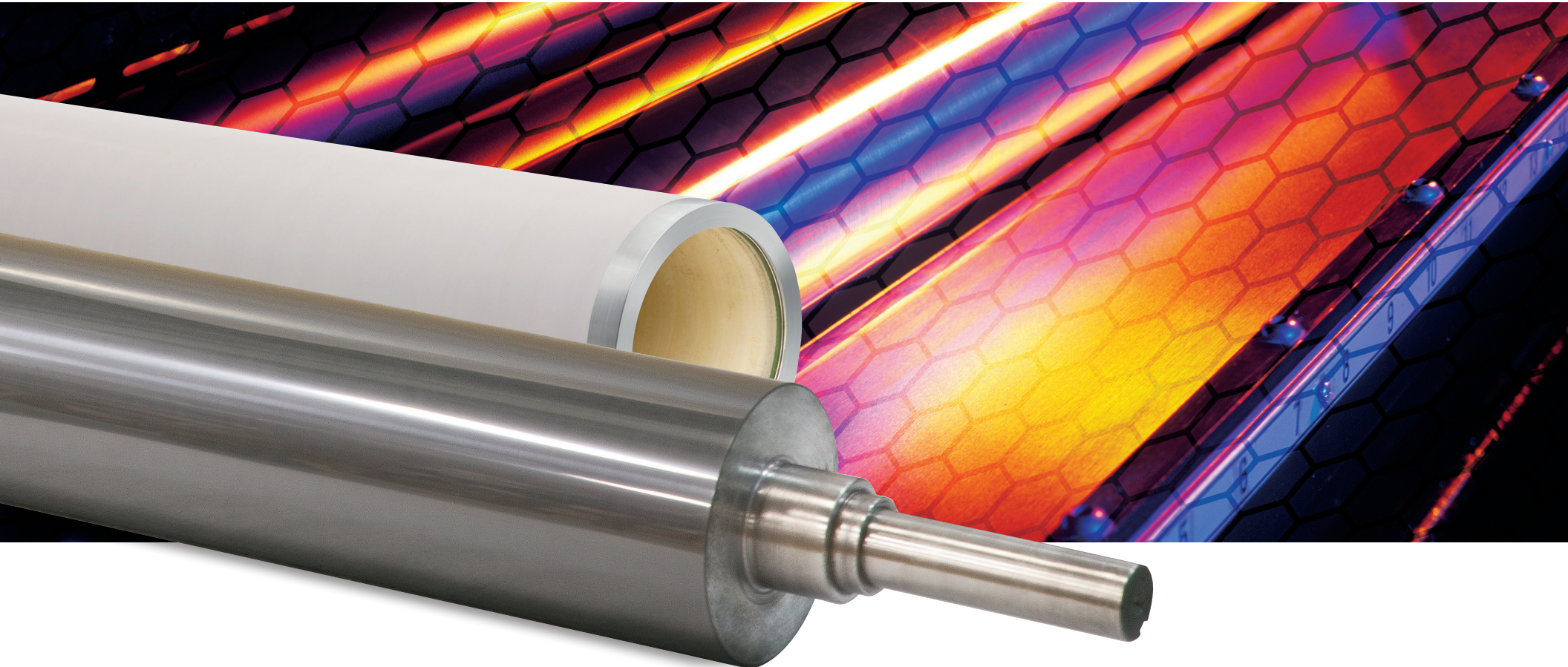


# Laser-Engraving Anilox Rolls and Sleeves | Selection Guide



A Linde company

 **PRAXAIR**  
SURFACE TECHNOLOGIES



# Screen Selection Guide | Metric

What to print		METRIC Cm <sup>3</sup> /m <sup>2</sup>																								
		Varnish					Heavy solids					Lines, work & Text					Degradation Halftones					Four - Seven color Process				
Plate screen <b>L/cm</b>	5% dot			18	22	28	38	48	54	59	69	80														
	4% dot				18	20	26	34	38	42	48	54	59	69	80											
	3% dot					18	20	26	28	34	38	42	48	54	59	69	80									
	2% dot						18	20	22	28	34	38	42	48	59	69	80									
	1% dot							18	20	22	26	28	34	42	48	54	59	69	80							
Anilox Screen	<b>L/cm</b>	20	40	50	60	80	100	120	140	160	180	200	220	240	260	280	320	360	420	480	520	600				
Nova	NOVA MAX	120.0	60.0	48.0	40.0	32.5	26.0	21.5	18.5	16.5	14.5	13.0	12.0	11.0	10.0	9.5	8.0	7.0	6.5	6.0	5.5	4.5				
60°	MAX	100.0	50.0	40.0	33.5	25.0	20.0	16.5	14.5	12.5	11.0	10.0	9.0	8.5	7.5	7.0	6.0	5.0	4.0	3.5	3.5	3.0				
60° Optimum RATIO	33%	61.0	30.5	24.5	20.5	15.5	12.0	10.0	8.5	7.5	7.0	6.0	5.5	5.0	4.5	4.5	4.0	3.5	3.0	2.5	2.5	2.0				
	23%	42.5	21.5	17.0	14.0	10.5	8.5	7.0	6.0	5.5	4.5	4.5	4.0	3.5	3.5	3.0	2.5	2.5	2.0	2.0	1.5	1.5				
60°	MIN	22.5	11.5	9.0	7.5	5.5	4.5	4.0	3.0	3.0	2.5	2.5	2.0	2.0	1.5	1.5	1.5	1.5	1.0	1.0	1.0	1.0				
Nova	MIN	40.5	20.5	16.5	13.5	11.5	9.0	7.5	6.5	5.5	5.0	4.5	4.0	4.0	3.5	3.0	3.0	2.5	2.0	2.0	1.5	1.5				
Market segment	Corrugated	ARTGold																								
	Label	ARTGold					NovaSilver					60° ISF										Nova UVG				
	Flexo	ARTGold					60° SLR										Nova Gold									
	Coating /Varnish Offset /Adhesive	ARTGold - TIFFGold																								
	Tactile varnish	ARTGold																								

# Screen Selection Guide | Imperial

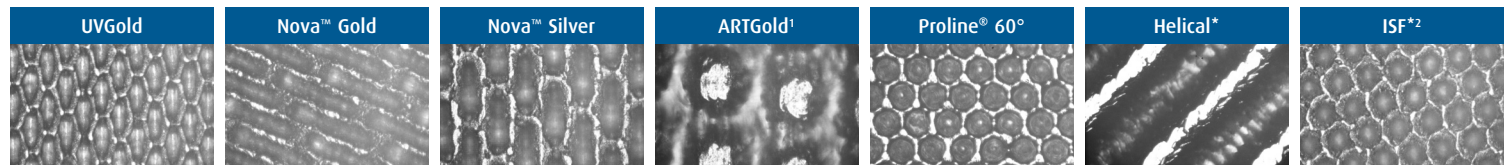
What to print		IMPERIAL BCM																								
		Varnish					Heavy solids					Lines, work & Text					Degradation Halftones					Four - Seven color Process				
Plate screen <b>Lpi</b>	5% dot			45	55	70	100	120	140	150	175	200														
	4% dot				45	50	65	85	100	110	120	140	150	175	200											
	3% dot					45	50	65	70	85	100	110	120	140	150	175	200									
	2% dot						45	50	55	70	85	100	110	120	150	175	200									
	1% dot							45	50	55	65	70	85	100	110	120	140	150	175	200						
Anilox Screen	<b>Lpi</b>	50	100	130	150	200	250	300	360	400	460	510	560	610	660	710	810	910	1070	1220	1320	1520				
Nova	NOVA MAX	77.5	38.7	31.0	25.8	21.0	16.8	13.9	11.9	10.7	9.4	8.4	7.7	7.1	6.5	6.1	5.2	4.5	4.2	3.9	3.6	2.9				
60°	MAX	64.6	32.3	25.8	21.6	16.1	12.9	10.7	9.4	8.1	7.1	6.5	5.8	5.5	4.8	4.5	3.9	3.2	2.6	2.3	2.3	1.9				
60° Optimum RATIO	33%	39.4	19.7	15.8	13.2	10.0	7.7	6.5	5.5	4.8	4.5	3.9	3.6	3.2	2.9	2.9	2.6	2.3	1.9	1.6	1.6	1.3				
	23%	27.4	13.9	11.0	9.0	6.8	5.5	4.5	3.9	3.6	2.9	2.9	2.6	2.3	2.3	1.9	1.6	1.6	1.3	1.3	1.0	1.0				
60°	MIN	14.5	7.4	5.8	4.8	3.6	2.9	2.6	1.9	1.9	1.6	1.6	1.3	1.3	1.0	1.0	1.0	1.0	0.6	0.6	0.6	0.6				
Nova	MIN	26.1	13.2	10.7	8.7	7.4	5.8	4.8	4.2	3.6	3.2	2.9	2.6	2.6	2.3	1.9	1.9	1.6	1.3	1.3	1.0	1.0				
Market segment	Corrugated	ARTGold																								
	Label	ARTGold					NovaSilver					60° ISF										Nova UVG				
	Flexo	ARTGold					60° SLR										Nova Gold									
	Coating /Varnish Offset /Adhesive	ARTGold - TIFFGold																								
	Tactile varnish	ARTGold																								

## Correct Handling

- Care should be taken when handling anilox rolls.
- Never rest the roll or sleeve on its surface, this can damage the engraved surface and cause defects in print.
- Always support the roll/sleeve from the journals.
- A sleeve should be loaded in a straight horizontal line, without forcing the sleeve up and down. Only twisting or spinning the sleeve on the mandrel is allowed.
- Avoid hard impact on the back stop to prevent chipping of the ceramic.
- Cover the Anilox roll body with a roll wrap, foam covering, or fluted card board to protect the engraved surface from being damaged by impact against a hard surface such as the machine frame. Chipped ceramic on the dead band areas of the roll can eventually lead to inks and solvent leaching under the ceramic.
- Store rollers safely in crate or rack.
- Keep rollers covered with protective covers, foam or fluted cardboard to avoid damage and dust.
- Do not use a protective cover on a wet Anilox Roller.
- Sleeves are a highly technical, advanced and delicate product that need to be handled very carefully. All sudden impact and high local pressure can cause problems with TIR or fitting.
- Do not use chlorine, ammonia or 100% acidic as cleaning liquids. These chemicals will attack the ceramic layer and cause corrosion.

# Print with Confidence | Engraving Solutions

## Long-life Precision with Praxair Laser-engraved Anilox Rolls.



- UVGold**
  - Ideal for UV ink use, including aluminum, film and paper packaging
  - Delivers high-quality, high-resolution printing with minimized ink spitting
  - Achieves density with a 20% to 30% shallower engraving depth for improved ink release
- Nova™ Gold**
  - Ideal for High-definition flexible, paper and corrugated packaging, processing printing
  - Provides greater transfer rate and higher achievable volumes for screen counts
  - Improves ink transfer and cleaning with a 20% shallower engraving depth
- Nova™ Silver**
  - For solid, screens and text high-density printing
  - Ideal for flexo printing of flexible, paper and high-quality corrugated packaging
  - Reaches higher densities with minimal dot penalty gain
- ARTGold¹**
  - For demanding coatings, specialty materials and varnish applications
  - Smooth solids coverage, improves gloss and produces less pinholing
  - Lays down adhesives, metallic, water-based and UV coatings, and white and heavy ink coverage
- Proline® 60°**
  - Most popular pattern in use today
  - Transfer ink to the plate easily and produces uniform cell structure
  - Suppresses moiré effects in screen and process work (angle doesn't interfere with the plate angle)
- Helical\***
  - Open cell structure offers better ink release for gravure and coater applications
  - Optimizes high viscosity materials
  - Achieves high volume capacity-50+ BCMs
- ISF\*²**
  - Minimizes spitting of UV or high viscosity inks

## Applications

Applicators (Coating, Laminating)	+			+++	+	+++	++
Corrugated (Post-print)		+	+++			++	
Corrugated (Pre-print)		++	+++	++/+ Varnish		+++	
Envelope		++	+++	+/+ Lint		+++	
Flexible Packaging	+++	+++	+	+		+++	
Folding Carton	++	+++	++	++			++
Liquid Carton/Aseptic Packaging	++	+++		++		+++	
Metal Decorating	++			+++	+	+	++
Newspaper			+			+++	
Printed electronics	++/+++			+++		+	+
Publications				+++ /+++ Varnish	+	+	+
Single Use (Tissue, Towel, Cups)			++			+++	
Tag and Label	+++		+	+ /++ Coating	+++		+++
Wallcoverings		++			++	+	

+ = Good ++ = Better +++ = Best

<sup>1</sup>Anilox Reverse Technology

<sup>2</sup>Ink Spitting Free

\*Not available in the U.S.



Making our world more productive

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