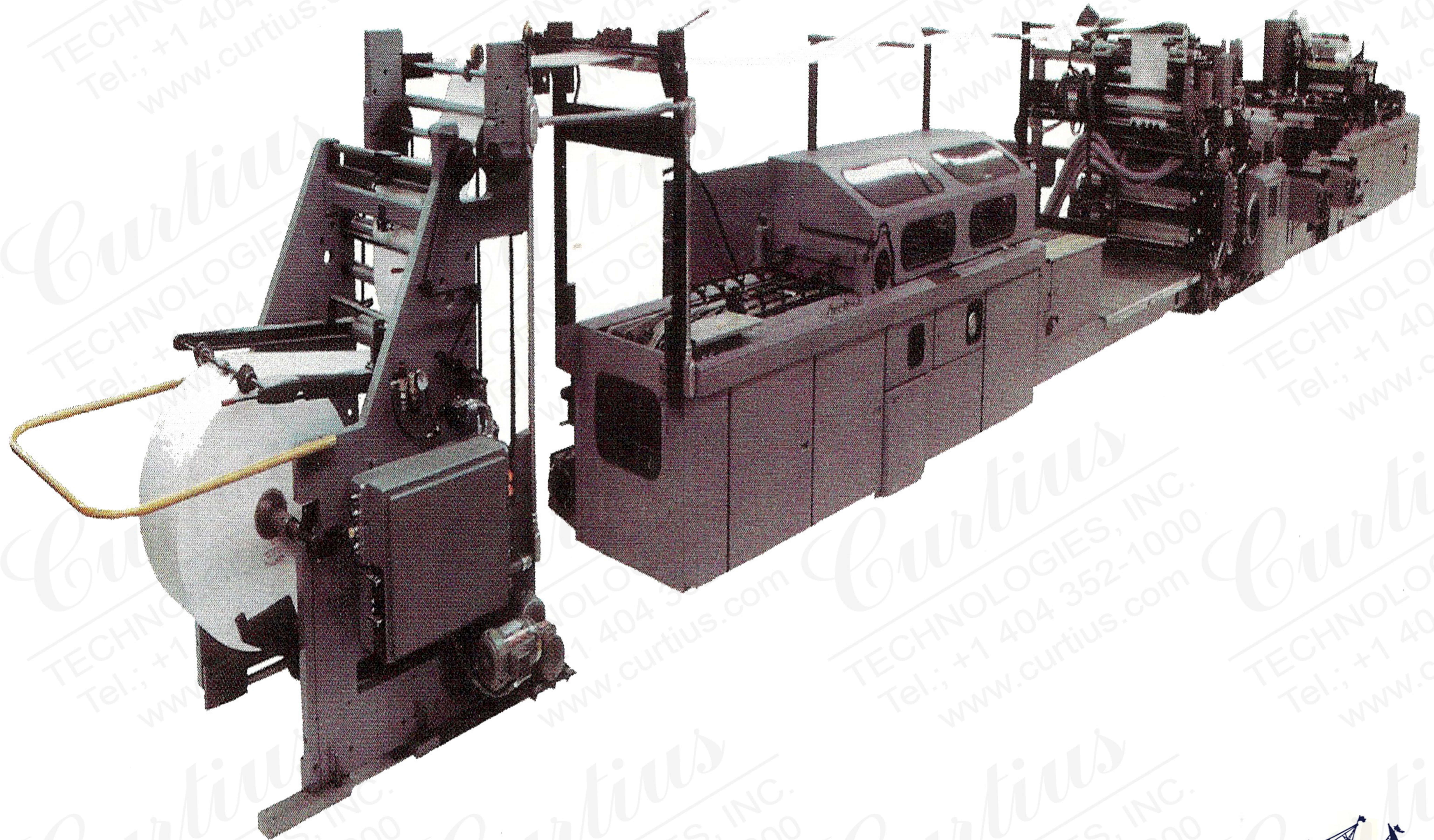




# Booklet/Open End Machine

F. L. Smithe **BOE**





The CHAMPION Booklet/Open End, F.L. Smithe model "BOE", envelope folding machine represents the latest in design and technology in the field of envelope manufacturing machinery. This is a cost-efficient, high-speed, quick-change machine which produces a wide range of booklet (wallet), open end (pocket), and diagonal (banker) style envelopes, at speeds up to 500 EPM.

The BOE feeder/printer station provides both disc and shovel feed capabilities, plus one inside and two outside flexographic printers. These printers can be easily converted to the reverse angle doctor blade system. Vacuum transfer tables, used throughout the machine, enhance registration, enable faster size changes and afford better access.

An extensive list of options keeps machine cost low while allowing maximum flexibility and versatility. The BOE can be used to produce specialty envelopes by including the panel cutter and patcher, or the second patcher stations. Peel-n-stick, latex, timed seal, and mirror gumming are also possible.

We at F.L. Smithe have incorporated the most modern features into the BOE machine to ensure operator ease and production versatility. Our engineers have designed a machine that allows excellent operator access to running adjustments and size change parts.

From feed to delivery, the new high speed, quick-change, CHAMPION booklet/open end model "BOE" envelope folding machine was developed for easier, faster, and more profitable envelope productions.

### BOE ATTACHMENT - BOW

The "BOW," optional web attachment for the BOE machine, was developed for high speed production of booklet (wallet) or open end (pocket) style envelopes from the roll.

A BOE, with the "BOW" option, can produce envelopes from either the roll or blank. The machine can be easily changed from roll fed to blank fed, or vice versa. Rectangular sheets can be fed through the machine to produce shaped blanks. These sheets may be preprinted, and since blank shaping follows the printer station, full-bleed printing can also be attained. To further increase production versatility, an additional shaping station may be used for specialty trimming, or as a second panel cutter.

The BOW can be ordered with the BOE machine or may be attached to a BOE at a later date. Any available splicer can be attached to the BOW.

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FEATURES contributing to the versatility of the BOE machine include:

- Modular design of machine sections for efficient moving & installation, or for adding optional sections.
- Contemporary guarding, designed to reduce noise levels.
- DC drive with programmable controller.
- Low profile design for ease of machine operation and quick size change.

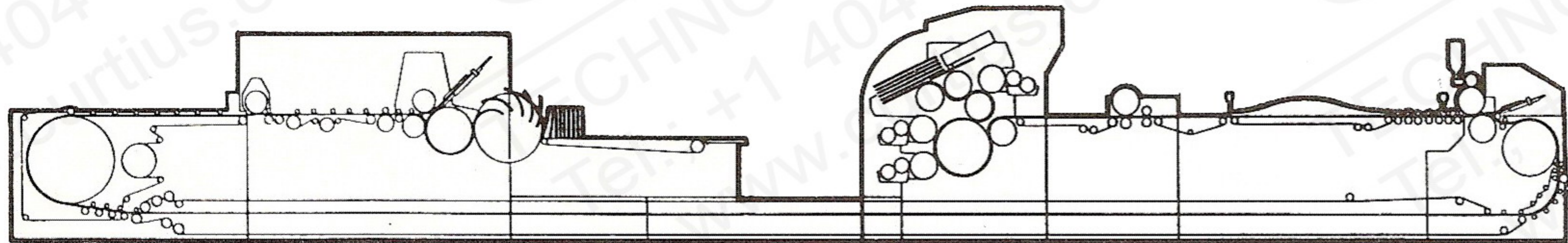




# Booklet/Open End Machine

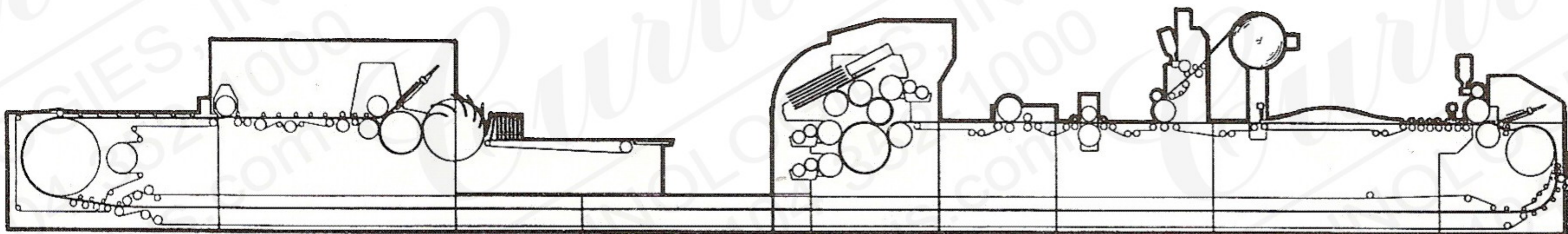
# F. L. Smithe BOE

**No.1 - BASIC MACHINE**



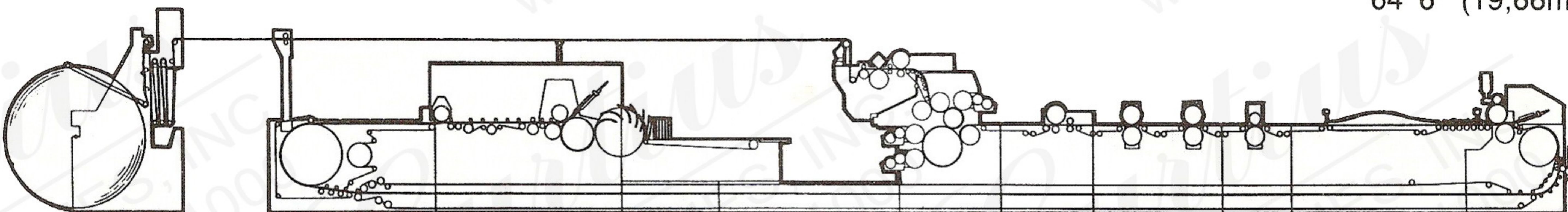
**MACHINE LENGTH:**  
41' 6" (12,65m)

**No.2 - BASIC MACHINE WITH PANEL CUTTER / PATCHER**



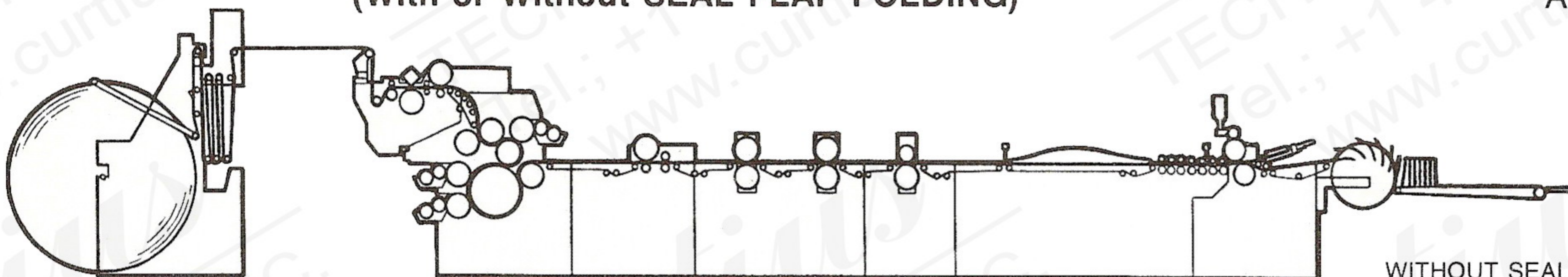
**MACHINE LENGTH:**  
46' 6" (14,17m)

**No.3 - BASIC MACHINE WITH WEB ATTACHMENT**



**MACHINE LENGTH:**  
64' 6" (19,66m)

**No.6 - BASIC MACHINE WITH WEB ATTACHMENT WITHOUT SEAL GUMMING  
(With or Without SEAL FLAP FOLDING)**



**MACHINE LENGTH:**  
APPROX. 50' (15,2m)

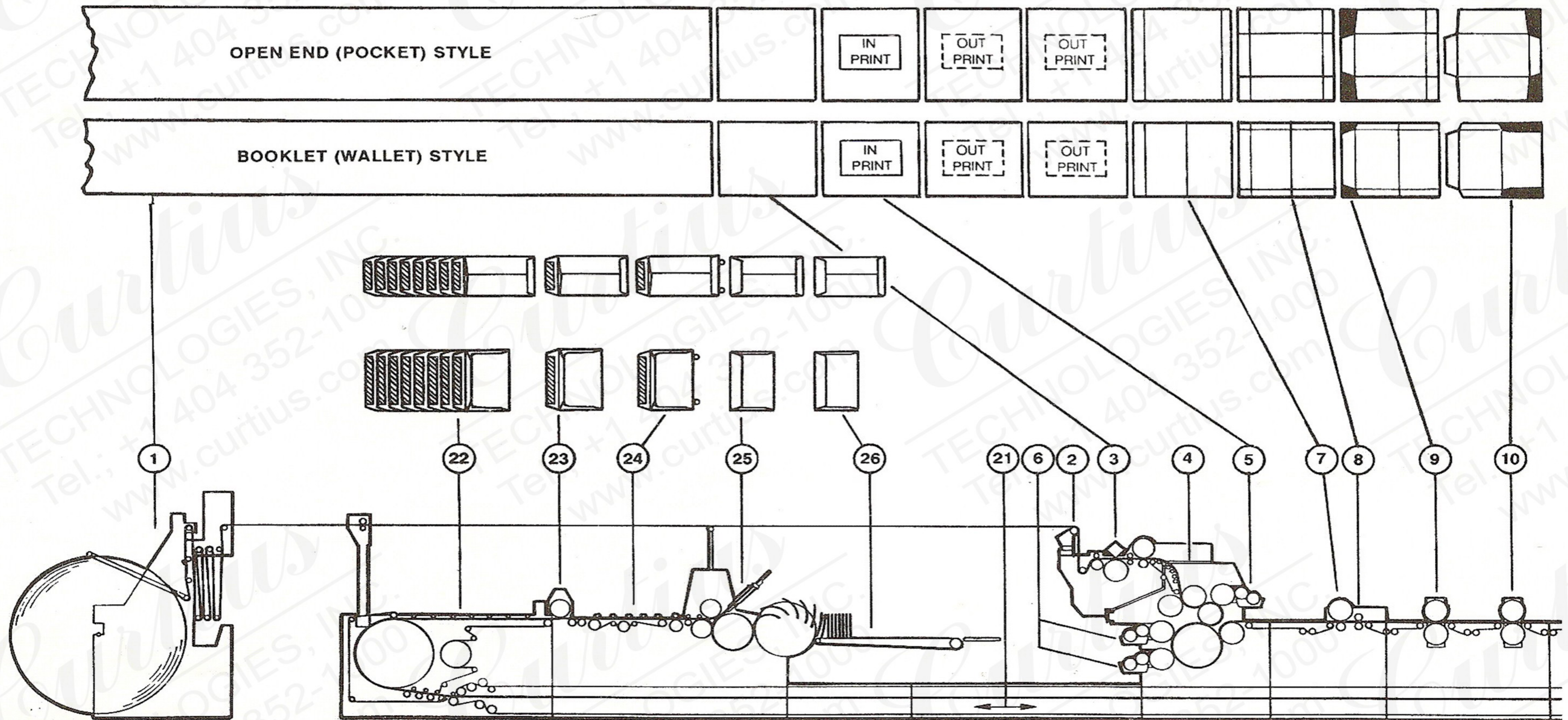
WITHOUT SEAL FLAP FOLDING - SHOWN





# Booklet/Open End Machine

F. L. Smithe **BOE**

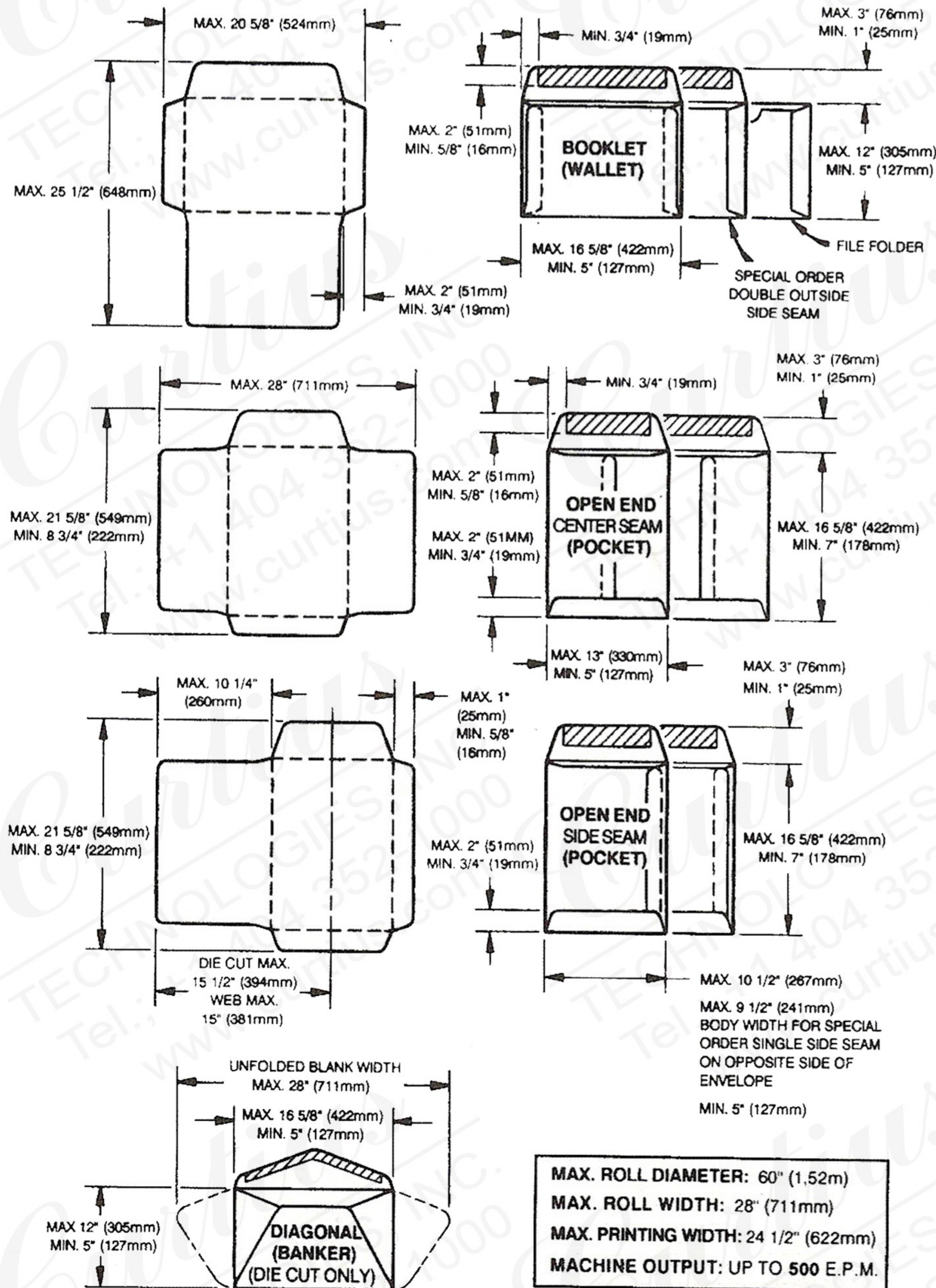


- 1. ROLL UNWIND
- 2. WEB ALIGNMENT SYSTEM
- 3. WEB CUT-OFF
- 4. FEEDER/PRINTER SECTION
- 5. INSIDE FLEXO PRINTER
- 6. OUTSIDE FLEXO PRINTERS
- 7. TOP & BOTTOM SCORER
- 8. SIDE SCORER
- 9. SEAL FLAP FORMER

- 10. BOTTOM FLAP FORMER
- 11. BOTTOM FLAP FORMER (Trim)
- 12. PANEL CUTTER
- 13. PATCHER UNIT
- 14. CENTER SEAM ADHESIVE (O.E.)
- 15. SIDE FLAP FOLDER
- 16. SIDE SEAM ADHESIVE (Booklet)
- 17. BOTTOM FLAP ADHESIVE (O.E.)
- 18. BOTTOM FLAP FOLDER

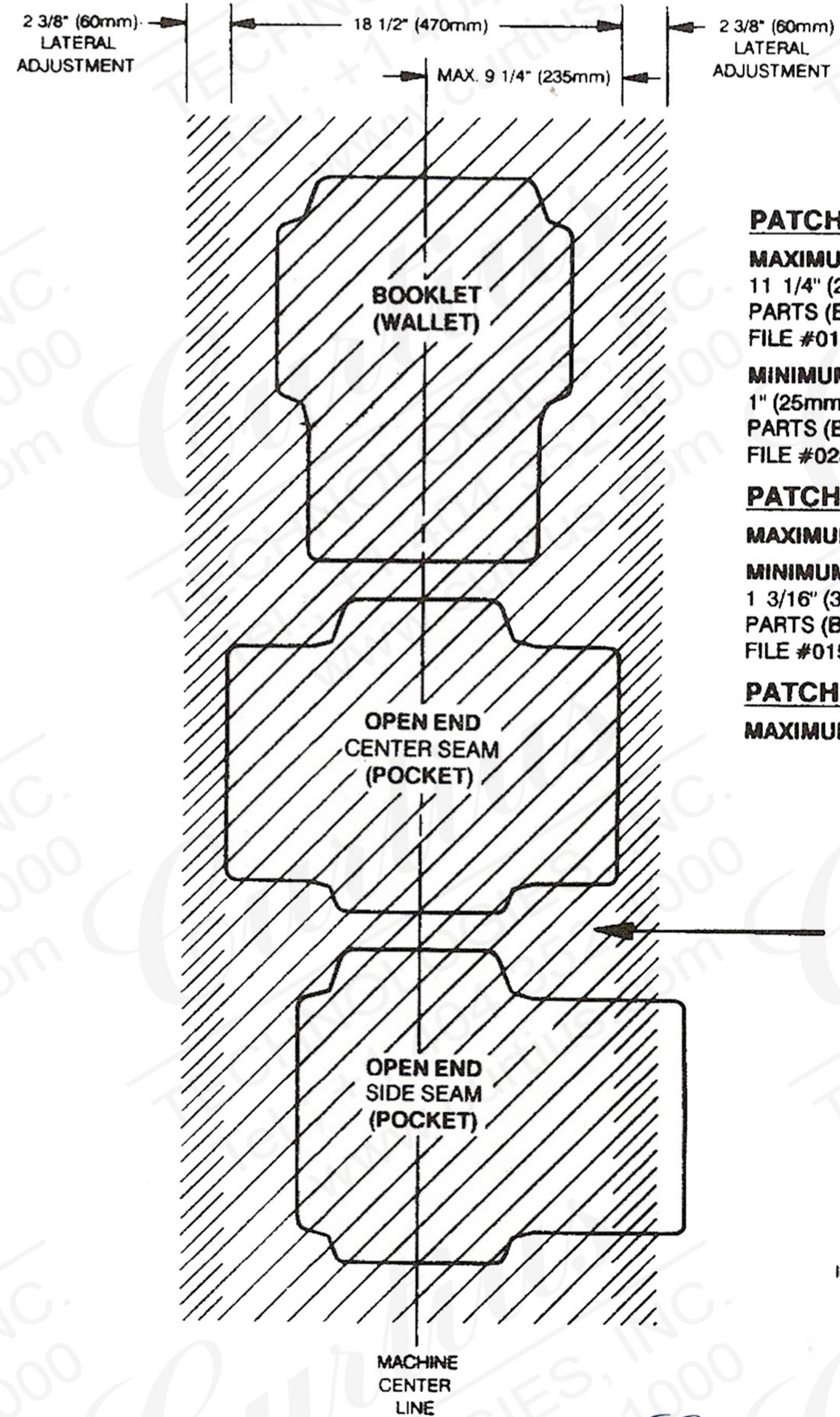
- 19. COLLATOR SECTION
- 20. SEAL FLAP ADHESIVE
- 21. HOT AIR DRYING CHAMBERS
- 22. REFEEDER SECTION
- 23. PULL-OUT SECTION
- 24. ALIGNER STATION  
(optional PANEL CUTTER)
- 25. SEAL FLAP FOLDER
- 26. DELIVERY





**MAX. ROLL DIAMETER: 60" (1,52m)**  
**MAX. ROLL WIDTH: 28" (711mm)**  
**MAX. PRINTING WIDTH: 24 1/2" (622mm)**  
**MACHINE OUTPUT: UP TO 500 E.P.M.**

## PANEL CUTTING & PATCHING UNIT



### PATCH LENGTH

**MAXIMUM: 10 3/4" (273mm)**  
**11 1/4" (286mm) WITH SPECIAL PARTS (BOE SPECIAL ORDER FILE #014)**

**MINIMUM: 1 1/2" (38mm)**  
**1" (25mm) WITH SPECIAL PARTS (BOE SPECIAL ORDER FILE #028)**

### PATCH WIDTH

**MAXIMUM: 19 1/4" (489mm)**

**MINIMUM: 2 1/4" (57mm)**  
**1 3/16" (30mm) WITH SPECIAL PARTS (BOE SPECIAL ORDER FILE #015)**

### PATCH ROLL DIAMETER

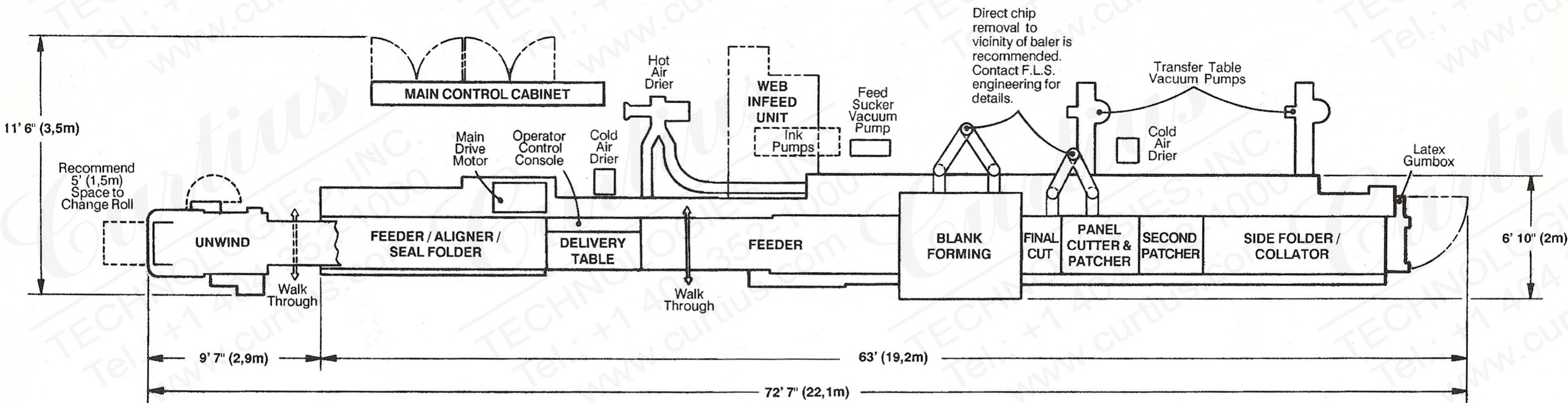
**MAXIMUM: 18" (457mm)**

ILLUSTRATIONS REPRESENT  
 9 X 12" (229 X 305mm)  
 ENVELOPES





**COMB. #4 BOE WITH WEB & PANEL CUTTER PATCHER  
SHOWN WITH SECOND PATCHER & LATEX SEAL GUMBOX**



| ELECTRICAL SPECIFICATIONS<br>WITHOUT VACUUM & PRESSURE PUMPS |                             |       |       |       |          |       |       |
|--------------------------------------------------------------|-----------------------------|-------|-------|-------|----------|-------|-------|
| BOE<br>Comb.<br>NO.                                          | TOTAL CONNECTED LOAD - AMPS |       |       |       |          |       |       |
|                                                              | 3Ø-60 Hz                    |       |       |       | 3Ø-50 Hz |       |       |
|                                                              | 208 V                       | 230 V | 460 V | 575 V | 380 V    | 415 V | 440 V |
| 1                                                            | 239                         | 218   | 111   | 86    | 134      | 122   | 115   |
| 2                                                            | 252                         | 229   | 116   | 90    | 141      | 128   | 121   |
| 3                                                            | 371                         | 337   | 170   | 133   | 206      | 187   | 177   |
| 4                                                            | 371                         | 337   | 170   | 133   | 206      | 187   | 177   |





| <b>PRESSURE &amp; VACUUM REQUIREMENTS - FREE AIR</b> |                             |                          |                           |                          |                          |                          |
|------------------------------------------------------|-----------------------------|--------------------------|---------------------------|--------------------------|--------------------------|--------------------------|
| <b>BOE Combination</b>                               | <b>PRESSURE</b>             |                          |                           |                          | <b>VACUUM *</b>          |                          |
|                                                      | <b>80 P.S.I. = 5.4 ATM.</b> |                          | <b>30 P.S.I. = 2 ATM.</b> |                          | <b>15" Hg. = .5 ATM.</b> |                          |
|                                                      | <b>CFM</b>                  | <b>m<sup>3</sup>/hr.</b> | <b>CFM</b>                | <b>m<sup>3</sup>/hr.</b> | <b>CFM</b>               | <b>m<sup>3</sup>/hr.</b> |
| <b>1</b>                                             | 5                           | 8                        | 20                        | 34                       | 60                       | 102                      |
| <b>2</b>                                             | 5                           | 8                        | 25                        | 42                       | 65                       | 110                      |
| <b>3</b>                                             | 5                           | 8                        | 25                        | 42                       | 70                       | 119                      |
| <b>4</b>                                             | 5                           | 8                        | 30                        | 51                       | 70                       | 119                      |
| <b>2+2nd Patcher</b>                                 | 5                           | 8                        | 30                        | 51                       | 70                       | 119                      |
| <b>4+2nd Patcher</b>                                 | 5                           | 8                        | 40                        | 68                       | 80                       | 133                      |

\* Use of central vacuum system on this machine is recommended. For specification of individual vacuum pumps. Please consult with FLS Engineering Department.

| <b>APPROX. NET WEIGHT</b> |             |            |
|---------------------------|-------------|------------|
| <b>BOE COMBINATION</b>    | <b>LBS.</b> | <b>KG.</b> |
| <b>BOE No. 1</b>          | 43155       | 19575      |
| <b>BOE No. 2</b>          | 49920       | 22645      |
| <b>BOE No. 3</b>          | 56250       | 25515      |
| <b>BOE No. 4</b>          | 63000       | 28584      |

