

LFP INK SYSTEMS



TECHNICAL INK
BOOKLET

durst



DURST. ADVANCED DIGITAL PRINTING AND PRODUCTION TECHNOLOGY

Durst is a world-leading manufacturer of advanced digital production technologies. In the active business areas, Durst is the first choice and a preferred partner for the transformation and digitization of industrial production processes. Durst is a family company with an 80-year history, where the values are focused on innovation, customer orientation, sustainability and quality.

- > 80 years experience
- > Innovation
- > Sustainability
- > Quality



Durst location in Brixen, Italy



Durst location in Lienz, Austria

LFP FLATBED AND LFP ROLL-TO-ROLL INKS

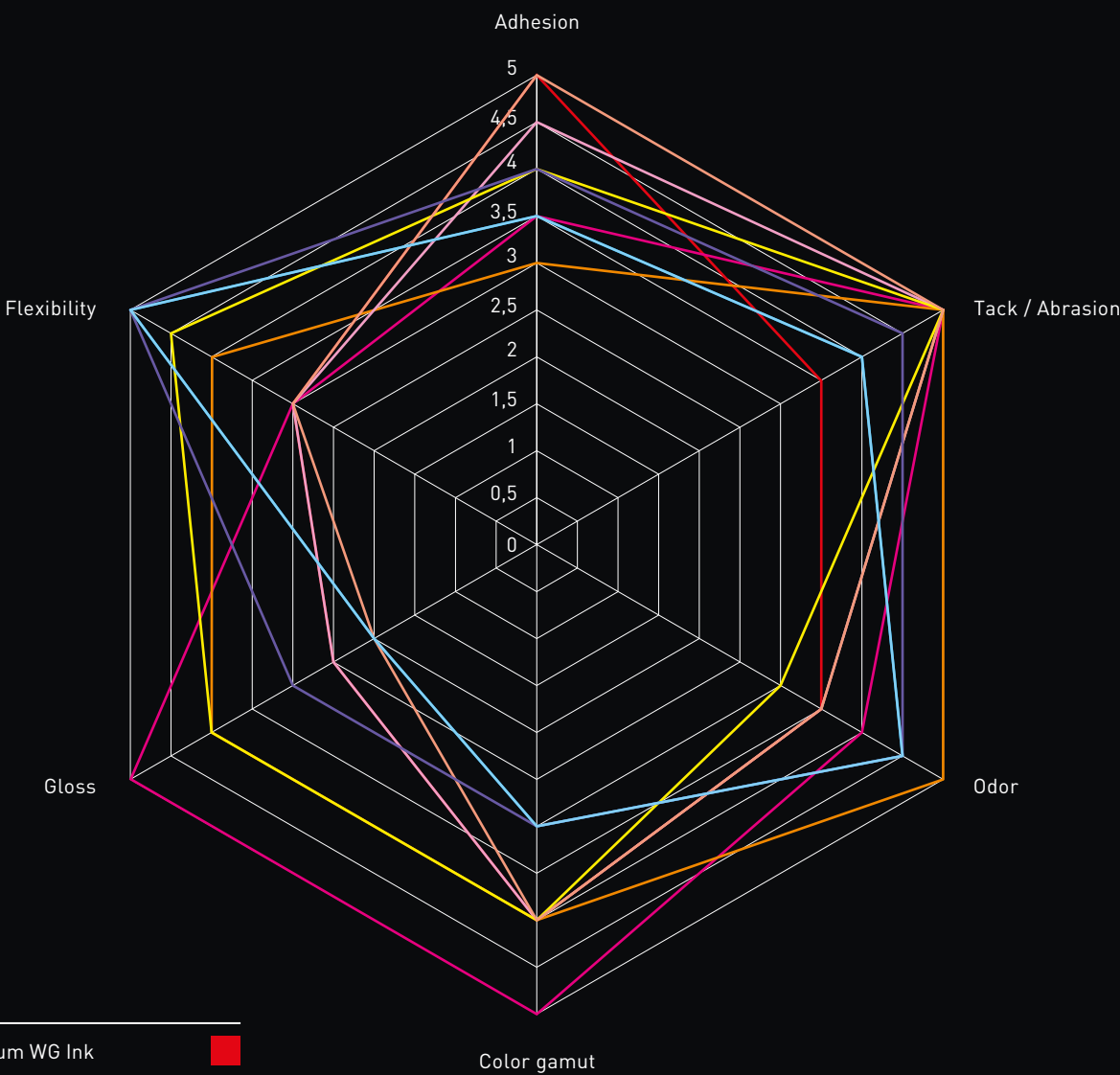
This brochure gives an overview of the current LFP ink portfolio of Durst. On the following pages, typical areas of application, color gamuts and performance characteristics are summarized.

The Durst ink portfolio is as versatile as the jobs of our customers. For fulfilling your demands, flatbed and roll-to-roll inks are provided tailored towards the particular needs of the corresponding applications.

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DURST LFP INK SYSTEMS AT A GLANCE

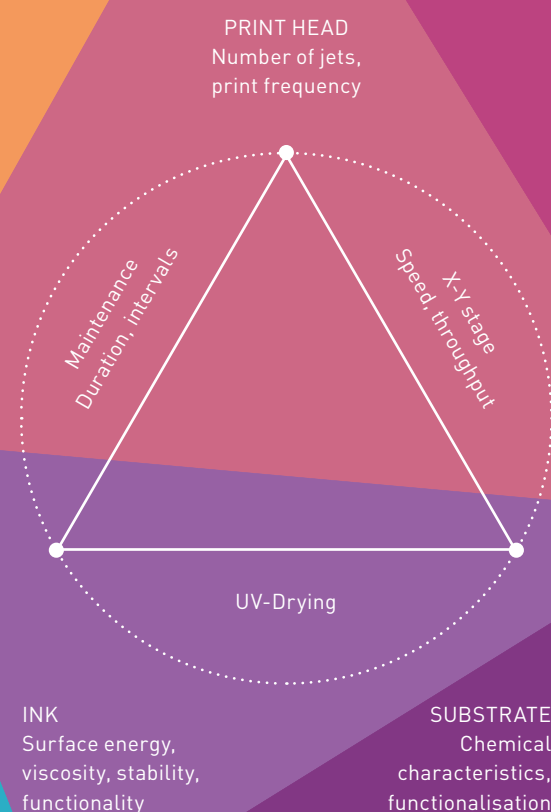


Rho/P5 Premium WG Ink	
Rho/P5 POP HS Ink	
Rho Paper and Board 30 DM Ink	
Rho POP Rigid Ink	
Rho POP Flexible Ink	
Durst Rigid LED Ink	
Rho Roll 30 DM	
Rho Roll FLT Ink	
Durst Roll DM LED Ink	

DURST INK TECHNOLOGIES

In accordance with Durst's quality, productivity and environmental standards, the company's ink portfolio comprises various UV ink systems matched to our clients needs. Maximum print quality, uptime, and productivity with minimum ink consumption are the result of the continuous and systematic development of the core competencies in mechanical engineering as well as in ink and print-head technology in Durst's innovation center.

This 'magical triangle of inkjet technology' is a holistic approach aimed at providing inks for a wide range of different end uses.



LFP FLATBED INKS — UV-CURING, VOC-FREE INKS

Durst offers VOC-free UV ink systems for a wide range of flatbed applications. Durst's development approach, including in-house application and weathering tests, ensures maximum system stability.

All ink systems and production batches are continuously monitored under the strictest laboratory conditions in order to provide optimum performance for users.

- > Large color space
- > High system stability
- > Broad application diversity
- > Low ink consumption
- > Certification 'Greenguard gold'

RH0/P5 PREMIUM WG INK

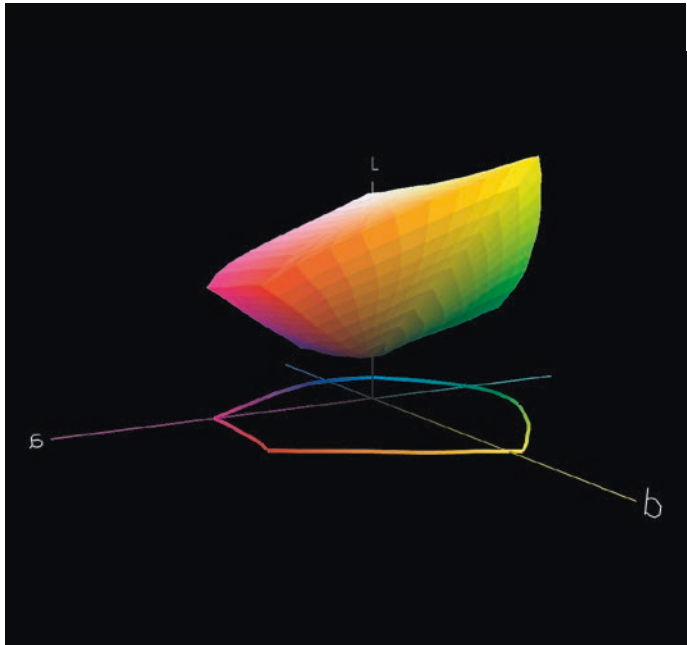
The universal ink set is ideally suited for finishing a large number of different types of flatbed and roll media. Besides standard materials such as paper or PVC, this ink is particularly suitable for media requiring high ink adhesion such as acrylic, polycarbonate, and polypropylene.

AREAS OF APPLICATION

- > Paper
- > Banner
- > Pressure sensitive (self-adhesive foil)
- > Fabrics
- > Plastic hard foam board (e.g. Forex, Sintra)
- > Soft foam board (e.g. Kapa)
- > Folding carton
- > Corrugated boards
- > Metals (e.g. Alcan Dibond)
- > Acrylic
- > Polycarbonate
- > Polypropylene
- > Rigid PVC
- > Styrene

Standard	
CMYK	<div><div></div><div></div><div></div><div></div></div>
Light Cyan	<div><div></div></div>
Light Magenta	<div><div></div></div>
White	<div><div></div></div>
Addition of Orange, Violet and Green is possible in combination with other ink families.	

COLOR GAMUT



Color gamut measured on Gardamatt with a P5.

RH0/P5 POP HS INK

Rho/P5 POP HS was specially developed to produce high print volume cost-efficiently. This high-gloss ink makes it possible to eliminate additional finishing processes such as high-gloss lamination, making the overall production process more efficient.

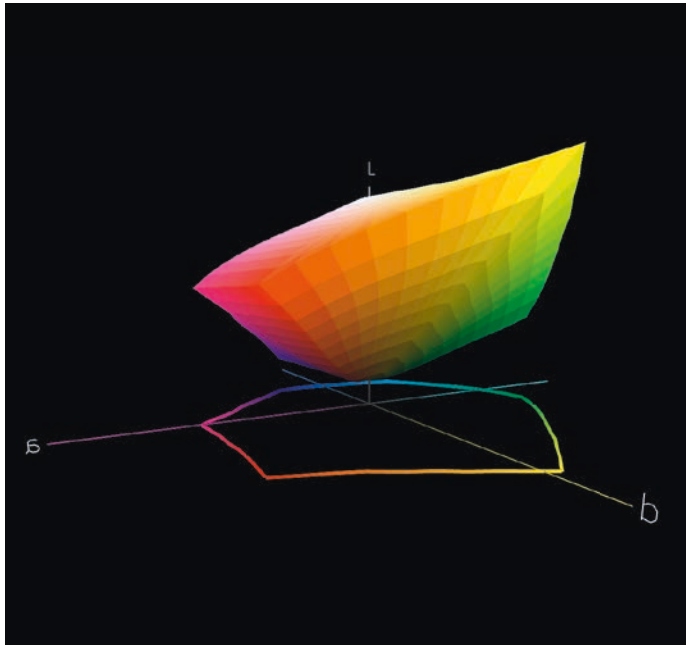
POP HS ink is a very versatile ink that is suitable for printing on paper surfaces as well as on Forex, dibond, and styrene. The particularly large color space and the gloss finish make this ink suitable for a broad range of applications.

AREAS OF APPLICATION

- > Plastic hard foam board (e.g. Forex, Sintra)
- > Soft foam board (e.g. Kapa)
- > Folding carton
- > Corrugated boards
- > Metals (e.g. Alcan Dibond)
- > Polystyrene

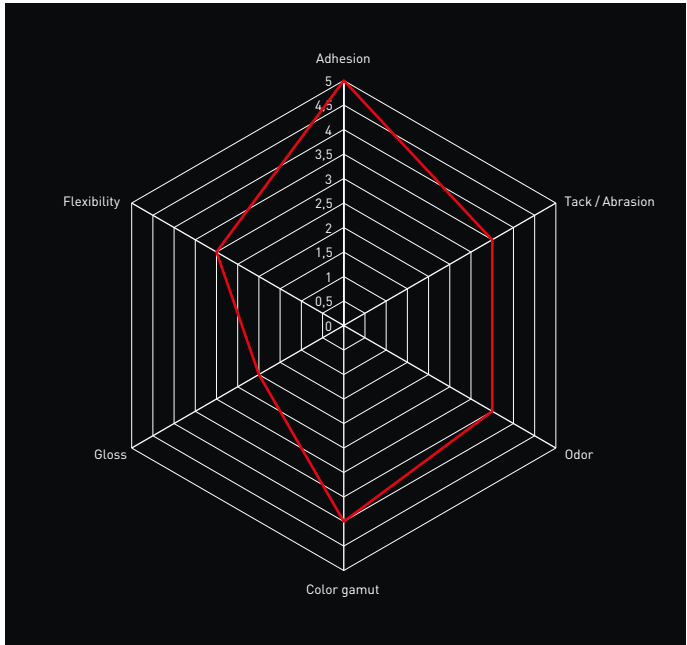
Standard	
CMYK	<div><div></div><div></div><div></div><div></div></div>
Light Cyan	<div><div></div></div>
Light Magenta	<div><div></div></div>
Addition of White, Orange, Violet and Green is possible in combination with other ink families.	

COLOR GAMUT

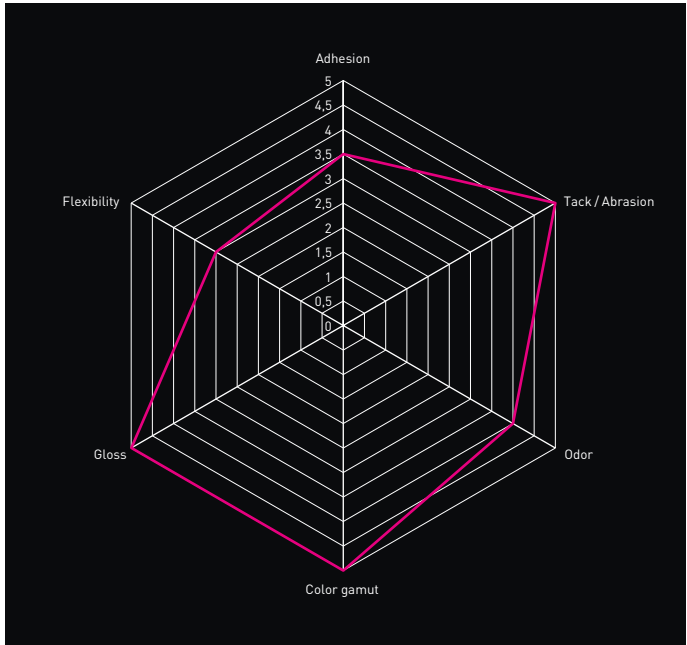


Color gamut measured on Gardamatt with a P5.

INK PERFORMANCE



INK PERFORMANCE



RHO PAPER AND BOARD 30 DM INK

This ink was developed for inexpensive and odor-reduced printing on paper surfaces, corrugated displays, posters, and packaging. It has been optimized with regard to application specific criteria to allow, for example, 360-degree bending when post-processing paper surfaces.

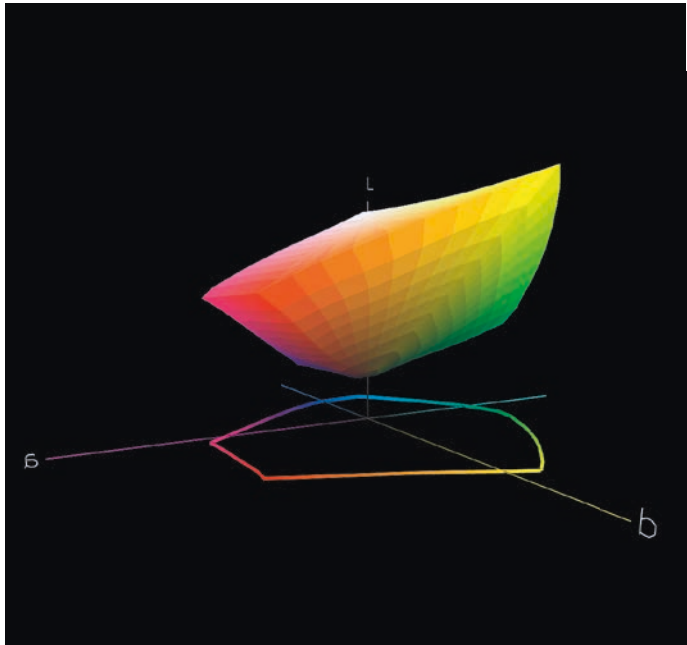
This paper and board ink was specially developed for printing on paper surfaces. It is a particularly cost-efficient solution for all producers of displays and other paper applications. The ink is suitable for printing on coated and semi-coated paper as well as uncoated, absorbent paper surfaces. Its hard surface allows it to be stacked easily and further processed without abrasion.

AREAS OF APPLICATION

- > Plastic hard foam board (e.g. Forex, Sintra)
- > Soft foam boards (e.g. Kapa)
- > Folding carton
- > Corrugated boards

Standard	
CMYK	<div><div></div><div></div><div></div><div></div></div>
Light Cyan	<div><div></div></div>
Light Magenta	<div><div></div></div>
Addition of White, Orange, Violet and Green is possible in combination with other ink families.	

COLOR GAMUT



Color gamut measured on Gardamatt with a Rho P10 250 HS.

RHO POP RIGID INK

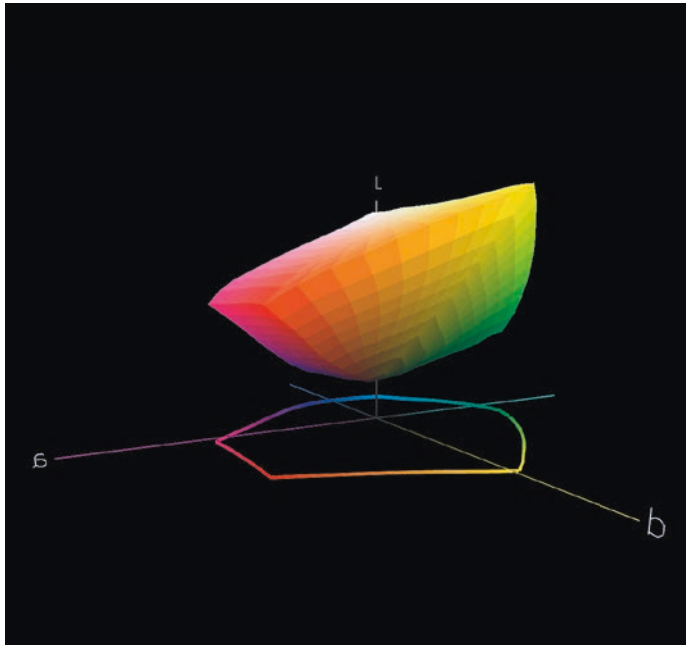
Rho POP Rigid ink is designed for high volume printers such as the Rho 1300 series where adhesion onto acrylic, polycarbonate and polypropylene is required.

AREAS OF APPLICATION

- > Paper
- > Banner
- > Pressure sensitive (self-adhesive vinyl)
- > Fabrics
- > Plastic hard foam board (e.g. Forex, Sintra)
- > Soft foam boards (e.g. Kapa)
- > Folding carton
- > Corrugated boards
- > Metals (e.g. Alcan Dibond)
- > Acrylic
- > Polycarbonate
- > Polypropylene
- > Rigid PVC
- > Styrene

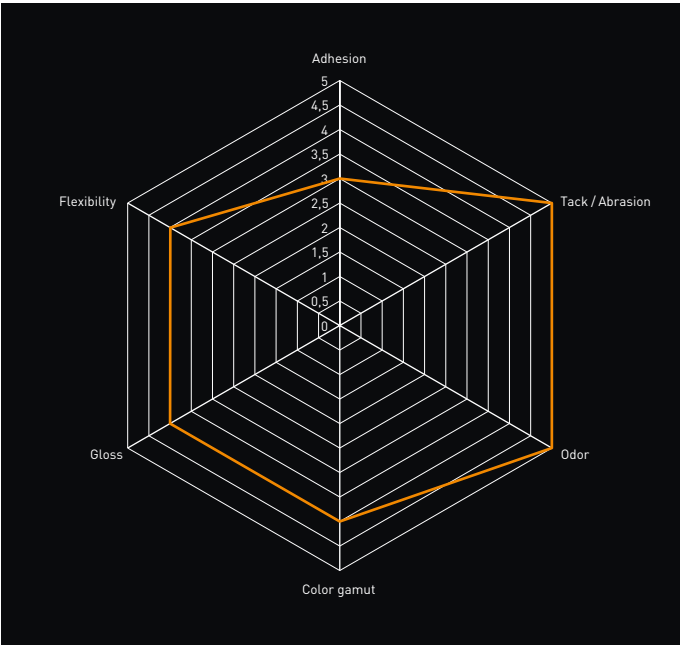
Standard	
CMYK	<div><div></div><div></div><div></div><div></div></div>
Light Cyan	<div><div></div></div>
Light Magenta	<div><div></div></div>
Addition of White, Orange, Violet and Green is possible in combination with other ink families.	

COLOR GAMUT

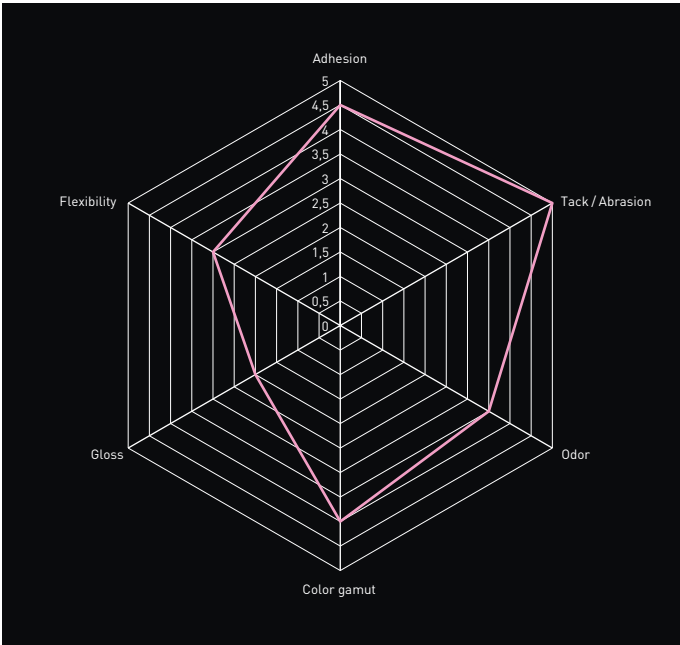


Color gamut measured on Gardamatt with a Rho P10 250 HS.

INK PERFORMANCE



INK PERFORMANCE



RHO POP FLEXIBLE INK

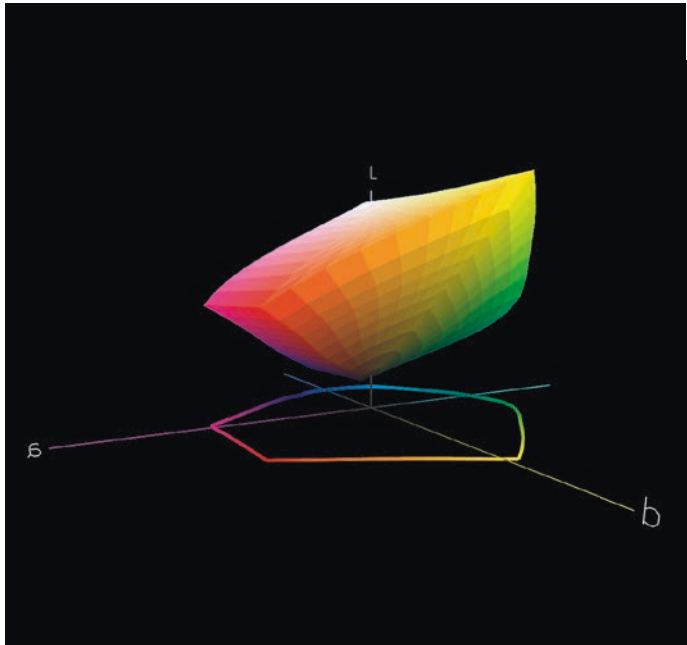
Rho POP Flexible ink is compatible with all Durst flat-bed-printers and is suitable for a wide range of materials. While keeping a sufficient level of flexibility for flatbed printers the ink set has a very low tack level.

AREAS OF APPLICATION

- > Paper (Cardstock)
- > Banner
- > Pressure Sensitive (Self-adhesive foil)
- > Fabrics
- > Plastic hard foam board (e.g. Forex, Sintra)
- > Soft foam board (e.g. Kapa)
- > Folding carton
- > Corrugated boards
- > Polypropylene
- > Rigid PVC
- > Styrene

Standard	
CMYK	<div><div></div><div></div><div></div><div></div></div>
Light Cyan	<div><div></div></div>
Light Magenta	<div><div></div></div>
Addition of White, Orange, Violet and Green is possible in combination with other ink families.	

COLOR GAMUT



Color gamut measured on Gardamatt with a Rho P10 250 HS.

DURST RIGID LED INK

Durst Rigid LED Ink is designed for typical Flatbed applications such as printing on papers, plastic hard foam boards (e.g. Forex), soft foam boards (e.g. Kapa), folding carton, corrugated boards, coated metals (e.g. Alcan Dibond), acrylics, polycarbonate, polypropylenes, rigid PVCs and styrenes. This ink set provides excellent surface resistance, stackability and low tack on rigid media, while closely resembling the established performance characteristics of conventional Durst Premium WG Ink concerning adhesion or color gamut.

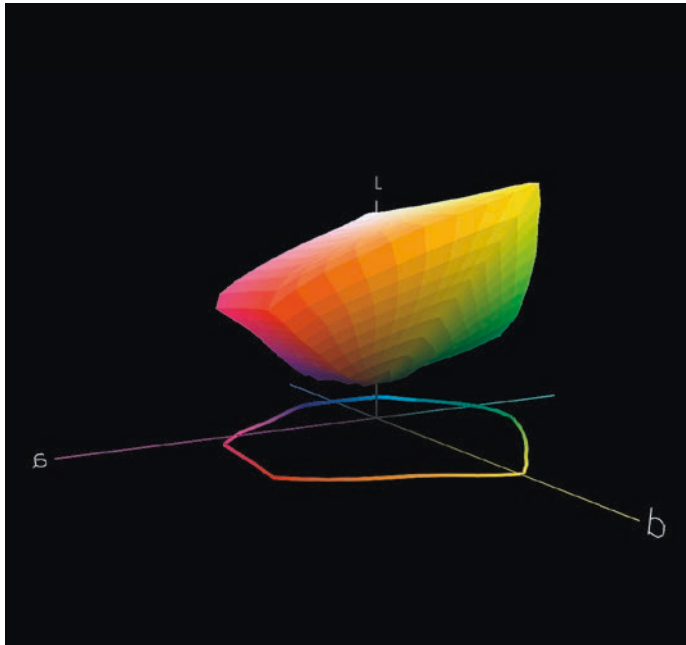
Durst Rigid LED Ink is also suitable for printing on thermo-sensitive media, is fully LED cured even in high speed printing modes without inertization and permits capturing the advantages of LED technology in terms of reduced machine energy consumption and no ozone formation.

Standard	
CMYK	<div><div></div><div></div><div></div><div></div></div>
Light Cyan	<div><div></div></div>
Light Magenta	<div><div></div></div>
White	<div><div></div></div>

AREAS OF APPLICATION

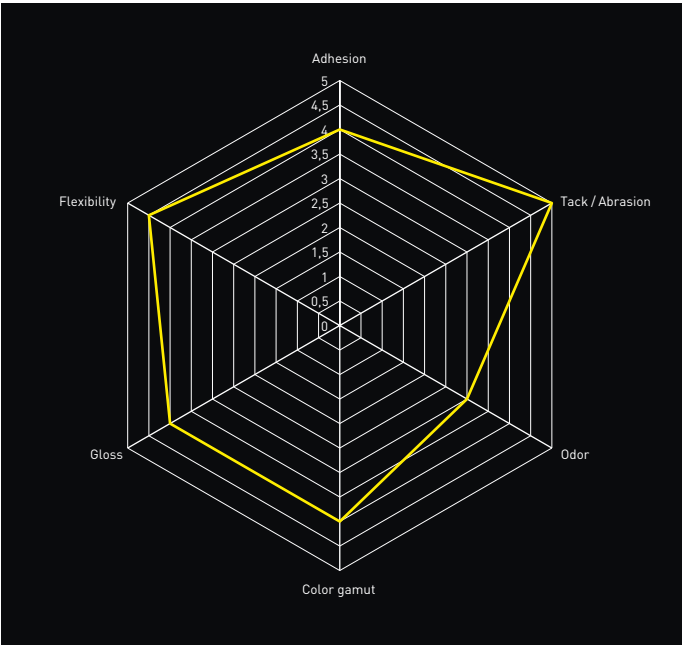
- > Paper
- > Banner
- > Pressure sensitive (Self-adhesive vinyl)
- > Fabrics
- > Plastic hard foam board (e.g. Forex, Sintra)
- > Soft foam boards (e.g. Kapa)
- > Folding carton
- > Corrugated boards
- > Metals (e.g. Alcan Dibond)

COLOR GAMUT

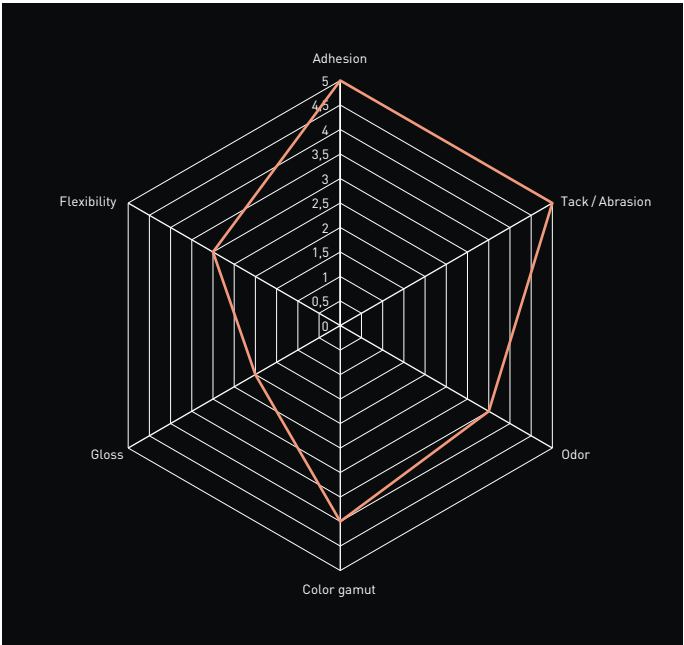


Color gamut measured on Gardamatt with a Rho P10 HS LED.

INK PERFORMANCE



INK PERFORMANCE



LFP ROLL-TO-ROLL — UV-CURING, VOC-FREE INKS

Durst offers several sets of VOC-free UV inks for all applications on roll material that deliver impressive flexibility, excellent adhesive characteristics, and a large color space. The use of light colors together with white and additional process colors provide a broad tonal range.

The sets of ink are ‘Greenguard gold’ certified and deliver an exceptional level of color brilliance combined with low consumption thanks to their high degree of pigmentation.

- > Certification ‘Greenguard gold’
- > Low ink consumption
- > Flexibility
- > Process and spot colors
- > Large color space

RHO ROLL 30 DM

This ink is the most economical solution for flexible media printed on Rho roll-to-roll presses such as the Rho 512R Plus or the Rho 312R Plus.

AREAS OF APPLICATION

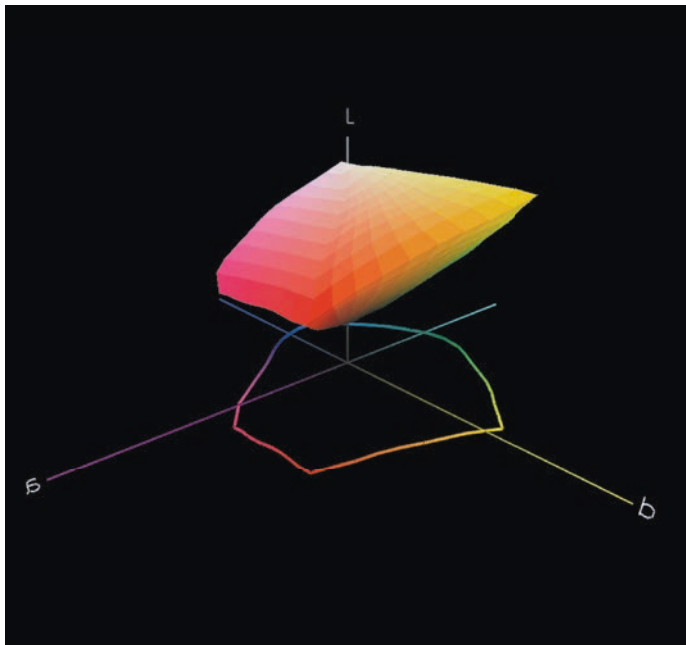
- > Blackback textiles
- > Banner
- > Self-adhesive vinyl
- > Fabrics
- > Clear film
- > Canvas

Standard

CMYK	
Light Cyan	
Light Magenta	
Light Black	
White	

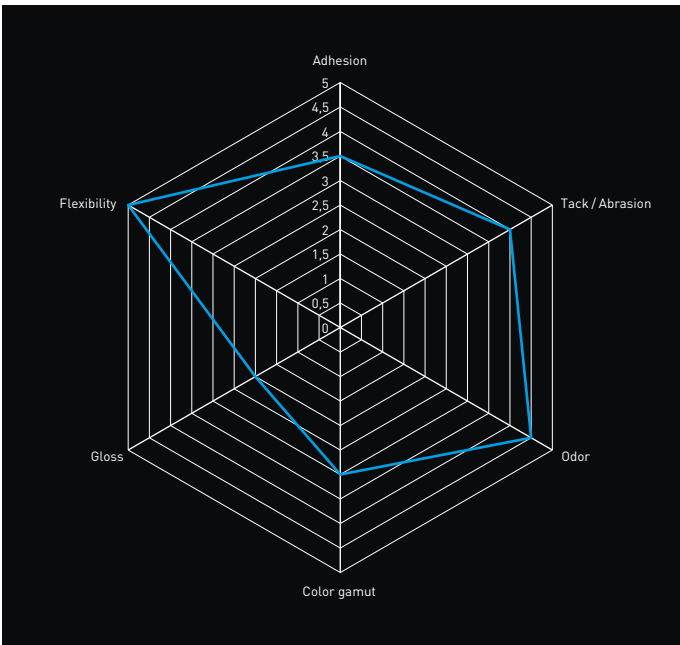
Addition of Orange, Violet and Green is possible in combination with other ink families.

COLOR GAMUT



Color gamut measured on Blueback Paper GIV 115 g Lenzing with a Rho 512R Plus.

INK PERFORMANCE



RHO ROLL FLT INK

The flexible, low-tack ink is compatible with all Durst roll-to-roll printers and is suitable for a wide range of materials. This includes self-adhesive substrates, backlit materials, transparent films, paper, and PVC.

AREAS OF APPLICATION

- > Blackback textiles
- > Pearl textile
- > Banner
- > Self-adhesive vinyl
- > Clear film
- > Fabrics

Standard	
CMYK	<div><div></div><div></div><div></div><div></div></div>
Light Cyan	<div><div></div></div>
Light Magenta	<div><div></div></div>
Light Black	<div><div></div></div>
White	<div><div></div></div>
Addition of Orange, Violet and Green is possible in combination with other ink families.	

DURST ROLL DM LED INK

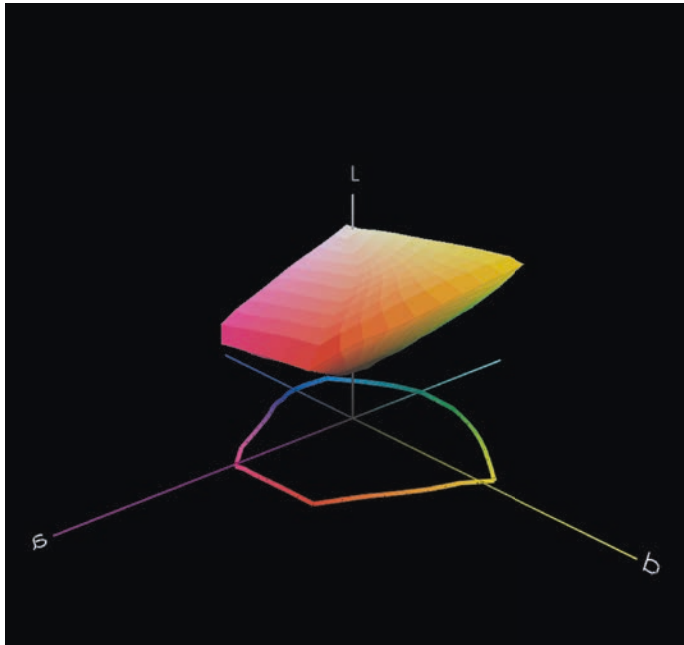
Durst Roll LED Ink is designed for typical Roll-to-Roll applications such as banners, blackback textiles, self-adhesive vinyls, fabrics, clear films and canvases. Optimized for utilization in Durst Rho 312/512 LED machines, this ink set fully resembles the performance characteristics of conventional Durst Roll Inks in terms of flexibility, adhesion, color gamut or gloss. In addition to these established performance characteristics, Durst Roll LED Ink is suitable for printing on thin and thermosensitive media, is fully LED cured even in high speed printing modes without inertization and permits capturing the advantages of LED technology in terms of reduced machine energy consumption and no ozone formation.

Standard	
CMYK	<div><div></div><div></div><div></div><div></div></div>
Light Cyan	<div><div></div></div>
Light Magenta	<div><div></div></div>
White	<div><div></div></div>

AREAS OF APPLICATION

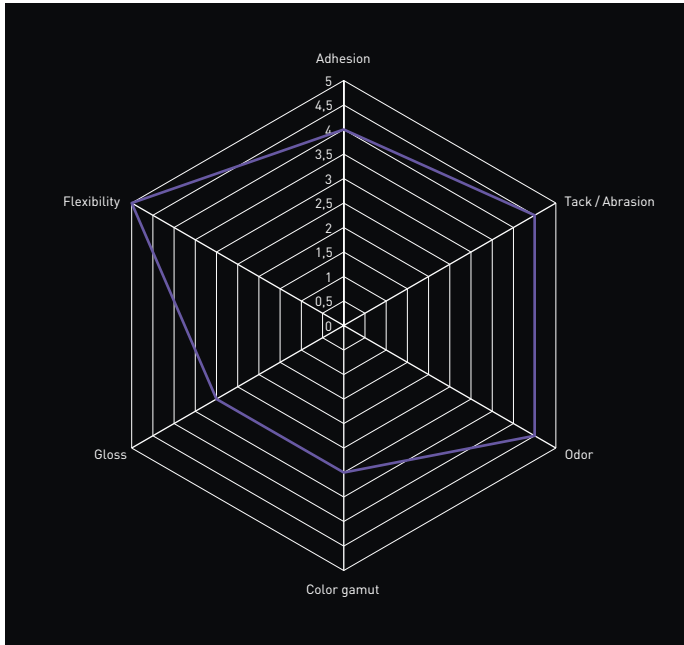
- > Blackback textiles
- > Banner
- > Self-adhesive vinyl
- > Fabrics
- > Clear film
- > Canvas

COLOR GAMUT

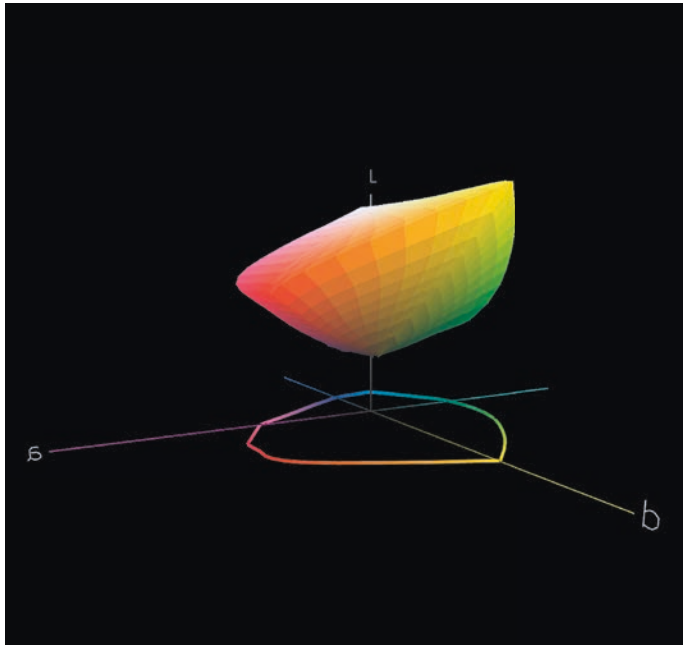


Color gamut measured on Chantaffiche 250JE 115 g Blueback Paper Ahlstrom with a Rho 512R Plus.

INK PERFORMANCE

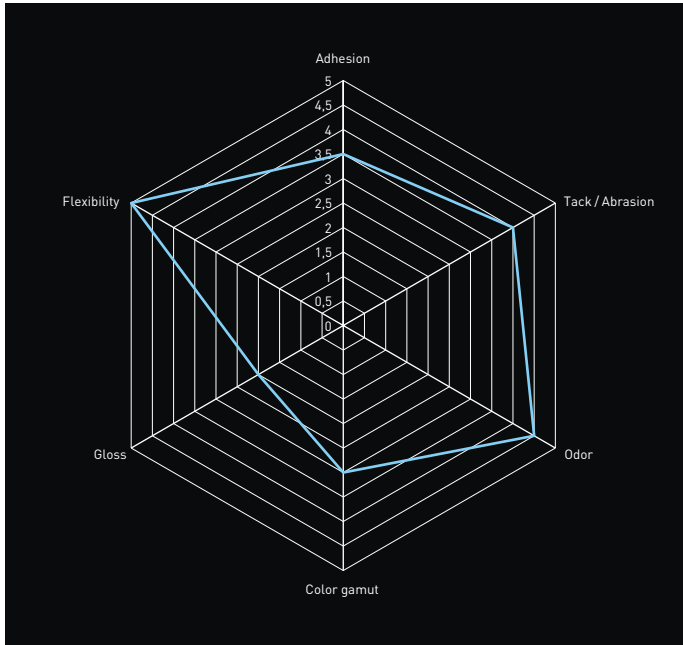


COLOR GAMUT



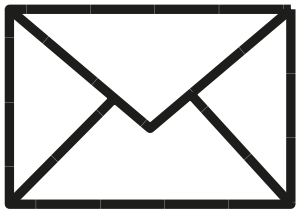
Color gamut measured on Tom & Otto Silk Paper 170 g Antalıs with a Rho 512R LED.

INK PERFORMANCE



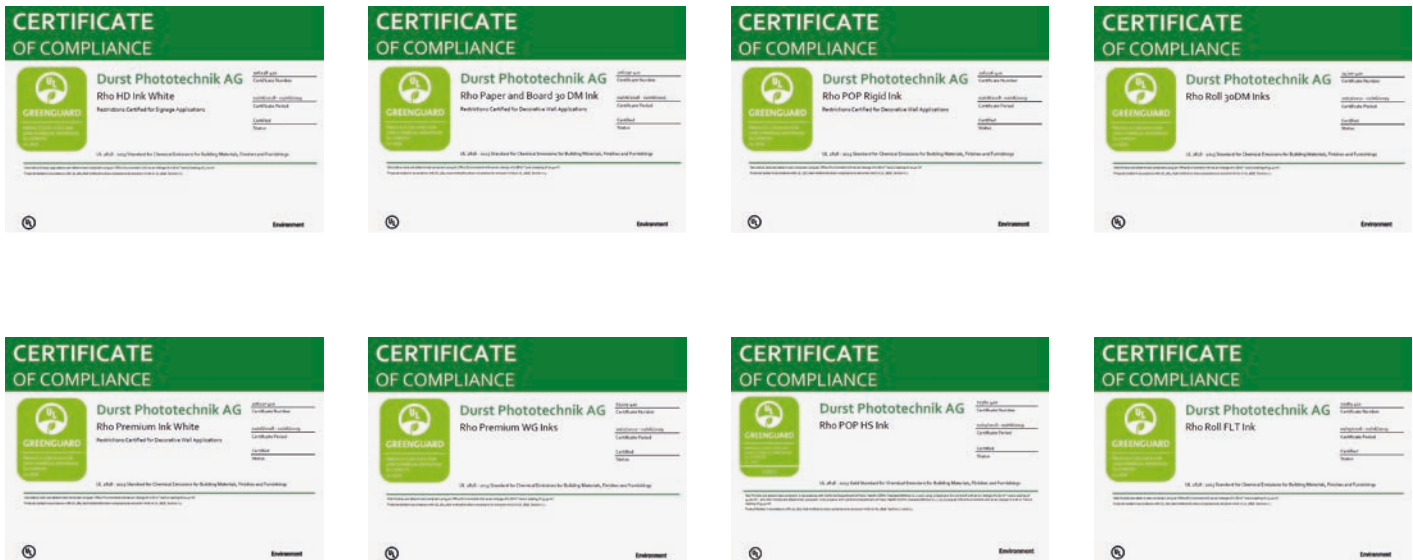
DURST QUALITY STANDARDS

Inks are a key factor for a successful and stable production. For Durst it is essential to have control and traceability about the ink manufacturing and testing phases to ensure that the high quality level of inks is maintained during the whole life cycle of the printer. Retain samples of each ink production batch are checked and kept throughout the shelf-life in Durst's quality and research center in Lienz, Austria. External and independent test institutes are testing the conformity of our inks according to different requested market certifications. All this effort ensures that our customers receive continuously high quality inks to produce high value prints.



Further certificates and self-declarations are available upon request from office@durst-group.com

SELECTED CERTIFICATES



DURST UV LFP INKS — SELECTED TECHNICAL STATEMENTS

REACH	VOC	SVHC
COMPLIANT	NONE	NONE
RoHS	Phthalates	MOSH
COMPLIANT	NONE	NONE
MOAH	94/62/EG heavy metal	EuPIA exclusion list
NONE	NONE	COMPLIANT
	Blue wool rating (approximately, depending on color and ink set)	
	UP TO 7-8	

The herein presented technical data summarizes selected ink characteristics, performance results and compliance statements. For further information and additional test results, please contact your local sales representative or Durst product management team.

durst-group.com/inks



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