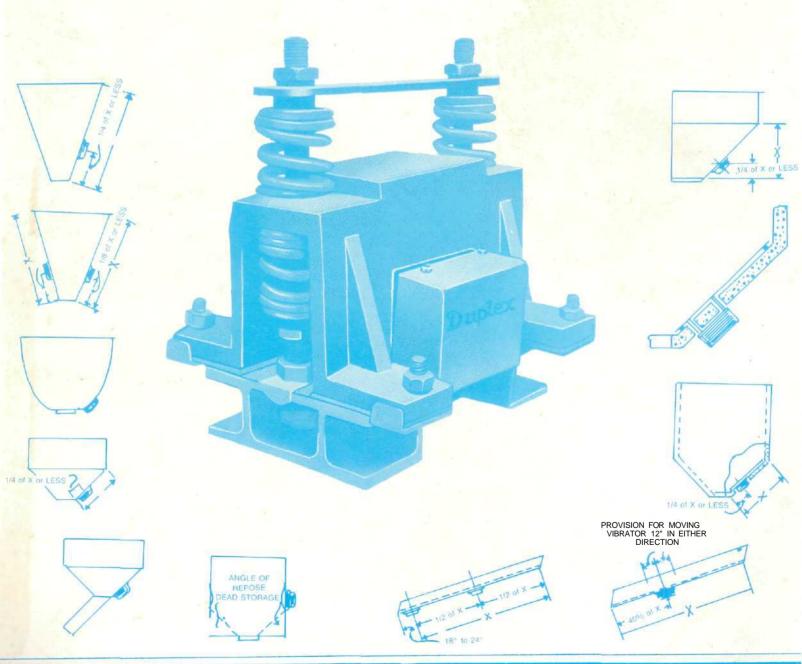


## VIBRATORS







"DUPLEX" ELECTROMAGNETIC VIBRATORS PROVIDE POWERFUL VIBRATION BY ENERGISING THE ELECTROMAGNET OF THE VIBRATOR BY THE PULSATING CURRENT OBTAINED THROUGH THE RECTIFIER. THE AMPLITUDE OF THE VIBRATION CAN BE CONTROLLED TO SUIT INDIVIDUAL REQUIREMENTS BY A CONTROLLER. "DUPLEX" VIBRATORS CAN BE USED FOR:

- VIBRATING BINS AND HOPPERS: TO KEEP MATERIALS FLOWING FREELY.
- VIBRATING FORMS: TO ELIMINATE AIR POCKETS AND VOIDS.
- 3. VIBRATING CONTAINERS: TO INCREASE THEIR WEIGHT CONTENTS.
- 4. VIBRATING CHUTES: TO ENSURE STEADY FLOW.
- 5. VIBRATING SCREENS: TO INCREASE CAPACITY.

## THE CHOICE OF THE PROPER SIZE VIBRATOR DEPENDS UPON:

- 1. PURPOSE OF VIBRATION: TO FLOW MATERIAL OR TO COMPACT OR SETTLE IT.
- CHARACTER OF MATERIAL: WHETHER DRY AND FREE OR MOIST AND STICKY.
- 3. THE WEIGHT OF MATERIAL: TO BE VIBRATED.
- 4. THE RIGIDITY: I.E. THICKNESS OF THE HOPPER, CHUTE OR FORM.

THE SIZE OF VIBRATOR REQUIRED TO PROMOTE THE FLOW OF MATERIAL IN HOPPER DEPENDS ON MANY FACTORS SUCH AS: SIZE, SHAPE, CONSTRUCTION (INCLINATION OF HOPPER FACE, THICKNESS OF HOPPER PLATE, NUMBER AND STIFFNESS OF SUPPORTS), KIND OF MATERIAL IN THE HOPPER, THE CONDITION OF THE MATERIAL WHETHER

WET OR DRY AND GRAIN SIZE. A COARSE GRAINED MATERIAL OF APPROXIMATELY 20 MESH IS GENERALLY THE EASIEST TO MOVE. THE SAME MATERIAL IN 200 MESH OR IN LARGE CHUNKS WOULD REQUIRE CONSIDERABLY MORE VIBRATION.

THE MOST SUITABLE LOCATION OF VIBRATOR IS DIRECTLY ON THE CENTRE LINE OF THE OPENING APPROXIMATELY 1/4 TO 1/3 OF THE DISTANCE FROM THE OPENING TO THE TOP OF THE SLOPING SIDE OF THE HOPPER. IF THERE IS A STIFFNER ON THE CENTRE LINE THEN THE VIBRATOR BE MOUNTED IN THE CENTRE OF THE ADJACENT PANEL. THE TYPICAL INSTALLATIONS OF THE VIBRATORS ARE SHOWN ON FRONT PAGE.

VIBRATORS ON HOPPERS SHOULD OPERATE ONLY WHILE THE HOPPER IS OPEN TO FLOW OTHERWISE IT MAY PACK THE HOPPER CONTENTS. TOO MUCH VIBRATION TENDS TO PACK THE MATERIAL, CONSEQUENTLY, THE CONTROLLER SHOULD NOT BE TURNED ANY HIGHER THEN IS ACTUALLY REQUIRED TO MOVE MATERIAL.

SINCE VIBRATION IS RELATIVELY LOCALIZED, VIBRATOR SHOULD BE INSTALLED AS NEAR AS POSSIBLE TO THE POINT WHERE MATERIAL BEGIN TO BUILD UP.

WHEN MORE THAN ONE UNIT VIBRATOR IS FOUND NECESSARY, IT IS USUALLY BEST TO INSTALL THE SECOND UNIT ON THE OPPOSITE WALL OF THE BIN. BE CERTAIN WHEN INSTALLING TWO OR MORE BIN VIBRATORS THAT THEY ARE IN PHASE.

VIBRATOR TYPE	APPROX. CAPACITY	THICKNESS OF HOPPER METAL		POWER CONSUMPTION (220 VOLTS)		WEIGHT OF VIBRATOR
		NORMAL	MAX.	WATTS	AMPS.	
DUP. 7511	.085 CU. MT.	1.5 MM	3 MM	45	0.7	10 KGS.
DUP. 6215	1 CU- MT.	3 MM	5 MM	75	1.2	35 KGS.
DUP. 315	2 CU. MT.	5 MM	8 MM	145	2.2	45 KGS.
DUP. 842	1 VIBRATOR	8 MM	12 MM	383	5.5	110 KGS.
Part of the last	PER 20 TONS					
DUP. 843	1 VIBRATOR	12 MM	16 MM	460	7	200 KGS.
	PER 40 TONS					
DUP. 845	1 VIBRATOR	16 MM	25 MM	1500	12-5	385 KGS.
	PER 75 TONS			(415 V)		

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