## **MODEL "251 ACDA"** Air Operated Pallet Accumulator

- Zero pressure accumulation
- Air operated
- Heavy duty construction
- · Chain driven rollers
- Zone connections outside frame for easy installation

### **STANDARD SPECIFICATIONS**

**Frame** - Heavy duty 7" deep x 4 gauge formed and painted steel channel with heavy duty cross braces. Frames are bolted together with splice plates and floor supports.

**Rollers** -  $2^{1}/2^{"}$  diameter x 11 gauge steel rollers, grease packed and labyrinth sealed bearings,  $^{11}/_{16}^{"}$  hex shaft. Rollers are spaced on 4" or 6" centers, set  $2^{1}/_{4}^{"}$  low.

**Floor Supports** - Adjustable 18<sup>3</sup>/<sub>4</sub>" to 23<sup>3</sup>/<sub>8</sub>" (HD-4) from floor to top of roller, for each end of conveyor and at each bed joint along with knee braces for each support. Supports on 5 foot centers, changes with zone length.

**Drive** - Located near center of conveyor length, shaft mount motor and reducer.

**Drive Chain** - RC 40 chain used for roller-to-roller connections, RC 60 chain drive each zone. Chains are totally enclosed by metal guards.

Accumulation Zones - Standard zones are 60" long with a maximum of 30 zones per single drive. Each zone is driven by an air clutch and controlled by a sensor roller.

Motor - 3/4 HP 230/460-3-60 TE motor.

**Electrical Controls** - 110/1/60 Electric Solenoid and Air switch for discharge zone.

Conveyor Speed - 30 FPM constant roller speed.

**Capacity** - 4,000 lbs. Maximum unit load. Total conveyor live load not to exceed Load Capacity Chart.

**Speed Reducer** - Heavy duty, sealed worm gear, C-Face. **Bearings** - Sealed prelubricated with cast iron housings.

## **OPTIONAL EQUIPMENT**

Accumulation Zones - 4" roller centers - 36", 40", 44", 48", 52", 56" and 72" long. 6" roller centers 36", 42", 48", 54" and 72" long. Frame lengths change with zone lengths.

**Tread Rollers** -  $2^{5}$ /8" diameter x 7 gauge steel,  $^{11}$ /16" hex shaft.

Floor Supports - Higher or lower supports available, adjustable or fixed type.

**Conveyor Speed** - Constant and variable speeds (Contact Factory).

**Limit Switch** - to provide signal for customers infeed equipment.

**Time Delay** - Allows for product to be unloaded from discharge zone of conveyor without movement of next load into discharge zone.

**Sensing Devices** - Photo cells, limit switches, etc. can be supplied for electrically operated zones in lieu of mechanical sensing devices.

**Motor** - Single phase, energy efficient, explosion proof, etc. Other HP available.

**Electrical Controls** - Magnetic starters and push button stations; Manual motor starters with overload protection, others. 24V DC solenoid can be supplied in lieu of 110V AC solenoid in discharge zone.

**Optional Loads** - Larger capacity clutch is available for 6000 lb. unit loads.

**Reversible** - can be supplied with reversing feature to allow accumulation in both directions.

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	Conveying Surface	34"	40"	46"	52"	58"
Bed	Between Frame Width	37"	43"	49"	55"	61"
Length	Overall Frame Width	48"	54"	60"	66"	72"
10'	Weight (Ibs.) Based On 4" Roller Centers	1137	1227	1317	1407	1497
15'		1632	1767	1902	2037	2172
20'		2127	2307	2487	2667	2847
25'		2622	2847	3072	3297	3522
30'		3117	3387	3657	3927	4197
40'		4107	4467	4827	5187	5547
50'		5097	5547	5997	6447	6897
60'		6087	6627	7167	7707	8247
70'		7077	7707	8337	8967	9597
80'		8067	8787	9507	10227	10947
90'		9057	9867	10677	11487	12297
100'		10047	10947	11847	12747	13647



#### OPERATIONAL SEQUENCE

- 1. Load #1 is placed on infeed end of conveyor, travels to discharge end into Zone #1 and depresses sensor roller. Depressing sensor roller activates solenoid, disengaging clutch in Zone #1 and signals Zone #2 that Zone #1 is occupied.
- Load #2 travels into Zone #2, depressing sensor roller which disengages clutch in Zone #2 and signals Zone #3 that Zone #2 is occupied. This sequence will continue until conveyor is fully loaded.
- 3. To activate Zone #1 to release Load #1, an external electrical signal must be sent to solenoid switch controlling clutch in Zone #1.

## **Load Capacity Charts**

Ac	cumula	ated	Moving			
Convey	or Speed	@ 30 FPM	Conveyor Speed @ 30 FPM			
HP	Total Load (lbs.)		HP	Total Load (lbs.)		
	Up to 50'	Up to 100'		Up to 50'	Up to100'	
3/4	12000	7500	3/4	6000	3750	
1	18000	13000	1	9000	6500	
<b>1</b> <sup>1</sup> / <sub>2</sub>	30000	25000	<b>1</b> ½	15000	12500	
2	42000	37000	2	21000	18500	





