

**INSTRUCTION BOOKLET FOR**  
**“N” & “NW” SERIES PALLET DECOILER**

**MODEL#: N-1200, N-3500, N-5000,  
N-6000, N-7500, N-8500, N-10M, N-12M**

**(DC DRIVE)  
CHAIN**



200 Circuit Drive • North Kingstown, Rhode Island 02852 • USA  
International Phone: 401-781-7800 • Toll Free: 800-338-7268 • Fax: 401-738-2586 •  
• Internet Address: [www.durantco.com](http://www.durantco.com) •

ATTENTION: PLANT MANAGER

Thank you for purchasing Durant equipment. Enclosed are very important safety instructions, operating instructions, and setup procedures.

Read all these materials completely and carefully. Please distribute copies to your SAFETY MANAGER, PRODUCTION MANAGER, and MACHINE OPERATORS.

If there is any help required in setup or operation, we will be readily available for your assistance.

Thank you again and we look forward to developing and maintaining a fine relationship with your company.

Sincerely,

DURANT TOOL COMPANY

## **SAFETY INSTRUCTIONS FOR ALL DURANT EQUIPMENT**

The enclosed information and instructions must be forwarded and distributed to the Plant Safety Director, Plant Manager, Production Manager, and all Operators of Durant equipment.

Operators of Durant equipment must have a minimum of (3) three years operating experience with similar Durant press room equipment or a minimum of (3) three years experience with identical equipment manufactured by other press room equipment manufacturers.

### **WARNING**

Never operate, install, or maintain this machine without understanding the complete and safe operation thereof.

It is the employer's responsibility to provide proper safety devices and equipment to safeguard the operator from harm and to safeguard this machine at all times to meet all current government safety codes and standards.

### **CAUTION**

All Durant equipment must be securely fastened to the floor. This will prevent the machine from tipping. Failure to follow the above instructions could cause harm to the operator or machine.

### **ATTENTION**

If any danger points are observed:

1. Immediately stop machine.
2. Do not run machine until danger point is eliminated.
3. Report danger point in writing to your employer.
4. Keep a copy of your report for your records.
5. Do not run machine again until danger point has been corrected.
6. It is your employer's responsibility to safeguard this machine to meet all government safety codes and standards.
7. There are U.S. companies that specifically specialize in safe guarding machines to plant requirements and government codes. The safe guarding companies are located throughout the United States, Canada, and foreign countries. Representatives will visit your site to advise and recommend safe guarding procedures for your company.

### **IMPORTANT**

Before the first use and monthly thereafter, all nuts, screws, and bolts should be checked for tightness. Gears, sprockets, chains, and belts should also be checked for tightness.

Grease and oil fittings and reducers monthly.

**ELECTRICAL SETUP AND ADJUSTMENT PROCEDURE FOR DURANT TOOL “N” & “NW” SERIES HORIZONTAL STOCK REEL [MODEL #'S: N1200, N3500, N-5000, N-6000, N-7500, N-8500, N-10M, N-12M].**

Theory of operation: The “N” series Electronic control package Model #MDC-1040 consists of 3 main control items. They are as follows:

1. Material Roller control assembly.
2. Regen D.C. Drive Amplifier.
3. Process controller circuit board, (Model PP-PCB-1000).

With the material roller in the Off or Zero speed position, the GREEN LED on the main circuit board should be De-Energized. As the roller is pulled forward, GREEN LED Energizes and the Reel starts to increase in speed in relation to the roller movement. In the event the roller reaches its maximum travel, the RED LED De-energizes and the Reel comes to an immediate Emergency Stop and also supplies a normally open contact for top stop or emergency shut down. (See terminals 30 & 31). The reel will not operate until the roller is returned to the Off position to Reset the control system, then normal operation can resume.

Operator Control (located on cover):

1. START [Green illuminated push button energizes control system, Power On.]
2. STOP [Red push button that de-energizes control system, Power Off]
3. JOG [Yellow push button to jog reel while in MAN mode only.]
4. AUTO/MAN [2 position selector switch for Automatic/Manual modes.]
5. FORWARD/REVERSE [Switches motor direction. Warning: Select motor direction when reel is in the Off/Zero position only! Do not move switch from FWD to REV or from REV to FWD while reel is in operation!]

Step Adjustment Procedure:

1. With roller in the desired Off or Zero position, adjust potentiometer P8 until GREEN LED De-energizes (OFF). [This sets your roller reset or idle position.]
2. Move roller slightly until GREEN LED energizes (ON) and turn potentiometer P1 on until reel just stops rotating. [This sets your ZERO or Minimum speed position].
3. Move roller to over travel position and adjust P13 until RED LED De-energizes. [This sets your emergency stop position. See terminals 30 & 31 of wiring diagrams for auxiliary connections to customers equipment.]
4. In the event the reel does not keep up and hits the over travel limit frequently during normal operation, a faster RPM per inch of roller movement is needed (example: On very fast line speeds such as Roll Forming lines). Turn potentiometer P2 CCW until desired max reel speed is obtained at desired max speed roller position. [This sets your RPM per inch of roller movement or maximum speed position.] [CW decreases RPM/inch, CCW increases RPM/inch.]

(Note: All potentiometers are 26 turn maximum travel and just slip after 26 turns.)

## **“N”-“NW” SERIES DECOILER MECHANICAL SETUP INSTRUCTIONS**

1. Be sure that correct power voltage is connected to the machine. It will be labeled on the machine. Voltage must be constant. A voltage drop will cause failure to the machine and eventual damage.
2. Mount control post on machine box with (4) bolts. See diagram A for best position of post and position of control arm in relation to the press or machine which you are feeding coil into.
3. Adjust position of material roller. Roller should be slightly higher than level of the top coil of material.
4. Your N-SERIES DECOILER is delivered with preset maximum, minimum, speed, acceleration and deceleration levels. You may find that it is necessary to adjust these control. They are located in the main control box on the post. Please refer to the control adjustment page attached. Adjust these control levels to match your line requirements.
5. Emergency Stop Attachment. There is (1) Method to activate the emergency stop feature on all models.

*Method #1: Is described in the electrical set up procedures enclosed. (Step #3).*

Input Power - input power must be 220 VAC / 1 Ph / 50-60 Hz. - which will be indicated in the control box unless other voltage is requested.

If you required further assistance call 1-800-338-7268.

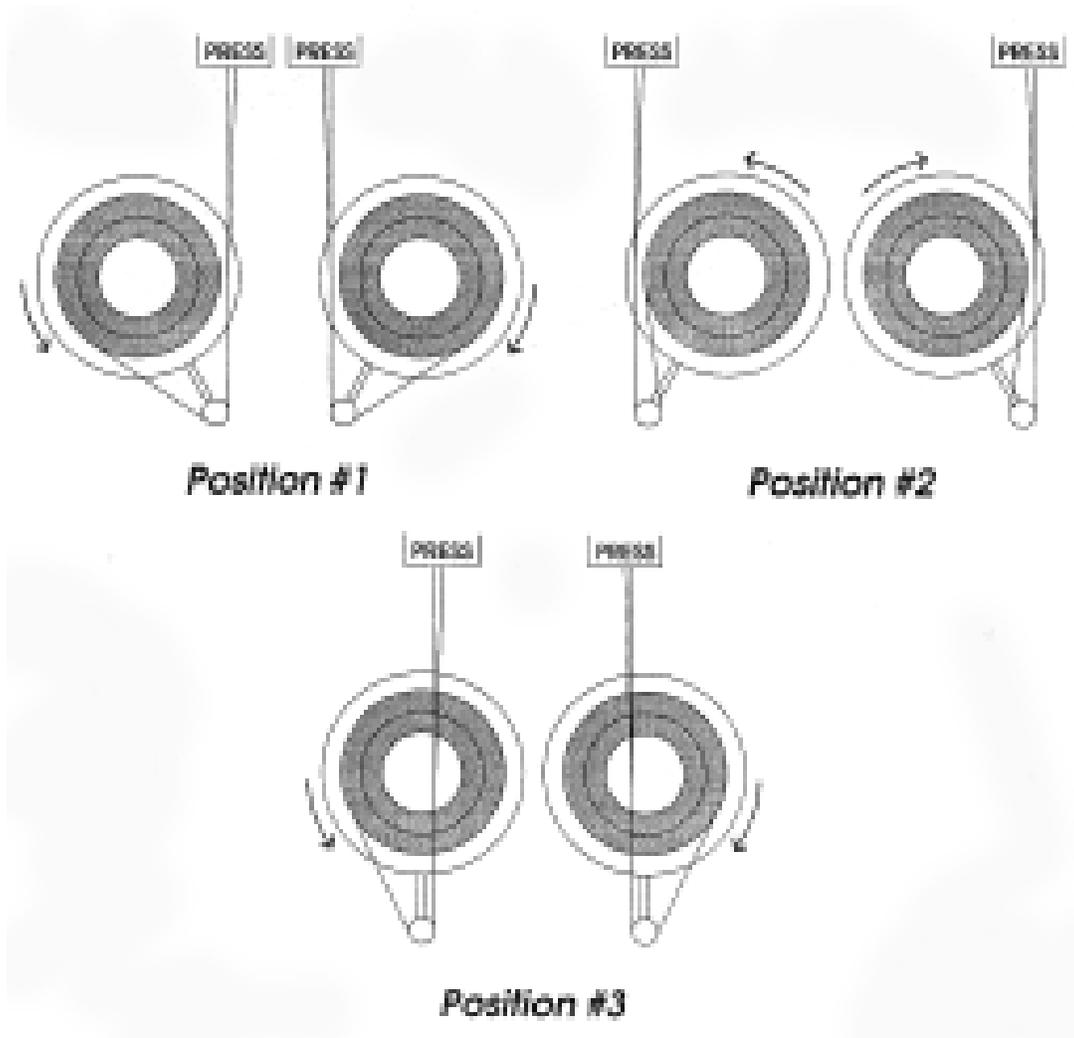
# POSITIONING

## CONTROL HEAD POSITION

The Control Head should always be aligned with the production equipment feed entry so that the strip loop will follow a straight run from the Decoiler Guide Drum directly to the forming equipment entry. This alignment can be done by visual line of sight from Control Head to feed entry.

## TURNTABLE POSITION

The turntable position may be placed in one of three ways depending on space available and direction of coil unwinding. The following diagrams demonstrate the various positions available.



**PALLET DECOILER  
DIAGRAM "A"**

