# MPLASTIKOIL

### Gateway Bookbinding Systems Ltd. **The Plastic Spiral Experts**

#### It All Starts With

PLASTIKOIL® filament – For years, Gateway Bookbinding has endorsed the many advantages of working with an elliptical profile of plastic filament. For those customers manufacturing coil in-house, this elliptical PLASTIKOIL filament - versus a round profile - results in much higher yields per pound of formed coil. The elliptical profile has also been proven to work better with automated coil insertion equipment. Gateway maintains a large inventory of spooled filament, with our extrusion department operating 24 hours a day so that we can provide our customers with quick and efficient turnaround.



### The Advantages Of PLASTIKOIL® Filament

- Made from top quality, high grade PVC
- 45 different colors to choose from
- Custom color matches / custom filament diameters also available
- Disposable spools (No spool deposits or spools to return)
- Manageable 25 lb. (11 kg) spools maintained in inventory
- Envirokoil® filament an environmentally friendly PLASTIKOIL® by-product produced from over 95% post-commercial waste.
- RecyKoil filament available manufactured from recycled materials that are sourced outside of Gateway's own internal production
- PETG filament also available as an alternative to PVC
- In-stock Large inventories of Black / White / Clear maintained at all times
- Fast turnaround 24 hour production

### Advantages of In-House Plastic Spiral Manufacturing

- Increase your profit margin Material savings up to 50%!
- Produce exactly what you need when you need it.
- The 7 recommended stock filament profiles yield 26 different coil diameters - from 6 thru 50 mm.
- Free up valuable floor space by eliminating formed coil inventory.
- No product distortion during transit improving bindery productivity.
- Save on freight eliminating the need to rush ship pre-formed coil in by air freight.
- Packaging savings re-use cartons when consuming coil in-house.
- Empowering you to provide outstanding

customer service – resulting in the highest customer satisfaction.



#### Material Savings using Elliptical Filament







**Round Profile** of Filament

**Elliptical Profile** Material of Filament Savings

Standard PLASTIKOIL® Filament Profiles	PLASTIKOIL® Lite Filament Profiles	Corresponding Coil Diameters
1.8 mm (.072")	1.6 mm (.063")	6 – 9 mm
2.0 mm (.080")	1.8 mm (.072")	10 – 13 mm
2.2 mm (.088")	2.0 mm (.080")	14 – 17 mm
2.4 mm (.096")	2.2 mm (.088")	18 – 23 mm
2.6 mm (.104")	2.4 mm (.096")	25 – 32 mm
2.8 mm (.110")		35 – 42 mm
3.0 mm (.118")		45 – 50 mm

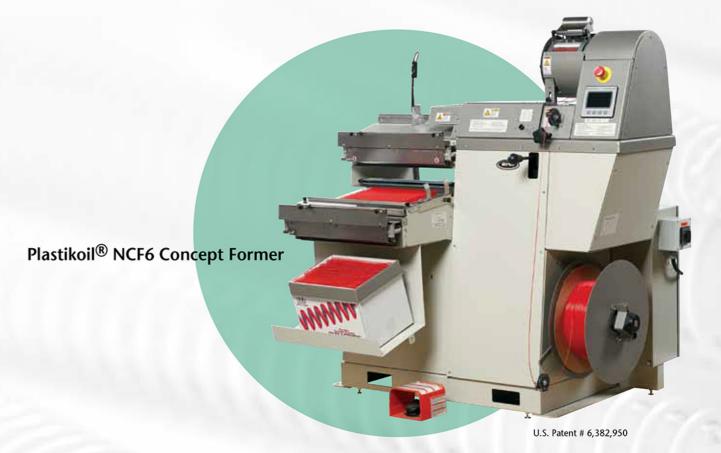




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### **In-House Coil Production / Interline Solutions**





U.S. Patents # 6,000,897, #7,246,982 & # 6,382,950





The new NCF6 control system with its Allen-Bradley Micro 850 PLC and Panelview C400 4.3 inch color touchscreen improves the operator interface, making it easy and fast to set up the machine or change sizes. Pre-programmed temperature and machine speed values are optimized for each coil diameter insuring consistent top quality coil while at the same time insuring MAXIMUM productivity.



**Unique 2 Roller System**Allows for easier mandrel changes and a better cool air flow around the forming coil.



Automatic Oiling
Ensures precise amount of oil is released so coil is not under lubricated or too greasy.



Innovative Hot Start Feature

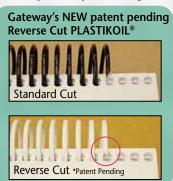
The Hot Start Feature allows the NCF6 Concept Former to Stop and Start – without any interruptions in production. Hot air keeps the filament warm as it exits the heater drum so that when the Former re-starts there is no product distortion. A very important feature that allows the Concept QS Interline Systems to operate as well as they do.



**Built In Mandrel Storage** 

# Exciting NEW Features of the PLASTIKOIL® NCF6 Concept Former

- Coil Diameter Capabilities 6 mm to 30 mm with options up to 50 mm
- Multiple Pitch options .2475" / 4:1 / 6 mm / 5:1 / 3:1 / 2.5:1
- Custom pitches also available
- Min / Max lengths 6.5" to 18" (16 46 cm)
- Optional slide-in extension table for lengths up to 43" (109 cm)
- An enhanced state of the art PLC Control system
- Color Touchscreen with a very User Friendly Interface making set up and changeovers even easier
- Pre-programmed temperature and machine speed values for each coil size – Optimized for MAXIMUM productivity
- Enhanced system status monitoring (watchdog features) complete with fault log to aid with service and maintenance
- An electrical system complete with breakers. No replacement fuses needed.
- 3 phase AC motors and variable frequency drives.
- Empty Spool Detection system allows for easier and quicker spool changes.
- Improved ergonomics with the Control Touchscreen and E-stop now on the front of the machine for easier operator access.
- Easy mandrel changeover
- Positive Hexagon Mandrel Drive
- Cost effective IMC (Interchangeable Mandrel Components)
- Unique Spool Brake design
- Safety shields on the heater drum
- Air cylinder coil eject
- Automatic Oiling System
- Small footprint
- Smooth, quiet, simple operation
- Self-reliant / Minimal operator supervision
- Hot Start option Stop / Start with zero waste
- Optional packaging systems
- Interline capabilities with the PBS 3000QS4 Auto Inserter(s)
- Optional packaging / single and dual interline modules pre-configured into the control system make expansion easy



The reverse cut lead edge smoothly funnels its way through the punch hole in comparison to the standard cut lead edge. A great advantage especially when binding thicker books. An option on the PLASTIKOIL® New Concept Former. Retrofits also available for existing machines.



## **Modular Solutions for Plastic Spiral Binding**

Operate in unison or detach whenever necessary for independent production.

### **PBS 3000QS4 Automatic Inserter**

**Start with** a stand alone 3000QS4 Automated Coil Inserter.



#### Works with pre-formed, pre-cut lengths of plastic spiral

- QS—Quick Setup—No tools required for basic setup and changeover
- Multiple pitch options—Changeover simple and inexpensive - Vertical book placement can accomodate tabs or
- Consistent simultaneous crimping of both coil ends
- Single stage process—More efficient than two stage insertion/crimp
- Binding capabilities—6 mm through 30 mm coil diameter
- Min / Max binding edge—5 to 12 inch with options to 17 inch
- Low maintenance design—No need for expensive service contracts
- Can be interlined with the PLASTIKOIL® NCF6 Concept Former

# **PLASTIKOIL® Concept QS Single Interline System**

Interline your 3000QS4 with a PLASTIKOIL® NCF6 Concept Former.



# Now you're able to manufacture coil in-house, on demand In-House Manufacturing = 50% Material Cost Savings

- In-house coil manufacturing **interlined** with automated coil insertion
- Coil produced and immediately conveyed into position for insertion into book
- Manufacture the coil you need—when you need it
- Free up valuable inventory floor space
- Coil forming capabilities—6 mm to 30 mm (50 mm not available when interlining)
- One operator handles the entire setup
- One operator nandles the entire setup
   Hands free coil placement dramatically speeds up
- binding productivity
   'Hot Start' feature allows the Former to stop & start
- with zero waste

  Operate in unison or detach when necessary for
- independent production
   Can be expanded to a Concept QS2 Dual Interline System

### PLASTIKOIL® Concept QS2 Dual Interline System

Add a 2nd 3000QS4 to your Single Interline System for maximum output. 1 Forming Machine interlined with 2 Auto Inserters.



# Double your productivity without doubling your cost. In-House Manufacturing = 50% Material Cost Savings

- The first DUAL Interline system for plastic binding with two interlined PBS 3000QS4 Auto Coil Inserters keeping pace with the PLASTIKOIL® NCF6 Concept Formers' high speed production output
- All of the advantages of in-house coil manufacturing
- Bindery labor savings as high as 65%
- Modular design—Operate as a Dual Interline or operate with one Inserter inline and one Inserter offline to bind two different jobs at the same time.
- Maximize bindery productivity without the need to invest in a second forming machine
- Productivity ratings as high as 1400 books per hour!