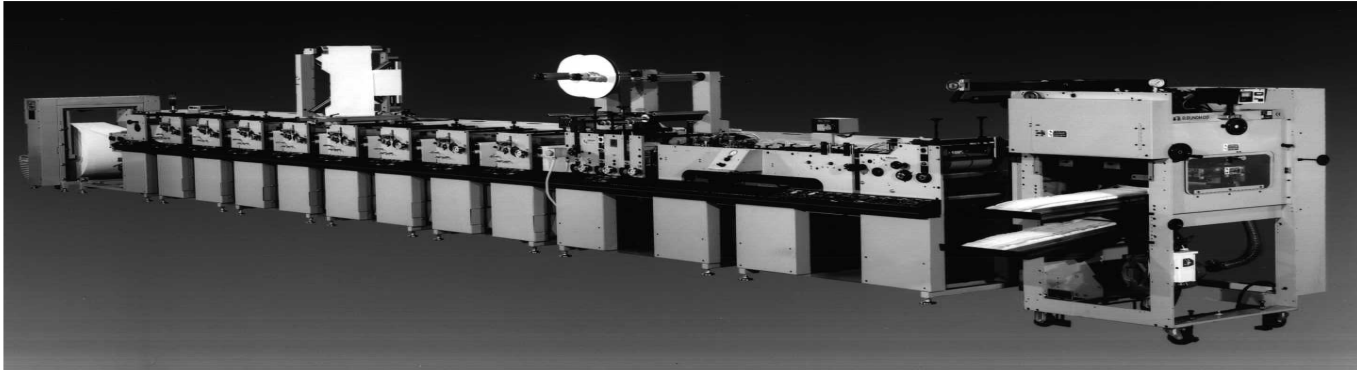


ALLIED GEAR & MACHINE CO., INC.

SPECIFICATIONS



ALLIED 300 SERIES PRESS

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ALLIED 300 SERIES SPECIFICATIONS:

INTRODUCTION:

The 300 Series is Allied Gear and Machine Company's 0 to 10-color label printing press. It offers all the latest features in Flexographic technology. The 300 Series was designed to make multi-color printing and diecutting affordable. Quick-change features and ease of operation allow greater productivity and less downtime. The latest technology assures you of high quality printing, job after job.

We solicited input from hundreds of press owners and operator to find out what features would go into the ideal narrow web flexo press. Armed with their ideas and a few improvements of our own, we have created what we believe is by far the most press for the money. One look at the Allied 300 Series at work and we think you'll agree.

As with any Allied Gear presses, you will also receive service and support from a knowledgeable staff of professionals who are always ready to help. Allied Gear offers a complete range of solidly engineered narrow web presses. All are designed to work long and hard to produce superior quality results.

GENERAL DIMENSIONS:

	<u>10-inch</u>	<u>13-inch</u>
Max press height	51.50"	51.50"
Max press depth	48.00"	51.00"
Max web width	10.25"	13.25"
Max print width	10.00"	13.00"
Max diecut width	10.00"	13.00"
Max print repeat	24.00"	24.00"
Max diecut repeat	24.00"	24.00"
Max speed*	400 fpm	400 fpm
Unwind diameter	30"/40" opt	40"
Rewind diameter	30.00"	30.00"
Waste rewind diameter	24.00"	24.00"
Drive motor	10 HP	10 HP

*Indicates maximum mechanical speed. Actual production speed is application dependent.

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CONSTRUCTION:

- The 300 Series press is an **in-line modular design** that allows for addition of printing and diecutting stations and better flexibility in press configuration. It also provides easy access and viewing area to all print stations.
- The 300 Series is constructed from **3/4" thick steel side plates** on the printing and diecutting stations to insure rigidity and to eliminate vibration. The printing heads are seated on a dual steel base, which includes leveling bolts.
- **Class 10 AGMA gearing** for tighter and consistent registration.
- Drive and print station connections of Allied Gear's **patented gearbox** with registration that utilizes worm gear angle drive (worm gear) with 7/8" diameter solid steel shafts with anti-backlash couplers. This design provides long life and is the most efficient way to transfer power.
- The **Master Control Panel** is located at the diecutting and sheeting module with complete operating controls. This panel also has the Predetermined Counter and the Speed Meter.
- **Removable cabinetry** at the back of the press makes the drive train easily accessible. The sheet metal panels are removable without tools for quick access for routine maintenance.
- The spacious, well-organized electrical control box provides easy access to all electrical components. The press requires only **one power drop** reducing additional expenses during installation.
- The drive unit includes a **10 horsepower** drive motor with electronic motor controller for controlled acceleration and emergency stop dynamic braking.
- This press has been designed with **minimal custom parts** and allows the users to purchase most of the replacement parts from local suppliers.
- **Reduced floor space**, the Allied 300 Series press requires less of your valuable space, as the drying and electrical systems are within the foot print of your press.

UNWIND STATION INCLUDES:

- The **30" roll diameter unwind** is standard on the 310. A 40" roll diameter unwind with roll lift is standard on the 313. 3" diameter unwind shafts with **air-operated coreholders**. The "ON/OFF" switch supplies air pressure to expand the coreholder leaves. The expansion of the leaves traps the core when unwinding the stock.

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- **Unwind Control Panel** located at the top of the front panel on the unwind module. It contains the core “ON/OFF” switch, the unwind tension “ON/OFF” switch, the unwind tensions dial, the stop tension dial and the “JOG”, “STOP” and “E-STOP” buttons.
- **“UNWIND” tension control** that works in conjunction with the follower arm to maintain constant tension as the stock roll reduces in size. This is attained through an electronically controlled unwind brake.
- **“STOP” tension control** to keep stock roll from coasting and slacking the web when you stop the press.
- **Follow Arm/End-of-Roll Switch** that automatically shuts off the press before the stock rolls runs out of material.
- **Splicing platform** located close to the unwind and makes quick work of roll changes and minimizes waste of time and materials. This platform is positioned waist high to allow the operator to easily perform the splicing operation.
- The **Electronic Edge Guide System** is a standard feature, which automatically compensates for imperfect or telescoped stock rolls to keep the web at a set position in the press. As a result, make-ready is easier and faster. This also aids side-to-side registry, while increasing production speeds.
- **In-feed pacing module** with pneumatically actuated nip roll, electronic controlled hysteresis brake infeed pacing roll, silicone rubber covered with 2" diameter bearings for rigidity.
- **In-Feed Nip Control Panel** which contains the “JOG”, “RUN”, IDLE”, “STOP”, “IMPRESSION” and “EMERGENCY” buttons, the nip “ON/OFF” switch, the nip pressure regulator and pressure gauge.
- The **Power Tower Light** indicates the press has power and is ready to run.

PRINTING STATIONS INCLUDES:

- Available from **0 to 10 color print stations**. All printing stations are identical to each other with exactly the same controls and adjustments. This makes the 300 Series press the easiest press to operate in the industry.
- **Independent registration** on each print station that has a maximum lineal registration adjustment of +/- 3/8". The registry adjustment knob also has a position indicator. Motorized registration system is also available as an option.
- **24" maximum print repeat** that allows for the greatest print job versatility.
- **Quick-change print head design**. The print cylinder, anilox roll, metering rolls, doctor blades and the ink pan have been designed for quick changeover that can be accomplished within minutes. This requires “no tools”.
- **Operating Control Panel** on each print station with “JOG”, “IDLE”, “RUN”, “STOP”, impression “ON/OFF”, dryers switch with “OFF/ON/LOW/HIGH”, anilox “ON/OFF” and “E-STOP” button.

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- **Automatic plate roll throw off** to prevent the printing plates from burning when the press stops.
- Automatic individually controlled **constant turning anilox and meter rolls** to prevent the ink from drying when the press stops.
- Industry standard **4 way adjustable print heads** to adjust the vertical and horizontal impression of each print cylinder from 5" to 24" repeats (8" to 24" on the 313).
- Precision **steel adjusting arms** that rigidly supports the plate rolls.
- **Ball bearing print cylinders** that allows for much faster cylinder changes and higher print quality, an important feature when running short run jobs.
- 3.5" diameter **anilox rolls** and 65 durometer rubber meter rolls are supplied as standard and are recommended for standard applications. Other types are available upon request.
- 3.5" diameter **hardened steel impression rolls** with 4" outside diameter bearings. This heavy-duty design provides stability for better print repeatability and consistency.
- 1/2" shaft diameter on the 10" press and 3/4" on the 13" press, quick **release plate roll mounting pins** with built-in lateral registration control of +/- 1/8".
- **Quick-change stainless steel ink fountain assembly**. The inking rolls have 2" outside diameter bearings for stability and longer life.
- **Machine surfaced idler rolls** with less T.I.R. than bead blasted extruded rollers. This improves the within repeat registration.

DRYER PACKAGE INCLUDES:

- Each print station is followed by an **individual high-velocity impinged air drying tunnel** with a choice of three settings "ON/LOW/HIGH".
- **Slotted air tunnels** as opposed to round holes. The slotted tunnels allow for greater impinged air saturation to your web to improve drying.
- **Individual dryer switch** that powers all or each individual dryer heat relays at each print station. With this switch "ON", the heaters at each station will only be activated during the "RUN" mode. This prevents excessive heat build-up at the print stations during non-run periods. This can be a significant money/energy savings if you are not printing in each station of your press.
- **Internal blowers** that are located within the foot of the press. Each print station has a designated blower for the pressure and exhaust.

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- **4" diameter dryer ducting** offering more airflow and drying capacity to your web.
- **2 heater elements** designated for each color. Each heater element is rated at 1.8 kilowatts.

DIECUTTING STATIONS INCLUDES:

- **3 diecutting stations and 1 sheeting station.**
- **Independent registration** on each diecutting and sheeting station that has a maximum lineal registration adjustment of +/- 3/16". The registry adjustment knob also has a position indicator.
- **Thru hardened steel removable anvil rolls** in all the diecutting and sheeting stations. The diecutting stations have 3.5" diameter anvil rolls and the sheeting station has 4" diameter anvil roll. Thru hardened steel provides longer life and prevents marking from metal to metal diecutting.
- **Thru hardened steel support rolls** for all diecutting and sheeting stations to allow for easy undercutting. A support roll also helps prevent deflection and prolongs the life of the anvil rolls and dies.
- Standard **1" ID bearing blocks** (other sizes are available) with 1/4 turn style for front side installation, hold-down rollers that bear directly on the die bearers, bearer wipers and die pressure adjusting units.
- **18" maximum diecut repeat** with an optional 24" diecut repeat which allows for the greatest diecutting and sheeting versatility.
- **24" roll diameter waste wind-up**, which consist of a small idler, an adjustable belt driven capstan and take up roll.
- **Exit pacing** with pneumatically actuated nip roll, silicone rubber covered with 2" diameter bearings for rigidity. Exit pacing also includes an Exit Pacing Control Panel located at the Master Control Panel with nip "ON/OFF", nip pressure gauge and regulator knob.
- **30" roll diameter rewind.**
- 3" diameter rewind shafts with **air operated coreholders.**
- **Rewind Control Panel**, which is located in the Master Control Panel. The "Core" switch that supplies air pressure to expand the core holder leaves, the "Clutch" switch supplies the air pressure indicated in the tension gauge to the clutch and the "Regulator" knob that regulates the air pressure supplied to the clutch, thus changing the rewind tension.
- Optional motor driven rewinds are available.

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OPTIONAL ACCESSORIES:

- **40" roll diameter unwind module** with 3" diameter air cores and roll adjustment. This module also includes a web tension control system and a pneumatic lift. It is an option for the 310 and standard for the 313.
- **Motorized registration system**, this allows the operator to adjust the registration on the printing and die cutting stations with a push of a button from the main control panel. With this option, the operator does not have to go to each print station to adjust the registration and helps increase productivity and reduces waste. Excellent when used in conjunction with a strobe light or a video inspection unit.
- **Ultraviolet curing unit**, this is for UV coating/printing applications and can be located at any or all of the printing stations.
- **Reverse Angle Doctor Blade** this is a quick release design to allow for quick change over.
- **Strobe light or Video Web Inspection Unit** are devices that allows the operator to monitor the printing quality on the web, while the press is running, before it is wound on the rewind core. The strobe light includes a manual control and all necessary connections and mounting brackets. The video web inspection unit includes a camera, a computer and a monitor unit.
- **Turnover Bar** is a device that allows the web to be turned over between any two print stations. It lets you print on both sides of the web by turning the web over while running. It consists of two idler rollers, two air bars and an air regulator.
- **Ink pan covers** to prevent contamination of airborne debris, and reduce solvent evaporation.
- **Second 24" roll diameter waste wind-up** for dual winding of waste diecutting product. This unit consists of a small idler, an adjustable belt driven capstan and take up roll.
- **24" roll diameter lamination arm** is a device that allows you to add another layer to the top of the web. This unit includes an unwind tension control, a lateral adjust knob, a mechanical brake, a guide roll, ironing roll and pressure blocks.
- **Razor, air circular or mechanical circular slitter knife** assembly with side-to-side adjustment. Slitters let you slit, score or perforate the web longitudinally while printing. The air circular type includes an Air Slitter Control Panel located at the Master Control Panel with an "ON/OFF" switch which operates the air valve that supplies air to activate the slitter blades and a "Pressure Regulator" that regulates the air pressure supplied to the slitter blades. The pressure setting is determined by the cutting requirements.

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- **Die adaptors**, fixed or adjustable (to make use of dies shorter than standard, which are driven from the backside of the press) includes all die pressure adjusting units and necessary bearing blocks.
- **Lateral Register Bearing Block Assembly** to allow the lateral registration adjustment of dies. Note: Requires die journal to be drilled & tapped.
- **Second 30" roll diameter rewind** allows the operator to rewind multiple rolls from a single web simultaneously after slitting. It includes a 3" air core and a separate second Rewind Control Panel located at the Master Control Panel.
- **Bottom or Top stacker**. The bottom stacker is for stacking rectangular shaped sheets of printed materials. It stacks sheets in a bottom-to-top order. The top stacker is a ShingLing conveyor for stacking printed sheets of irregular shapes in top-to-bottom order. Both stackers include appropriate mounting brackets, acceleration section to separate sheets, drive pulley, belt tightener, guard and support bar. The top stacker can be purchased with a batch counter that can speed up the conveyor belt momentarily at a pre-selected count for batch separation.
- **Dual gearing** allows the operator to run more than one gear series on the same press. The press can be configured with both 1/8 CP gears on the gear side of the press and 32 DP gears on the operator side of the press.
- **B-Bunch 590 Series Fan Folder** for folding the finished product to be shipped in boxes. This unit includes the fan folder adapter kit and fan folder drive.
- **T & P drop in type male/female punch** unit punches holes on materials that will later be used in tractor feed type equipment. This unit fits in either die slot.
- **I Kela drop in type hot stamp equipment** apply gold or foil stamp to the web while the press is running. This unit fits in either die slot.
- **Variable information system** for printing varying information or graphics while the press is running.
- **Corona Treaters** with support rolls, ozone destruct, auto power density and installation kit. This option allows the operator to treat the film surface for better ink adhesion.
- **Web Cleaners**, available in single or double side. This option cleans the surface of the web and picks up any contaminants prior to printing.
- **Static Eliminators** that help reduced any problems related to static. Helpful in maintaining the web clean and most advantageous in film applications.
- **Delam/ Relam Unit**. This option is used in supported films where the operator needs to separate the film from the paper support, print reverse on the back side of the film and then relaminate the two substrate for final finishing.
- **Safety cages** that are installed to surround and guard the diecutting and printing stations.

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ADDITIONAL INFORMATION:

- Standard (1) **one year warranty** applies to all press purchases.
- Press requires **100 PSI** of compressed for operation.
- Standard power requirements is **230 volts, 3 phase, 60 Hertz** @ 40 amps for the basic press plus 12 amps per print station. Other voltages are available upon request at no additional cost.

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TYPICAL WEB PATH:

