

Flint Group's Special Series of Varn® Web Conditioners

The Apollo Series

The most effective web conditioners on the market

Flint Group is the global leader in web conditioner technology

Flint Group manufactures our web conditioners with a variety of special silicone oils that impart unique lubricating characteristics. Flint Group supplements these specialty oils with carefully selected raw materials from other sources. Using years of formulation experience, the specialty raw materials are combined to create the most cost-effective web conditioners on the market.

Because these web conditioners are tailored to specific printing environments (substrate / speed / finishing equipment), each product can be optimized for the intended use.

By selecting the right product for the application, the total cost of print is reduced.

Many commodity silicone emulsions are designed for automotive appearance and mold release applications. The printing market is simply another outlet for these commodities. As a result, the commodity silicones need to be dosed higher to achieve the desired performance.

Flint Group is the only pressroom chemistry supplier who is vertically-integrated to manufacture silicone oils. This, combined with years of formulation experience, enablesus to create the most cost-effective web conditioners on the market.

WEB CONDITIONER is not "commodity silicone".





Features and Benefits of the **Apollo Web Conditioners Series**

Design Features

Blends of silicone oils, waxes, and mineral oils are tailored to the specific application.

Conductivity tracers allow users to monitor and control dosage.

Each Apollo Web Conditioner contains uniquely formulated built-in static reducers that accommodate specific print variables, including stocks.

Benefits

Reduces cost because of increased effectiveness at lower dosages compared to commodity silicones.

Reduces cost by eliminating gross over-dosing and random "spiking".

Reduces waste in the bindery and newspaper inserting operations to eliminate the expensive and time-consuming "back to press" situations.

Reduce the Total cost of Print

Features

Unique blends of silicone oils, mineral oils, and waxes

Conductivity tracers

Built-in-antistatic properties
— designed for the application

Benefits

Prevents
marking
at lower
dosages
than
commodity
silicones

Allows
operators
to control
lower dosage
for improved
consistency

Further improves consistency of delivery to improve post-press efficiencies

Technical Tips:

Five Mechanisms to Prevent Ink Marking

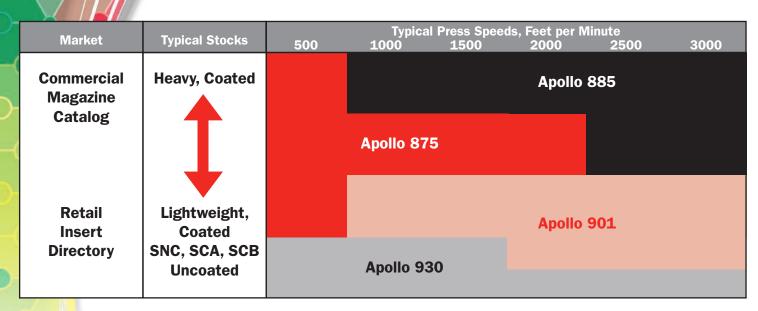
- **1.** Set oven temperatures properly.
- Set chill roll temperatures properly.
- 3. Use proper web tension.
- **4.** Use forced air to create a "pillow" between the web and non-moving metal parts.
- **5.** Use web conditioner as a lubricant to reduce friction between ink and metal.

Web conditioner cannot replace either ink curing or forced air.

Product Attributes

Web Conditioner	Segment	Post-chill Systems	Conduc- tivity	Antistat	Dosage	Wax	Press Speeds	Comments
Apollo 930	Retail/insert with uncoated stock	must dose <4 oz	No	No	3 to 8%	Low+	All	Economical/blend of silicone and oils with low wax added.
Apollo 865	Universal application /~60%silicone product	Yes	No	No	6 to 30%	No	All	Straight blend of silicone oil traditionally in use.
Apollo 875	Retail with coated commercial directory	Yes	Yes	No	3 to 12%	Low+	<2000 fpm	Blend of silicone oils, low wax content.
Apollo 885	Commercial/ magazine/catalog	Yes	Yes	Low	3 to 12%	Med++	1000- 3000 fpm	Blend of silicone oils, high wax content. Field tested and formulated for higher speeds.
Apollo 901	Retail/insert with coated/SNC/SCS/SCB uncoated stocks	Yes	Yes	Low	3 to 12%	High+++	1000- 3000 fpm	Blend of silicone oils with medium wax content formulated to prevent path roller and former nose buildup often observed at very high speeds with retail stocks. Reduces the risk of ink and paper blocking.

Apollo Web Conditioners Series continued... Product Recommendation Map



The map is designed to indicate the product with the largest operating window. Generally more than one of these products will perform in a press room.

Individual technical data sheets for the Apollo Series Web Conditioners are available for pdf download at: www.flintgrp.com in the Product Locator.



Rely on us™

to bring greater value to your pressroom.

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Version 11/2016 Page 4 of 4