

*Morgana*

**FREESTANDING**

# ROTARY NUMBERERS

**FROM MORGANA**



**THE FIRST NAME IN DOCUMENT FINISHING SOLUTIONS**

## FRN 5 - 5,500 sheets/sets per hour

### ROTARY NUMBERING SETS THE

All Morgana numbering machines use rotary numbering action. The operating principles are similar to those used on litho presses. 'Point contact' ensures superb quality on single sheets and unmatched definition when crashing through multi-part sets. Simple adjustment to the platen pressure compensates for varying stock thicknesses. Morgana numberers feature adjustable numbering position whilst the machines are in operation. Numbering, perforating, scoring or slitting can be accomplished in ONE pass through the machine and without the sheets stopping.

### FRN5 PRO-FEED ROTARY

The FRN 5 rotary numbering machine is ideal for the small implant, instant or commercial printer. With a production speed of 22,000 impressions per hour when using 4 heads, the FRN 5 shares many of the same features as the FSN. These include quality numbering and the ability to feed up to SRA3 sheets. The pro-feeder can be loaded 'on the run' and will feed sets with the open edge leading - a real advantage for users who need to perforate parallel with the glued edge.



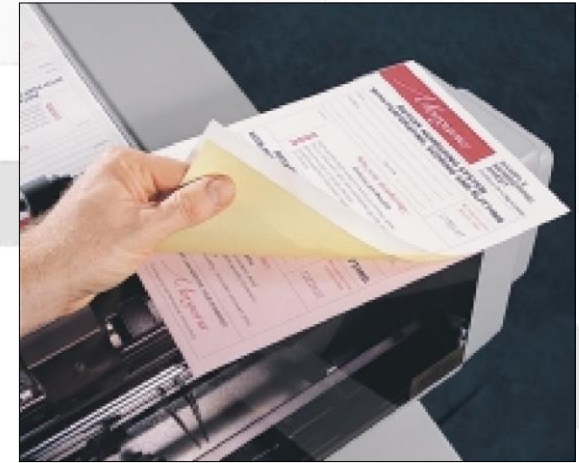
The space-saving design of the FRN5 allows feed and delivery tables to be folded away when not in use.

## FSN - Up to 9,000 sheets/sets per hour

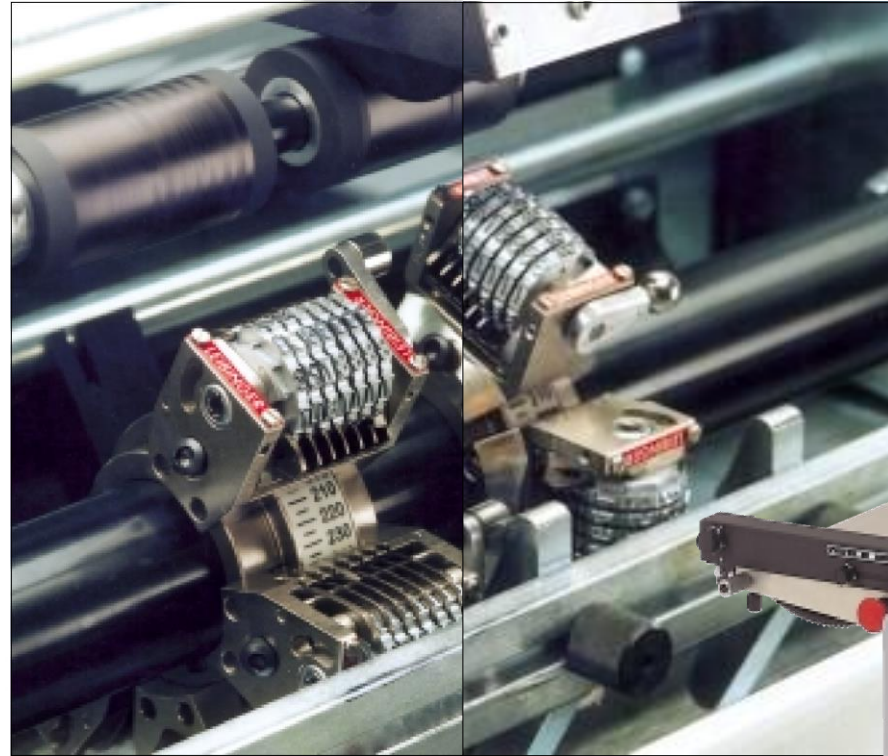
### FSN SUCTION-FEED ROTARY

The FSN has a powerful suction feeder which will feed a wide range of paper weights. Positive control of the paper from feed to delivery ensures unmatched and consistent register of numbering action.

The suction feed system uses electronic pulsing, while feeding from the bottom of the stack allows loading on the run for non-stop production.



- Precision-feeding and sheet control
- Up to 8 parallel or convex heads
- Full safety enclosures and interlocks
- High power vacuum and air pump



### FRN5 & FSN

- Fast, simple make-ready
- Imprinting capability
- Micro-porous ink roll system
- Perforates and numbers anywhere on the sheet in one pass
- Adjustable platen pressure
- 2 perforators and a scorer as standard
- Electronic sheet spacing
- Continuous operation
- Fully mobile
- Feeds carbonless sets with open and closed edge leading

### THE MORGANA

The Morgana Jogger is designed to complement the Morgana FSN Numberer, but will also interface with other machines because of the angle of the jogger and the fact that it is fully adjustable in height. It takes a 450 x 450mm sheet size and has a robust motor which provides variable jogging power that will knock up the most demanding materials.



# FRN5 & FSN FEATURES

Our standard inking system uses a micro porous ink roller. This transfers ink onto a forme roll to give clean consistent inking of the numbering heads. Ink rollers are available in black and red.



An optional re-inking system enables you to use Pantone inks. The system produces thousands of impression before it needs re-inking.

The FRN5 control panel allows for fast simple operation. Make ready from job to job is accomplished in seconds.



Controls are centrally located for ease of operation. Both the FRN 5 and FSN have platen pressure adjustment. The numbering position can also be adjusted whilst the machine is in operation.

Advanced pro-feed technology enables sheets or sets to be loaded on the run. Both the FRN 5 and the FSN will feed sets either closed or open edge leading.



A sophisticated sensing system controls the numbering action. Several numbering heads can be fitted and both convex and parallel heads can be run, simultaneously.

Quick release fold-away feed and delivery tables allow for space-efficient storage when the machines aren't being used.



Slitting perforators give flat perforating on a wide range of stocks. Various perforating, slitting and scoring wheels are available.

# TECHNICAL INFORMATION

SPECIFICATIO		FRN 5	FS
OVERALL LENGTH	Working	900 mm	1340 mm
	Stored	500 mm	990 mm
WIDTH		780 mm	781 mm
HEIGHT		1110 mm	1050 mm
WEIGHT		95 kgs	162 kgs
POWER REQUIREMENTS		220v-50 Hz	230v-50 Hz
MAXIMUM RUNNING SPEEDS		5100 SPH	9000 SPH
MAXIMUM NUMBER OF HEADS		4	8
MAXIMUM RECOMMENDED SHEET SIZE (Length & Width)		460 mm	460 mm
MINIMUM SHEET SIZE	Length	210 mm	210 mm
	Width	125 mm	125 mm
RECOMMENDED STOCK THICKNESS			
	Maximum	6 part carbonless	7 part carbonless
	Minimum	45 gsm/ <sup>1</sup>	45 gsm/ <sup>1</sup>
MAXIMUM SPACING OF HEADS ON SAME COLLAR WITH FIRST NUMBER PRINTED ON HEAD OF SHEET			
	Parallel	365 mm	365 mm
	Convex	354 mm	354 mm
MINIMUM SPACING OF HEADS ON SAME COLLAR (RADIAL SPACING )			
	Parallel	50.0 mm	50.0 mm
	Convex	73.5 mm	73.5 mm
MINIMUM SPACING OF ADJACENT HEADS			
	Parallel	62 mm	62 mm
	Convex	48 mm	48 mm

# ROTARY NUMBERERS FROM MORGANA

## THE FASTEST WAY TO MAKE A GREAT

The Morgana FRN 5 and FSN rotary numbering machines offer state-of-the-art design, rugged construction and stand-alone operation - freeing you from time consuming numbering on-press.

The rotary action is far more productive than that of impact numberers because numbering, perforating, scoring or slitting can be accomplished in one pass and without the sheet stopping. You are assured of sequential numbering because the machines will not operate until the sheets or sets are correctly presented.

With their high productivity and unmatched numbering quality, it is no surprise that Morgana numberers can make a great impression on your profitability.



**MANUFACTURED BY: MORGANA SYSTEMS LIMITED**