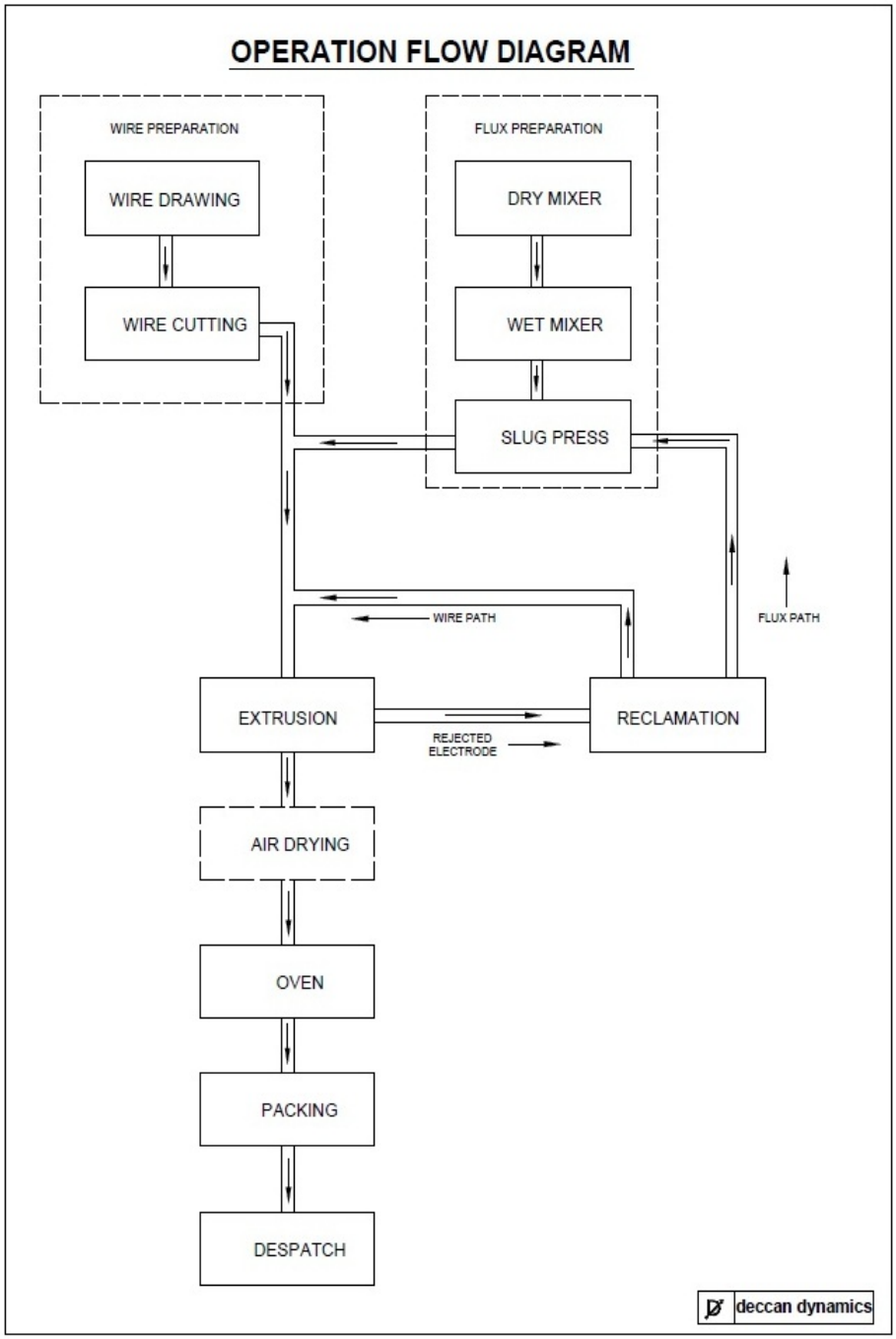
WELDING ELECTRODE MACHINE



WIRE PREPARATION MACHINERY

1.Wire Straightening & Cutting Machine

FLUX PREPARATION MACHINERY

1.Dry mixer

2.Wet Mixer

3.Slug Press

EXTRUSION MACHINERY

1.Wire Feeder

- A.Wire Feeder - Vertical
- B.Wire Feeder - Horizontal

2.Extruder

- A.Lab Model Extruder
- B.Horizontal Bell Housing
- C.Horizontal Twin Cylinder

3.Conveyor

4.Electrode Name printing unit.

BAKING MACHINERY

1.Drying oven

DE-COATING MACHINERY

1.Flux reclamation machine

PACKING MACHINERY

1.Shrink packing machine

TESTING MACHINERY

1.Eccentricity tester

ADDRESS:-

DECCAN DYNAMICS, No: 21, Deccan Estate,

Civil Aerodrome Post, Coimbatore-641014,

Tamilnadu,India.

CONTACT US

Moblie 1 :- +91-9443326696, Mobile 2 :- +91-8056977477

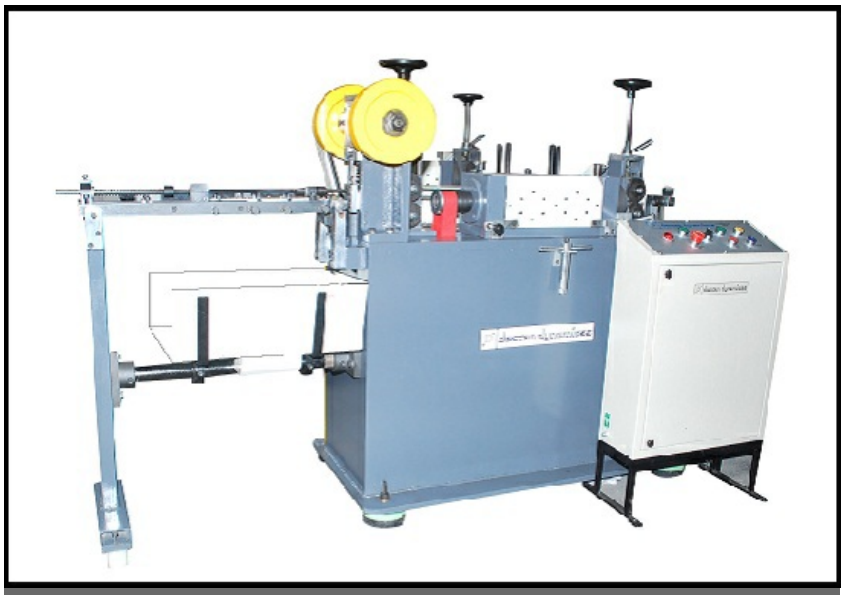
Landline 1 :- +91-422-2627288, Landline 2 :- +91-422-2628168

E-mail :- deccandynamics@yahoo.com

WIRE PREPARATION MACHINERY

Wire Straightening & Cutting Machine

DD-100 & DD-200



Pre drawn wire of the required size is fed into the machine got straightened and cut into pieces of the required length.

DD-800

		DD 100	DD 200	DD 800
Cuts/minute	Nos.	100 - 120	180 – 200	600 -800 cuts
Wire Dia	mm	2.5 to 5.00	2.5 to 5.00	2.5 to 6.3
Cutting Length	mm	250 to 450	250 to 450	300, 350 & 450
Speed	M/min	35 - 42	63 -70	210 -280
No. of Straightening dies	Nos.	5 T.C.	5 T.C.	7 T.C.
No. of Feed Wheels	Nos.	4	4	7
Cutter Nozzle		Material T.C.	Material T.C.	Material T.C.
Power	HP	5	8.5	28.5

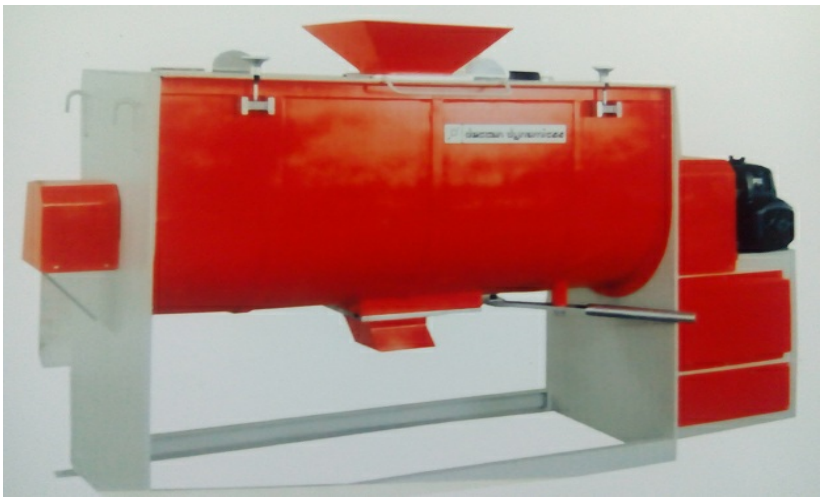
FLUX PREPARATION MACHINERY

DRY MIXER

DRY MIXER - ROTARY

Mix the flux powder of given proportion into a homogeneous mix. It is a batch type production machine.

DRY MIXER - RIBBON BLENDER



Type	Rotating Double Cone drum.	Ribbon type blender	Ribbon Blender
Chamber Capacity	300 KGS.	500 KGS.	1300 kgs.
Working Capacity	250 KGS.	500 KGS.	1000 kgs
Power	3HP	5HP	12.

WET MIXER

Mix pre determined quantity of silicate(binder) to the dry mix flux. It is a batch type production machine.

Capacity	50 kgs.	100 kgs.	200 kgs.	250 kgs.
Number of Blades	2 Nos.	2 Nos.	2 Nos.	2 Nos.
Number of Roller	2 Nos.	2 Nos.	2 Nos.	2 Nos.
Roller Width	90 mm	120 mm	160 mm	200 mm
Roller dia Meter	350 mm	350 mm	500 mm	550 mm
Shell Dia Meter	900 mm	1100 mm	1400 mm	1530 mm
Shell Height	550 mm	550 mm	650 mm	750 mm
Discharge	SIDE	SIDE	SIDE	SIDE
Power	3 hp.	7.5 hp.	15 hp	20 hp.
Gear Box	Worm reduction	Worm reduction	Worm reduction	Worm reduction

SLUG PRESS

Slug press will convert the wet silicate added flux into briquettes.

Plant capacity		1	3	5	7	8	10
Press Capacity	Tons	7	7	20	20	30	30
Max. Operating Pressure	Kg / cm2	90	90	90	90	90	90
Normal Working Pressure	Kg / cm2	80	80	80	80	80	80
Main Hydraulic cylinder Bore	mm	100	100	160	160	210	210
Piston Rod Size	mm	Dia 56	Dia 56	Dia 90	Dia 90	Dia 110	Dia 110
Stroke	mm	200	200	250	250	250	250
Flux Cylinder Bore	mm	100	110	145	145	205	220
Cake Height	mm	100-125	100-125	100-150	100-150	100-150	100-150
Power	HP	3	3	5	5	10	10
Unit Pressure on Flux at 90 Kg / cm2	Kg / cm2	90	70	100	100	80	80
Door Cylinder Bore	mm	Dia 50	Dia 50	Dia 50	Dia 50	Dia 70	Dia 70
Door Cylinder Piston rod Size	mm	Dia 25	Dia 25	Dia 25	Dia 25	Dia 36	Dia 36

EXTRUSION MACHINERY

WIRE FEEDER

Wire Feeder - Vertical

Wire feeder feed the Straightened and cut wires loaded on the hopper into the extrusion press with variable feed rates.

Plant Capacity		1 Ton	3 Ton	5 Ton
Type		**Vertical**	**Vertical**	**Vertical**
Power	Pick up	2.0 HP A.C. Variable.	2.0 HP A.C. Variable.	2.0 HP A.C. Variable.
	Feeding		3.0 HP A.C. Variable.	3.0 HP A.C. Variable.
	Agitating	0.5 HP	0.5 HP	0.5 HP
Number of Pick up rollers		2 Sets.	2 Sets.	2 Sets.
Number of feed rollers		1 Set	2 Sets.	2 Sets.
Wire Sizes		2.5 to 5 mm	2.5 to 5 mm	2.5 to 5 mm
Feed Rate		90 m/min.	175 m/min.	225 m/min.
Hopper capacity		300 kgs.	300 kgs.	300 kgs.

Wire Feeder - Horizontal

Wire feeder feed the Straightened and cut wires loaded on the hopper into the extrusion press with variable feed rates.

Plant Capacity		5 Ton	7 Ton	8 Ton	10 Ton
Type		**Horizontal**	**Horizontal**	**Horizontal**	**Horizontal**
Power	Pick up	3.0 HP A.C. Variable.	5.0 hp A.C. Variable.	5.0 hp A.C. Variable.	5.0 hp A.C. Variable.
	Feeding	5.0 HP A.C. Variable.	7.5 hp A.C. Variable.	7.5 hp A.C. Variable.	7.5 hp A.C. Variable.
	Agitating	1 HP	1 HP	1 HP	1 HP
Number of Pick up rollers		2 Nos	2 Nos	2 Nos	2 Nos
Number of feed rollers		4 Nos	4 Nos	4 Nos	4 Nos
Wire Sizes		2.5 to 5 mm	2.5 to 5 mm	2.5 to 5 mm	2.5 to 5 mm
Feed Rate		280 m/min	350 m/min.	350 m/min.	350 m/min.
Hopper capacity		300 kgs.	300 kgs.	300 kgs.	300 kgs.

EXTRUSION MACHINERY

EXTRUDER-LAB MODEL EXTRUDER

The machine consists of three major assembles.

1. Hopper

2. Gear box and

3. Extrusion press.

The Gear box, hopper and extrusion press are mounted on a table. The cut wires loaded in the hopper descending down one by one through hopper liners assisted by an agitating mechanism driven by a cam and connecting rod. The agitating mechanism is powered by a standard motorized reduction gear box The descended wire pushed into a wire feed gear box by a set of rotating hardened and ground pickup rollers through hopper wire guide. The wire feed gear box feeds the wires by a set of hardened and ground rotating feed rollers to the extrusion press through wire guides. The feed pressure on the wire can be controlled by a hand wheel provided on the top of the feed gear box. The pickup rollers and wire feed rollers were powered by an electric motor controlled by an AC variable speed drive. The wire feed speed can be varied by varying the supply frequency to the motor by the AC variable frequency drive.

In the extrusion press the core wire is coated with flux and the outside diameter of the coated flux is controlled by a coating die. The concentricity between the wire and the flux coated over the wire can be controlled by four adjusting screws provided on the coating die holder. The flux pressure can be varied by adjusting the hydraulic system pressure. The Lab model extruder is designed to extrude electrodes of wire diameter ranging from 2.0 mm to 5 mm with variable feed rates.

Wire feeding speed	7 – 20 Rods / Min (2.5 to 7 Meters / Min)	
Wire size	2.0 mm to 5 mm	
Input power to wire feeding unit	Pick Up	0.5 HP
	Feed	1 HP
Pickup roller	2 Sets (Hardened and Ground)	
Pickup roller diameter	98 mm	
Feed roller	1 set (Hardened and Ground)	
Feed roller diameter	104 mm	
Oil cylinder bore	160 mm	
Flux cylinder bore	70 mm	
Flux cylinder length	250 mm	
Flux cylinder volume	950 cc	
Max Flux flow rate	250 cc / Min	
Hydraulic system pressure	200 Kg / Sq.cm	
Specific pressure on flux	1045 Kg / Sq.cm	
Input power Hydraulic system	3 Hp	
Oil tank volume	50 lit	

EXTRUDER- HORIZONTAL (BELL HOUSING)

The loaded flux in the form of briquettes is coated with high pressure over the steel wire fed by the wire feeder

Plant capacity	1	3	5	8
Power	5hp	7.5 hp	15 hp+10 hp+1 hp	25 hp + 20 hp.+1 hp
Oil Cylinder Capacity	60 tons	62 Tons.	150 Tons	275 Tons.
Flux Cylinder length	450mm	675 mm	800 mm	950 mm
Flux Cylinder Bore	Dia 103 mm	Dia 115 mm	Dia 150 mm	Dia 225 mm
Max. Ram Pressure	200 kg/cm2	200 kg/cm2	200 kg/cm2	200 kg/cm2
Oil Cylinder Stroke	650 mm	900 mm	1000 mm	1050 mm
Hydraulic Cylinder Bore	200 mm	232 mm	317.5 mm	420 mm
Flux Discharge	2500 cc/min	3300 cc/min	3600 cc/min	7500 cc/min.
Specific Pressure	754 kg/cm2	813 kg/cm2	896 kg/cm2	700 kg/cm2
No. of Flux Cylinder	1 No	1 No	1 No	1 No
Flux Cylinder Capacity	3.75 litre	7.0 litre	14 litre	37.75 litre

EXTRUDER- HORIZONTAL (TWIN CYLINDER)

Capacity	7 Tons	10 Tons
Power	15 hp+10 hp+1 hp	25 hp + 20 hp.+1 hp
Oil Cylinder Capacity	150 Tons	328 Tons.
Flux Cylinder length	850mm	850 mm
Flux Cylinder Bore	Dia 150 mm	Dia 225 mm
Max. Ram Pressure	200 kg/cm2	200 kg/cm2
Oil Cylinder Stroke	900 mm	900 mm
Hydraulic Cylinder Bore	317.5 mm	457 mm
Flux Discharge	4200 cc/min	5900 cc/min.
Specific Pressure	896 kg/cm2	825 kg/cm2
No. of Flux Cylinder	2 Nos	2 Nos
Flux Cylinder Capacity	15 litre	34 litre

CONVEYOR

Conveyor unit consists of 3 major sections.

a) Transverse conveyor

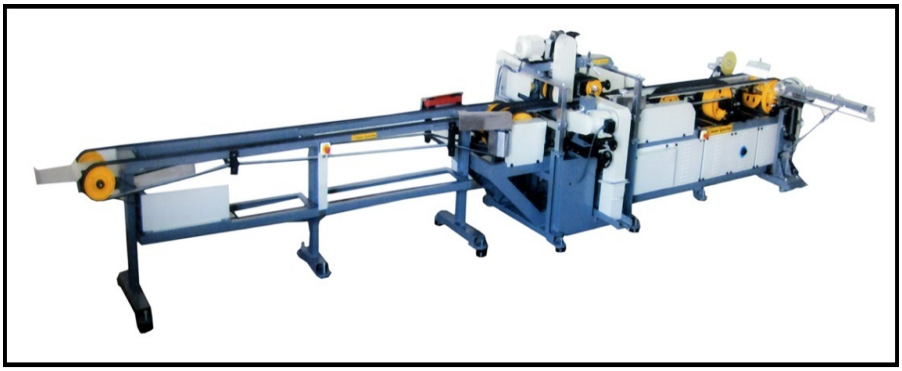
Extruded electrodes transferred to the main conveyor by this unit. The speed of the conveyor can be varied using a variable speed drive.

b) Main conveyor

Electrodes on the main conveyor aligned for orientation by the corrugated belt section and then by the aligning unit. Electrode tip end and brushing operation carried out after the aligning section. The speed of the conveyor can be varied using a variable speed drive.

c) Unloading conveyor

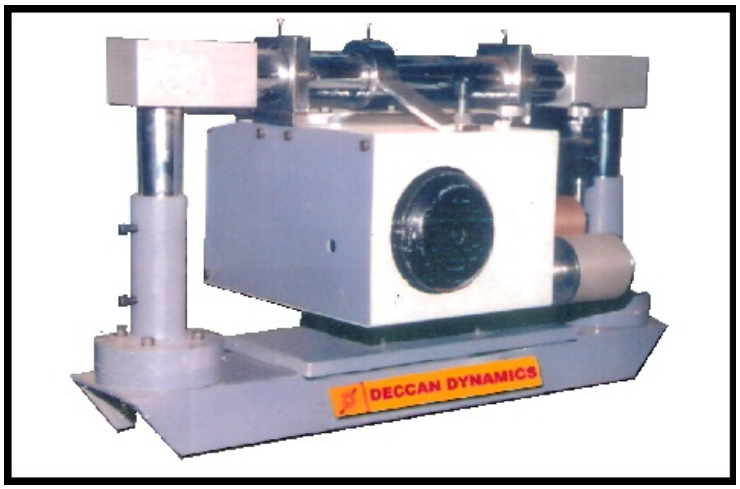
Brand name printing is carried out in this section and the finished electrodes picked up for air drying from this section. The speed of the conveyor can be varied using a variable speed drive.



Plant Capacity	1,3,5,7,8 & 10
Power	6.50 hp.
Main Conveyor	2.0 hp. A.C. Variable.
Take of Conveyor	1.0 hp. A.C. Variable.
Rotating Cater Pillar	0.75hp A.C. Variable.
High speed brushing & tip end	0.75 x 3 (2.25 hp) A.C.
Unloading Conveyor	0.5 hp A.C. Variable.

ELECTRODE NAME PRINTING UNIT

Printing unit is used to print the brand name printing using rubber stereos.



Range of Wire Size	mm	2.5 – 5.00
Length of wire	mm	350 & 450
Length of Printing	mm	60mm Max
Power	DC	250 watts

BAKING MACHINERY

DRYING OVEN

Drying oven is used to cure the air dried electrodes at a specified temperature.It is a batch type production unit

Chamber Size	5x5x5	6x5x5	7x6x5	8x6x6	5x5x5	6x5x5	7x6x5
Temperature	150ºC	150ºC	150ºC	150ºC	450ºC	450ºC	450ºC
Power	21 KW	24 KW	36 KW	48 KW	36 KW	48 KW	64 KW
No of Fan	2 Nos	2 Nos	2 Nos	2 Nos	2 Nos	2 Nos	2 Nos
Power of Fan	1 HP/Fan	2 HP/Fan	2 HP/Fan	3 HP/Fan	2 HP/Fan	3 HP/Fan	3 HP/Fan
No of Trolley	2 Nos	2 Nos	2 Nos	2 Nos	2 Nos	2 Nos	2 Nos
No of Door	D.D.D.S*	D.D.D.S*	D.D.D.S*	D.D.D.S*	D.D.D.S*	D.D.D.S*	D.D.D.S*

*Double Door Double Side

DE-COATING MACHINERY

Flux reclamation machine

Flux reclamation machine is used to strip off the flux from coated wet electrode. The reclaimed wire and flux can be reused.

Electrode Sizes	2.5 to 6.35 mm
Length	300 to 450 mm
Weight/Charge	10 kgs.
Capacity	250 kgs.
Drive	3 HP
Nett Weight	400
Type	Disc type.

PACKAGING MACHINERY

SHRINK PACKAGING MACHINE

Shrink packing machine is used to shrink wrap the polythene sheet over the carton box.

Power – Fan Motor	Kw	0.37
Chain Conveyor	Kw	0.74
Heaters	Kw	9
Production Capacity/Shift	Packets	5000 Packets.

TESTING MACHINERY

Eccentricity Tester

Eccentricity tester is used to test the centricity between the steel wire and the coated flux.

Eccentricity tester	
Wire size	1.6 to 6.3 mm
Magnification	100 X (10 X , 10 X)

ADDRESS

DECCAN DYNAMICS, No: 21, Deccan Estate,
Civil Aerodrome Post, Coimbatore-641014,
Tamilnadu,India.

CONTACT US

Moblie 1 :- +91-9443326696, Mobile 2 :- +91-8056977477
Landline 1 :- +91-422-2627288, Landline 2 :- +91-422-2628168
E-mail :- deccandynamics@yahoo.com