

Special Purpose Machinery for the **Clayworking** Industry Product Guide



Our Clayworking Skills

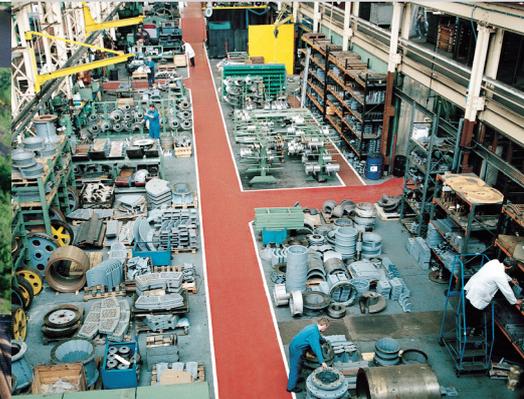
At Craven Fawcett we are committed to first class, design led engineering solutions geared directly at producing state-of-the-art machinery for the heavy clayworking industry.

Main (left): Aerial photograph of the Company's Wakefield site

Top: Spare Parts Stock

Bottom (left): Technical Design Department

Bottom (right): Fabrication Facility



Established in 1843, **Craven Fawcett Limited** is a pioneer in the field of Clayworking machinery, helping Britain build and maintain one of the most efficient Clayworking industries in the world. Today, as part of Group Rhodes, Craven Fawcett design and manufacture a full portfolio of clay preparation machinery ranging from Box Feeders and Grinding Mills through to Mixers and Extruders. The machinery is exported throughout the world, successfully competing for international market share on the basis of design, price and build quality.

In addition to supplying high quality Original Equipment Manufacturer (OEM) products and services, Craven Fawcett places great emphasis on spare part design, material selection and component finish in order to optimise production efficiency and reduce the frequency of machinery repair. Highly trained and experienced service engineers dedicated to clay preparation machinery are available at short notice to repair and maintain Craven Fawcett equipment in the field.

Craven Fawcett operates from an 8-acre site in Wakefield, England, with over 15,000 sq. metres of factory space under crantage. The Company's extensive production facility boasts excellent fabrication, machining and fitting departments, ensuring that all aspects of machine build are controlled to Craven Fawcett's quality (ISO 9001:2008), environmental (ISO 14001:2004) and European safety (CE) accreditations.

Special Purpose Machinery for the Clayworking Industry

- Storage Hoppers
- Extrusion Machines
- Cutting Tables
- Vertical and Horizontal Pipe Machines and Trimmers
- Stiff Plastic Presses
- Ball Mills
- Handling Systems
- Ancillary Equipment
- Spare Parts and Service
- Box Feeders
- Worm Feeders
- Kibblers
- Disintegrators
- Hammer Mills
- Crushers
- Wet Grinding Mills
- Dry Grinding Mills
- Fine Roller Mills
- Mixers

Feeder Type	Power (KW)	FEE
BOX FEEDER	2.2 to 7.5	
ROTARY SILO	7.5	
ROTARY PLASTIC FEEDER	11	
SCREEN FEEDER	60 & 100	
EVEN FEEDER	4 to 15	



Feeders / Storage

Craven Fawcett offers a range of feeders for storage and distribution of both raw quarried and prepared materials.

Main (right): Box Feeder with Storage Hopper

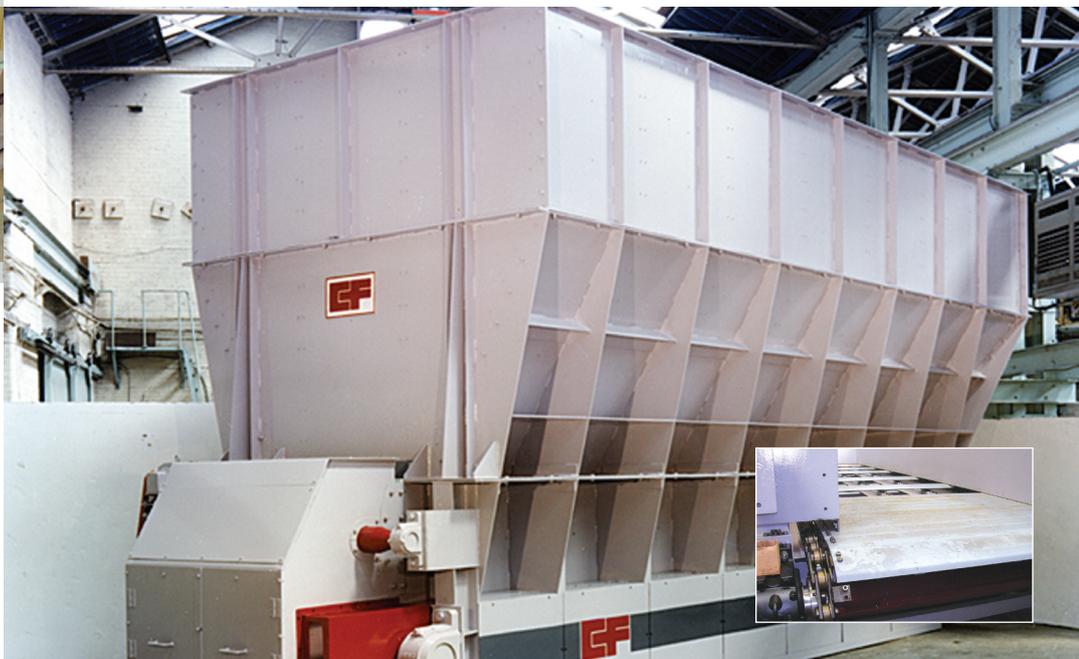
Main (right inset): Track plate system

Top (left): Screen Feeder

Top (right): Even Feeder

Bottom (left): Rotary Plastic Feeder

Bottom (right): Rotary Silo Feeder



FEEDERS

Output (T/hr)	Storage Capacity (Tonnes)
Up to 100	3 to 200
Up to 50	65 to 90
Up to 60	3 to 9
40 to 100	
3 to 60	Up to 20

GF BOX FEEDERS

- Accepts and delivers almost any type of raw material from the quarry or stockpile. Electronic variable speed drive feeds at a controlled rate to next stage of manufacture.
- Also suitable as buffer storage of pre-ground material prior to extrusion.
- Range of widths from 1000mm up to 1800mm and lengths from 2.9 mtr. up to 7.5 mtr. centres.
- Available with steel slat bottoms or with rubber belt for fine dry materials with scraper.
- Easily replaceable bolt on drive sprocket teeth are standard and slats can be fitted with up to 3 intermediate support rollers on heavy duty applications where shock loading is anticipated.

OPTIONAL EXTRAS :-

- Pickershaft facility regulates the feed of wet or sticky material.
- Storage hoppers from 10 - 200 tonnes capacity (non-stick lining material optional).

GF ROTARY SILO FEEDER

- Free standing silo for dry ground clay storage with minimum particle segregation.
- Easy access external tyre drive with plough units for extraction of material.

GF ROTARY PLASTIC FEEDER

- Provides up to 9 tonnes of clay storage and supplies even feed of prepared plastic clay
- Ideal for buffer storage between preparation machinery and extruder.

GF SERIES 2000 CIRCULAR SCREEN FEEDER

- Feeders with either 1500mm or 1900mm diameter drums.
- Ideal for mixing and homogenising prepared material.
- Material extruded or expressed through perforated side plates.
- V.S Drive options through heavy duty gearbox or hydraulic drive.

GF EVEN FEEDERS

- Multi-worm feeders for even feed of dry ground or plastic clay plus various other materials.

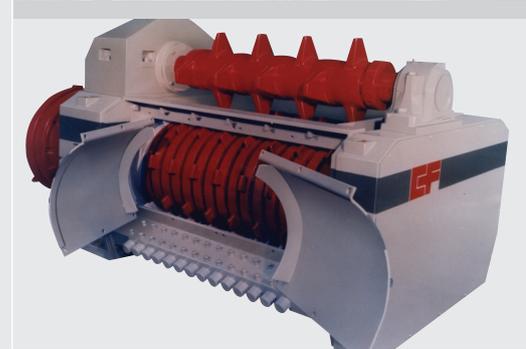
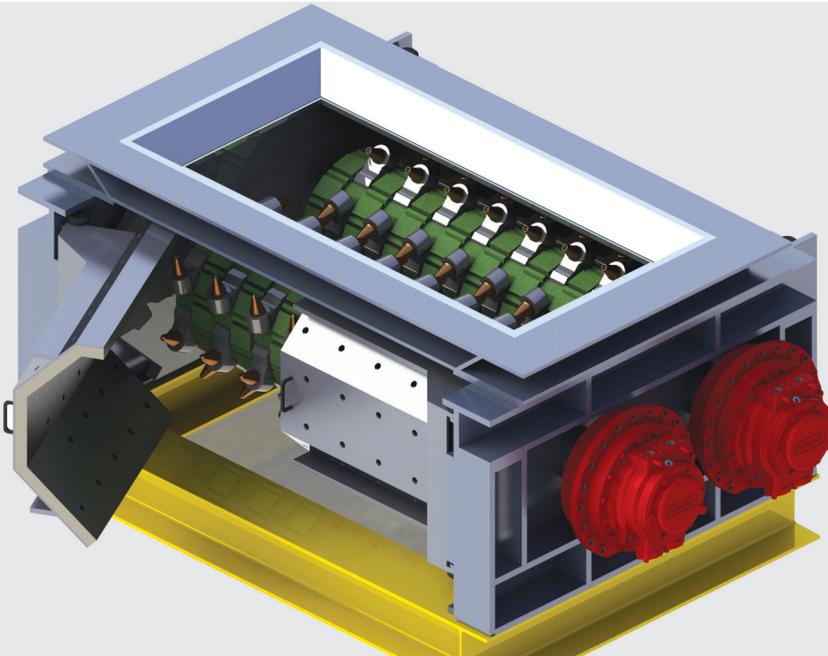
Crushing - Primary Crushers

Machinery for crushing large lumps of quarried clay and various other materials.

Main (left): Double Rotor Hydraulic Crusher (Schematic)

Top: Crusher Rotor with tungsten carbide tipped cutters

Bottom: High speed crusher with packer shaft



EF HEAVY DUTY TOOTHED CRUSHING ROLLERS (TCR)

- Crushes large pieces of hard shale clays and fireclays of 450 to 1000mm cube size prior to grinding mill or other plant.
- Drive through triple reduction gear train.
- Rollers fitted with long-life replaceable manganese steel crusher segments.
- Crusher sizes: 794mm dia X 914mm wide and 946mm dia X 1219mm wide.

EF SERIES 2000 HIGH SPEED CRUSHER

- Primary crusher ideal for soft to medium hard materials.
- Hydraulic variable speed drive fitted as standard, making the machine virtually unbreakable.
- For large and / or moist materials, an optional packer shaft can be fitted to prevent bridging in the feed hopper.

EF DOUBLE ROTOR HYDRAULIC CRUSHER

- Primary crusher in various sizes to suit various outputs and duties.
- Each rotor is equipped with an individual hydraulic motor for total flexibility.
- Rotor fitted with easily replaceable tungsten carbide tipped cutters.
- Various cutter sizes and patterns can be arranged to suit each application.

EF DOUBLE ROLL KIBBLER

- All steel construction with manganese steel kibbler discs for reducing shale, soft clay and chamotte lumps prior to further treatment in flow line.
- Two sizes available: 355mm x 730mm and 660mm x 1140mm.

PRIMARY

Crusher Type	M/c Size	Material Input (mm)
HD Toothed Rolls (TCR)	794 x 914 946 x 1219	300 to 600 400 to 1000
High Speed Hydraulic Crusher	600 x 1300	Up to 600
Double Roll Hydraulic Crusher	800 x 1200 800 x 1800	Up to 1000 Up to 1500
Kibbler Crusher	355 x 730 660 x 1140	Up to 350 Up to 1000

SECONDARY

Crusher Type	M/c Size	Material Input (mm)
Disintegrator	D500 D800 D1000	Up to 150
Hammer Mill (Double Rotor)	HM 900 HM 1100	Up to 200

Crushing - Secondary Crushers

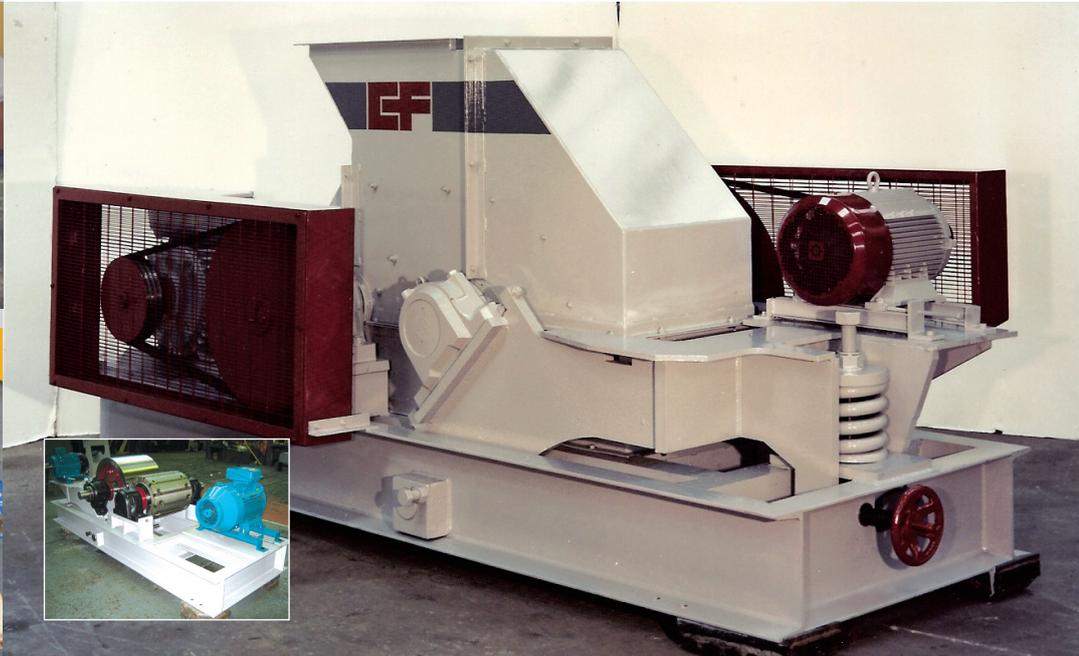
Follows or replaces primary crushers where the incoming clay material lump size is smaller, more friable and easier to crush.

Main (right): D500 Disintegrator

Main (right inset): D500 Disintegrator with covers and guards removed

Top: Double Rotor Hammer Mill

Bottom: Double Rotor Kibbler Crusher



CRUSHERS		
Max Material Output (mm)	Throughput (T/ Hr)	Power (kW)
150	45 to 100	30
	50 to 150	56
75	Up to 100	90
Minus 150	Up to 150	2 x 55
	Up to 250	2 x 90
Minus 150	20 to 50	18.5 to 37
	45 to 120	37 to 90

Y CRUSHERS		
Max Material Output (mm)	Throughput (T/ Hr)	Power (kW)
Variable down to 2 to 3	20 to 50	7.5 & 37
	30 to 80	7.5 & 55
	50 to 100	
Variable down to 1	Up to 60	2 x 75
	Up to 90	2 x 100

EF DISINTEGRATORS

- 'D' Series machines to reduce medium / soft clay, moist clays and shales.
- Possible alternative to wet or dry grinding mills where the material is friable and does not require working.
- Fitted with large slow roll with smooth renewable shell.
- Pivoted small fast roll with renewable hardened breaker bars.
- Easily adjusted roll gap setting system.
- Heavy duty spring loaded machine protection.
- Three sizes of machine available, 500mm, 800mm & 1000mm wide.
- Feed size of 100 – 150mm is accepted with an output down to 2mm (depending on gap and bar setting).

EF HAMMER MILLS

- Can complement or replace traditional dry grinding mill(s).
- Handles materials in the range of 8-12% moisture content (wet basis testing).
- Feed size 200mm maximum (for best results feed at even rate).
- Screen bars available with variable spacing to offer variable size output.
- Final particle sizing by high speed rolls or vibrating screen to suit requirements.
- Two HM900 & HM1100 models of double rotor design available.
- Other single rotor models available on request.

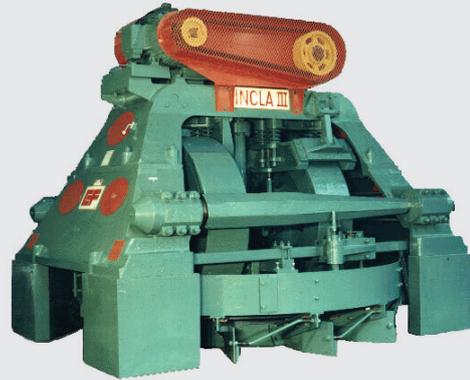
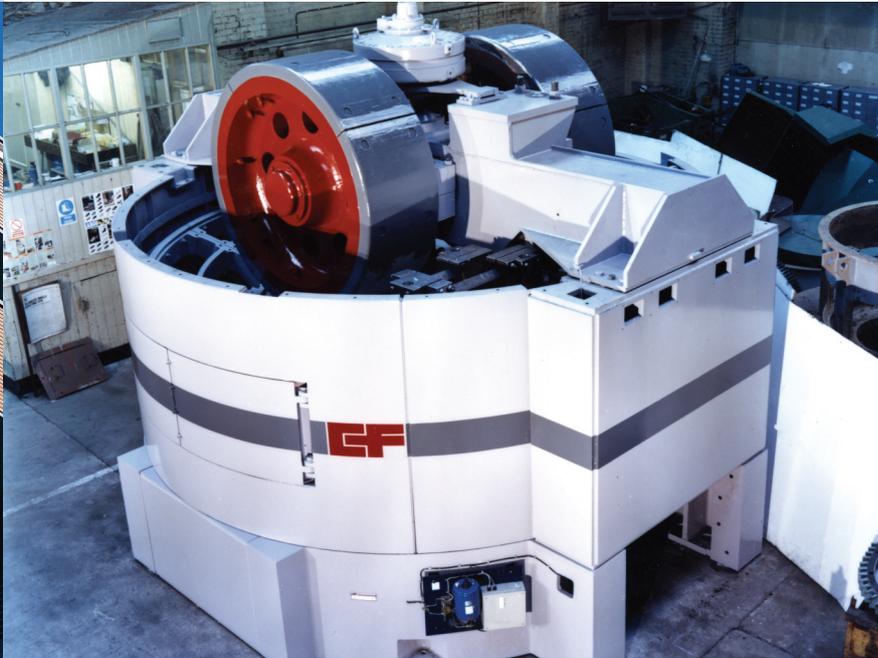
Grinding Mills - Dry Grinding

For grinding mainly shale type clays and those materials with a moisture content generally less than 10%

Main (left): Series 2000 Incla 45 Dry Pan Mill

Top: Mark III Incla Dry Pan Mill

Bottom: Mark III Incla revolving dish with scrapers



EF INCLA II AND INCLA III DRY GRINDING MILLS

- Heavy duty mills capable of grinding shales, marls and clays of a dry nature at high outputs.
- Fitted with inclined grids, roller suspension device (optional), worm reduction gearbox and fully adjustable curved scrapers.
- Optional hydraulic drive available.
- Both mills have a 3.35 mtr diameter base.
- Incla II has 5 tonne rollers, Incla III has 6 tonne offset mounted rollers for finer grinding.

EF SERIES 2000 INCLA 45

- Constructed mainly from steel fabrications with large 4.5 mtr diameter base designed for high output.
- Offset mounted rollers of 10 tonnes each for fine grinding.
- Hydraulic variable speed drive makes it virtually unbreakable.
- Discharge either through inclined grate, or inclined grate and rim.
- Removal of ground material arranged from any one of four sides of the foundation.
- Simple foundation construction.

DRY GRINDING

Pan Mill Type	M/c Size (metre)	Material Input (mm)
Mk 11 Incla	3.35 Dia	Up to 200
Mk 111 Incla	3.35 Dia	
Incla 45	4.5 Dia	

WET GRINDING

Pan Mill Type	M/c Size (metre)	Material Input (mm)
GMF	2.1 Dia	150 to 200
	2.7 Dia	
	3.35 Dia	
GMG	3.35 Dia	
Delta 45	4.5 Dia	

BATCH GRINDING

Pan Mill Type	M/c Size (metre)	Material Input (mm)
GMH	2.1 Dia	To suit
	2.7 Dia	mix required
	3.35 Dia	

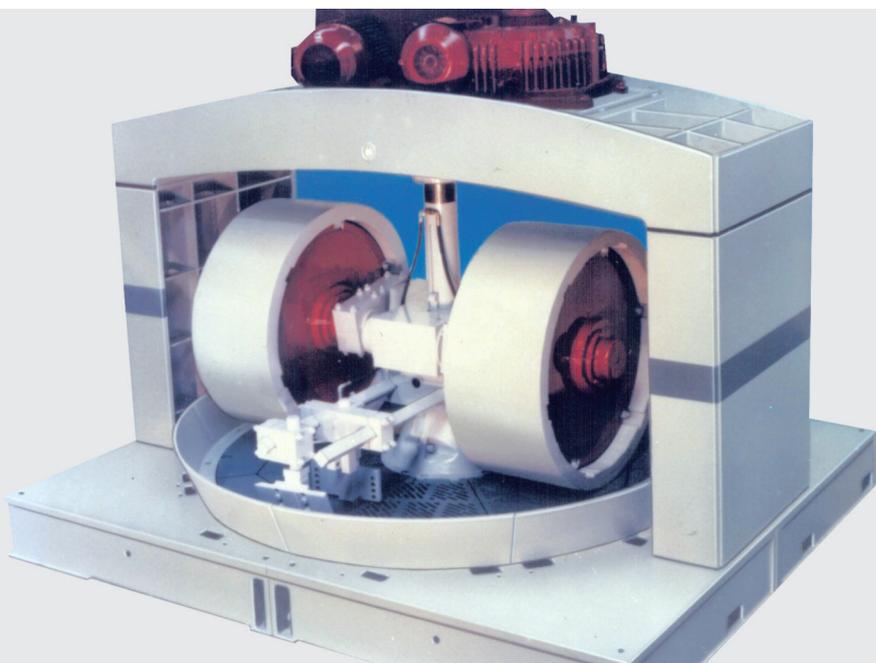
Grinding Mills - Wet Grinding

For grinding the softer plastic clays and those materials with a moisture content generally greater than 10%.

Main (right): Series 2000 Delta 45 Wet Pan Mill (Overdriven)

Top: 2.1 m GMH Batch Pan Mill

Bottom: 3.35 m diameter GMG Wet Pan Mill



GRINDING

Material Output (mm)	Throughput (T/ Hr)	Power (kW)
1 to 4	15 to 25	55
	20 to 40	75
	45 to 80	160

GRINDING

Material Output (mm)	Throughput (T/ Hr)	Power (kW)
10 to 25	5 to 10	22
(Variable to suit grid size)	10 to 15	30 to 37
	15 to 25	45
	30 to 50	55 to 75
	60 to 100	132 to 150

GRINDING

Material Output (mm)	Throughput (T/ Hr)	Power (kW)
300	5 to 10	22
	10 to 15	37
1350	15 to 25	45

EF GMF WET GRINDING MILLS

- Three models, 2.1 metre, 2.7metre and 3.3metre diameter bases available each accommodating two rollers running on overlapping tracks.
- Perforated grid discharge onto single conveyor.
- Has rolled steel support beams for rigid support without discharge interference.

EF GMG WET GRINDING MILL

- 3.35m diameter base accommodating two rollers running on overlapping tracks.
- Rollers: 560mm face, 7.6 and 8.6 tonnes respectively.
- Perforated grid discharge onto single conveyor.
- Has three deep section RSJ's for rigid support without discharge interference.

EF SERIES 2000 DELTA 45 WET GRINDING MILL

- Super duty single machine for high capacity plant providing consistent operation over long periods.
- Pan diameter 4.5m accommodates two rollers running on overlapping tracks.
- Rollers: 2000mm diameter and 800mm face, 14 tonnes and 10.75 tonnes respectively (weighted rollers optional).
- Provides single point or multi-point discharge onto single or double extraction conveyors.
- Drive options available: Over driven with gearbox or under driven with V.S. hydraulic drive.

EF GMH BATCH MIXING MILLS

- Range of sizes available, similar to GMF wet grinding mills but with solid base.
- Processes measured quantities of material in batches for later discharge through a power operated sliding discharge door.
- Recommended for mixing and tempering a range of materials such as fireclays, ganister, dolomite, carbon etc.
- Base can be supplied with heaters for additives such as tar.

Fine Roller Mills

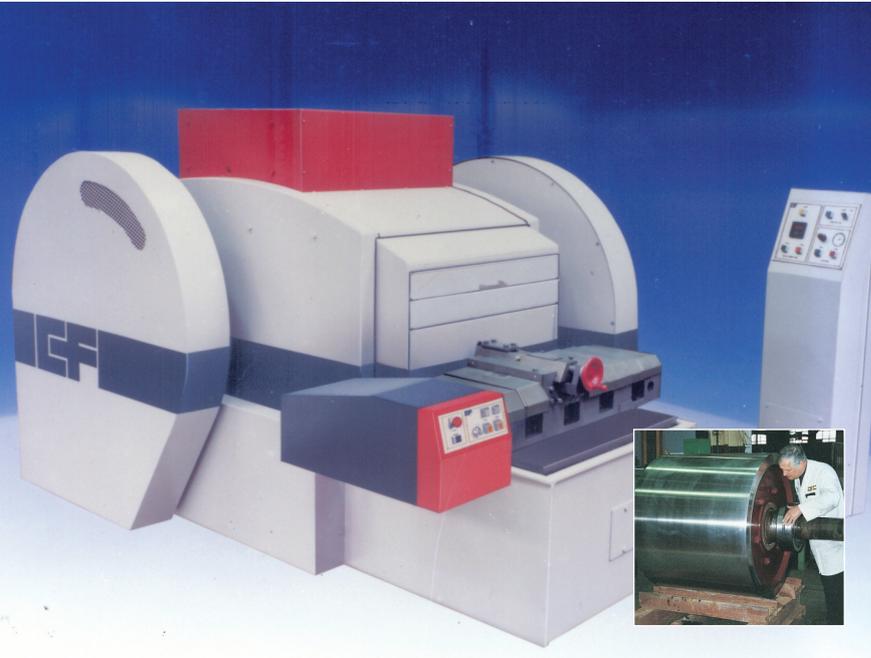
A comprehensive range of mills with a gap setting variable down to 0.5mm. These machines are for use following the initial wet grinding operation where the material to be processed has a high residual moisture content.

Main (left): Series 2000 Auto Re-set Fine Roller Mill With Turning Attachment

Main (left inset): New roll shell assembly undergoing final inspection

Top: 800 diameter x 600 wide Roller Mill with Turning Attachment

Bottom: 1200 diameter x 1000 wide fixed and Sliding Bearing Roller Mill



EF FIXED AND SLIDING BEARING TYPE ROLLER MILLS (\$)

- Various machine sizes available.
- Can be run at medium or high speed.
- Variable outputs dependent upon material and roll gap setting.
- Fitted with breaker plate overload device with micro adjustment for roll gap setting.
- Roll truing is by separate turning attachment.
- Pneumatic or mechanical roll scrapers (dependent upon model).
- Option for hydraulic cylinder overload device to replace breaker plate.

EF SERIES 2000 'AUTO RE-SET' FINE ROLLER MILL (#)

- Range of machine sizes available.
- Rolls run at similar or differential speeds from medium up to super speed.
- Fitted with 'Automatic re-set' hydraulic gap setting mechanism with digital readout.
- Locking cylinders fitted between bearings when fine roll gap setting anticipated.
- Pneumatically operated roll scrapers fitted.
- Roll shells of 500-650 Brinell hardness selected to suit application.
- Roller turning attachment has boron nitride tool for fast re-facing.
- Outputs: Up to 100 tonnes per hour (variable depending on size of rolls, speed of operation, gap setting, material, feed system and power input).

FINE ROLLER MILLS	
Dia x width (mm)	Medium Speed
FRM 600 x 450 \$	11 & 18.5kW
FRM 800 x 600 \$	22 & 30kW
FRM 800 x 800 \$	30 & 37kW
FRM 1000 x 600 \$ #	22 & 30kW
FRM 1000 x 800 #	30 & 37kW
FRM 1200 x 1000 \$ #	37 & 55kW
FRM 1000 x 1200 #	On request

MACHINE TROUGH SIZE	
Length/Width	
2135 x 585	
2745 x 840	
2745 x 1065	
3735 x 1300	

Mixing

A range of double shafted and single shafted mixers are available for the mixing of various materials together or with water to obtain the correct moisture content prior to extrusion.

Main (right): Double Shafted Mixer blade assembly

Top: 2.74 metre 1065 Double Shafted Mixer

Bottom: 1200 x 5 metre Soft Mud Mixer



ROLLER MILLS

Fast Speed	Super Speed
18.5 & 18.5kW	N/A
30 & 55kW	N/A
45 & 75kW	N/A
30 & 55 kW	N/A
45 & 75kW	75 & 75kW
55 & 90kW	75 & 90kW
75 & 90kW	110 & 110kW

MIXING

OUTPUT	
Tonnes/Hour	Power Input
8 - 10	11kW
20 - 30	18-26kW
30 - 70	30-37kW
70 - 100	75kW

EF DOUBLE SHAFTED MIXERS

- Normally positioned just prior to the extruder in the plant layout for mixing dry and plastic clays with water and / or other materials.
- Fitted with fully adjustable 28% chrome alloy mixer knives.
- Drive is through a vee rope drive and reduction gearbox.
- Water spray system is standard.
- Can be adapted for steam addition if necessary.

EF SERIES 2000 SINGLE SHAFTED SOFT MUD MIXER

- Recommended for the soft mud process.
- Drives through fluid coupling vee rope to a proprietary spur reduction unit.
- Fitted with renewable clamp-on mixing and transition blades.
- Material discharge via power operated sliding side exit door(s).
- Size of mixer: 1.2 metre wide x 5 metre long.
- Output: Up to 70 tonnes per hour.
- Power Input: 75kW.

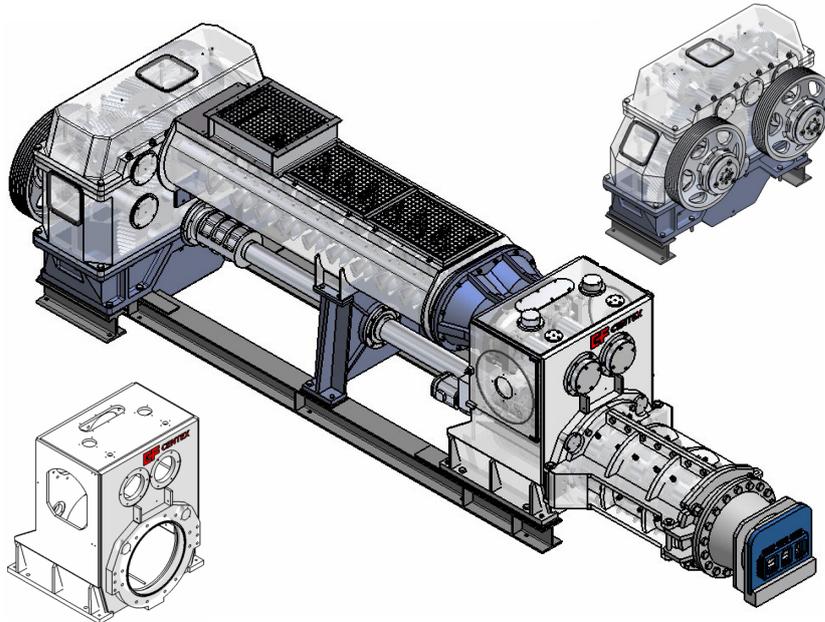
Extrusion

Our extensive range includes models suitable for both soft and stiff extrusion and most extruded sections eg: clay brick, hollow block, tile bats or sewer pipe at hourly capacities of between 5-80 tonnes per hour (green ware).

Main (left): Schematic Centex 670 Extruder

Top: CF 90 BD Extruder and Pug Sealer

Bottom: Centaur Extruder



EF TWO-STAGE DE-AIRING EXTRUDERS

- Recommended for prepared clay feed for producing bricks, hollow blocks and field drain pipes.
- Three lighter duty machines in the range with either (9") 225mm, (13") 330mm or (16") 406mm diameter auger worms, and usually supplied with a double shafted mixer.
- Heavy duty machines combine from 350mm up to 670mm diameter extruder worms in high wear resistant 28% chrome alloy with large capacity double shafted mixer / pug sealer.
- Various combinations of mixer to extruder mounting positions, in-line or at right angles (dependent upon machine).
- Ideal for production of solid or perforated bricks and hollow ware.
- Various types of die lubrication systems available.
- Particularly suitable for stiff extrusion enabling products to be set directly onto a kiln car.
- Easy servicing and maintenance via large access doors fitted to the de-airing chamber.
- Split barrel available for easy access to worms and liners (optional on some machines).
- Drive through vee rope pulleys, air clutch and independent reduction gearbox.

EF CENTEM EXTRUDER

- 350mm dia or 406 dia worms available.
- In-line Mixer / Extruder.
- Spur geared machine.

TWO STAGE DE-AIRING

Model	Bricks/Hour
9" PMG	1,000 – 1,500
13" PML	3,000 – 4,000
16" PML	5,000 – 8,000

HEAVY DUTY TWO STAGE

Model	Bricks/Hour
CENTEM 350 / 406	3,000 – 5,000
CENTRIM 410 / 550	8,000 – 13,000

CENTAUR 510 / 406	10,000 – 16,000
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CENTEX 430 / 670	12,000 – 20,000
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CF 90 RANGE

Model	Bricks/Hour
60F	10,000 – 13,000
75AD	12,000 – 15,000
90BD	15,000 – 30,000

Extrusion

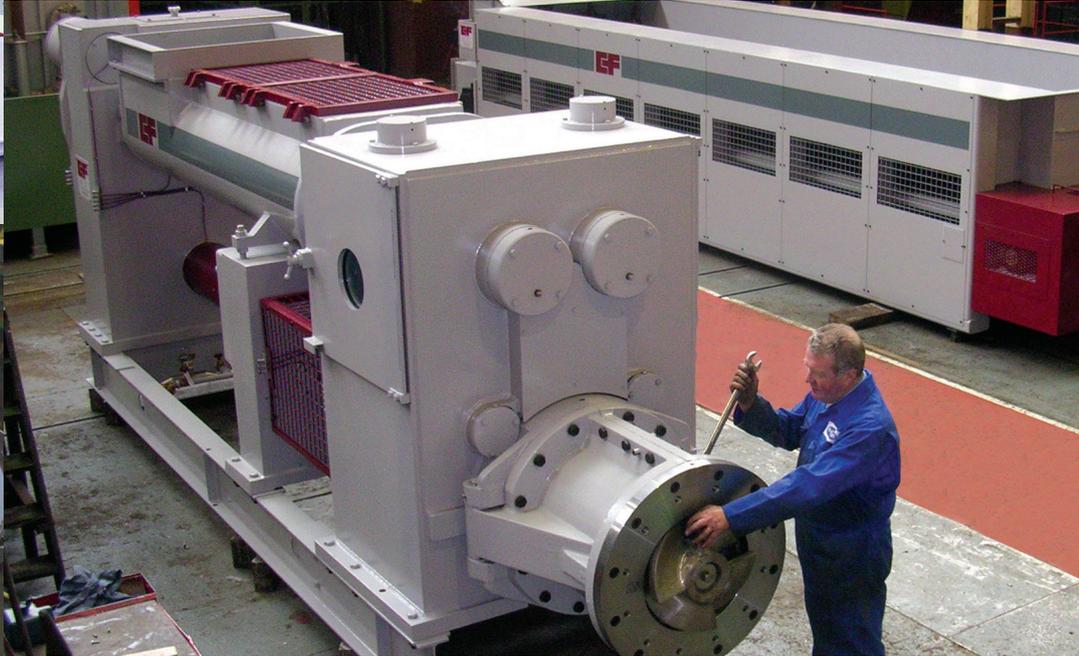
All Craven Fawcett worm sections are subjected to a combination of in-house treatments to ensure energy minimisation, longevity and component quality. After being cast, each worm section undergoes a unique heat treatment process in our own high temperature ovens in order to ensure an even distribution of chrome throughout the component.

Main (right): Centrim Extruder during construction

Top (left): Centem Extruder

Top (right): PML Extruder

Bottom: Centex Extruder with split barrel, worms and liners.



AIRING EXTRUDERS

Power Input

37kW

60kW

110kW

DE-AIRING EXTRUDERS

Power Input

90 – 110kW

110 – 150kW (Extruder)

60 – 75kW (Pug Sealer)

110 – 185kW (Extruder)

60 – 90kW (Pug Sealer)

150 – 260kW (Extruder)

75 – 110kW (Pug Sealer)

RANGE OF EXTRUDERS

Power Input

150kW (Extruder)

90kW (P. Sealer)

185 – 220kW (Extruder)

110kW (Pug Sealer)

224 – 450kW (Extruder)

115 – 224kW (Pug Sealer)

CF CENTRIM EXTRUDER

- 406mm dia or 550mm dia worms available.
- In-line Mixer / Extruder.
- Optional spur or helical gearing.

CF CENTAUR EXTRUDER

- 406mm or 510mm dia worms available.
- Separate double shafted mixer / pug sealer which can be mounted in line or at right angles to suit plant layout.
- Helical gearing fitted as standard.
- Split barrel fitted as standard.

CF CENTEX EXTRUDER

- 430mm dia, 500mm dia & 670mm dia worms available.
- In-line Mixer / Extruder.
- Helical gearing fitted as standard.
- Split barrel fitted as standard.
- Independent packershaft drives on 670 machine.

CF 90 RANGE OF EXTRUDERS

- Separate single shaft mixer / pugsealers can be mounted in line or at right angles to suit plant layout. (75AD & 90BD models only).
- Drive through independent reduction gearboxes with helical gearing.
- Double vacuum pugsealers available as an option should extra pugging be required.
- Suitable for extrusion of bricks or clay pipes.

Cutting

A range of cutters used in the manufacture of clay bricks and pavers together with special machines used to cut extruded pellets.



Main (left): Series 2000 Brick and Paver cutter
Top: Brick and Paver Cutter with Slug Cutter
Centre (left): CTC Mark IV Cutter
Centre (right): Pelletiser Cutter
Bottom: CTOE Mark II Cutter

EF SIDE CUTTER TYPE CTC MK4

- Basic design cuts bricks or hollow blocks from soft to medium stiff extruded column with maximum cross section of 305 X 230mm.
- Cuts measured length or 'slug' from extruded column, which is then pushed through a bank of wires depositing cut bricks at take-off position.

EF AUTOMATIC SIDE CUTTER TYPE CTOE

- Includes Slug Cutter to pre-cut extruded column to required length.
- Extruded clod is conveyed to side pusher cutting section where it is pushed through a bank of wires. Single or double sided delivery is possible.
- Fully automatic machine for high output of bricks or blocks.

EF SERIES 2000 BRICK AND PAVER CUTTER

- Highly efficient machine for production of standard and modular bricks or chamfered pavers.
- Slug cutter pre-cuts the extruded column which is transferred to the main cutting section. A lift table with support platens lifts the column through a bank of wires.
- Heavy duty machine for stiff extruded product (up to 4 to 5 penetrometer reading).

EF ROTARY PELLET CUTTER ATTACHMENT

- For producing and cutting small pellets of clay, bentonite and other materials.
- With variable speed drive cutter it easily mounts onto front of extruder barrel.

CUTTING

Cutter Ref.	Capacity
CTC MK 4 Side Cutter	1,500
CTOE Side Cutter	Up to 13,000
	Up to 18,000
Series 2000 Brick & Paver Cutter	15,000
Rotary Pellet Cutter	

PIPE M

Model	Pipe Sizes
280mm M/c	75mm to 150mm
330mm M/c	100mm to 300mm
H.D. 330 / 380mm dia. M/c	100mm to 400mm
H.D. 450mm dia M/c	300mm to 600mm
H.D. 600mm dia Hydraulic M/c	400mm to 1000mm

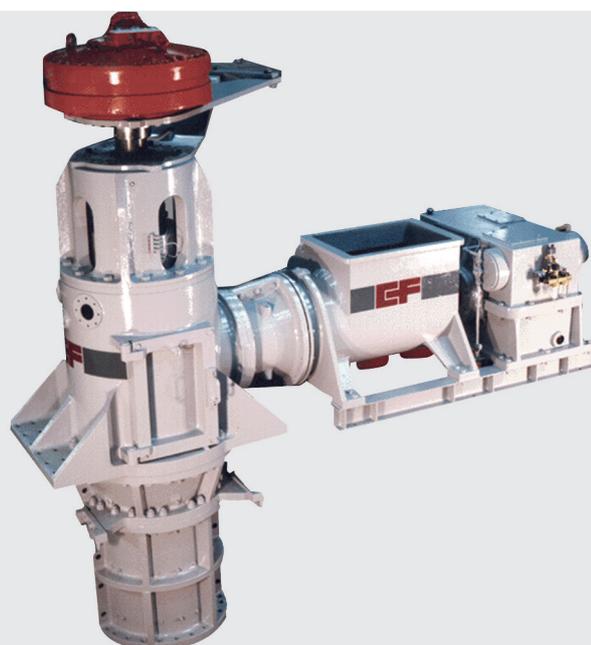
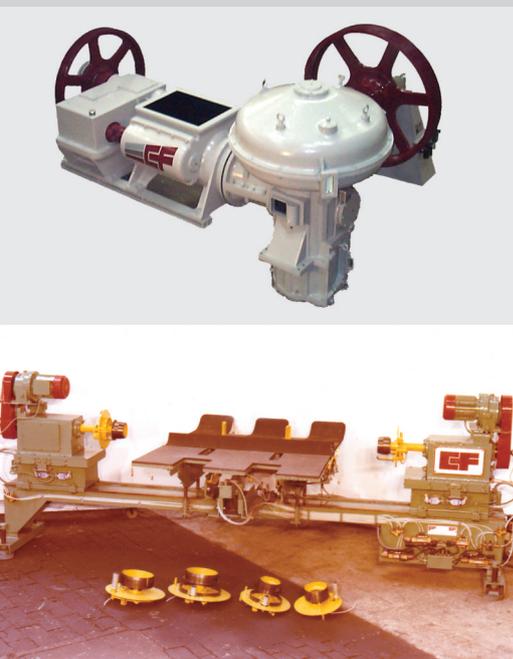
Pipe Machinery

Machinery used in the production of stoneware clay sewer pipes and fittings.

Main (right): 600 diameter Hydraulic Vertical Pipe Machine

Top: 15/13 Vertical Pipe Machine

Bottom: Horizontal SPE1 Pipe Trimmer



OUTPUT TABLES

Output (Tonnes per Hour)	Power Requirement (kW)
100 to 4,000	2.8
1000 – Single Sided	
1000 – Double Sided	7.5
1000 to 20,000	12
Variable	7.5

OUTPUT TABLES

	Output	Power Input
150mm dia.	4 to 6 Tonnes/hr	45kW
200mm dia.	6 to 8 Tonnes/hr	60kW
250mm dia.	8 to 10 Tonnes/hr	110kW & 30kW
300mm dia.	10 to 15 Tonnes/hr	130kW & 55kW
400mm dia.	15 to 20 Tonnes/hr	400kW & 75kW

GF VERTICAL PIPE MACHINES

- Standard or heavy duty machines available (arranged to suit prepared clay feed).
- Supplied with either manual, semi-automatic or fully automatic control.
- Available in a range of sizes with 280mm, 330 / 380mm, 450mm and 600mm diameter extrusion augers.
- Independent feeder drive on all heavy duty models.
- Produces pipes from 100mm dia. up to 1000mm diameters (depending on model selected).
- Pipes up to 2 ½ meters long can be manufactured depending on machine size.
- Drives through vee ropes drive and reduction gearbox (600mm dia machine through hydraulic variable speed drive unit).
- Mechanical or fully automatic hydraulic lift tables available with automatic die lubrication system.

GF VERTICAL PIPE TRIMMER (LARGE PIPES)

- Overhead and under pipe trimmer recommended for trimming and grooving extruded socketed sewer pipes from 230 – 1000mm diameter in a vertical position.
- Electrically and pneumatically operated.
- Provision made for trimming both socketed and spigot ends of the pipe including the setting ring.

GF AUTOMATIC HORIZONTAL PIPE TRIMMER – SPE1

- Fully automatic single stage horizontal trimmer.
- Suitable for trimming, cutting to length and grooving pipes from 100 – 250mm diameter and lengths from 600mm – 2,000mm.
- Multi stage machines available incorporating cleaning and spray glazing stations.

Presses - Mechanical

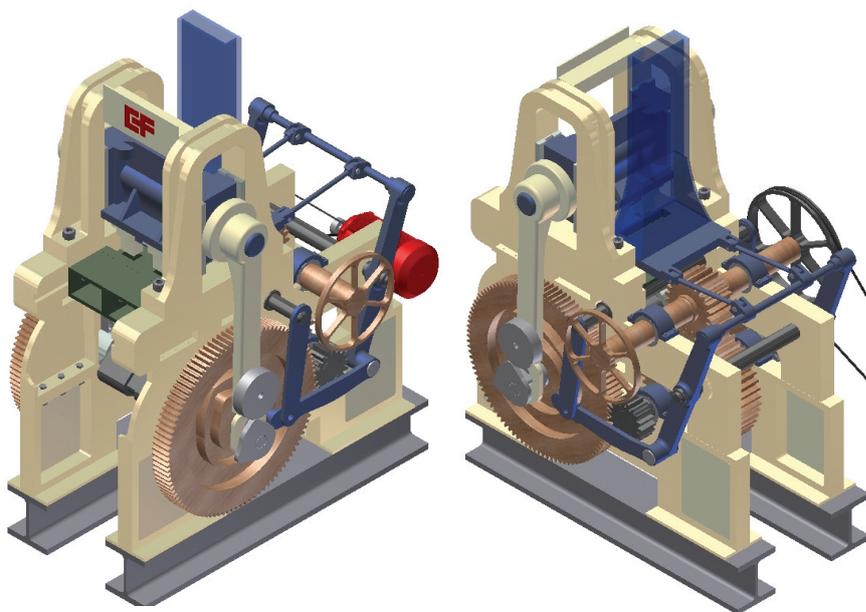
Mechanically operated presses used in the production of clay bricks, pavers and roof tiles.

Main (left): Stiff Plastic Granular Feed Mechanical Press

Top: Mechanical Double Tile Press

Bottom (left): Friction Screw Press

Bottom (right): Double helical gears can be used on CF presses



EF RE-PRESS M/C's FOR EXTRUDED BRICK AND TILE BLANKS

- Single or double machines independently driven and fed with extruded brick or tile clods.
- Continuous running when pressing with automatic feed motion or can be operated manually to produce special shapes and sizes including cable covers.
- Eccentric pushing and stopping motion arrests press at top of each stroke to allow removal by hand if required.

EF STIFF PLASTIC GRANULAR FEED BRICK & PAVER PRESS

- Accepts semi dry granular material.
- Two bricks pressed simultaneously.
- Two stage double pressing action creates strong dense bricks.
- Fully automatic feed and discharge via cams and eccentric action.
- Simple easily maintained mechanical technology with low power input.

EF FRICTION SCREW PRESSES

- Independently driven and fed with extruded clods.
- Produces special shape bricks, blocks and tiles.
- Two models available. BPD has maximum block size of 380x305x105mm and can be fitted with a 560mm stroke for pressing stoppers or similar goods. BPE has a maximum block size of 610mm x 550mm x 150mm.

MECHANICAL

Press Model

Brick Re-press M/c

Tile Re-press M/c

Granular Feed Press

Friction Screw Press

HYDRAULIC

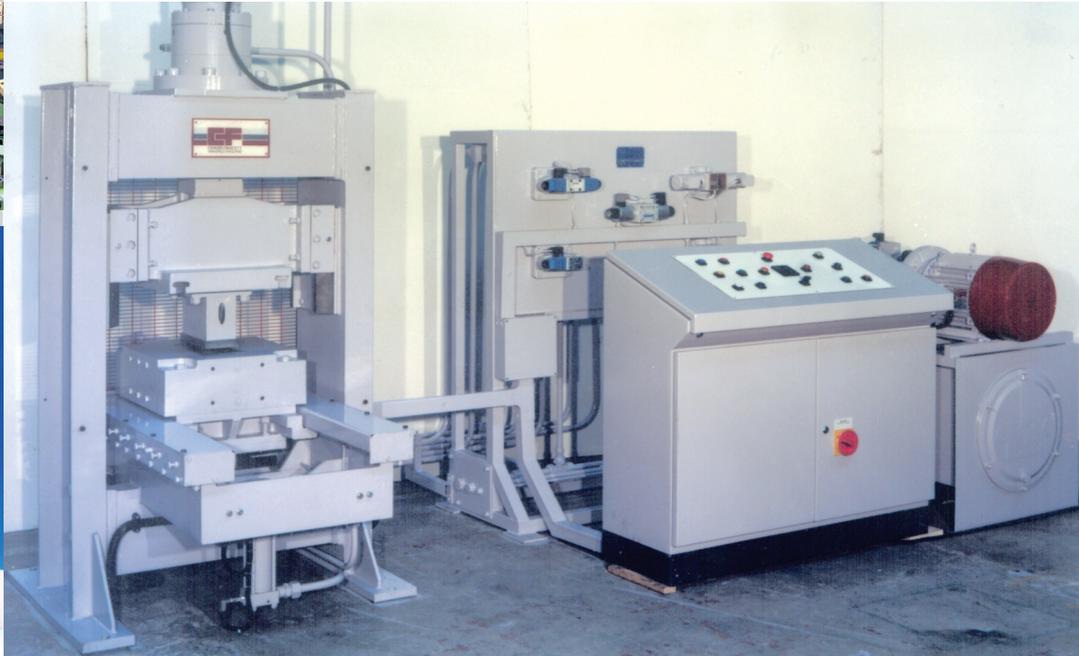
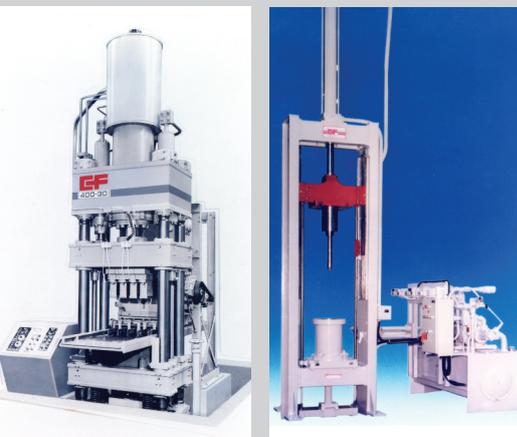
Capacity (tonnes)	Stroke (mm)	Power Input (KW)
10	1200	7.5
20	1400	7.5
250	610	32
300	535	32
400	610	45
500	90	45

Main (right): 40 Tonne Hydraulic Press for special shapes.

Top: Craven Fawcett holds over £1m of machine parts in stock.

Bottom (left): 500 Tonne Hydraulic Press.

Bottom (right): 20 tonne x 1400 Stroke Hydraulic Press.



Presses - Hydraulic

Hydraulically operated presses used in the production of special shaped clay products and of various products for the refractory industry.

CAL PRESSES

Output (Bricks per hour)	Power Input (KW)
Single – 1000	5.5
Double – 2000	
Single – 1500	5.5
Double – 3000	
1300	7.5
BPD – 75 to 150	5.5
BPE – 30 to 60	7.5

LIC PRESSES

Output per hour	Maximum size*
	single die
300	
300	
220	458x228x100
200	610x305x150
220	458x228x100
180-240	406x228x100

EF HYDRAULIC PRESS FOR SPECIAL SHAPES

- 40 to 60 tonne capacity press x 125mm stroke for use in production of special shapes.
- Suitable for pressing almost any shape of extruded section.
- Protected by photo-electric light guard system for operator safety.
- Electronically programmable press cylinder for accurate and repeatable positioning.

EF HYDRAULIC PRESSES FOR REFRACTORY PRODUCTS

- Smaller presses, available in 10 or 20 tonnes capacity for production of stoppers, round or square runners and nozzles from extruded slugs used in the refractory industry.
- Larger presses available from 250 up to 500 tonnes capacity for semi-dry refractory materials used in the steel industry.
- Includes machines with single or shuttle die, automatic machines with floating mould boxes and other special presses.

EF AUTOMATIC SLEEVE PRESS

- 10 tonnes pressing capacity.
- For high speed production of refractory sleeves and rod covers of both circular or square section at rates of 400 to 600 pieces per hour for the steel industry.
- Extruded sections are conveyed to machine for final pressing.
- Ejection mechanism and vacuum pick up system allows removal by hand to the drying racks or kiln car.



Left: Heat treatment furnace for high chrome worms

Centre: Machine assembly and repair

ANCILLARY EQUIPMENT

EF FINGER AND TRANSFER CAR

- Transports bricks, blocks or other products up to 5 or 6 rows deep and 14 rows high to and from storage frames and drying chambers at high speed.
- Electrically powered and driven by a fluid coupling system with hydraulic braking for smooth, high-speed movement.
- Tailor made for both new and existing chamber dryer systems.
- Output: Up to 10,000 bricks / hr.
- Power Input: 7.5kW – Transfer car
3.0kW – Finger car
2.2.kW – Lift hoist

EF SIMPLE PACK LOADING SETTING MACHINES

- Ideal for working with CTOE type cutting table.
- Sets up to 12,000 cut bricks / hr into fork liftable packs for transportation to dryers.
- Programmable brick spacing option available.
- Combination hydraulic and electronic operation.
- Sets in two positions, either side of cutter, allowing continuous operation.

EF CRAVEN FAWCETT SERVICE

- Plant installation and commissioning.
- Service and repair.



A Group Rhodes Company