

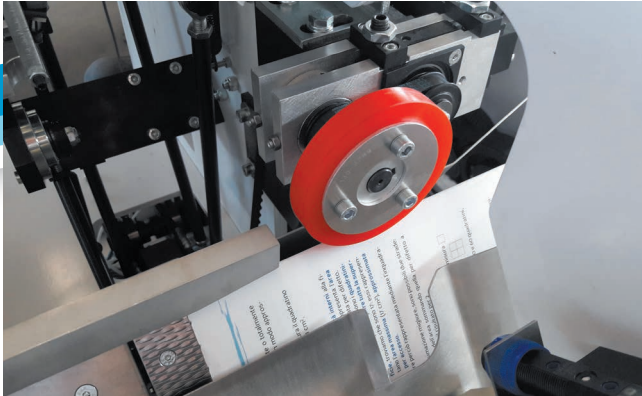


SMYTH
PERFECTLY SEWN

YOUR PARTNER IN BOOK FINISHING SOLUTIONS

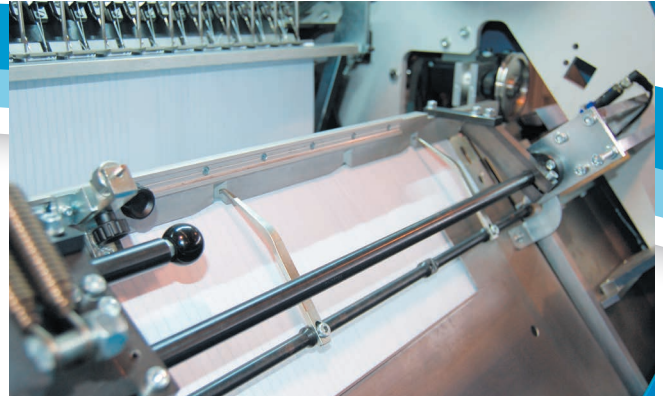
FF-70 4D

AUTOMATIC BOOK SEWING MACHINE



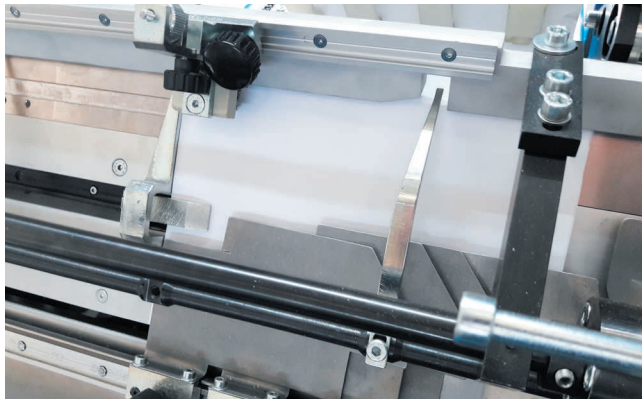
KICKER WHEEL

The kicker wheel speed can be automatically adjusted according to the signature thickness and paper type to allow the optimal feeding of the signature on the mobile saddle.



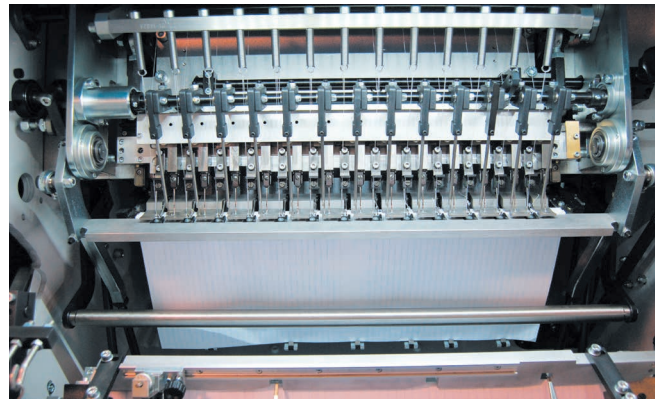
SIGNATURE LOCKING SYSTEM

The mobile saddle is equipped with a precise signature locking system. This system holds the signatures down on the saddle and assures the exact centering of the stitches on the spine.



HEADING UP SYSTEM

Heading up System of signatures consisting of fix header on the tail side and alignment gripper on the head side. This mechanism further ensures the proper transfer of all types of signatures to the sewing head.



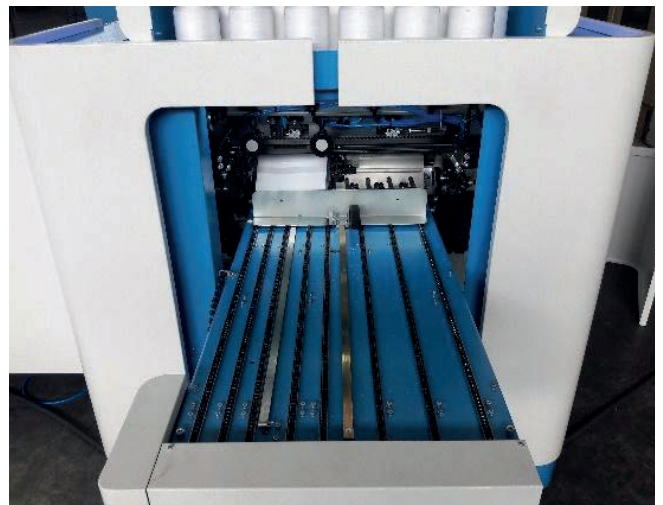
NEW PULLING OUT SYSTEM

The new FF-70 4D comes equipped with a new pulling out system to gently drive the signatures after the sewing cycle.



OPERATOR INTERFACE

Programming and Diagnostics are performed through OMRON PLC and a new software designed by the in-house team of Smyth engineers. A swivel 12" color touch screen is placed centrally to enable all machine functioning parameters and automatic adjustments to be set and checked easily from both sides of the machine.



BOOKS DELIVERY

A very compact design enables an easy unloading of the sewn books on the delivery table equipped with a transport system with speed adjustment.



SMYTH FF-70 4D is the **new automatic sewing machine** specifically designed to produce high quality sewn books combining easy use and reasonable investment. Its proven reliability is the result of the Company experience gained over decades combined with its long-standing tradition in bookbinding. Unique design features allow the FF-70 4D book sewing machine to process all types of signatures, and the latest technology helps to make it simple to use and operator friendly. Fast set-ups and the exceptional versatility of the 4D feeder are just some of the features that make the FF-70 4D capable of fulfilling an unparalleled range of production requirements.



LOADING, FEEDING AND OPENING

Smyth Patented Feeder

Signatures to be sewn are loaded in the hopper. A vision camera system (optional) monitors the correct sequence of gathered signatures and stops the machine in case of mistake. In Smyth patented feeder the signatures are transported in a shingled stream by means of geared belts. This unique system reduces by 50% the travelling speed of the signature, compared to a conventional transport of a signature at a time. Contact time with the vacuum openers is longer and the special movement of suction cups ensures a gentle and precise opening of the signature even in presence of porous paper, heavy perforation and static electricity. The shingled stream transport also reduces the risk of "flying paper" when signatures are transported at high speed (especially with light paper).



INTEGRATED LAP OPENING DEVICE

The integrated LAP opening device is ready to work when programmed and does not require any installation. It provides the possibility to open overlapped signatures having different back to front size (i.e. different size signatures) and different overlap size on both sides (i.e upwards lap and downwards lap). For porous paper, Venturi-type openings are also available (**optional**).



IN LINE CONNECTION

Smyth FF-70 4D book sewing machine is designed to be connected in line with Smyth gathering machines series P12. It means that this machine can be purchased individually and then connected in line later.

This is possible thanks to the modular design of Smyth gathering and sewing system mod. UNIT and CONCEPT.

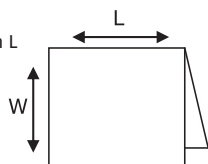


PASTING DEVICE (optional)

The pasting device is specifically designed to obtain higher spine book solidity. It is composed of a pneumatic driven gun that applies a thin clod glue strip. It is controlled via touch screen for accurate glue application and simple operation. The glue system is easy to maintain as it is a self contained pot and does not require daily clean-up of the glue tank. The application of the glue strip is set to be applied on the second and on the last signature of the book. However, the glue strip can also be applied on any combination of signatures or on each signature of the book.

TECHNICAL FEATURES FF-70 4D

Max. sewing speed:	up to 140 cycles/min.
Signature size:	max. 520 (L) x 350 (W) mm L min. 135 (L) x 80 (W) mm
Number of sewing stitches:	12
Sewing stitch length:	24 mm W
Openings feeder:	4 uppers + 4 lowers + LAP
Rated Power:	5,5 Kw
Power consumption:	4,5 Kw
Standard voltage:	400V – 50Hz. 3Phases
Max air consumption:	300 NI/min. a 6 bar*
Weight:	3000 Kg.
Sizes:	3,1 x 1,95 x H 1,65 mt.



*Note: The air (externally supplied) must be dry to optimize the correct functioning of the machine.



Smyth s.r.l.

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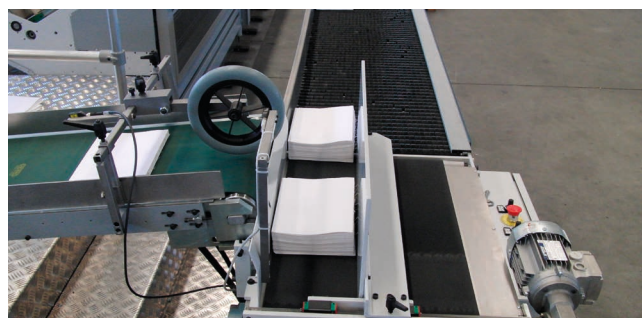
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GATHERING SEQUENCE CONTROL (optional)

The gathering sequence control is a self-learning system performed by Omron Camera which is located in the hopper of the book sewing machine. This camera performs the gathering sequence control by reading shapes (text) and colours. Thanks to continuous measurements this system ensures the highest level of control by filtering data and info, preventing false alarms and unnecessary stops.



SMYTH STACKER "Easy Stack" (optional)

It is the stacker that makes piles of sewn books delivered by the sewing machine in order to facilitate the unloading operations. Pile height is programmable up to 120 mm.



HELIX DEVICE (optional)

It is designed to improve reliability of the signature transfer from the feeder to the fixed saddle with any type of signature and any type of paper. This device can be adjusted during the machine set-up, and it keeps the signature open easily.

LAYOUT FF-70 4D

