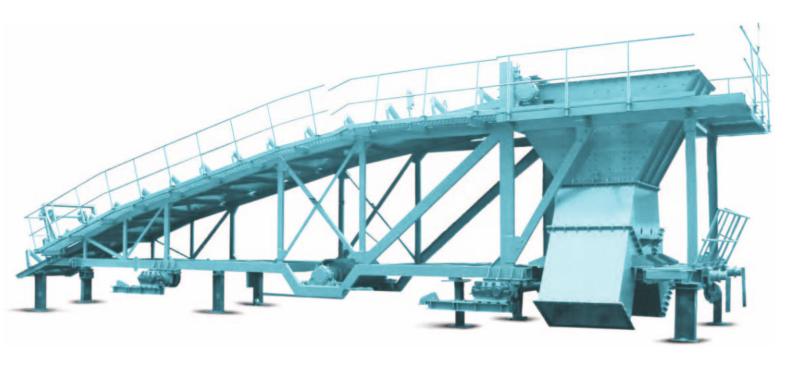


# **Travelling Trippers**



- Manufactured as one-way chute, two-way chute & three-way chute
- Driven electrically
- Up to 2000 mm belt
- Material handled coal, iron ore, limestone, etc. to fill the bunker or pile of mounted on ground
- Comprises special design with concave and convex curve to minimise the un-supported length of belt

## **Travelling Trippers**

The tripper is provided in the conveying system to stack the material at the desired location on the conveyor with the help of chute/chutes fitted to the tripper. The tripper is provided with wheels, which move on rails, placed parallel to conveyor on each side. These trippers have a rigid welded steel frame to resist shock and minimise distortion.

**Motorised Tripper** 

Motorised trippers move on independent electric motors. It is used where continuous and uniform distribution of material along the conveyor is required or where the tripper is moved back and forth frequently. It can be automatically reversed at each end of its travel with the help of limit switches carried on the tripper and actuated by stops placed where desired along the runway. Push buttons are provided for manual control to regulate the tripper. The tripper can be moved either when the conveyor belt is moving or stationary. Each tripper is provided with a hand operated powerful, quick action rail clamp for holding it in a fixed position. The tripper is provided with a platform for the operator.

### Long Travel Drive Assembly

Travel drive is through direct wheel axle drive design. A hollow shaft mounted gear box is placed directly on the wheel axle. The input of gearbox is coupled with an electric motor. The brake is mounted on the rear extend shaft of the motor or between input shaft of gearbox and motor shaft. All drive components are mounted on a common drivebase which is connected with the tripper's main body with a torque arm. Alternately geared motor may also be provided with hollow shaft with inbuilt brake and torque arm arrangement to overcome space constraint. The power is supplied by a cable reeling drum mounted on tripper body or festooning cable arrangement, if the travel length is small.

single actuator either by using special link mechanism or by individual actuators whichever is required by the customer.

#### **Bunker Belt Sealing**

The entire bunker opening is sealed by covering with a belt. The covering belt is deflected in a particular profile with the help of a set of idlers and it is mounted on the tripper chute.

By virtue of such a belt profile, the bunker opening below the chute discharge is cleared automatically to drop the material into bunker.

#### **Features**

- To minimize the over hang of belt, the tripper structure has been designed with concave and convex curves.
- There are options of drive system. Drives with chain and sprocket; direct drive with hollow shaft mounted gearbox alongwith motor and brake.
- Direct drive is also given with hollow shaft mounted geared motor with an inbuilt brake.
- The machine can be controlled either by local operation from the machine or by remote operation from control station with selector switch or both.
- The machine has been provided with all safety controls and limit switches, such as over travel limit switch, chute-jamming switch, etc.
- The machine can be provided with cradle assembly, mounted on the machine to protect the conveyor belt from damage due to the impact of discharged material.

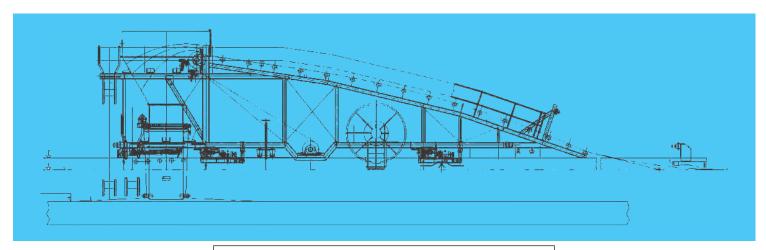
#### Flapper Gate Drive Assembly

The gate drive is through electro mechanical linear actuator fitted with link mechanism. The actuator is supported on a trunnion-mounted bracket. In a three-way chute two flap gates are required. Both can be operated by a

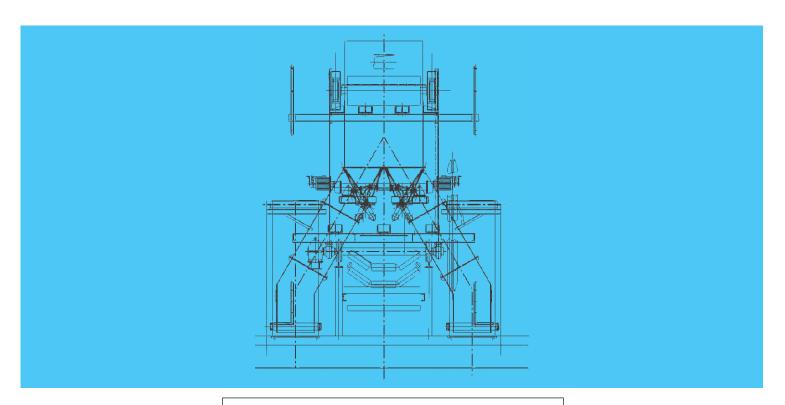


### Material Handling, Capacity & other features of some Travelling Trippers:

| MATERIAL          | LUMP SIZE<br>mm    | CAPACITY<br>RATED TPH | CAPACITY<br>DESIGN | TYPE OF<br>CHUTE           | BELT<br>WIDTH | TRAVEL DRI<br>POWER KV |
|-------------------|--------------------|-----------------------|--------------------|----------------------------|---------------|------------------------|
| COAL              | 6 mm               | 150 TPH               | 165 TPH            | 2 WAY CHUTE                | 650           | 3.7 KW                 |
| COAL              | 20 mm              | 1600 TPH              | 1760 TPH           | 3 WAY CHUTE                | 1400          | 3.7 KW                 |
| COAL              | 6 mm               | 150 TPH               | 165 TPH            | 3 WAY CHUTE                | 800           | 3.7 KW                 |
| COAL              | 20 mm<br>20 mm     | 750 TPH<br>750 TPH    | 825 TPH<br>825 TPH | 2 WAY CHUTE<br>3 WAY CHUTE | 1200<br>1000  | 3.7 KW<br>3.7 KW       |
| COAL              | 20 mm              | 750 TPH               | 825 TPH<br>825 TPH | 3 WAY CHUTE                | 1000          | 5.5 KW                 |
| LIGNITE           | (-) 6 mm           | 660 TPH               | 730 TPH            | 2 WAY CHUTE                | 1000          | 3.7 KW                 |
| LIME              | (-) 20 mm          | 300 TPH               | 330 TPH            | 1 WAY CHUTE                | 600           | 2.2 KW                 |
| COAL              | (-) 250 mm         | 1500 TPH              | 1800 TPH           | 2 WAY CHUTE                | 1400          | 5.5 KW                 |
| COAL              | (-) 75 mm          | 750 TPH               | 825 TPH            | 2 WAY CHUTE                | 1000          | 2.2 KW                 |
| CLEAN COAL        | (-) 20 mm          | 50 TPH                | 60 TPH             | 1 WAY CHUTE                | 500           | 2.2 KW                 |
| CLEAN COAL        | (-) 20 mm          | 125 TPH               | 150 TPH            | 1 WAY CHUTE                | 650           | 2.2 KW                 |
| CLEAN COAL        | (-) 20 mm          | 125 TPH               | 150 TPH            | 2 WAY CHUTE                | 650           | 2.2 KW                 |
| COAL              | (-) 20 mm          | 210 TPH               | 230 TPH            | 2 WAY CHUTE                | 650           | 3.7 KW                 |
| COAL              | (-) 25 mm          | 1350 TPH              | 1485 TPH           | 3 WAY CHUTE                | 1400          | 3.7 KW                 |
| CRUSHED<br>COAL   | (-) 20 mm          | 800 TPH               | 960 TPH            | 2 WAY CHUTE                | 1200          | 3.7 KW                 |
| L.S/DOLO          | (-) 40 mm          | 200 TPH               | 240 TPH            | 2 WAY CHUTE                | 800           | 3.7 KW                 |
| IRON ORE/<br>FLUX | (-)40/(-)30 mm     | 500 TPH               | 600 TPH            | 2 WAY CHUTE                | 1000          | 3.7 KW                 |
| COKE              | (-)25 TO 80 mm     | 200 TPH               | 240 TPH            | 3 WAY CHUTE                | 1000          | 3.7 KW                 |
| SINTER            | (-)50 mm           | 400 TPH               | 480 TPH            | 3 WAY CHUTE                | 1000          | 3.7 KW                 |
| COAL              | (-)30 mm           | 1200 TPH              | 1440 TPH           | 2 WAY CHUTE                | 1400          | 3.7 KW                 |
| CRUSHED<br>COAL   | (-)20 mm           | 1800 TPH              | 1900 TPH           | 2 WAY CHUTE                | 1400          | 5.5 KW                 |
| COAL              | (-)20 mm           | 400 TPH               | 500 TPH            | 2 WAY CHUTE                | 1000          | 1.5/0.75 KV            |
| COAL              | (-)250 mm          | 1600 TPH              | 1900 TPH           | 2 WAY CHUTE                | 1600          | 7.5 KW                 |
| CRUSHED<br>COKE   | (-) 15 mm          | 250 TPH               | 275 TPH            | 1 WAY CHUTE                | 1000          | 3.7 KW                 |
| COKE              | (-) 100 mm         | 350 TPH               | 385 TPH            | 2 WAY CHUTE                | 1200          | 3.7 KW                 |
| IRON ORE          | (-) 150 mm         | 2500 TPH              | 3000 TPH           | 2 WAY CHUTE                | 1500          | 2 x 3.7 KW             |
| MIDDDLINGS        | (-) 6 mm           | 400 TPH               | 480 TPH            | 2 WAY CHUTE                | 1000          | 3.7 KW                 |
| COAL              | (-) 3 mm           | 150 TPH               | 180 TPH            | 1 WAY CHUTE                | 650           | 3.7 KW                 |
| CHAR              | (-) 6 mm           | 300 TPH               | 360 TPH            | 3 WAY CHUTE                | 1200          | 3.7 KW                 |
| COAL              | (-) 20 mm          | 1500 TPH              | 1500 TPH           | 3 WAY CHUTE                | 1400          | 2 x 2.2 KW             |
| COAL              | (-) 20 mm          | 1600 TPH              | 1760 TPH           | 3 WAY CHUTE                | 1400          | 2 x 2.2 KV             |
| COAL              | (-) 50 mm          | 1650 TPH              | 1815 TPH           | 1 WAY CHUTE                | 1600          | 2 x 3.7 KW             |
| COAL              | (-) 50 mm          | 1000 TPH              | 1200 TPH           | 2 WAY CHUTE                | 1200          | 2 x 2.2 KW             |
| COAL              | (-) 8 mm           | 2400 TPH              | 2880 TPH           | 2 WAY CHUTE                | 1600          | 2 x 5.5 KW             |
| COAL              | (-)5 TO (+) 5 mm   | 1000 TPH              | 1200 TPH           | 2 WAY CHUTE                | 1200          | 2 x 2.2 KV             |
| COAL              | (-)5 TO (+) 5 mm   | 1000 TPH              | 1200 TPH           | 2 WAY CHUTE                | 1200          | 2 x 2.2 KW             |
| COAL              | (-) 20 mm          | 1600 TPH              | 1760 TPH           | 3 WAY CHUTE                | 1400          | 2 x 3.7 KW             |
|                   |                    |                       |                    | 3 WAY CHUTE                |               | 2 x 5.5 KW             |
| COAL              | (-) 20 mm          | 2200 TPH              | 2420 TPH           |                            | 1600          | ļ                      |
| COAL              | (-) 100 mm         | 2300 TPH              | 2760 TPH           | 2 WAY CHUTE                | 1600          | 1 x 7.5 KW             |
| COAL              | (-) 100 mm         | 2300 TPH              | 2760 TPH           | 1 WAY CHUTE                | 1600          | 1 x 7.5 KW             |
| COAL              | (-) 20 mm          | 2000 TPH              | 2200 TPH           | 3 WAY CHUTE                | 1600          | 2 x 5.5 KW             |
| IRON ORE          | (-) 10 mm          | 3500 TPH              | 3850 TPH           | 1 WAY CHUTE                | 1600          | 2 x 5.5 KW             |
| IRON ORE          | (-) 10 mm          | 3500 TPH              | 3850 TPH           | 2 WAY CHUTE                | 1600          | 2 x 5.5 KW             |
| COAL              | (-) 10 mm          | 3500 TPH              | 3850 TPH           | 2 WAY CHUTE                | 2000          | 2 x 5.5 KW             |
| COAL              | (-) 10 mm          | 3500 TPH              | 3850 TPH           | 2 WAY CHUTE                | 2000          | 2 x 5.5 KW             |
| COAL              | (-) 25 mm          | 1800 TPH              | 1980 TPH           | 2 WAY CHUTE                | 1600          | 2 x 5.5 KW             |
| SINTER            | (+)5mm TO (-)50 mm | 1200 TPH              | 1320 TPH           | 3 WAY CHUTE                | 1400          | 2 x 2.2 KW             |
| COAL              | (-) 20 mm          | 2200 TPH              | 2420 TPH           | 3 WAY CHUTE                | 1600          | 2 x 5.5 KW             |
| COAL              | (-) 13 mm          | 360 TPH               | 435 TPH            | 2 WAY CHUTE                | 1000          | 2 x 3.7 KW             |
| COAL              | (-) 13 mm          | 600 TPH               | 720 TPH            | 2 WAY CHUTE                | 1200          | 2 x 3.7 KV             |
| COAL              | (-) 20 mm          | 3300 TPH              | 3630 TPH           | 3 WAY CHUTE                | 2000          | 2 x 7.5 KW             |
| COAL              | (-) 13 mm          | 900 TPH               | 1000 TPH           | 2 WAY CHUTE                | 1200          | 3.7 KW                 |
| IRON              | 85 mm              | 1920 TPH              | 2130 TPH           | 2 WAY CHUTE                | 1200          | 2 X 7.5 KW             |
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FRONT VIEW OF A TRAVELLING TRIPPER



SIDE VIEW OF A TRAVELLING TRIPPER