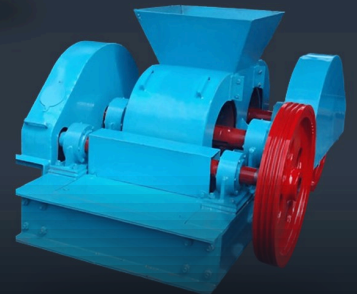
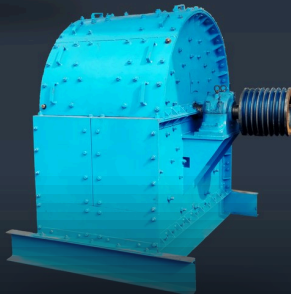
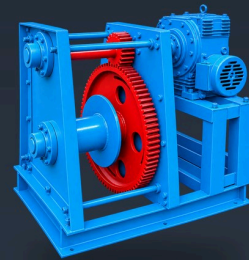
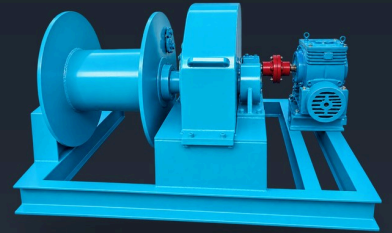




MANUAL TOOLS COMPANY

Manufacturer of Coke Oven Machinery



PRODUCT RANGE

BUILT FOR THE COKE OVEN

Coal crushers · Coke cutters · Vibrator screens · Pusher machines · Charging cars · Power winches · Haulages · Conveyor parts

30+ YEARS OF
EXCELLENCE



3 STEPS TO THE RIGHT MACHINE

1. TELL US ABOUT YOUR PLANT

What material do you handle, coal or coke? Which stage of the plant is the machine for: crushing, sizing, screening, charging, pushing or hauling? And how many tons per hour must it handle?

2. MATCH THE CAPACITY

Use the machine selector opposite and the specification charts to shortlist a model by capacity, feed size, output size and motor power. Allow for the wettest, hardest material you expect, not the average.

3. WE BUILD IT TO ORDER

Every machine is fabricated in our Dhanbad workshop, with capacity, motor power and dimensions matched to your plant and drawings. Installation supervision and commissioning are available.

Not sure which machine fits? Call us on +91 9430707348 and talk it through with the people who build it.

Manual Tools Company has built heavy-duty coke oven machinery in Dhanbad since 1995. Coke, steel, refractory and cement companies across India, and abroad, run our crushers, cutters, screens and oven machines.

Founded by the late Shobha Ram Agarwal and run today by Ravindra Kr. Agarwal, we design and fabricate every machine in our own workshop at Bastacolla, Dhansar. The liners, teeth and rings that take the wear are manganese steel; the parts that carry the load are cast steel gears and worm reducers. We also supervise installation, commission the machine and supply its spare parts.

MACHINE SELECTOR

MACHINE	DUTY	AT A GLANCE
COAL PREPARATION		Years experience 30+
Coal Crusher (5 No.) Single Disc – Coal Disintegrator	8 – 12 TPH, coal to below 2 mm	Happy clients 150+
Coal Crusher (5 No.) Double Disc – High Capacity Disintegrator	20 – 25 TPH, coal to below 2 mm	Projects done 500+
COKE SIZING & SCREENING		Experienced staff 15+
Coke Cutter Machine Double Drive, Drum Type – Industrial Series	12 – 15 TPH, coke to 40 – 60 mm	 ISO 9001:2015 certified quality management
Ring Type Coke Cutter Double Drive – Segmented Manganese Steel Rings	15 – 20 TPH, coke to 40 – 60 mm	
Vibrator Screen Machine Multi-Deck Series – Industrial Grading & Sorting	1 – 4 decks, up to 5' x 16'	
OVEN OPERATION		
Pusher Machine With Roller Stamping Arrangement	Ovens up to 11 m, roller stamping	
Coal Charging Car Top Feed – Coke Oven Machinery Series	8 – 20 T hopper, 2, 3 or 4 mouths	
Door Lifting Power Winch Coke Oven Gate Lifting Equipment	2.5 – 5 T door lift	
MATERIAL HANDLING		
Haulage Machine 10 HP / 10 Ton – Coke Oven Extraction Series	10 T horizontal pull	
Conveyor Components Idlers, Rollers & Pulleys – Industrial Handling Systems	Belts 600 – 1400 mm	

Figures are typical. Every machine is built to order, so final figures are confirmed on the quotation.

BUILT FOR COKE OVEN DUTY

WEAR PARTS & DRIVES

Coal and coke are abrasive, and oven machines work next to heat and dust. Our machines separate the two jobs: the parts that take the wear are made to be worn and replaced, and the parts that carry the load are made to last the life of the machine.

The following will help you understand the terms used for each machine in this catalogue.



MANGANESE STEEL

Crusher liner plates, cutter teeth and toothed rings are high manganese steel, which work-hardens as it is struck. It stands up to abrasive metallurgical coke, and each wearing part is replaceable on its own. Crusher hammers are mild steel, replaced through the side access door when worn.



DRIVES

Worm reducer – a gearbox whose worm cannot be driven backwards by the load, so a lifted door or a loaded wagon cannot run back if the power fails.

Double drive – a motor on each end of the cutting shaft for equal torque, so hard or large lumps do not jam the drums, and the gears last longer.

Cast steel gears – machine-cut gears on haulages, winches and coke cutters.



FABRICATION

Bodies and frames are fabricated from heavy steel: 12 and 16 mm plate on the coal crushers, 8 mm plate on the charging car hoppers, MS Channel base frames under the haulages, and heavy coil springs under the vibrator screens.

IN THIS CATALOGUE

COAL PREPARATION			
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	Coal Crusher (5 No.) Double Disc – High Capacity Disintegrator	8	
COKE SIZING & SCREENING			
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OVEN OPERATION			
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MATERIAL HANDLING			
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Contact & your requirement	32		

Coal Crusher (5 No.)

SINGLE DISC – COAL DISINTEGRATOR

- Manganese steel side and top liner jaw plates
- Double row spherical roller bearings
- Single-side easy feeding mouth
- Extra-wide disc for uniform output
- Hammers replaceable through the side access door



8 – 12 TPH
Capacity



80 – 120 HP
Motor Power



< 2 mm
Output Size



Up to 150mm
Max Feed Size



1 Year
Warranty

1 MILD STEEL HAMMERS

Six hammers throw the coal against manganese steel liner plates. They are replaced through the side access door without dismantling the rotor.

2 SINGLE-SIDE FEEDING MOUTH

Takes coal lumps up to 150 mm straight from the conveyor into the crushing chamber.

3 SPHERICAL ROLLER BEARINGS

Double row spherical roller bearings carry the rotor shaft.

4 EXTRA-WIDE DISC

Keeps the output size uniform, below 2 mm, across the full 8 – 12 TPH range.

HOW IT WORKS

01

Gravity Feed

Raw coal lumps up to 150 mm are delivered by conveyor and drop into the crushing chamber through the top hopper.

02

High-Speed Impact

The single disc rotates at speed. Six mild steel hammers throw the coal against the liner plates and shatter it on contact.

03

Fine Discharge

The pulverised coal passes the grate bars below 2 mm and discharges onto the outgoing conveyor, ready for the oven or boiler.

BUYING INFORMATION

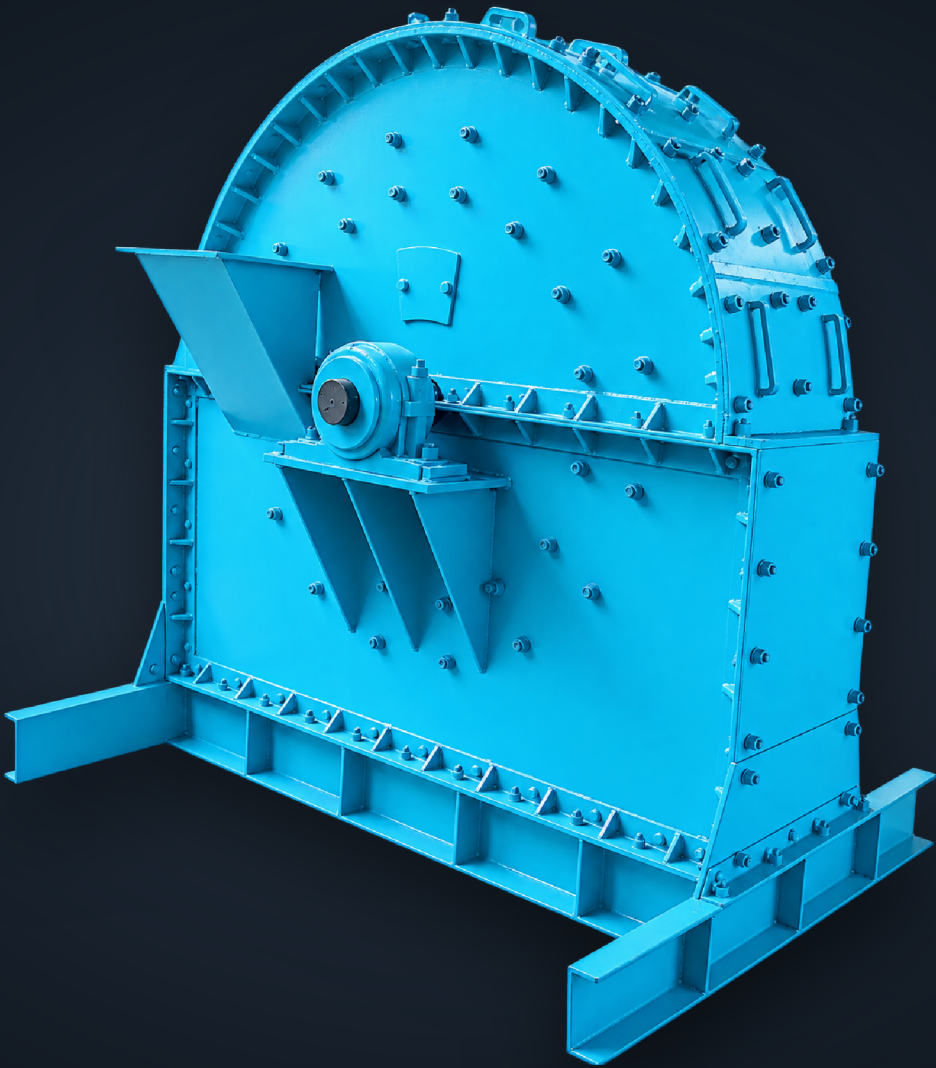
Lead time: Made to order. Ask us for the current lead time.

Warranty: 1 year, as on all our machinery.

Installation: Installation supervision and commissioning available.

Custom builds: Capacity, motor power and dimensions matched to your plant and drawings.

COAL CRUSHING



Coal Crusher (5 No.)

Single Disc – Coal Disintegrator

8 – 12 TPH

CRUSHING CAPACITY

80 – 120 HP

MOTOR RANGE

< 2 mm

OUTPUT SIZE

Coal Crusher (5 No.)

DOUBLE DISC – HIGH CAPACITY DISINTEGRATOR

- Double disc rotor fitted with 12 mild steel hammers
- Individually replaceable hammers
- 16 mm fabricated steel housing
- Manganese steel top and side liner jaw plates



20 – 25 TPH
Capacity



150 – 180 HP
Motor Power



< 2 mm
Output Size



Up to 200mm
Max Feed Size



1 Year
Warranty

1 DOUBLE DISC ROTOR

Two discs fitted with 12 mild steel hammers, creating a dense impact zone for 20 – 25 TPH.

2 REPLACEABLE HAMMERS

Each hammer can be replaced or reversed.

3 16 MM FABRICATED HOUSING

Heavy steel body built to take the impact of lumps up to 200 mm.

4 MANGANESE STEEL LINER JAW PLATES

Bolted top and side plates take the wear instead of the body, and are swapped without cutting.

HOW IT WORKS

01

Large Feed Intake

Accepts lumps up to 200 mm; the wide hopper spreads material across both discs.

02

Dual Rotor Impact

Two discs fitted with 12 mild steel hammers create a dense impact zone.

03

High Volume Discharge

Crushed coal passes the calibrated grate bars at up to 25 TPH, below 2 mm.

BUYING INFORMATION

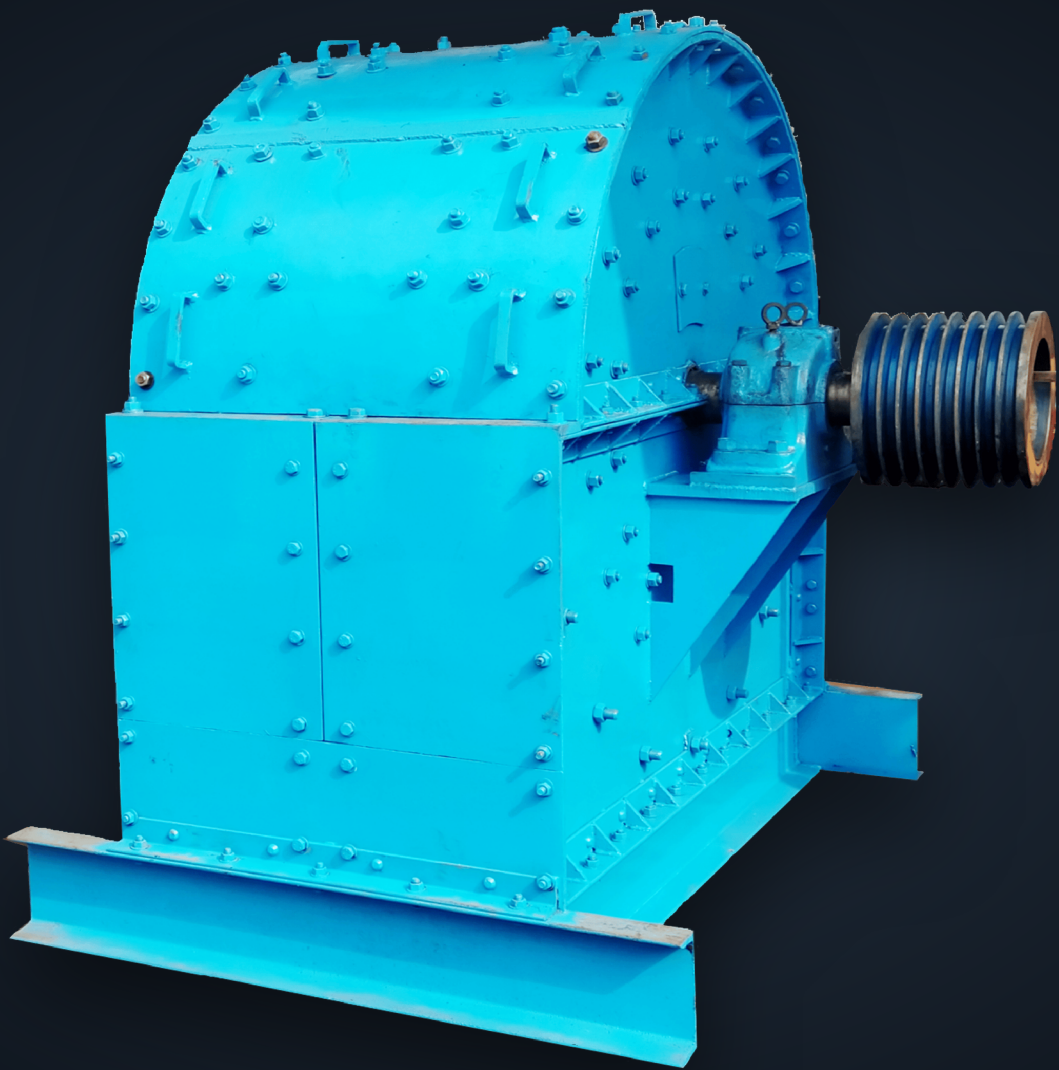
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Installation: Installation supervision and commissioning available.

Custom builds: Capacity, motor power and dimensions matched to your plant and drawings.

COAL CRUSHING



Coal Crusher (5 No.)

Double Disc – High Capacity Disintegrator

20 – 25 TPH

CRUSHING CAPACITY

150 – 180 HP

MOTOR RANGE

< 2 mm

OUTPUT SIZE

Coke Cutter Machine

DOUBLE DRIVE, DRUM TYPE – INDUSTRIAL SERIES

- Manganese steel liner teeth, replaceable
- Cast steel gears on both sides
- Adjustable drum distance up to 30 mm
- Double drive system prevents jamming



12 – 15 TPH
Capacity



20 HP × 2 (Dual)
Motor Power



40 – 60 mm
Output Size



Up to 200mm
Max Feed Size



1 Year
Warranty

1 FEED HOPPER

Coke lumps up to 200 mm are delivered by conveyor straight into the intake hopper.

2 DOUBLE DRIVE

Two 20 H.P. motors drive the cutting drums from both ends: balanced torque, no jamming.

3 CAST STEEL GEARS

Machine-cut cast steel gears on both sides of the drums.

4 ADJUSTABLE DRUMS

Drum distance adjusts by up to 30 mm, setting the output between 40 mm and 60 mm.

HOW IT WORKS

01

Material Feed

Coke lumps up to 200 mm are delivered by the upper conveyor belt directly into the intake hopper.

02

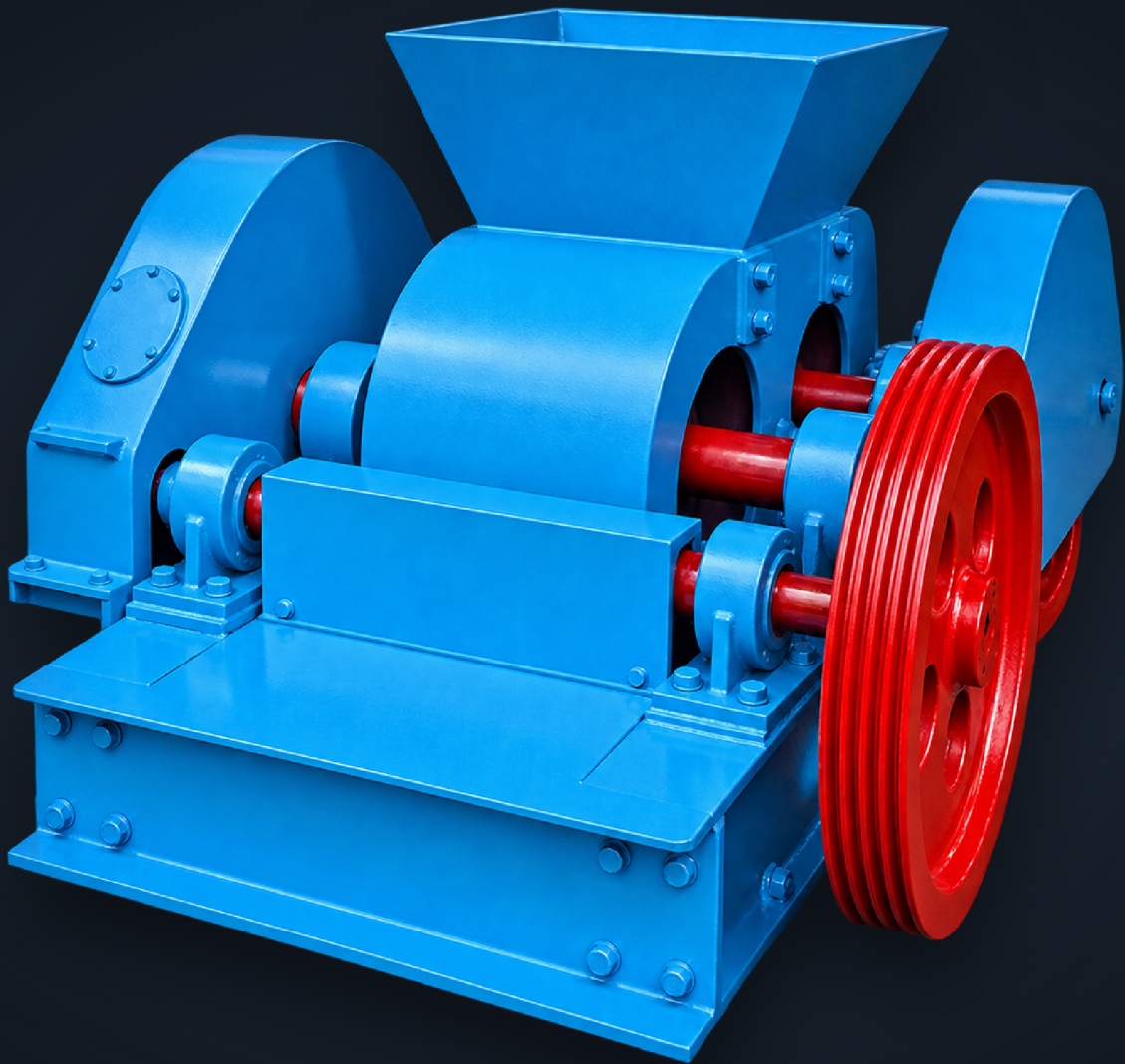
Double Drive Cutting

The dual 20 HP motors power the cutting drums from both ends, breaking the material down without jamming.

03

Sized Output

Uniformly sized coke, 40 – 60 mm, discharges onto the lower conveyor belt for immediate transport.



COKE CUTTING

Coke Cutter Machine

Double Drive, Drum Type – Industrial Series

12 – 15 TPH

BREAKING CAPACITY

20 HP × 2

DOUBLE DRIVE

40 – 60 mm

OUTPUT SIZE

BUYING INFORMATION

Lead time: Made to order. Ask us for the current lead time.

Warranty: 1 year, as on all our machinery.

Installation: Installation supervision and commissioning available.

Custom builds: Capacity, motor power and dimensions matched to your plant and drawings.

Ring Type Coke Cutter

DOUBLE DRIVE – SEGMENTED MANGANESE STEEL RINGS

- Segmented toothed rings, keyed individually
- High manganese steel that work-hardens in use
- Individually replaceable rings
- Double drive: equal torque, less jamming



Toothed Rings
Mechanism



25 HP × 2 (Dual)
Motor Power



40 – 60 mm
Output Size



15 – 20 TPH
Capacity



1 Year
Warranty

1 SEGMENTED TOOTHED RINGS

Rings are keyed to the shaft one by one, so a damaged section is replaced on its own instead of relining the whole drum.

2 HIGH MANGANESE STEEL

The rings work-harden in use and stand up to abrasive metallurgical coke.

3 DOUBLE DRIVE

Two 25 H.P. motors give equal torque on both ends of the cutting shaft, preventing jamming on large or hard lumps and extending gear life.

4 ADJUSTABLE GAP

The gap between the ring shafts adjusts from 40 mm to 60 mm.

HOW IT WORKS

01

Feed Intake

Large coke lumps fall into the cutting chamber. The robust housing is designed to withstand impact from heavy material.

02

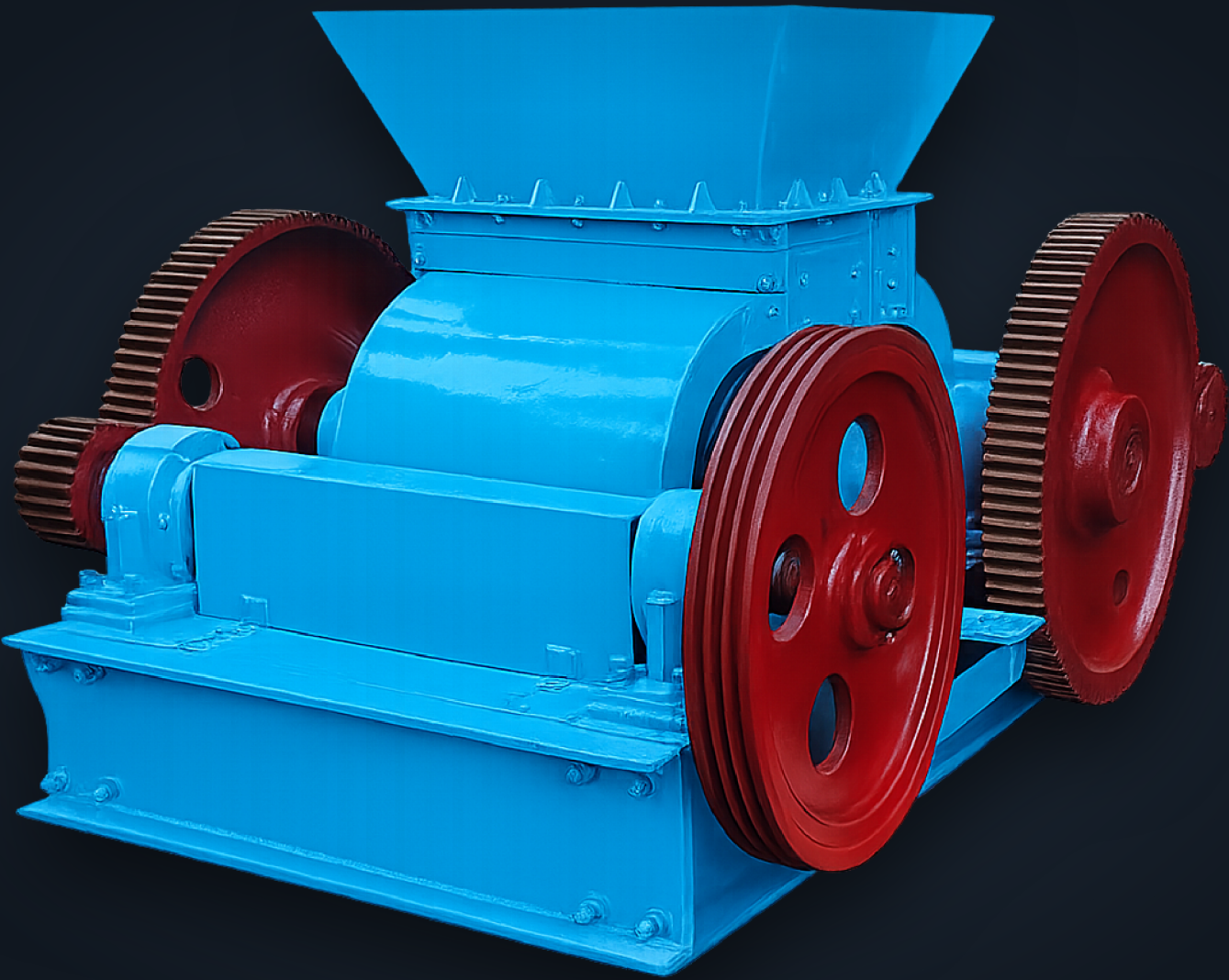
Ring Shearing

As the shafts rotate, the toothed rings engage the coke. The segmented design concentrates force for cleaner cuts with less dust.

03

Sized Output

Sized coke (40 – 60 mm) passes through the gap. Oversized pieces remain until cut, for consistent furnace-grade coke.



COKE CUTTING

Ring Type Coke Cutter

Double Drive – Segmented Manganese Steel Rings

15 – 20 TPH

CUTTING CAPACITY

25 HP × 2

DOUBLE DRIVE

40 – 60 mm

OUTPUT SIZE

BUYING INFORMATION

Lead time: Made to order. Ask us for the current lead time.

Warranty: 1 year, as on all our machinery.

Installation: Installation supervision and commissioning available.

Custom builds: Capacity, motor power and dimensions matched to your plant and drawings.

Vibrator Screen Machine

MULTI-DECK SERIES – INDUSTRIAL GRADING & SORTING

- Eccentric shaft vibration mechanism
- Heavy coil spring suspension
- Interchangeable mesh decks
- Adjustable amplitude via counterweights



1 – 4 Decks
Configuration



7.5 – 15 HP
Motor Power



Up to 5' x 16'
Screen Size



High Carbon Steel
Mesh Type



1 Year
Warranty

1 ECCENTRIC SHAFT

An eccentric shaft mechanism gives strong vibration and high screening efficiency.

2 1 TO 4 DECKS

Each deck discharges its own size grade: a 3-deck machine gives 4 output sizes (oversize + 3 grades).

3 INTERCHANGEABLE MESH

High carbon steel wire mesh in different aperture sizes changes the output size.

4 ADJUSTABLE AMPLITUDE

Changing the counterweights on the flywheels / eccentric shaft adjusts the vibration. Heavy coil springs carry the screen.

HOW IT WORKS

01

Material Feed

Mixed material is fed onto the top deck and spread across the full width of the screen cloth.

02

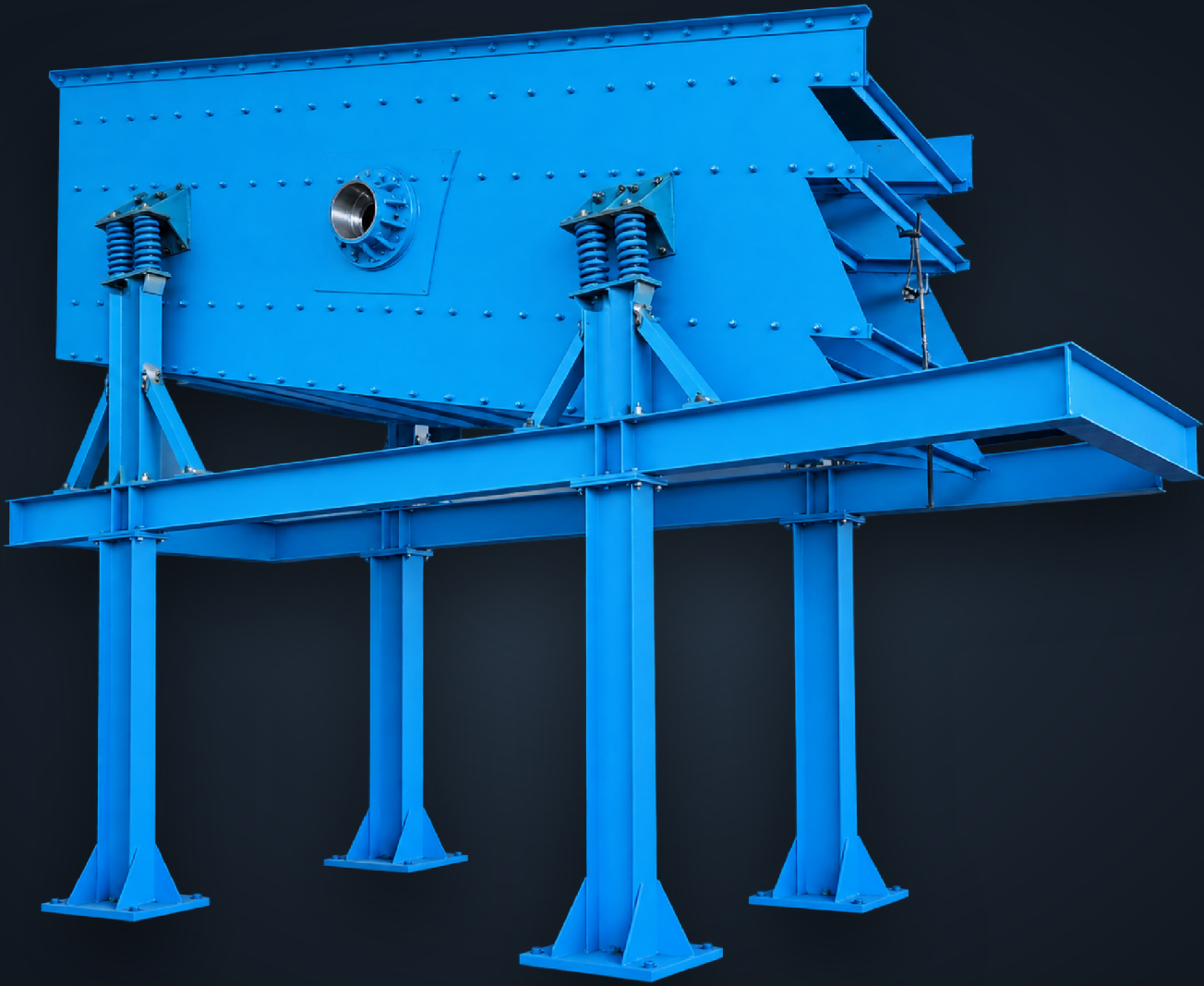
Stratification

Fines pass through the mesh to lower decks while oversize lumps ride over the top to the discharge chute.

03

Multi-Output

Each deck discharges its own size grade (e.g. +40mm, 20-40mm, -20mm) to separate hoppers or conveyors.



SCREENING & GRADING

Vibrator Screen Machine

Multi-Deck Series – Industrial Grading & Sorting

1 – 4

SCREENING DECKS

7.5 – 15 HP

MOTOR RANGE

5' x 16'

MAX SCREEN SIZE

BUYING INFORMATION

Lead time: Made to order. Ask us for the current lead time.

Warranty: 1 year, as on all our machinery.

Installation: Installation supervision and commissioning available.

Custom builds: Capacity, motor power and dimensions matched to your plant and drawings.

AT THE BATTERY



OVEN MACHINES AT A GLANCE

MACHINE	DUTY	SIZE
Pusher Machine	Pushes the coke out, stamps the coal cake	Ovens up to 11 m
Coal Charging Car	Top-charges coal into the ovens	8 – 20 T hopper, 2, 3 or 4 mouths
Door Lifting Power Winch	Lifts the oven doors	2.5 – 5 T lift
Haulage Machine	Pulls wagons and coke cakes	10 T pull

**SIZING FOR YOUR BATTERY**

Standard coke oven doors usually need a 2.5 to 5 ton winch, depending on the battery height and the door weight.

The standard 20 m pusher beam suits ovens up to 11 m long; custom lengths are available.

The charging car is built with 2, 3 or 4 mouths, to match the charging holes on your oven top.

Pusher Machine

WITH ROLLER STAMPING ARRANGEMENT

- Helical gearbox and chain drive
- Rack and pinion leveller beam
- Suits ovens up to 11 m long
- Rail-mounted travel along the battery



20 Meters
Beam Length



40 HP (Elec.)
Main Motor



15 HP Motor
Long Travel



Roller Stamping
System



1 Year
Warranty

1 PUSHER BEAM

A 20 m heavy fabricated beam, driven by the 40 H.P. main motor through a helical gearbox and chain drive, rams the finished coke out of the oven.

2 ROLLER STAMPING

The 7.5 H.P. roller stamping system compacts coal fines into a high-density cake: faster and lower-maintenance than drop-hammer systems.

3 LEVELLER BEAM

A 20 m rack and pinion leveller beam, for ovens up to 11 m long. Custom lengths are available.

4 LONG TRAVEL

A 15 H.P. drive moves the machine on rails along the battery to line up with each oven.

HOW IT WORKS

01

Coal Stamping

Coal fines are fed in and the roller stamping system compacts them into a high-density cake.

02

Charging

The machine travels on rails along the battery and aligns with the oven.

03

Coke Ejection

After carbonisation, the pusher beam rams the finished coke mass out of the oven.

BUYING INFORMATION

Lead time: Made to order. Ask us for the current lead time.

Warranty: 1 year, as on all our machinery.

Installation: Installation supervision and commissioning available.

Custom builds: Capacity, motor power and dimensions matched to your plant and drawings.

PUSHING & STAMPING



Pusher Machine

With Roller Stamping Arrangement

65 – 70 HP

CONNECTED LOAD

20 m

PUSHER BEAM

11 m

MAX OVEN LENGTH

Coal Charging Car

TOP FEED – COKE OVEN MACHINERY SERIES

- Two, three or four conical hoppers in 8 mm plate
- Worm reducer travel gearbox
- Motorised slide gates with manual override
- Telescopic sleeves limit smoke leakage



8 – 20 Tons
Hopper Capacity



15 HP (Elec.)
Travel Motor



2, 3 & 4
Charging Mouths



Gravity Feed
Operation



1 Year
Warranty

1 CONICAL HOPPERS

Two, three or four 8 mm plate hoppers, in 8, 15 or 20 ton capacities. The steep cones help wet coal flow.

2 MOTORISED SLIDE GATES

3 H.P. slide gates open to let coal fall into the oven by gravity, with a manual override wheel.

3 RAIL TRAVEL

Track wheels driven by a 15 H.P. motor through a worm reducer, at 60 – 80 m/min.

4 TELESCOPIC SLEEVES

They line up with the charging holes and limit smoke leakage while the oven is charged.

HOW IT WORKS

01

Bunker Filling

The car stops under the coal tower and its 4 hoppers are filled with a measured coal blend.

02

Alignment

The car travels to the empty oven; telescopic sleeves align with the charging holes to limit smoke leakage.

03

Gravity Discharge

The bottom slide gates open and coal flows into the oven by gravity.



TOP CHARGING

Coal Charging Car

Top Feed – Coke Oven Machinery Series

8 – 20 T

HOPPER CAPACITY

2, 3 & 4

CHARGING MOUTHS

60 – 80 m/min

TRAVEL SPEED

Door Lifting Power Winch

COKE OVEN GATE LIFTING EQUIPMENT

- Worm reducer gearbox
- Gears for a smooth, non-jerky lift
- Grooved steel drum or steel drum for wire rope



2.5 – 5 Tons
Lifting Capacity



5 – 7.5 HP
Motor Power



Worm Reducer Gearbox
Gearbox Type



Vertical Lift
Operation



1 Year
Warranty

- 1 WORM REDUCER GEARBOX**

A high reduction ratio in a single compact stage, so a 5 – 7.5 H.P. motor lifts up to 5 tons.
- 2 GEARS**

The worm gearing cuts speed and multiplies torque for a smooth, non-jerky lift at about 2 – 4 m/min.
- 3 GROOVED STEEL DRUM / STEEL DRUM**

Winds the wire rope evenly. A standard rope length is included; length and diameter can be customised.

HOW IT WORKS

01

Drive Activation

The electric motor engages and drives the worm gearbox input shaft through a coupling.

02

Torque Multiplication

The worm shaft drives the worm wheel, cutting speed and multiplying torque for a smooth, non-jerky lift.

03

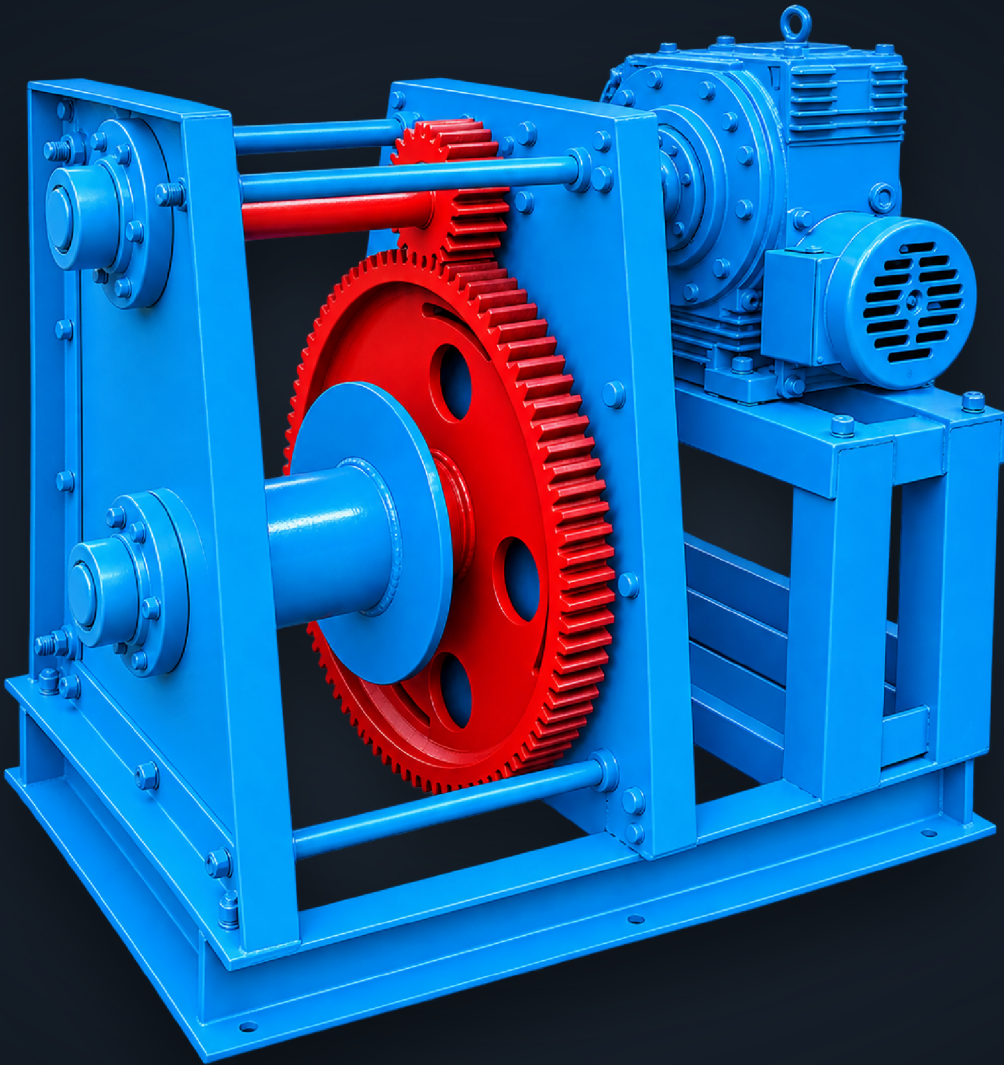
Vertical Lift

The output shaft turns the grooved drum, winding the wire rope and lifting the oven door to the required height.

BUYING INFORMATION

- Lead time:** Made to order. Ask us for the current lead time.
- Warranty:** 1 year, as on all our machinery.
- Installation:** Installation supervision and commissioning available.
- Custom builds:** Capacity, motor power and dimensions matched to your plant and drawings.

DOOR LIFTING



Door Lifting Power Winch

Coke Oven Gate Lifting Equipment

2.5 – 5 T

LIFTING CAPACITY

5 – 7.5 HP

MOTOR

2 – 4 m/min

LIFTING SPEED

Haulage Machine

10 HP / 10 TON – COKE OVEN EXTRACTION SERIES

- Cast steel gears, machine cut
- Fabricated MS Channel steel base frame
- Manual or electro-hydraulic thruster brake (optional)
- Non-reversible worm drive resists back-slip



10 Tons
Pulling Capacity



10 HP (Elec.)
Motor Power



Worm Reducer
Gearbox Type



Coke / Mining
Application



1 Year
Warranty

- 1

WORM REDUCER GEARBOX
A high-torque, non-reversible worm drive: the gear action helps prevent the load slipping back.
- 2

CAST STEEL GEARS
Machine-cut cast steel gears for a steady 10-ton horizontal pull.
- 3

MS CHANNEL BASE FRAME
A fabricated MS Channel steel base, with a manual or electro-hydraulic thruster brake as an option.
- 4

PULLING, NOT LIFTING
Designed for horizontal pulling or inclined dragging, not as a vertical lifting hoist.

HOW IT WORKS

01

Electrical Input
The 10 HP motor starts; a flexible coupling transmits power to the gearbox input shaft and absorbs start-up shock.

02

Speed Reduction
The worm reducer lowers the RPM and multiplies torque. The non-reversible gear action helps prevent load back-slip.

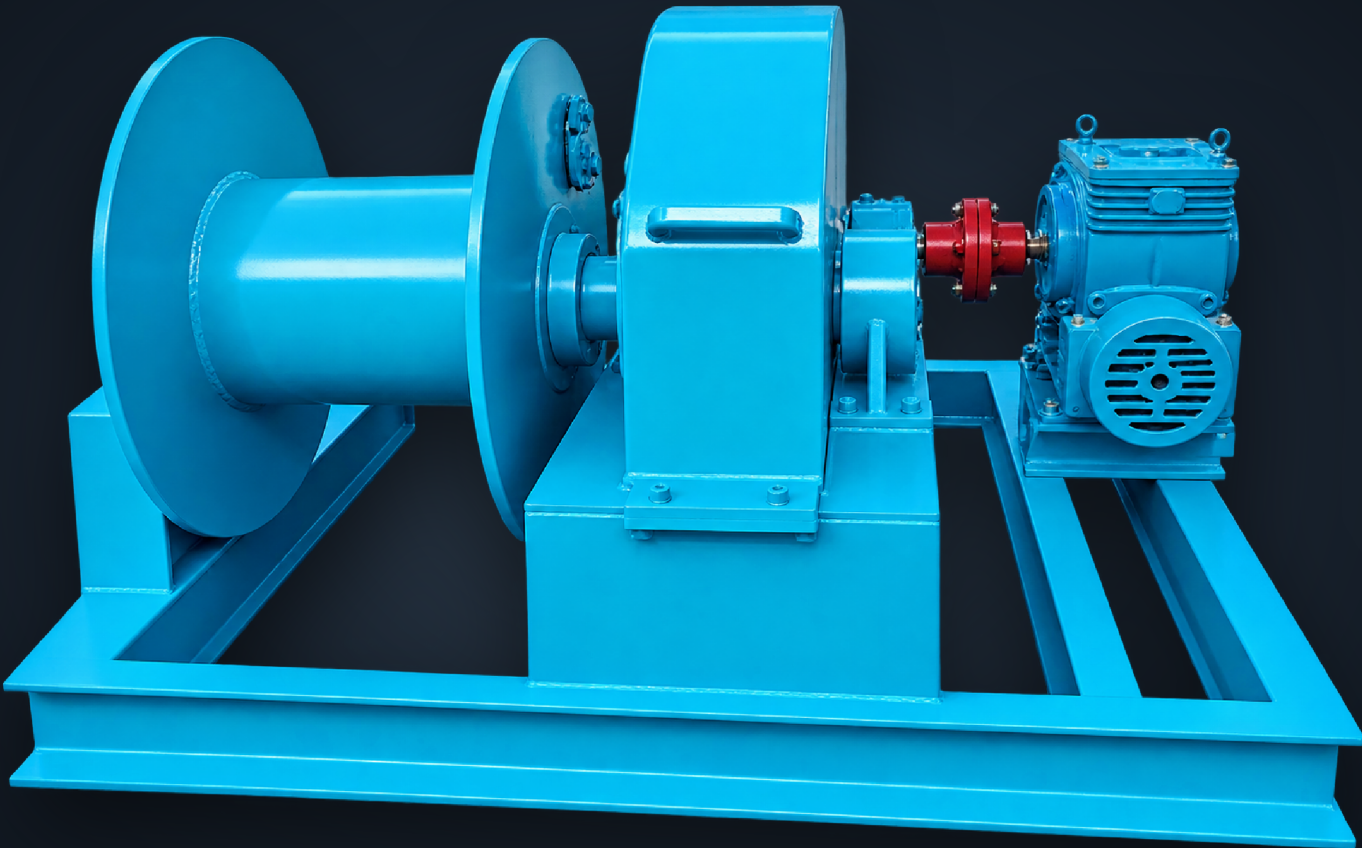
03

Drum Traction
The output shaft turns the rope drum, coiling the steel wire rope and applying a steady 10-ton pull on the connected load.

BUYING INFORMATION

- Lead time:** Made to order. Ask us for the current lead time.
- Warranty:** 1 year, as on all our machinery.
- Installation:** Installation supervision and commissioning available.
- Custom builds:** Capacity, motor power and dimensions matched to your plant and drawings.

HAULAGE & PULLING



Haulage Machine

10 HP / 10 Ton – Coke Oven Extraction Series

10 Tons
PULLING CAPACITY

10 HP
MOTOR

440 V
3-PHASE SUPPLY

Conveyor Components

IDLERS, ROLLERS & PULLEYS – INDUSTRIAL HANDLING SYSTEMS

- Carrying idlers in 30 degree troughing sets
- Return rollers with a smooth surface to prevent belt wear
- Impact rollers with shock-absorbing rubber rings
- Head and tail pulleys with key-based locking assemblies
- Coupling pair available for the head pulley
- Bulk orders taken for plant-wide replacement



600 – 1400 mm
Belt Widths



Sealed
Bearings



Seamless Pipe
Material



Heavy Duty
Application



1 Year
Warranty

- 1

CARRYING IDLERS
30 degree troughing sets shape the belt into a trough so it holds its load.
- 2

IMPACT ROLLERS
Rubber rings absorb the shock of falling lumps at hopper loading points.
- 3

RETURN ROLLERS
A smooth surface supports the empty underside of the belt without wearing it.
- 4

HEAD AND TAIL PULLEYS
Plain steel or rubber lagged (diamond groove or plain) for traction in wet conditions, with key-based locking assemblies.

HOW IT WORKS

01

Loading Point
Material drops onto the belt over impact rollers, whose rubber rings absorb the shock and stop falling lumps damaging the belt.

02

Carrying Run
Carrying idlers in 30 degree troughing sets shape the belt into a trough so it holds its load, running on sealed bearings that keep dust out.

03

Return Run and Drive
Return rollers support the empty underside of the belt with a smooth face, while the head pulley drives the belt and the tail pulley keeps it tensioned.

BUYING INFORMATION

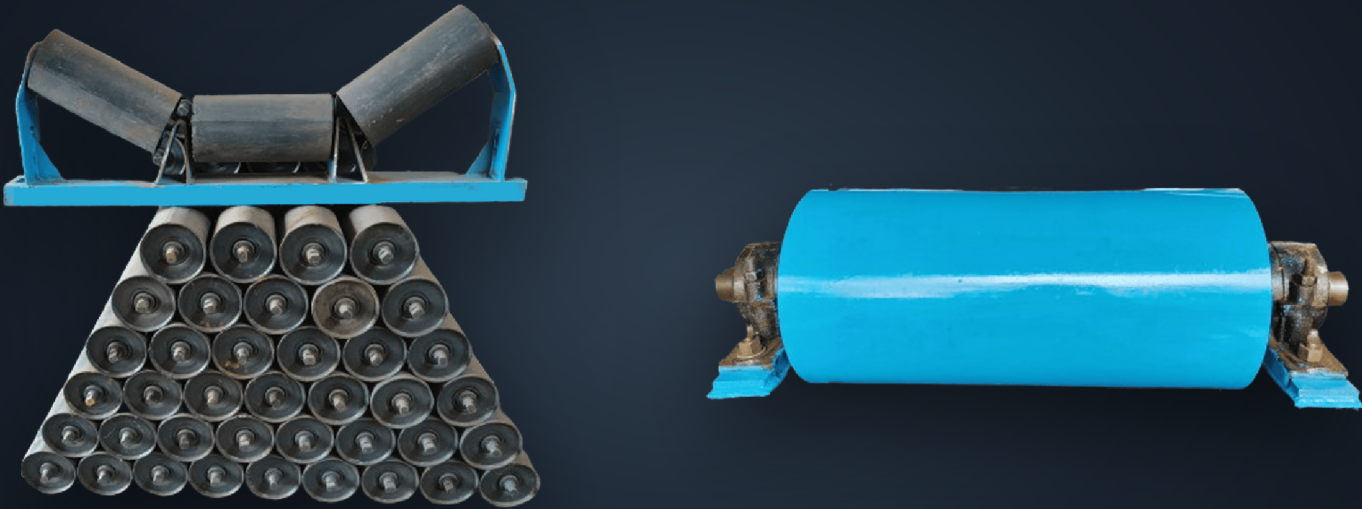
Lead time: Standard sizes (800 mm and 1000 mm rollers) are often in stock. Custom pulleys usually take 2 – 3 weeks.

Warranty: 1 year, as on all our machinery.

Bulk orders: Taken for plant-wide replacement of idlers, rollers and pulleys.

Custom builds: Sizes and lagging matched to your plant and drawings.

BELT CONVEYING



Conveyor Components

Idlers, Rollers & Pulleys – Industrial Handling Systems

600 – 1400 mm

BELT WIDTHS

EN-8

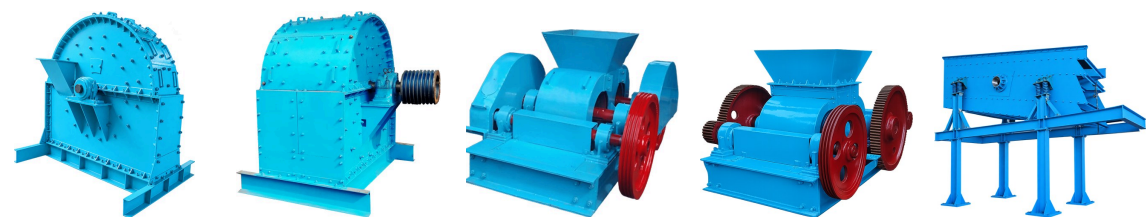
SHAFT MATERIAL

Sealed

BALL BEARINGS

SPECIFICATION CHART

CRUSHING, CUTTING & SCREENING

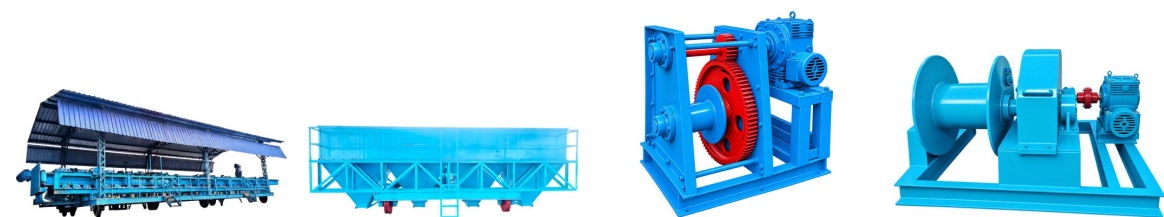


MODEL	COAL CRUSHER SINGLE DISC	COAL CRUSHER DOUBLE DISC	COKE CUTTER DRUM TYPE	COKE CUTTER RING TYPE	VIBRATOR SCREEN
PERFORMANCE					
Capacity	8 – 12 TPH	20 – 25 TPH	12 – 15 TPH	15 – 20 TPH	1 – 4 decks
Feed size	Up to 150 mm	Up to 200 mm	Up to 200 mm	Up to 200 mm	Mixed feed
Output size	Below 2 mm	Below 2 mm	40 – 60 mm	40 – 60 mm	One grade per deck
Material	Coal	Coal	Coke	Coke	Coke, coal, ore
DRIVE					
Motor	80 – 120 H.P.	150 – 180 H.P.	20 H.P. × 2	25 H.P. × 2	7.5 – 15 H.P.
Drive	Single disc	Double disc	Double drive	Double drive	Eccentric shaft
Adjustment	•	•	Drum distance, up to 30 mm	Ring gap, 40 – 60 mm	Mesh and counterweights
BUILD					
Wear parts	6 mild steel hammers	12 mild steel hammers	Manganese steel liner teeth	High manganese steel rings	High carbon steel mesh
Body	12 mm fabricated steel	16 mm fabricated steel	Cast steel gears both sides	Segmented rings, keyed	Coil spring suspension

• Not applicable. The vibrator screen's capacity depends on the deck count, screen size and mesh. Capacities depend on the material and feed conditions; every machine is built to order, and final figures are confirmed on the quotation. Warranty: 1 year on all our machinery.

SPECIFICATION CHART

COKE OVEN & HANDLING MACHINES



MODEL	PUSHER MACHINE	COAL CHARGING CAR	DOOR LIFTING POWER WINCH	HAULAGE MACHINE
DUTY				
Job	Pushes coke, stamps the coal cake	Top-charges coal into ovens	Lifts oven doors	Horizontal pulling
Capacity	Ovens up to 11 m	8 / 15 / 20 T hopper	2.5 – 5 T lift	10 T pull
Speed	•	60 – 80 m/min travel	2 – 4 m/min lift	•
DRIVE				
Main motor	40 H.P. pusher	15 H.P. travel	5 – 7.5 H.P.	10 H.P., 440 V
Other drives	15 H.P. travel, 7.5 H.P. stamping	3 H.P. slide gates	•	•
Connected load	Approx. 65 – 70 H.P.	•	•	•
Gearbox	Helical, with chain drive	Worm reducer (travel)	Worm reducer gearbox	Heavy duty worm reducer
Brake	•	•	•	Manual or thruster (optional)
BUILD				
Mounting	Rail-mounted	Rail-mounted	Fixed base	MS Channel base frame
Main parts	20 m pusher and leveller beams	2, 3 or 4 conical hoppers, 8 mm plate	Grooved steel drum / steel drum	Cast steel, machine-cut gears

• Not applicable. Conveyor components have their own pages. Capacities depend on the material and feed conditions; every machine is built to order, and final figures are confirmed on the quotation. Warranty: 1 year on all our machinery.

SPARES & WEAR PARTS

We supply spare parts for the machines we build, made to the same drawings. Tell us the machine and, if you have it, the old part's size, and we will quote.



CRUSHER HAMMERS

Mild steel hammers, replaced through the side access door without dismantling the rotor.

Fits: Coal crushers: 6 per single disc, 12 per double disc



CRUSHER ROTORS

Disc rotors that carry the hammers, built to the same drawings as the machine.

Fits: Coal crushers, single and double disc



TOOTHED CUTTER RINGS

High manganese steel rings, keyed to the shaft one by one, so a damaged section is replaced on its own.

Fits: Ring type coke cutter



IDLERS & ROLLERS

Seamless steel pipe on EN-8 bright steel shafts, running on sealed ball bearings (6204, 6205, 6305).

Fits: Belt widths 600 – 1400 mm



HEAD & TAIL PULLEYS

Plain steel face or rubber lagged (diamond groove or plain), with key-based locking assemblies.

Fits: Belt conveyors



TRAVEL WHEEL SETS

Flanged wheels on machined axles for machines that run on rails along the battery.

Fits: Rail-mounted oven machines

WHY MANUAL TOOLS COMPANY

SINCE 1995

Founded in Dhanbad by the late Shobha Ram Agarwal and run today by Ravindra Kr. Agarwal. More than 30 years of building machinery for coke ovens.

BUILT TO YOUR DRAWINGS

Capacity, motor power and dimensions are matched to your plant, so the machine fits the battery, the belt or the bunker it serves.

BUILT IN OUR OWN WORKSHOP

Every machine is designed and fabricated at Bastacolla, Dhansar, by a team of 15+ experienced engineers and technicians.

ISO 9001:2015 CERTIFIED

A certified quality management system, and compliance with Indian Factory Act standards.



30+

YEARS EXPERIENCE

150+

HAPPY CLIENTS

500+

PROJECTS DONE

15+

EXPERIENCED STAFF

CLIENTS ACROSS INDIA AND ABROAD INCLUDE

- | | | |
|-------------------------|----------------------------|-----------------------------------|
| ■ Akash Coke Industries | ■ Metalik Fuel | ■ Simplex Coke & Refractory |
| ■ Brahma Refractories | ■ Narsingh Ispat | ■ Su Mangala Coke |
| ■ Jindal Saw IPU | ■ Nilachal Carbo Metalicks | ■ Surya Cement Udyog |
| ■ Kalimati Metalik | ■ Ramco Cement | ■ Vivan Overseas |
| ■ Krishna Coke (India) | ■ Saurashtra Fuels | ■ C.I. Milpa S.A. (international) |
| ■ Krishna Hydrocarbon | ■ SBQ Steel | |
| ■ Mahalaxmi Group | ■ Shree Satya Group | |

ORDERING A SPARE

1

Name the machine and, if it is ours, roughly when it was supplied.

2

Send the old part's size, or a photo of it beside a tape measure.

3

We quote the part, made to the same drawings as the machine.

TALK TO THE PEOPLE WHO BUILD IT

EVERY MACHINE IN THIS CATALOGUE IS DESIGNED AND BUILT IN OUR WORKSHOP IN DHANBAD.

ENQUIRIES

Call or email with your material, capacity and site. We reply with a recommendation and a quotation.

SITE SUPPORT

Installation supervision and commissioning are available for every machine we build.

SPARES

Hammers, liner plates, rings, rollers, pulleys and gears for the machines we build, made to the same drawings.



MANUAL TOOLS COMPANY

Manufacturer of Coke Oven Machinery

Specifications and figures in this catalogue are typical and may change without notice. Every machine is made to order: capacity, motor power and dimensions are confirmed on the quotation. Capacities depend on the material and feed conditions. Warranty: 1 year on all our machinery.

**CALL +91 9430707348 OR VISIT
WWW.MANUALTOOLSCO.COM**

 +91 9430707348

 manualtoolsco.dhn@gmail.com

 Bastacolla, P.O. Dhansar, Dhanbad – 828106, Jharkhand, India



Scan for the website

YOUR REQUIREMENT

MACHINE

CAPACITY (TPH / TONS)

MATERIAL & FEED SIZE

OUTPUT SIZE

PLANT / SITE

NOTES