

# REVERSIBLE IMPACTORS



## DESIGN FEATURES INCLUDE:

- Heavy robust frame designed for added protection against the most difficult materials and the heavy duty double-row, self-aligning, spherical roller bearings ensure longer running life.
- Wide range of machines available capable of accepting up to 15" (380mm) feed sizes of a capacity rate in excess of 600 tonnes per hour.
- Reversing the Rotor direction each shift considerably reduces the necessity for changing hammers and breaker liners.
- Design incorporates easy access by opening the end of the crusher. This is made easier by the use of hydraulic actuators which are available as an optional extra.
- Reversible impactors are available in two forms, one the breaker liners are mounted on externally adjustable plates and the machine has an open bottom discharge alternatively breaker liners are mounted directly on the frame end plates, grid bars in the bottom aperture ensure a consistently fine product with no oversize.
- Can be supplied in fixed, skid mounted or mobile form.
- The Reversible impactor offers High Capacity, Low power consumption, Maximum Hammer life, low maintenance costs, good cubical products, maximum reduction with minimum fines.

## SPECIFICATION

### FRAME

Heavy robust construction fabricated from steel plate. Designed for heavy duty and easy access.

### ROTOR

Special heat-treated alloy steel with added strength designed at the centre where strength and rigidity are most needed. Disc plates and spacing collars protect the shaft which is extended beyond the bearings on one side to accommodate the drive pulley or coupling. The double-sided, heavy-headed hammers are free swinging to minimize crushing shock and to allow give in emergencies. Hammer design provides for greatest possible weight in the sledge head with a broad striking face to impact the maximum crushing energy. Hammers are cast manganese steel which are mounted on large diameter suspension pins and held in the crushing position by centrifugal force. The discs are of heavy section, specially hardened, carbon steel, fully machined, balanced and keyed to the main shaft. Flanged end discs form a seal with the side frame liners.

### BREAKER LINERS

Extra-heavy welded steel plate with overbracing to resist crushing shock. The manganese steel liners are fully interchangeable, hard-wearing, and those with only light wear can be refitted in the main wear zone allowing maximum liner utilisation and standardization of spares. The breaker plates are pivoted at the top, and the lower edge is adjusted by two hold back bars to alter setting position in relation to the rotor circle.

### BEARINGS

Double-row, self-aligning, spherical roller bearings fitted in dustproof housings. The housings are both bolted and dowelled to the frame.

### MAIN FRAME LINING

Heavy duty manganese steel side and top liners. Design permits main wear zone liners, which are

interchangeable, to be changed independently of areas of little wear simplifying spares requirements and offer maximum utilisation of liners.

### DRIVE

The machine can be coupled direct to the driving motor or fitted with multiple vee-belt drive depending on the application. The motor must be provided with a reversing switch on the control gear.

### FOUNDATIONS

Reinforced concrete is recommended for supports but when mounting the machine on steelwork, a heavy concrete mat should be under the unit to dampen any movement. Provision must be made to carry live load due to crushing plus weight of machine. An average figure of twice the dead loading is usually employed for calculations.

**GOODWIN  
BARSBY**

REVERSIBLE IMPACTORS

# TECHNICAL DATA — Reversible Impactors

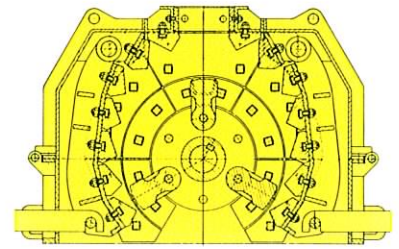
## CAPACITIES — Approx (Tonnes per hour)

| Model | Maximum-Feed Size |      | Capacity<br>Tons per-Hour | Maximum<br>Rotor R.P.M. | Max.<br>Motor Horsepower |
|-------|-------------------|------|---------------------------|-------------------------|--------------------------|
|       | mm                | inch |                           |                         |                          |
| 3818  | 203               | 8    | 75                        | 1100                    | 100                      |
| 3824  | 203               | 8    | 110                       | 1100                    | 150                      |
| 3830  | 203               | 8    | 130                       | 1100                    | 175                      |
| 3836  | 203               | 8    | 155                       | 1100                    | 200                      |
| 3842  | 203               | 8    | 180                       | 1100                    | 225                      |
| 3848  | 203               | 8    | 200                       | 1100                    | 250                      |
| 4442  | 254               | 10   | 240                       | 960                     | 300                      |
| 4448  | 254               | 10   | 280                       | 960                     | 350                      |
| 4462  | 254               | 10   | 360                       | 960                     | 450                      |
| 4468  | 254               | 10   | 400                       | 960                     | 500                      |
| 5060  | 381               | 15   | 460                       | 850                     | 600                      |
| 5070  | 381               | 15   | 540                       | 850                     | 700                      |
| 5080  | 381               | 15   | 620                       | 850                     | 800                      |

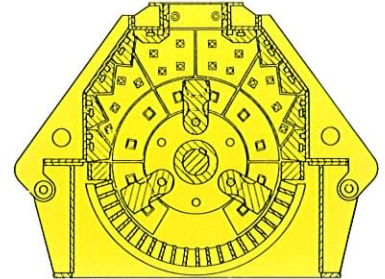
**NOTE:**

CAPACITY — Crushing medium hard limestone to approx 90% minus ¾" product size in open circuit

HORSEPOWER — Actual requirement will depend on crushing characteristics of rock and product size required



Standard Reversible Impactor



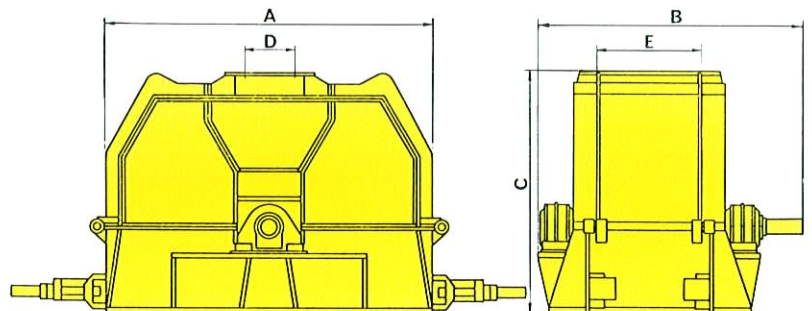
Reversible Impactor with Grid Plates

## DIMENSIONS

| Model | Base Length A<br>Open Bottom |    | Overall Width B<br>Overshaft |    | Height C |    | Feed Opening D |     | Feed Opening E |     |      |
|-------|------------------------------|----|------------------------------|----|----------|----|----------------|-----|----------------|-----|------|
|       | ft                           | in | ft                           | in | ft       | in | in             | mm  | ft             | in  | mm   |
| 3818  | 6                            | 4½ | 4                            | 8¾ | 4        | 8  | 12             | 305 | 0              | 18½ | 470  |
| 3824  | 6                            | 4½ | 5                            | 2¾ | 4        | 8  | 12             | 305 | 0              | 24½ | 622  |
| 3830  | 6                            | 4½ | 5                            | 8¾ | 4        | 8  | 12             | 305 | 2              | 6½  | 775  |
| 3836  | 6                            | 4½ | 6                            | 3½ | 4        | 8  | 12             | 305 | 3              | 0½  | 927  |
| 3842  | 6                            | 4½ | 7                            | 6  | 4        | 8  | 12             | 305 | 3              | 6½  | 1080 |
| 3848  | 6                            | 4½ | 8                            | 0  | 4        | 8  | 12             | 305 | 4              | 0½  | 1232 |
| 4442  | 7                            | 3  | 7                            | 8  | 5        | 8  | 15             | 381 | 3              | 6½  | 1080 |
| 4448  | 7                            | 3  | 8                            | 3  | 5        | 8  | 15             | 381 | 4              | 0½  | 1232 |
| 4462  | 7                            | 3  | 11                           | 2¼ | 5        | 8  | 15             | 381 | 5              | 2   | 1570 |
| 4468  | 7                            | 3  | 11                           | 8¼ | 5        | 8  | 15             | 381 | 5              | 8½  | 1740 |
| 5060  | 9                            | 3  | 11                           | 5  | 6        | 9  | 22             | 559 | 5              | 1   | 1550 |
| 5070  | 9                            | 3  | 12                           | 6  | 6        | 9  | 22             | 559 | 5              | 11  | 1803 |
| 5080  | 9                            | 3  | 13                           | 4  | 6        | 9  | 22             | 559 | 6              | 9   | 2057 |

## WEIGHTS

| Model | Kgs   | Tons  |
|-------|-------|-------|
| 3818  | 5842  | 5.75  |
| 3824  | 6604  | 6.50  |
| 3830  | 7468  | 7.35  |
| 3836  | 8382  | 8.25  |
| 3842  | 11075 | 10.90 |
| 3848  | 11938 | 11.75 |
| 4442  | 13666 | 13.45 |
| 4448  | 14478 | 14.25 |
| 4462  | 16013 | 15.75 |
| 4468  | 17019 | 16.75 |
| 5060  | 20320 | 20.00 |
| 5070  | 27433 | 27.00 |
| 5080  | 30481 | 30.00 |



# GOODWIN BARSBY LIMITED

P.O. Box 126, St. Margarets,  
 Watling Street, Leicester LE1 9ED.  
 Tel: (0533) 626501 Telex: 34304 Goodwn Fax: (0533) 626509

Approved to Ministry of Defence Standard AQAP4

In pursuance of this company's policy of constant development, the right is reserved to depart without notice from any detail illustrated or specified in the leaflet without incurring the obligations to provide such modifications on machines previously delivered.