Challenge

PRECISION

PROOF PRESSES

Models designed to meet your needs for
REPRODUCTION PROOFS
CLOSE REGISTER COLOR PROOFS
SHORT RUN QUANTITY PROOFS
AND GENERAL PROOFING WORK

including

THE NEW
STYLE GP PROOF PRESS

Available Through
YOUR AUTHORIZED PRINTING
EQUIPMENT DEALER
CONSIDER THE ADVANTAGES OF
THESE PRESSES TO YOUR PLANT

Today, proof presses are considered more and more to be "production
tools" which contribute in an important measure to the profit and produc-
tivity of a printing or typographic operation. Here are some important
ways they can help your plant.

FOR "REPRO" PROOFING . . .

They can enable you to meet your growing needs for reproduction proofs
for offset or engravings—give you a greater return on your present invest-
ment in typographic facilities.

FOR COLOR REGISTER PROOFING . . .

Good color proofs can go a long ways toward "selling" a job. The Chal-
lence GP model is provided with micrometer register front and side guides
specifically for this kind of proofing. In addition, you can proof in various
colors for a customer without tieing up valuable press equipment, check
color engravings and process plates.

FOR PRODUCTION PROOFING . . .

For short run requirements, such as 50 or 100 copies, the proof press
can be a real production tool—meet customers' needs when regular presses
are tied-up. The GP model with its automatic impression trip and auto-
matic gripper release is specially good for this purpose.

FOR DIRECT IMAGE PROOFING . . .

With a precision proof press, you can make direct image offset plates for
duplicators or small offset presses directly from type forms—eliminating
camera and plate-making work. Paper, plastic or metal direct image plates
can be used for this purpose. Forms with type, line cuts or even halftones
can be accurately reproduced.

FOR PRE-MAKEREADY WORK . . .

Another advantage of a precision proof press is the ability to save valu-
able press time by the accurate pre-makeready of cuts and type forms. Cuts
and type can be tested and brought up to type-high before they are put on
the press, thereby cutting down sharply on expensive makeready time.

FOR GENERAL BETTER QUALITY PROOFS . . .

Good proofs improve your service to customers, help "sell" the job, elim-
inate embarrassing and often costly errors and save unnecessary trouble
and expense.
Challenge has continually served the proof press needs of the average printer

Why Challenge is your best choice . . .

Challenge has been making proof presses for over 70 years – longer than any other manufacturer in the United States. Thousands of Challenge machines are in use in many parts of this country and the world and have been rendering excellent service.

In recent years, Challenge has been giving increased attention towards expanding and improving its proof press line. The results are shown in this booklet. The GP model, for example, is the latest type unit on the market and includes many features not provided in any other proof press.

Challenge has concentrated its efforts in providing proof presses to meet the needs of the average printer—rather than in developing specialized type units. The models shown in this booklet meet proofing needs of the average printer and many engravers and typesetters.

Another advantage of Challenge units is that they are the “most versatile”. For example all the principal models take all lengths of galleys up to and including 23”. In addition, many other exclusive features are included at moderate cost.

Furthermore, Challenge Proof Presses are available through local Printing Equipment Dealers—this means localized contact and service on your equipment. Trade-ins and financing can also be handled through these dealers.
CHOOSE THE MODEL BEST SUITED TO YOUR NEEDS

The information contained in this booklet, particularly the comparison chart on page 5 is designed to help you choose the model best suited to your proofing needs—and pocket book.

FOR REPRODUCTION PROOFING AND PRECISION PROOFING . . .

The five models described on these pages and the following ones are particularly recommended if reproduction, color register, large quantity or fine proofs are desired. They all have the automatic inking required for this purpose.

FOR GENERAL PROOFING NEEDS . . .

For the more general proofing needs of small shops, schools or newspaper plants, the five models described on page 8, are available. These range from the lowest cost H model to the model K.

STYLE GP

... for the best reproduction, register and quantity proofing.

The new GP model is designed particularly for the most critical “reproduction proofing” work. The type-high bed, hard packing, automatic power inking—particularly important for this type work—are provided as standard. In addition, the automatic impression trip and automatic gripper release are provided for faster proofing. Micrometer register front and side guides also provide for accurate sheet control for close register color proofing.

STYLE KP

... with automatic power inking and other features.

The KP model is best when slightly less critical reproduction proofing is needed or where the special features of GP are not required. Automatic power inking, and the other features shown on the opposite page are provided. The KP model is available in both 15 and 20 inch widths.

STYLE KA

... with hand operated ink distribution.

The KA model, available also in both the 15” and 20” widths, differs mainly from the KP in that the ink distribution is accomplished by turning the rollers by a crank rather than by a motor. It is suitable for fine reproduction proofing and is available at slightly less cost than the KP model.
### FEATURES AND SPECIFICATIONS OF CHALLENGE PRECISION PROOF PRESSES

<table>
<thead>
<tr>
<th>FEATURES AND SPECIFICATIONS</th>
<th>GP</th>
<th>15KP</th>
<th>20KP</th>
<th>15KA</th>
<th>20KA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>... Features:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive &quot;Cylinder Press&quot; Operation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Micrometer Adjustable Front Guides</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Micrometer Adjustable Side Guides</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Inking System—Power or Hand Operated</td>
<td>Power Operated</td>
<td>Power Operated</td>
<td>Power Operated</td>
<td>Hand Operated</td>
<td>Hand Operated</td>
</tr>
<tr>
<td>Exclusive Tip-Out Inking System</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Galley Height Bed (.968&quot;) and Galley Thickness Plate for Greater Versatility</td>
<td>Opt.</td>
<td>Std.</td>
<td>Std.</td>
<td>Std.</td>
<td>Std.</td>
</tr>
</tbody>
</table>

| **... Specifications**                               |          |          |          |          |          |
| Maximum Form Size, Inches                           | 14½ x 23½ | 14½ x 23½ | 19½ x 23½ | 14½ x 23½ | 19½ x 23½ |
| Maximum Sheet Size, Inches                          | 15 x 24  | 15 x 24  | 20 x 24  | 15 x 24  | 20 x 24  |
| Bed Size, Inches                                    | 15¼ x 26 | 15¼ x 26 | 20½ x 26 | 15¼ x 26 | 20½ x 26 |
| Net Weight, Lbs.                                    | 1160 lbs. | 1060 lbs. | 1250 lbs. | 1040 lbs. | 1215 lbs. |
| Floor Space, Bed Extended, Inches                   | 31 x 86  | 31 x 86  | 36 x 86  | 31 x 86  | 36 x 86  |
| Floor Space, Bed Centered, Inches                   | 31 x 53  | 31 x 53  | 36 x 53  | 31 x 53  | 36 x 53  |
| Height, Floor to Bed, Inches                        | 33       | 33       | 33       | 33       | 33       |
| Maximum Width (With Handle Removed for Installation)| 28       | 28       | 33       | 28       | 33       |

### STANDARD EQUIPMENT
*(also see comparison chart above)*

Hard packing (.40"), type-high gauge for roller and cylinder setting, one extra set of roller cores consisting of two form roller cores and one rider roller core, special wrenches for adjusting roller height and cylinder impression strength and gas can holding device.

### OPTIONAL EQUIPMENT

Auxiliary stands for placing at either or both ends of the press.
CHALLENGE PROOF PRESSES

Here are 11 good reasons why the Challenge Proof Presses shown on Page 4 are your best buy. They offer you all the important features required for good proofing, including several special "exclusive" features not available in any other press. Furthermore, these Challenge Proof Presses are "unexcelled" in the quality of proofs produced. Yet, with all these features, Challenge Proof Presses usually cost less than other comparable models of any other manufacturer.

IMPORTANT OPERATING FEATURES OF CHALLENGE PRECISION

1. EXCLUSIVE "CYLINDER PRESS" OPERATION

   Challenge is the only proof press that offers the "cylinder press" method of operation (stationary cylinder and moving bed) so widely used on all regular flat bed printing presses. One of the important advantages of this type operation is that the operator stays in one place to take a proof, providing a step-saving feature particularly desirable on continuous proof press operation.

2. AUTOMATIC AND MANUAL GRIPPER CONTROL FOR FASTER AND MORE AUTOMATIC PROOFING

   A feature on the GP Model is the automatic gripper control which opens the grippers automatically to take the sheet at the start of the printing cycle and releases the sheet automatically when the form has been printed. This is an important time-saving feature in quantity proof work. Also included on all models is the manual foot pedal trip (A) control, which opens the grippers at any point desired.

3. AUTOMATIC AND MANUAL CYLINDER TRIP CONTROL

   A feature of the GP Model is the automatic cylinder trip control which automatically puts the cylinder "on" and takes it "off" impression at the beginning and end of the printing cycle. This speeds proofing. All models also have the manual foot pedal control (B) which takes the cylinder "off impression" at any point desired.

4. MICROMETER ADJUSTABLE FRONT AND SIDE GUIDES FOR PRECISE REGISTER OF COLOR FORMS

   The GP Proof Press has the micrometer adjustable front and side guides (C) for the precise register of color forms. All other models have the micrometer adjustable side guide. This can be moved over a range of 8½ inches to permit the accurate feeding of any size sheet.

5. POWER OR HAND OPERATED AUTOMATIC INKING SYSTEM

   Important to fine proofing, is good ink break-up and distribution. On these Challenge Proof Presses this is accomplished by an extensive five-roller ink distribution system. The inking system includes two large 3" form rollers, a 2½" distributor roller, a 2½" steel vibrator roller and 1" steel rider roller. A 2½" lateral motion of the steel vibrator roller helps provide good ink break-up, avoids streaks and build-ups.

   On the GP and KP models, an electric motor turns the rollers. The control switch (D) turns the power on and off. On the KA models the system is operated by turning a crank.

   On all these models the ink is automatically transferred from the form roller to the form. The ink system automatically goes "off-the-form" at the completion of the printing cycle.
**PROOF PRESSES**

6. **EXCLUSIVE TIP-OUT INKING UNIT SPEEDS WASH-UPS**
   An exclusive time-saving feature of Challenge Proof Presses is the handy tip-out inking system. By simply releasing the catches (E) at each end of the inking system, the whole inking system can be tipped out and made easily accessible for quick wash-up. No other proof press has this important feature.

7. **TRIP-OFF CONTROL FOR EASY MULTI-COLOR PROOFING**
   For the easy proofing of additional colors, the inking “trip off” control enables you to raise the regular inking system by moving the control lever (F). The additional color can then be applied directly to the form by means of a brayer for multiple color proofing.

8. **EASY-TO-SET INKING ROLLERS**
   The correct height of the inking rollers is important to good proofing. Simple and easily accessible adjustments (G) enable you to set the rollers to the correct height on these Challenge Proof Presses. A convenient type-high gauge is also provided as an aid in accurate roller setting.

9. **HARD PACKING AND ADJUSTABLE IMPRESSION**
   All these models are supplied with the hard packing (.040), considered best for high quality proofing. In addition, a cylinder impression control is provided which can be easily adjusted by means of a handy tool to provide the impressional strength desired.

10. **COMPACTNESS FOR EFFICIENT USE OF FLOOR SPACE**
    Challenge Proof Presses take less floor space, even when extended full length in either direction, than any other proof press capable of taking a 23" galley. The auxiliary stands shown here can also be used on either or both ends for additional storage space without increasing floor space requirements.

11. **AND THESE OTHER IMPORTANT FEATURES**
    a. **Slide-Away Feed and Delivery Boards**—provide easy accessibility to the cylinder for packing changes (H)
    b. **Convenient Steel Stand With Storage Facilities**—A handy steel stand (I) with compartments for paper, ink cans, rags, etc. is provided.
    c. **Adjustable Form Clamp**—An adjustable form clamp (J) which can be positioned at various points along the bed to hold the form firmly in place is provided.
    d. **Convenient Rabbett**—On type high beds, such as are supplied as standard on the GP Model, a convenient rabbett is provided at the end of the press bed (K). This is the correct depth for a standard galley and permits the type to be easily slid off the bed onto a galley.
    e. **Handy Gas Can Holder**—A recent addition to these presses is a handy gas can holder which is mounted on the side of the press away from the operator.
STYLE K

... A quality proof press at moderate cost.
... 15K ... takes maximum form 14½" by 23½"
... 20K ... takes maximum form 19½" by 23½"

The style K models have all the features of construction and operation of the KP and KA models described in the previous pages, including grippers. They are the best choice when very high quality proofs of halftones or type are desired but where hand inking is adequate. It is also ideal for schools, as it provides a combination proof press and small cylinder press.

STYLE E

... Lowest cost “cylinder type” press.
... 1418E ... takes forms up to 13½" by 17½"
... 1425E ... takes forms up to 13½" by 23½"

The style E is widely used by schools and small shops, particularly combination newspaper and job shops. The 1425E model takes full length news galleys up to 5 columns wide. It is available with or without stand. Removable packing impression cylinder with tympan sheet and rubber blanket is provided. Ink plate is conveniently located on top and provides a cover for cylinder.

STYLE 1534H

... Lowest cost proof press.

The 1534H Proof Press offers the lowest cost type proving press. It has a rubber covered impression cylinder and a fixed bed. It can be supplied with or without the stand. A place is provided at one end of the stand for an ink plate and brayer. It is widely used by newspapers and small shops. It takes a 14¼" by 28½" form.