WRAPPER BRAKE OPERATION MANUAL

- End Flange
- L-duct
- TDFC Duct & Fittings
- Wrapper Duct
WRAPPER BRAKE MANUAL INDEX:

► PREPARATION FOR OPERATION
  - 1) Space of Installation
  - 2) Foundation
  - 3) Lifting and Transportation
  - 4) Installation
  - 5) Oil Supply
  - 6) Line Distribution
  - 7) Check

► OPERATION
  - 1) Operation Panel Description
  - 2) Operation

► ARRANGEMENT FOR DIE BLOCKS

► FRONT MATERIAL SUPPORT TABLE

► CLAMP SPEED ADJUSTMENT

► ELECTRIC SCHEMATICS

► HYDRAULIC SCHEMATICS
PREPARATION FOR OPERATION

Preparation jobs for operation:
1) Space of Installation
2) Foundation
3) Lifting and transportation
4) Installation
5) Oil Supply
6) Line Distribution
7) Check

1) Space of Installation
Install the machine at the large space which can feed material and remove the material easily, easy maintenance.

2) Foundation
The foundation must be strong and even surface.

3) Lifting and Transportation
Use proper crane, forklift or other lifting equipment in accordance to the machine’s weight. When slinging machine with crane, sling holes are the sling position for cable wire. When transport machine with forklift, please move it on the right position and pay attention to its gravity center. Machine must be well levelled after positioned, the leveling will influence the accuracy and use term.
## 4) Installation

### Precaution Items:

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Instructions</th>
</tr>
</thead>
</table>
| **(1) Quality for operator and maintenance man** | 1. Unqualified operators are not allowed to operate machine before they received a training course. Unauthorized and un-qualified personnel are not allow to access to areas such as electrical cabinet, motor, transformers, and relay boxes (Connectors)  
2. The key switch of mode selection should be kept by authorized person. |
| **(2) Restriction for material** | Other purpose of working is prohibited. It is not applicable to process fragile materials such as wood, glass and etc. |
| **(3) Restriction for working environment** | The machine is prohibited to be used in environment which temperature over 40ºC. |
| **(4) Operator protection device** | 1. Wear safety gloves or similar protection device during handling, installation or cleaning.  
2. During handling, installation or cleaning, anyone should wear helmet for protection.  
3. Wear safety shoes and ear protection device if necessary. |
| **(5) Disposal of wastes** | The disposal of wastes, such as oil, coolant, and chips, must comply with the local regulations. |
| **(6) Illumination for working environment** | Keep area around machine well lighten(>500 Lux) and dry. |
| **(7) Noise for working machine** | The actual noise measured results in factory is about 72 dB(A) under without production. (condition: leave machine body 1m distance and at 1.6m height from the floor, and 80% of maximum speed). If the noise pressure is over 80 dB(A) while operating, please wear proper ear defender. |

Before machine arrival, customer should contact qualified company for transportation work, and all machine installation conditions (e.g.: placement space, power source, air source...,) should be ready.

※ **Notice:**

Don't operate machine before the attendant tests of qualified people and training. Our company will not take responsibility for any action without authority and random usage.

- 4 -
5) Oil Supply
Using AW#46 hydraulic oil. (Example: SHELL hydraulic oil. AW#46)
Refill the oil from inlet port until to the oil level reaches the blue line on gauge.
Please prepare a ladder under 50cm when refill the oil from oil inlet port.

※Note:
How to exhaust air from hydraulic system
In the first time to start machine, air is subject to fall into oil, most because oil supply
to tank. And, after maintenance the air also might easily get into hydraulic system.
In normally, please dry run machine for 5 ~ 10 min, the air can be bled from the
hydraulic system.

6) Line Distribution
Use correct capacity and wiring to distribute the machine electric box line.
Different machine model shall use different wiring and ground wire.
Connect all the electric wires, and push PUMP START button, in this first time to
operate machine, please confirm if motor runs the right direction as the label on
motor indicated. If it does, machine is ready for working.
In future, if customer moves machine, please check its motor rotation direction once
again.
The correct motor rotation direction is as below drawing.

※Note:

1. Please connect earth for safety is necessary.
2. If motor rotation is going on wrong direction, turn off the electric power source immediately. Turn off the factory electric power and change any 2 wires of the R.S.T in the electric control box. If motor runs on wrong rotation for long time, pump will get damaged.
3. Please turn off factory electric power during changing the wires.
7) Check
1. Fill up the hydraulic oil (AW-46#) to 80% of the capacity of oil tank.
2. Connect “R”, “S”, “T” wires to power supply, turn on the over relay switch.
3. Press POWER ON button, the motor will start working.
4. Check the rotation direction of motor (it must follow the arrow direction).
5. Supply all grease lubricant feeding points.
6. Adjust levelling of machine.

After installation, or every maintenance, tool setting, pre-production work, please check items as follows:
1. Check if guards fixed (avoid people get in machine movement area, at the rear of the machine) and in place.
2. Check if blade seat can be stopped when the E.M. Stop is pushed.
3. Check machine works normally in manual mode.

If above item is normal, please press the reset button, and that the machine is ready.

※ Note:

Once the Emergency stop button is pressed, the resetting procedure is to turn the EMERGENCY STOP button according to arrow direction (Right), then press the RESET button so that the machine is ready.
OPERATION

1) Operation Panel Description:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>POWER</td>
<td>key switch to turn ON/OFF power</td>
</tr>
<tr>
<td>2.</td>
<td>MOTOR START</td>
<td>push button to start motor</td>
</tr>
<tr>
<td>3.</td>
<td>MODE</td>
<td>key switch to operate machine in AUTO/ MANUAL</td>
</tr>
<tr>
<td>4.</td>
<td>MOTOR STOP</td>
<td>push button to stop machine, will be locked every button pressed, turn it clockwise to unlock button</td>
</tr>
<tr>
<td>5.</td>
<td>PRESS UP/ DOWN</td>
<td>key switch to drive clamp go up/ down in MANUAL</td>
</tr>
<tr>
<td>6.</td>
<td>FOLDER UP/ DOWN</td>
<td>key switch to drive folder go up/ down in MANUAL</td>
</tr>
</tbody>
</table>

2) Operation:

**Auto Mode**

Keep foot pedal pressed, wrap brake would automatically go through all movements to complete one circle operation:

1. Press foot pedal, clamp goes down and fix material.
2. Keep foot pedal pressed, folder goes up and fold material, as folder reach its TDC, it goes down back its zero automatically.
3. Continue to keep foot pedal pressed, the clamp goes up, one circle operation finished
Note:

1. When Auto/ Manual mode switched, clamp and folder will go back their own zero position. (clamp stays at its TDC, folder stays at its BDC)
2. In auto mode, if foot pedal is released during auto operation, clamp and folder will go back their own zero position. (clamp stays at its TDC, folder stays at its BDC)

**Manual Mode**

In manual mode, machine only can be operated by the key switches on control panel, foot pedal is disabled. Clamp and folder are activated when key switch turned; as key switch released, clamp and folder will stop and stay still, don’t go back their zero position.

1. PRESS UP/ DOWN: clamp goes down by clockwise turning
   clamp goes up by anti-clockwise turning
2. FOLDER UP/ DOWN: folder goes down by clockwise turning
   folder goes up by anti-clockwise turning

Note:

1. In manual mode, folder can be activated only after clamp finishes its movement, stays at its BDC.

**Normal Operation**

1. Turn Power Switch to ON, the key switch lights up.
2. Push Motor Start button, motor starts and clamp automatically goes up to TDC.
3. Turn key switch to manual mode.
4. Feed material in, and to align its expected bending line with die block edge.
5. Clamp going down by manual, step by step, please keep small clearance between material and clamp, after make sure of the bending line is aligned, drive clamp go down to press material until fixed.
6. Folder going up by manual, step by step until it reaches TDC, then going back to its zero by manual.
7. If trial goes well with manual mode, turn it to Auto mode, after material placement, press foot pedal to start machine operation.

Note:

1. Do not stretch hand between into the gap between the folder and lower seat, and the gap between clamp and lower seat as well.
2. Do not be too close to machine as folder activated.
3. Feed grease lubricant periodically. (Three to four times a year)
4. Regularly change hydraulic oil and clean filter. (Clean filter each six months).

**ARRANGMENT FOR DIE BLOCKS**

Die blocks on lower seat can be taken out and set up for working on different kind of end flange, L-duct, TDFC duct or wrapper duct....;

**FRONT MATERIAL SUPPORT TABLE**

Material support table in front can be changed two positions-even with lower seat and even with die block. There are two lock bolts on both side for table fixing.
CLAMP SPEED ADJUSTMENT

If you feel clamp moves with proper speed, need to adjust clamp speed, please reach hydraulic block which is located on top of oil tank in the back side of machine. Adjust valve, by which the operator can adjust the clamp speed by turning manually. Clockwise turning, speed will go down; anti-clockwise turning, speed goes up.

PRESSURE ADJUSTMENT

If the machine can't move smoothly, and you think its pressure needs to be increased/ decreased, please reach hydraulic pump which connected with motor, in the back side of machine, there is a Pressure Adjusting Valve upon the pump. Operator can adjust machine’s pressure by turning valve manually. Clockwise turning to increase the pressure; anti-clockwise turning to decrease the pressure.

※ Suggested Pressure Ratting: 50-70kg/cm²(Bar)
   If pressure higher than this range, that would cause oil temperature rise up quickly.
※ Never increase pressure higher than 100kg/cm²(Bar)