without damage at a very high capacity. Then, ARBO's patented resonant frequency system allowed a vibratory tray feeder to gently feed the raisins into the process. A special feeder, KDA-DV/100RU, was developed to feed the raisins. It employs dedicated hopper shapes, novel surface treatments and a new type of bottom agitator. After installation it was discovered that whole figs, dates, apricots and dried, sugared date and pineapple cubes could be fed in a similar fashion as the raisins, with equally good results. No tooling changes were necessary in order to deagglomerate and feed all the various products. The system therefore adapted the name LIW system for "sticky fruits"!





Dimensions

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Inches	90.3	50	45.1	10.7	12.2	17.2	25.5	28.1	57.2	18.8	24.8	8.9	10	17.7
Mm	2294	1270	1146	271	310	437	648	714	1452	481	631	225	254	450

Operating Data

ARBO Feeder Power	¼ HP	0.2 kW
Quadro Comil Power	10 Hp	7.5 kW
System Capacity	200-1500 lb/hr	90-680 kg/hr
Load cell	220 lb SS single point shear beam	100 kg SS single point shear beam
Hopper Capacity	3.5 ft ³	99 L

Construction

	Contact	Non Contact
Material	304 SS	304 SS
Polish	150 Grit	Bead blast Finish
Welds	Ground Flush Polished	As laid Bead blasted
Vibratory tray	Bumpy Boundary Surface Treatment	Bead blast Finish