

# EMF RANGE & APPLICATIONS

**enmin**

# MOTOR FEEDER

vibratory equipment



# INTRODUCTION

## ELECTRO-MECHANICAL DRIVES

Out-of-balance electromechanical drives have proved to be the most economical and reliable method of powering vibratory feeders. The drives' relative output (considering their cost and weight) far surpasses other methods.

When used with frequency inverters surprisingly accurate feed control can be achieved.

## HOW DO THEY WORK?

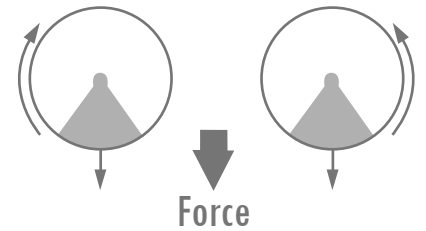
When the drive motors are run in opposing directions the resulting eccentric weights combine to produce a linear force. When these eccentric weights oppose each other a zero force results.

## ADJUSTING THE WEIGHTS

To adjust the vibrating force of a motor simply loosen the outer adjustable weights on each side of the motor and align them with the desired percentage settings on the inner fixed weights.

The position of the inner fixed weights should never be altered.

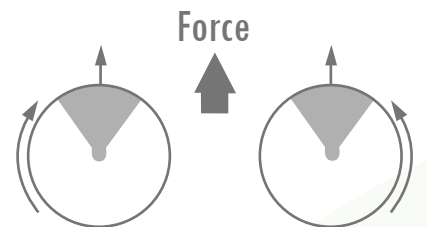
## PRINCIPLE OF OPERATION



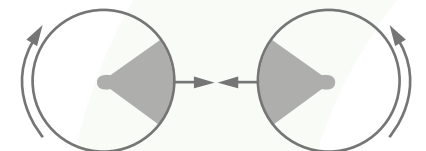
Both weights are in the down position. Resultant force is downwards.



The weights are outwards and opposed, 180 degrees apart. The resultant force is zero as these two forces cancel each other out.



Both weights are in the up position. Resultant force is upwards.



The weights are facing inwards and opposed, 180 degrees apart. The resultant force is zero as these two forces cancel each other out.

