



Easy-to-use, accurate **Precision Wet Film Applicators** lay down a uniform thickness of film for observation and testing. Their reliability has made them a standard in both experimental and quality control situations.

2-path models are made of chrome plated steel or hardened 440-C stainless steel. 8-path film applicators are made of hardened 440-C stainless steel. Bird-Style Applicators are marked with 1/2 actual clearance, all other applicators are calibrated to actual gap clearance. Film thickness deposited may vary from 40% to 80% of the actual clearance.

## Ordering 2-Path Applicators (a & b)

Select an applicator based on conformation and use, then construct a specification number beginning with film width, then the least clearance, followed by the greater clearance. For example, "4610 Stainless" indicates 4" clearance width, 6 mil clearance on one side and a 10 mil clearance on the other, in stainless steel.

Chrome plated steel U-shaped 2-path applicators are available in 2" to 10" path width. Clearance tolerance is ±.2 mil. Stainless steel 2-path applicators are available in 2" to 14" path width. Clearance tolerance is ±.2 mil.

## Dow Film Caster (Latex Applicator)

A U-shaped 2-path applicator with a 7 and 10 mil gap clearance and a thicker land width. This applicator allows a second coat of paint to be applied over a hardened based coat while the applicator ends remain in contact with the uncoated panel surface.

### Bird-Style Applicators (d)

Easy-to-clean, single clearance Bird-Style Applicators are durable enough for even the heaviest usage. PGT Bird-Style Applicators are made from a single piece of hardened 440-C stainless steel, and are shipped with certification. Note that Bird-Style Applicators are marked to 1/2 of the actual gap clearance.

## **Cube-Style Applicators (e)**

Convenient, easy-to-use 1" cube-style applicators are available in single and double path configurations.

### Use the following chart for ordering 8-Path Applicators (c)

Catalog Number	Overall Width Width  3" 2" 4" 3" 5" 4"		Actual Path Depth, Mils	Approx. Film Thickness 1/2, 1, 1-1/2, 2, 2-1/2, 3-1/2, 4 mils	
1 14 15			1, 2, 3, 4, 5, 6, 7, 8 mils		
2 24 25	3" 4" 5"	2" 3" 4"	5, 10, 15, 20, 25, 30, 40, 50	2-1/2, 5, 7-1/2, 10 12-1/2, 15, 20, 25	
3 34 35	3" 4" 5"	2" 3" 4"	1/2, 1, 1-1/2, 2, 3, 4, 5, 6	1/4, 1/2, 3/4, 1 1-1/2, 2,2 -1/2, 3	











#### Sag Meter (a)

Sag Meters produce a series of equally spaced coating stripes of varying thickness. When placed on a vertical surface, the stripes reveal the thickness at which the coating resists sag. Precision Gage & Tool provides meters for all coating thickness ranges; High (14-60 mil), Medium (4-24 mil), Low (1-6 mil), and Standard (3-12 mil). See ASTM D-4400 for proper test procedures.

## Leslie Applicator and Sag Marker (b)

Apply varied width stripes with a thickness of 1-18 mils. Can be used with a Leslie Sag Marker.

### NYPC Leveling Test Blade (c)

The New York Paint Club Leveling Test Blade allows better production analysis through accurate leveling measurements. Its rapid drawdown test method correlates well with brushout ratings, eliminates wetting of the substrate as a variable, provides clearly defined numerical ratings and is completely reproducible from one operator to another. It is not applicable to unpigmented products, textured finished or dark colors. Critical specifications of the test blade are described in ASTM D-2801.

#### **NPIRI Premix Gage (d)**

Proper premixing decreases subsequent roll mill time and labor costs, improves ink batch uniformity and decreases the volume of hang back on the mill. This gage is ideal for plant laboratory personnel in setting up optimum premixing procedures for specific formulations. The NPIRI Premix Gage evaluates premix quality, revealing when the premix is really ready for the mill. Similar to a wet film thickness gage, the Premix Gage is a draw-down blade which deposits wedge-shaped films of premix. The state of dispersion is judged from the number and distribution of scratches in the film. NPIRI Bulletin No. 58, "NIPIRI Premix Gage", contains all instruction and statistical data.

Catalog No. P-12 (0-12 Mils) Catalog No. P-24 (0-24 Mils)





# Notch Spool Test Roller (e)

Critical tool for determining the tendency of a paint to "spatter" when applied with a roller. ASTM D-4707 describes the proper use of the test roller and other apparatus.

## Sealant Slump Flow Test Jig

Needed for laboratory testing for the degree of slump of a sealant when applied to a vertical joint. When used according to ASTM D-22202, reveals slump in .01" increments.







The reliable, easy-to-use NPIRI Production Grindometer measures mill performance to decrease the inkmaker's labor costs, capital investment and power requirements.

The Grindometer consists of a machined block, grooved for sample ink, and an A-1 scraper for draw down. Grooves are one inch wide and 25 microns deep at the top. The tapered paths are graduated from one to ten according to depth, in ten thousandths of an inch increments. The A-1 scraper has two edges which are rounded to a 15 mil radius—rounded edges increase wear life compared to a sharp edge by reducing the effect of operators using varying blade angles. An extra scraper should be kept on hand as a master.

#### Ink Gage Kit (a)

Includes G-1 gage in a wooden case and A-1 scaper in a vinyl case.

#### Wedge Printing Plate (b)

The Wedge Printing Plate is used for quick and easy proof press testing of stocks and inks. It is especially effective in the routing production of standard prints having controlled ink film thickness. Stock ink combinations can be tested for print quality, as well as other performance properties such as gloss, holdout, drying time, varnishability, rub or fade resistance.

The plate consists of precision grooves which are inked with a hand-drawn scraper. Ink is laid down and cleaned up quickly, film thickness is controlled at known levels and variables of roller distribution are eliminated.

Models for variable film thickness produce a continuous range of film thickness in a single impression. Uniform film thickness models are used when testing for a large print area. A multi-path uniform model allows several different levels of uniform film thickness to be proofed simultaneously.

#### Ink Gages

Catalog Number	Block Size	Path Size	No. of Paths	
G-1	3/4 x 3-1/2 x 9-1/2*	1 x 6-1/4"		
G-2	3/4 x 3-1/2 x 9-1/2*	1 x 6-1/4"	2	
G-3	3/4 x 3-1/2 x 9-1/2"	1 x 6-1/4°	2	
SI-1	1/2 x 2-1/2 x 8*	1/2 x 6-1/4"	2	
SI-2	1/2 x 2-1/2 x 8*	1/2 x 6-1/4°	2	
SI-3	1/2 x 2-1/2 x 8°	1/2 x 6-1/4°	2	

Catalog Number	Scales	Range	Usual Application
G-1/SI-I	NPIRI	0-10	General
	Microns	0-25	Ink Gage
G-2/SI-2	NPIRI	0-20	Flexco
	Microns	0-50	Etc.
G-3/SI-3	NPIRI	0-30	Coarser
	Microns	0-75	Inks

#### **Wedge Printing Plates**

Name or Number	Block Size	Path Size	Number of Paths	Scales	Range	Comments
Variable	Film Thickness				34 (44	
NPIRI-A	3-1/2 x 9-1/2"	I x 6-1/4"	2	NPIRI Micron	0-10 0-25	
NPIRI-B	4-1/2 x 9-1/2"	1-1/2 x 6-1/4"	2	Micron Actual Depth	0-12 0-15	Marking at 80% fillag Not marked.
Uniform I	Film Thickness		100		***	
FPBAA-C*	6-1/2 x 4*	1-1/2 x 4*	3	Mils	0.2 0.4 0.6	
6960-1	6-1/2 x 4*	1-1/2 x 4"	3	Mils	0.2 0.3 0.4	
6960-2	6-1/2 x 4°	1-1/2 x 4*	3	Mils	0.5 0.6 0.7	
Warren-2	4 x 6 1/2 or 7-1/2"	3 x 6 1/2 or 7-1/2°	1	Mils	0.3	No marked scale.
Warren-3	4 x 6 1/2 or 7-1/2"	3 x 6-1/2 or 7-1/2"	1	Mils	0.4	No marked scale.
Warren-4	4 x 6 1/2 or 7-1/2*	3 x 6-1/2 or 7-1/2"	1	Mils	0.5	No marked scale.
Warren-5	4 x 6 1/2 or 7-1/2"	3 x 6-1/2 or 7-1/2"	1	Mils	0.6	No marked scale.
Lindner	5 1/2 x 8 or 6-1/2"	2 x 8 or 6-1/2"	2	Microns	15	No marked scale.
BSI-10	5 1/2 x 8 or 6-1/2*	2 x 8 or 6-1/2*	2	Microns	10	No marked scale.
Combina	tion Uniform and	Variable Film	Thickness			
6401	5 1/2 x 8	2 x 8" 2 x 6-1/4"	2	Microns	15 0-15	No marked scale. Graduated micron scale marked

Note: All models are type high, .916/.918" thickness.

<sup>\*</sup> Each path has a uniform film thickness, but the thickness is different in each path. Any other combinations may be ordered.



