



Babcock Wire

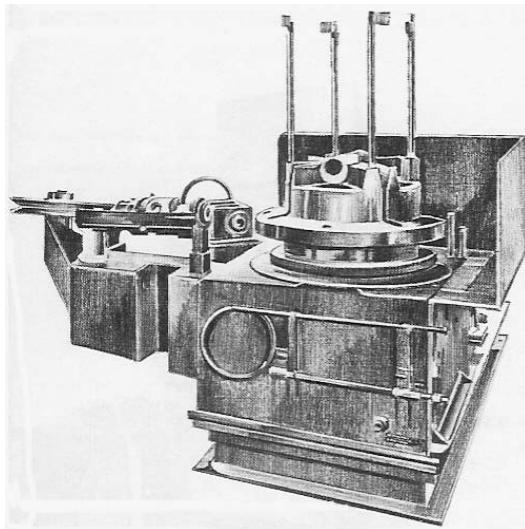
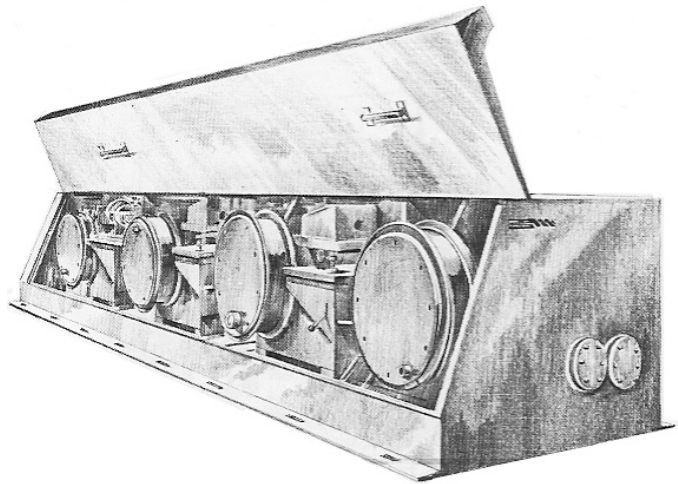
A Brief Guide to Wire Drawing Machines

Trolley Wire or Heavy Rod Breakdown Machine

This heavy duty machine is shown as a 4 die unit which is capable of producing "Trolley Wires" to DIN 43140, DIN 43131 and BS23. It can also be used for heavy rod breakdown applications and can be supplied in different versions with 2 to 6 dies. Means are provided for stringing with "pull-in dogs" which can be attached to each block in turn. A shaving head can be fitted between number 1 and 2 blocks if necessary.

Specification

Maximum number of dies: 6
Pullblock diameter: 660mm
Maximum Motor: 200 h.p.
Maximum Entry: 22mm soft copper
Shaving equipment optional
Standard Finishing Speeds: 0.76, 1.27 and 2.03 m.p.s.



Double Deck Rod Block Machine

This two die unit can be used for heavy rod breakdown. A shaving head can be fitted in place of the second die position. The unit is normally supplied with a two or three speed gearbox to provide a range of suitable speeds. The coiler block can be replaced with a spooling ring when the machine is used in conjunction with a 1 or 2 ton spooler. Stringing facilities are provided together with forward and reverse inching.

Specification

Maximum Entry: 19mm to 9.5mm diameter copper
Finish Diameter: 15.2mm to 6.7mm (drawing)
Maximum Finishing Speed: 3.04 m.p.s. (drawing)
Maximum Finishing Speed: 1.27 m.p.s. (shaving)
Maximum Coil Capacity: 115 kg
Maximum Motor: 100 h.p.

Rod Breakdown Machines

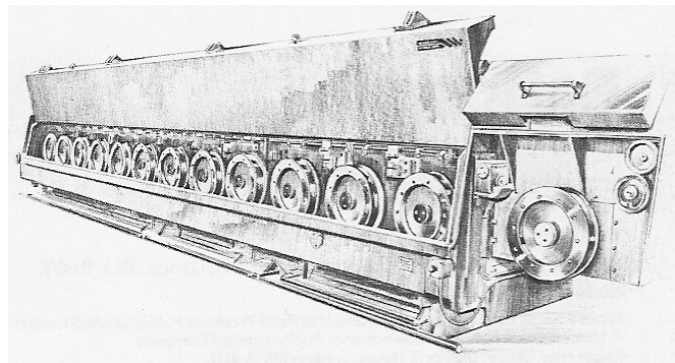
Tandem Machine Type 450T

Modular design enables this machine to be supplied with 7, 10, 13 or 16 dies, dependent on the required duty. 16 finishing speeds are obtainable by the combined use of the main and capstan gearboxes, both of which are integral with the machine housing to ensure that the available motor power is fully utilised. Standard drafting is 31% elongation, although taper drafting or special drafting can be supplied.

The 450T series of machines are ideal for the drawing of high quality copper, aluminium and aluminium alloys.

Specification

Maximum Entry: 10mm soft copper or 12.7mm E.C. aluminium
Finish Diameter: 1.0mm to 5.18mm diameter
Maximum Finishing Speed: 40 m.p.s.
Maximum Motor: 350 h.p.



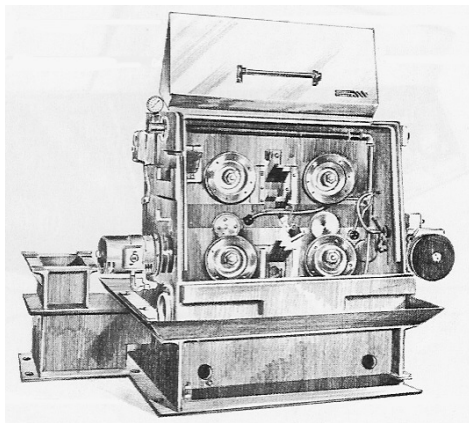
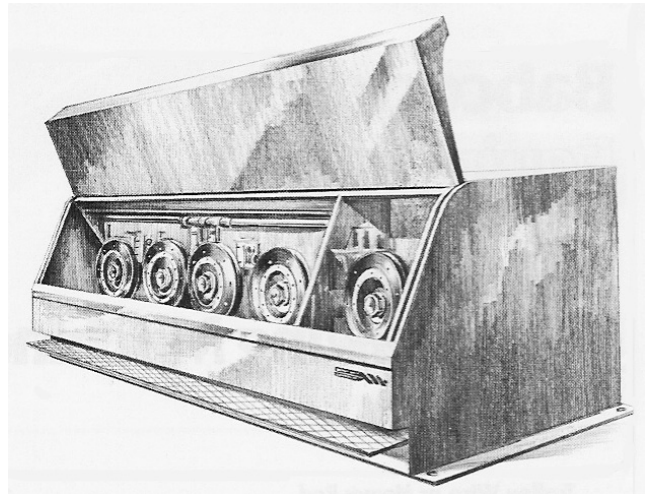


Rod Breakdown Machines 5TC13 Machine

This machine was specifically designed for high speed production of wire where floor space is limited. The 5TC13 is supplied with 4 three step pullblocks, a double finishing capstan and 13 die positions as standard. The use of a three speed gearbox on the capstan drive gives 6 wire finishing speeds. Alternatively a separately driven capstan gives a wider range of finishing speeds. Drafting is at a constant 26%.

Specification

Maximum Entry: 9.5mm copper or aluminium
Finish Diameter: 1.0mm to 4.1mm diameter
Maximum Finishing Speed: 40 m.p.s.
Maximum Motor: 400 h.p.



C13 Intermediate Machines

This machine can be supplied with 7, 9, or 13 dies. In the 13 die version, 4 pullblock shafts are fitted, each having a 3 step pullblock assembly with replaceable tyres or rings. A built-in two speed gearbox and a double finishing capstan provide 4 finishing speeds. Drafting is at a constant 26%.

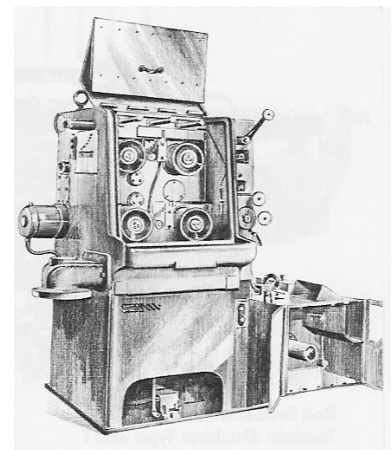
Specification

Maximum Entry: 4.12mm soft copper
Finishing Range: 0.40mm to 1.63mm diameter
Maximum Finishing Speed: 35.5 m.p.s.
Maximum Number of Dies: 13

B & BG Fine Wire Drawing Machines

The B Type machine can be supplied in various forms to provide from 8 to 19 dies dependent on customer requirements and the material to be drawn. Drafting is at a constant 26%.

Specification	B16	BG16	BG19
Maximum Entry:	1.63mm	1.83mm	1.83mm
Finishing Range:	0.15mm - 0.4mm	0.15mm - 0.71mm	0.15mm - 0.51mm
Maximum Operating Speed:	30 m.p.s.	30 m.p.s.	38 m.p.s.
Maximum Number of Dies:	16	16	19
Maximum Motor:	20 hp	25 hp	25 hp



Disclaimer

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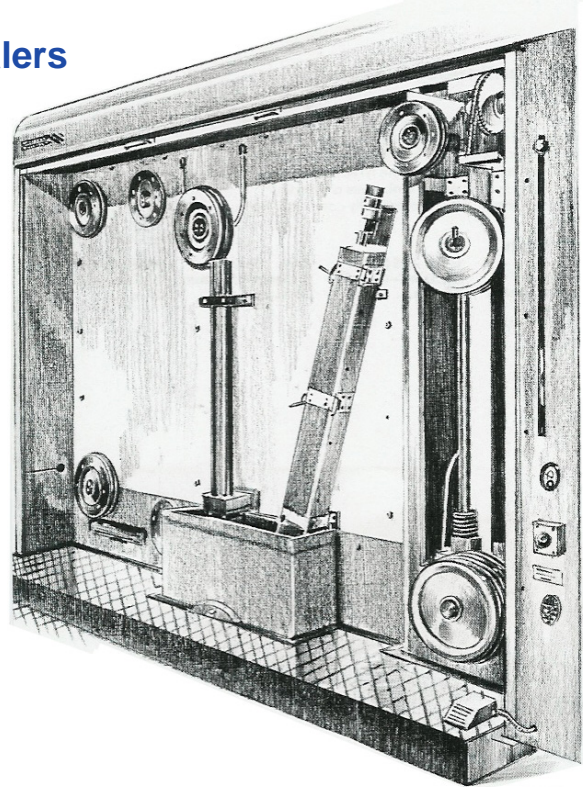
Babcock Wire A Brief Guide to Resistance Annealers

TR Annealer Range

This range of annealers was designed to provide the most versatile unit of its type having many unique features to simplify operation and maintenance.

The principle of unit construction adopted permits all major assemblies including the main water reservoir to be removed from the housing for maintenance. Special features:

- (a) Water cooled bearing assemblies.
- (b) Replaceable contact sheave tyres.
- (c) Air cooled slip ring with specially constructed brush gear and brushes.
- (d) Self contained closed circuit cooling system which embodies circulating pump and thermostatically controlled heat exchanger.



TRA Resistance Annealer For Aluminium Wire

Specifically adapted for the production of aluminium wire embodying re-draw facilities and specially constructed contact sheaves. Three heating zones are employed utilising a three phase annealing transformer which may if required provide for automatic speed/heat control from zero speed.

Specification

Maximum speed: 40 m.p.s.
Wire range: 1.60 mm-3.00 mm
Maximum power: 240 Kw

TRB Resistance Annealer For Copper or Aluminium

This annealer can be easily adapted to incorporate re-draw facilities for the production of aluminium or adapted with a re-heater for operating in line with plastic extruders. Two heating zones are employed on the annealing section, utilising a single phase annealing transformer which may if required provide of automatic speed/heat control from zero speed.

Specification

Maximum speed: 40 m.p.s.
Wire range: varies according to material
processed.
Maximum power: 100 Kw

TRC Resistance Annealer For Copper

This annealer is adapted for the production of wire for power, domestic, telephone cables or for subsequent redrawing processes.

Three heating zones are employed utilising a three phase annealing transformer with automatic speed/heat control from zero speed.

Specification

Maximum speed: 40 m.p.s.
Wire range: 1.04mm-4.2mm
Maximum power: 300 Kw

TRD d.c. Resistance Annealer For Copper

This annealer is specifically adapted for the production of high quality magnet wire.

Two heating zones are employed, the annealing power derived from a three phase transformer/rectifier unit suitably smoothed to give optimum annealing from zero the maximum speed under automatic speed/heat control.

Additional features include a fully lined detachable water reservoir

Specification

Maximum speed: 40 m.p.s.
Wire range: 1.04mm-3.5mm
Maximum power: 200 Kw

C3 Single Phase Continuous Resistance Annealer

This annealer is suitable for operation with intermediate wire drawing lines, the type of transformer and control employed being determined by the specific duty required.

This versatile unit may be added to existing drawing equipment and with the addition of a re-heat section, installed in line with plastic extruders.

Standard features include contact sheaves with replaceable and closed circuit cooling system which embodies a reservoir circulating pump and thermostatically controlled heat exchanger.

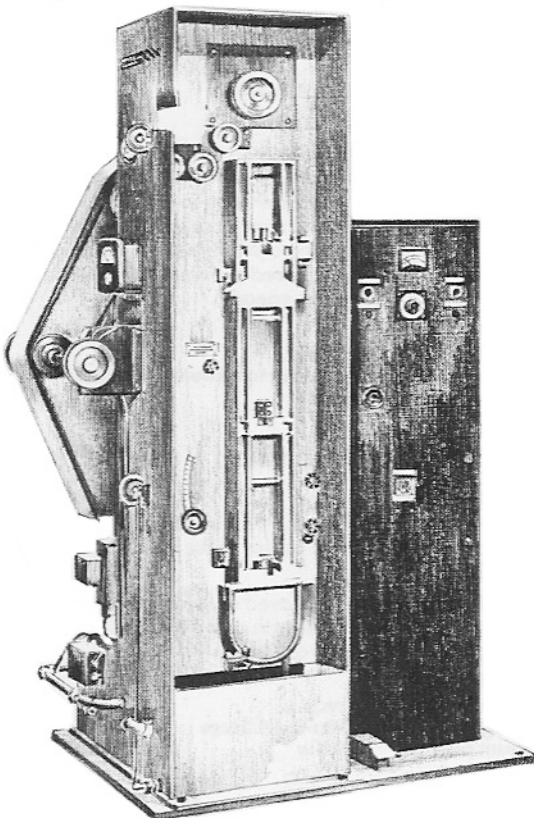
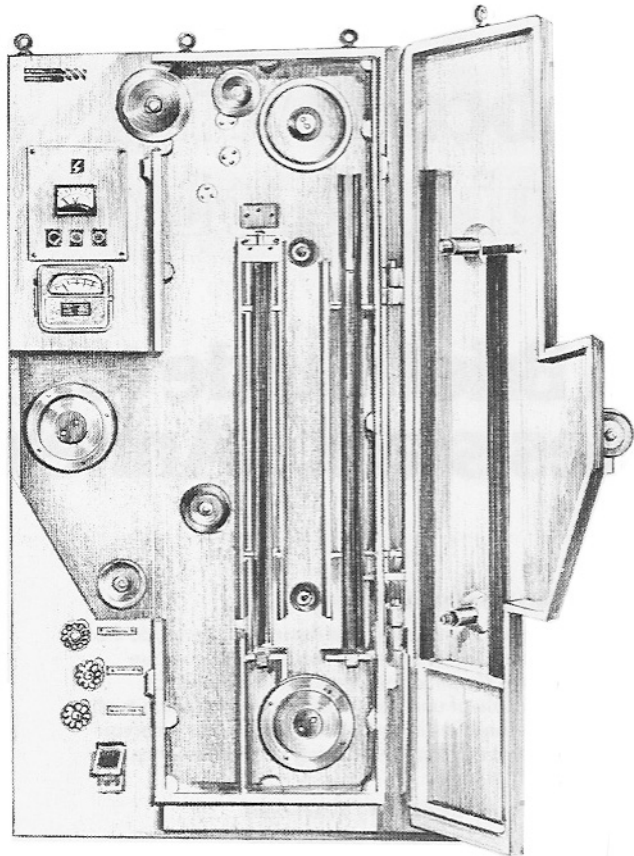
Speed heat control from zero to maximum speed is available for suitable lines.

Specification

Maximum speed: 35 m.p.s.

Wire range: 0.40mm - 1.63mm

Maximum power: 57 Kw



B Type Continuous Resistance Annealer

This annealer was specifically designed for operation with the type B and BG wire drawing machines for the production of copper wire. Standard features include contact sheaves with replaceable tyres and a closed circuit cooling system which embodies a reservoir circulating pump and thermostatically controlled heat exchanger.

Specification

Type: B4M 8.5Kw

B4M 11Kw

B4M 15Kw

Wire range: 0.15mm-0.4mm

0.15mm-0.51mm

0.15mm-0.7mm

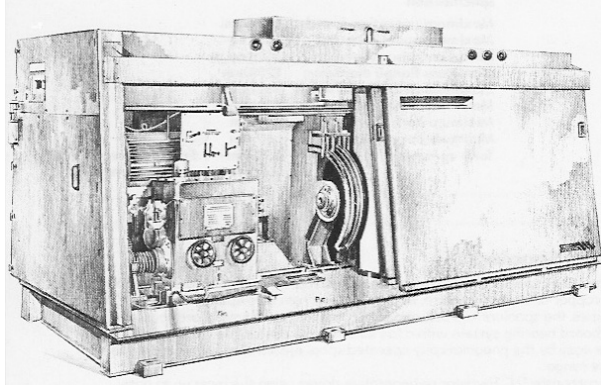
Maximum speed: 30 m.p.s. (all models)

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Babcock Wire A Brief Guide to Spoolers & Coilers



Continuous Spoolers

This range of continuous spoolers is specifically designed for operation with Babcock Wire Drawing Machines and Annealers, with easy adaptation for operating with existing drawing equipment for the continuous spooling of hard or soft copper or aluminium. Within the specified capacities, the spoolers will accommodate both large and small bore spools, the patented system of 'change-over' providing for a 'long end out' of usable wire to permit welding and continuous feed to subsequent processes.

The spoolers incorporate D.C. Thyristor re-generative drives using the most up to date technology with a self

diagnostic facility for ease of maintenance, the controlling wire accumulator ensuring that the soft wire is held to within the specified limits during acceleration, deceleration and the filling of the spool.

Safety interlocks conforming to the British standard code of practice are incorporated as standard together with a fault indication mimic diagram mounted on the control console providing a clear operational aid.

R800 Continuous Spoolers
for rod and intermediate drawing machines.

Specification

Max. Operating Speed 40 m.p.s.

Max. Spool Capacity 1,000 kg.

Max. Arbor Speed 3,200 r.p.m.

Take-up range:

Soft copper 0.4mm - 4.12 mm

Hard copper 0.4mm - 3.26mm

Hard aluminium 1.0 - 4.12mm

Motor power 2 x 40 hp.

R500K Continuous Spooler
for rod and intermediate drawing machines.

Specification

Max. Operating Speed 40 m.p.s.

Max. Spool Capacity 500kg

Max. Arbor Speed 3,800 r.p.m.

Take-up range:

Soft copper 0.4mm - 4.12mm

Hard copper 0.4mm - 3.26mm

Hard aluminium 0.5 - 4.12mm

Motor power 2 x 40 hp.

R450K Continuous Spooler
for rod and intermediate drawing machines.

Specification

Max. Operating Speed 25 m.p.s.

Max. Spool Capacity 450 kg

Max. Arbor Speed 3,200 r.p.m.

Take-up range:

Soft copper 0.4mm - 4.12mm

Hard copper 0.4mm - 3.26mm

Hard aluminium 0.5 - 4.12mm

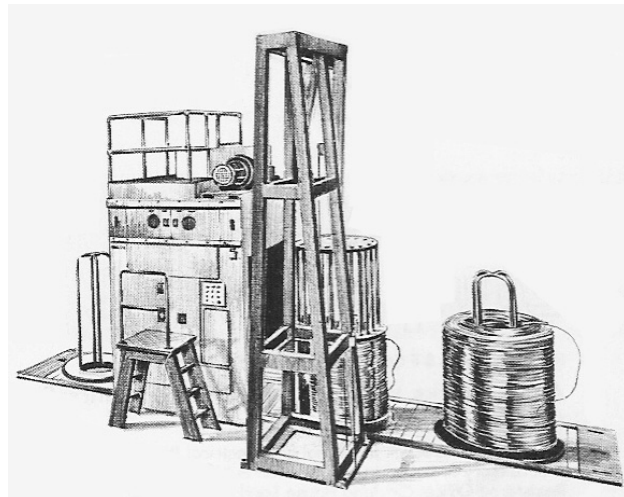
Motor power 2 x 15hp.

Vertical Continuous Coiler

These coilers are self contained units with inbuilt drives and are designed to operate under tension or speed control according to the application and may be used to take-up hard or soft copper or aluminium wire, either bare or plastic covered.

The coiler can be supplied for manual operation or completely automated using a 3 stage slat conveyor permitting continuous operation.

A 4 stage conveyor can be used as an alternative, incorporating a coil compacting unit at the strapping position to enable packs to be prepared for transportation.



Specification

SGD 1 Take-up range

Copper: 0.40mm - 3.25mm diameter

Aluminium: 0.74mm - 3.25mm diameter

Maximum operating speed: 25 m.p.s.

Approximate coil weight of copper: 180kg

SGD 4 Take-up range

Copper: 0.8mm - 4.0mm diameter

Aluminium: 1.0mm - 4.0mm diameter

Maximum operating speed: 30 m.p.s.

Approximate coil weight of copper: 1,700 kg

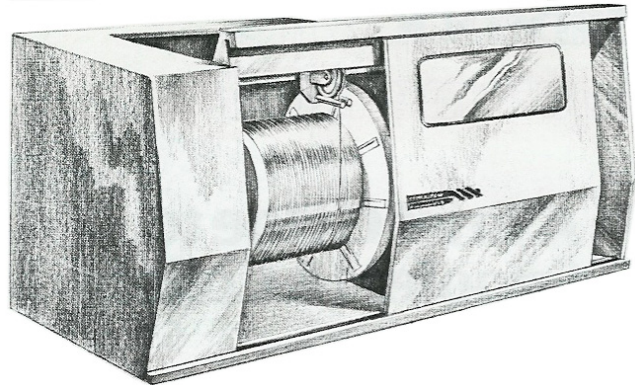
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2 Ton and 4 Ton High Speed Spoolers

This spooler was specifically designed for operation in conjunction with Babcock Wire Equipment high speed rod breakdown machines and annealers for the spooling of hard and soft copper or aluminium wire, onto conventional or collapsible spools, the dimensions of which must conform to DIN 46397.

The spooler incorporates a D.C. Thyristor re-generative drive designed in conjunction with the wire drawing machine drive, the combined design having unique features to produce optimum conditions during acceleration, deceleration and emergency stopping. The controlling wire accumulator ensuring that the wire is drawn annealed and spooled to within the required specified limits under all conditions.



Safety interlocks conforming to British standard code of practice are incorporated as standard together with a fault indication mimic diagram mounted on the control console providing a clear operational aid.

Additional Facilities

- 1) Hydraulically operated semi-automatic unloading
- 2) Strapping Station for take-a-part spools consisting of the following:
 - a) Turntable
 - b) Reel tilter
 - c) Pillar mounted electric lifting and stripping equipment including powered nut runner.

Specification

Maximum operating speed: 40 m.p.s.
 Maximum spool capacity: 4,000 kg
 Maximum arbor speed: 1,400 r.p.m.
 Maximum flange diameter: 1,250mm
 Maximum overall reel width: 950mm
 Maximum traverse: 800mm
 Minimum bore diameter: 250mm
 Minimum barrel diameter: 560mm
 Take up range: 5.19mm - 1.5mm diameter
 hard or soft copper or aluminium wire

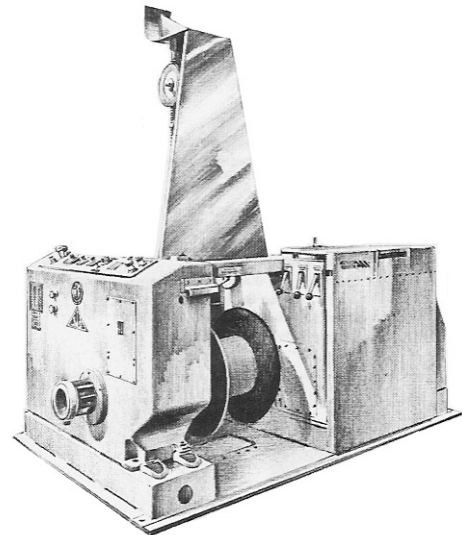
S800 and S250 Single Spoolers

This range of spoolers has been specifically designed for use with continuous inline annealers for the production of high quality copper or aluminium wire, with annealing from zero speed.

Within the specified capacities, the spoolers will accommodate both large and small bore spools using a hydraulically operated outboard bearing system with a fail safe locking device. The loading and unloading function is made easy by the pneumatically operated spool ejector and unloading platform fitted to each spooler in the range.

In all cases the spoolers incorporate D.C. Thyristor re-generative drives using the most up to date technology with self diagnostic facility for ease of maintenance. The controlling wire accumulator ensures that soft wire is held within the required limits during acceleration, deceleration and the filling of the reel.

Safety interlocks conforming to the British Standard code of practice are incorporated as standard with a fault indication mimic diagram mounted in the control console providing a clear operational aid. The type and size of controlling wire accumulator used is dependent on the duty of the spooler.



S800 SPOOLER

Specification

Maximum operating speed: 40 m.p.s.
 Maximum spool capacity: 800kg
 Maximum arbor speed: 3,200 r.p.m.
 Maximum flange diameter: 790mm
 Maximum traverse: 410mm
 Maximum overall width: 475mm
 Take-up range:
 For intermediate lines: 0.4mm - 1.6mm
 diameter copper or aluminium
 For rod breakdown machines: 1.0mm - 5mm
 diameter copper or aluminium
 Maximum motor power: 25 h.p.

S250 SPOOLER

Specification

Maximum operating speed: 40 m.p.s.
 Maximum spool capacity: 250kg
 Maximum arbor speed: 3,200 r.p.m.
 Maximum flange diameter: 560mm
 Maximum traverse: 355mm
 Maximum overall width: 406mm
 Take-up range:
 For intermediate lines: 0.4mm -1.60mm
 diameter copper or aluminium
 For Course/Fine lines: 0.15mm - 0.71 mm
 diameter copper or aluminium