



PASSION FOR
DIGITAL PRINTING

Innovating in creativity,
quality and sustainability





/ How do we **bring** creativity, quality and sustainability to **state-of-the-art** **digital printing?**

CREATING SUSTAINABLE SOLUTIONS

At Archroma, we continuously challenge the status quo in the deep belief that we can make our industry sustainable.

Archroma is committed to developing innovative products and processes that are safer for the consumer and for the environment. We strongly believe, based on our extensive experience in textile processing, that sustainability can generate innovation, performance and can even lead to cost reductions and added value for our customers. For this reason, our clear ambition is to offer our customers the best possible system solution in their textile segments.

Innovation is a core competence of Archroma, which ensures that our products and services meet future demands, foster future technologies and contribute to a more sustainable textile industry.

As a global leader in color and specialty chemicals with a trusted heritage, we offer bespoke product solution systems and innovations. We strive to be a reliable partner for textile mills as well as major retailers and brands for the whole textile chain – **from the first idea creation to the final article.**

Brand owners and retailers around the world are taking action to evaluate the environmental impact of textile treatment, dyeing and finishing processes in response to consumer concerns. We can help textile manufacturers with this. Our exclusive **ONE WAY Process Simulator** can be used to simulate and compare products and processes, and thus calculate the ecological and economical profile of the final end-product.



/ ABOUT US

From fiber to finish, Archroma plays a key role throughout the entire textile supply chain, with special system solutions for **spinning, sizing, pretreatment, dyeing, printing and digital printing, as well as finishing**.

Digital textile printing is the fastest growing segment within textile printing. Increasingly, more printing mills are making the transition from conventional to digital printing. More than 20 billion linear meters of printed textiles are produced every year; currently, only around five percent of these are made using digital printing techniques. However digital textile printing has an average growth of around 25% per year.

Archroma, a recognized global leader in integrated solutions for printing, is also investing in digital printing, bringing high innovation, creativity, quality and sustainability.

Together with our expertise, we bring economical benefits with wider design possibilities, opening new business opportunities for digital textile printers.

Competence Center for Digital Printing

Benefit from Archroma's digital printing expertise and networks for:

- Brand solution
- Innovative solutions for improved performance and sustainable production;
- New trends in the digital printing market;
- Collaboration network with market leaders in machinery manufacturers, digital printing producers, universities, textile industries, training centers and brands;
- Customer trainings and demos on Inkpresso® machines installed in each geographic region;
- State-of-the-art R&D labs for dyes purification and process developments.

The majority of Archroma's products are endorsed by some of the most important eco-standards.

• bluesign® • Oeko-Tex® • GOTS • ZDHC • REACH • EU Ecolabel • C2C • RSL • MRSL

/ SPINNING & SIZING

Flexibility on demand

At the very beginning of the textile chain, Archroma's spin finishes provide outstanding processing performance to all kinds of filaments and fibers. We combine our chemistry knowledge and yarn manufacturing experience to develop our high performance and innovative **spin finishes and sizing systems**, aimed at addressing the specific demands of our customers.

Archroma's spinning agents

- Spin finish
Afilan®
- Softeners, lubricants and antistatic agents
Leomin®

Archroma's sizing agents

- Sizing agent
Arkofil®
- Additives
Trefix®

/ PRETREATMENT

A heritage of performance

Pretreatment has always been a core competence in Archroma and our past heritage. We believe that a textile treatment process must be simple, robust and highly reliable.

With Archroma's **pretreatment systems**, you will be able to achieve better print quality on fabric by inkjet printing.

Archroma chemicals for cotton & viscose

- Wetting & deaerating
Printogen® Inkjet NFW liq
- Levelness and definition improver
Printogen® Inkjet DPE liq
- Reduction protection
Printogen® Oxidant Grains
- Solubility & fixation (helps to reduce amount of urea in the recipe)
Lyocol® BC liq

Archroma chemicals for polyamide

- Wetting & deaerating
Printogen® Inkjet NFW liq
- Synthetic thickener to adjust viscosity
Lutexal® GP Eco p
- Anti-frosting (improves penetration)
Lyogen® VN liq
- Levelness and definition improver
Printogen® Inkjet® DPE liq

/ DIGITAL PRINTING ARCHROMA INKPRESSO® SYSTEM

Color creation flexibility, supports sustainable production, cost efficiency

Inkpresso® brings together benefits that were unattainable so far in inkjet printing: Production flexibility, no shelf-life problems, a larger color spectrum and the possibility of an individual coloristic variant.

Our Inkpresso® system is a paradigm shift; **it allows you to manufacture your own inks**, close to the printing machines, ensuring **high stability** and **fresh Ink** from highly purified dyes with no issues of shelf life.

The central component of the system is the **Ink Formulation Unit (IFU)**, where each color is mixed in separate units. The IFU is designed for exclusive use with Archroma's Solar Reactive Dyes and Solar Compound.

The manufacturing process is automatically managed. The powder dyes are dosed through a closed system which ensures that no dye powder is released into the air. Chemicals and water are automatically fed into the mixing unit, all managed by a very accurate dosing system to ensure an exact ink output delivered when the customer needs it.



This new concept brings economical benefits together with wider design possibilities, sustainability and opens new business opportunities for digital textile printers.

Create your color ink library by mixing the eight high-quality available color modules and preparing them on site and on demand.

Archroma's Solar® reactive dyes & compounds

Dyes

- Raw materials especially selected for inks using own technology;
- Ultra purified and salt free dyestuffs based on most modern processes;
- Highly concentrated;
- High solubility of ink & very good filtration properties;
- Pure brilliant colors in powder form with high solubility;
- High fixation in the printing process;
- The on-site ink concept enables Archroma to develop novel reactive inks with higher yield and brilliance.

Solar® Brilliant yellow
Solar® Orange
Solar® Brilliant Red

Solar® Magenta 2B
Solar® Cyan
Solar® Brilliant Blue

Solar® Black

Compounds

- Specially designed and developed by Archroma as a carrier for dyes and water to optimize the ink for the following effects;
- Moisturizing effect;
- Runability in digital printer;
- Designed to fit all major print heads (Epson, Kyocera, Konica Minolta, Fuji etc.)

Solar® Compound

Archroma's reactive inks

For implementing the Inkpresso® system we have available a full color range of inks to pre-test Archroma technology on purification and manufacturing.

Inkpresso® Brilliant Yellow
Inkpresso® Orange
Inkpresso® Brilliant Red

Inkpresso® Magenta 2B
Inkpresso® Cyan
Inkpresso® Brilliant Blue

Inkpresso® Black

Archroma's digital printing auxiliaries

Head cleaner

We provide the customer the most suitable head cleaner for preparing the digital printing machines before its manufacturing.

DIGITAL PRINTING ARCHROMA FASTNESS LEVELS

Solar® dyes and Inkpresso®

FASTNESS LEVELS

On 20%

		Light Fastness ISO 105-B02	Water Fastness ISO 105-E01	Domestic Laundry ISO 105 C06/C2S	Home and Commercial Laundry AATCC 61.2*, 49°C	Perspiration ISO 150-E04		Weather Fastness ISO 105 B04-G53 (90h)	Dry Cleaning ISO 105-D01	Chlorine Water ISO 105-E03
						Alkaline	Acid			
Solar® Brilliant Yellow		5-6	4-5	4	4	4-5	4-5	4	4	4
Solar® Orange		3-4	4-5	5	4-5	4-5	4	2	4	4-5
Solar® Brilliant Red		4-5	4	4	4	3-4	4	2	3-4	4-5
Solar® Magenta 2B		5-6	4	4	4	4-5	4	2	3-4	4-5
Solar® Brilliant Blue		4-5	4	4	4	3-4	3-4	4	4-5	1-2
Solar® Cyan		5-6	3-4	3	4-5	3-4	3-4	3	4-5	2
Solar® Black		5	4	4	4	4-5	4-5	2	4	2-3

The new Solar® range meets all the requirements of modern textile industry: GOTS*, OEKO-TEX and RSL, MRSL.

POST TREATMENT

Washing-off process

Archroma washing-off systems will help to remove unfixed dye and chemicals from fabric and avoid back staining of dyestuff onto unprinted/white areas.

Archroma’s washing-off agents

- Dispersing & complexing agents
Cyclanon® X-CW New
Dekol® RSK

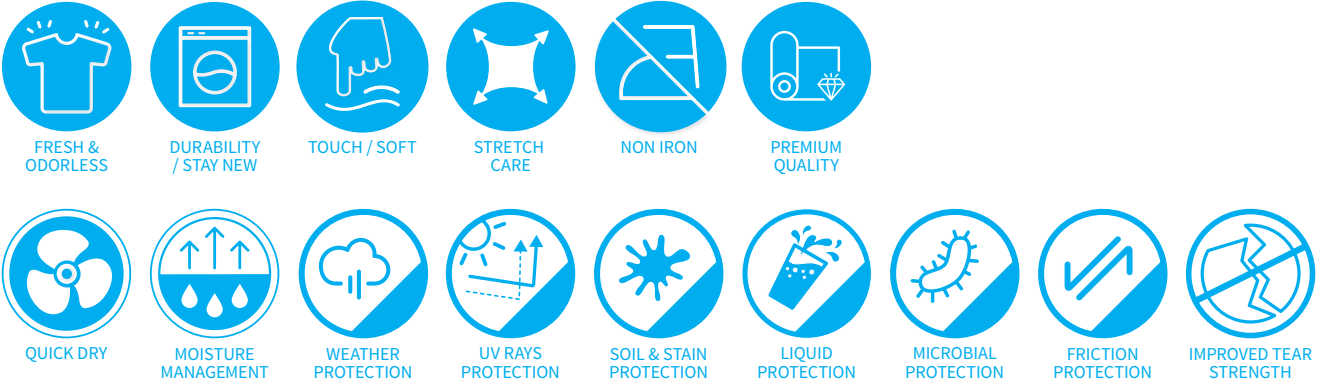
FINISHING

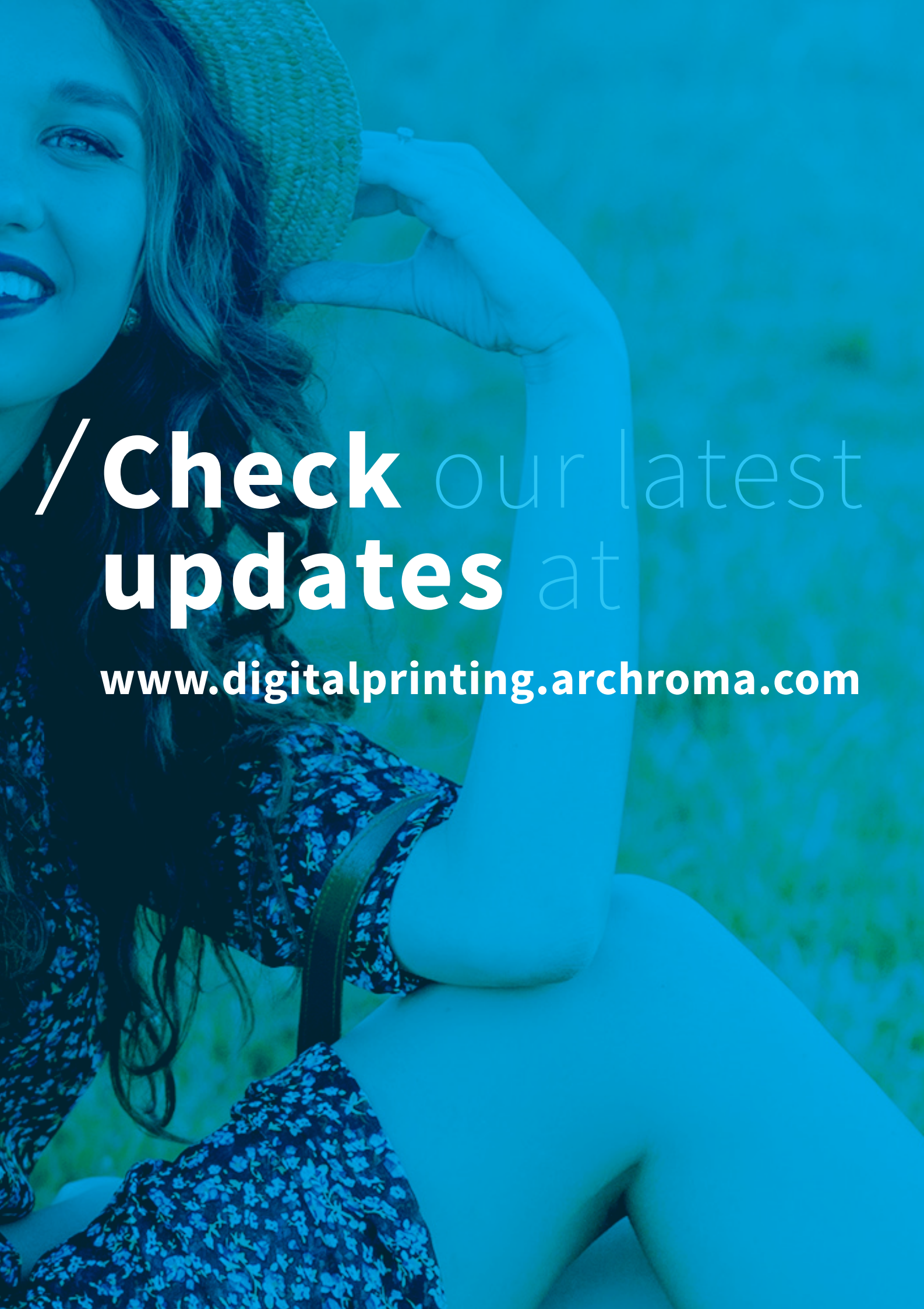
Archroma is a recognized expert in finishing solutions to fulfill the different market segment requirements.

Archroma’s finishing solutions

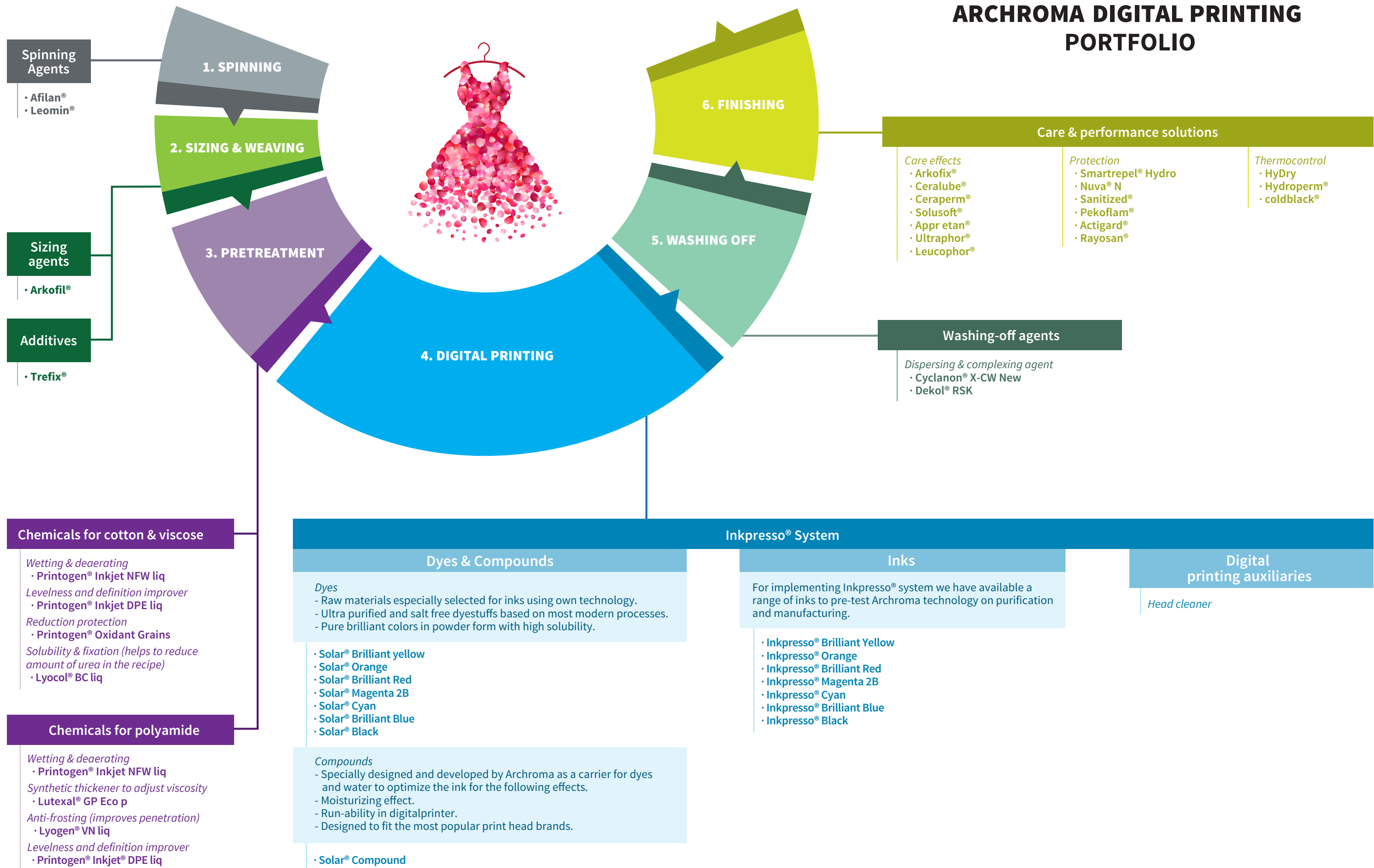
- Care effects
Arkofix®
Ceralube®
Ceraperm®
Solusoft®
Appretan®
Ultraphor®
Leucophor®
- Protection
Smartrepel® Hydro
Nuva® N
Sanitized®
Pekoflam®
Actigard®
Rayosan®
- Thermocontrol
HyDry
Hydroperm®
coldblack®

Discover more information in our ‘Functional Finishing’ brochure





/check our latest updates at
www.digitalprinting.archroma.com



/ THE ARCHROMA WAY

Safe, efficient, enhanced.

As a global leader in color and specialty chemicals, we are committed to develop innovative systems and services to provide you with custom solutions that are:

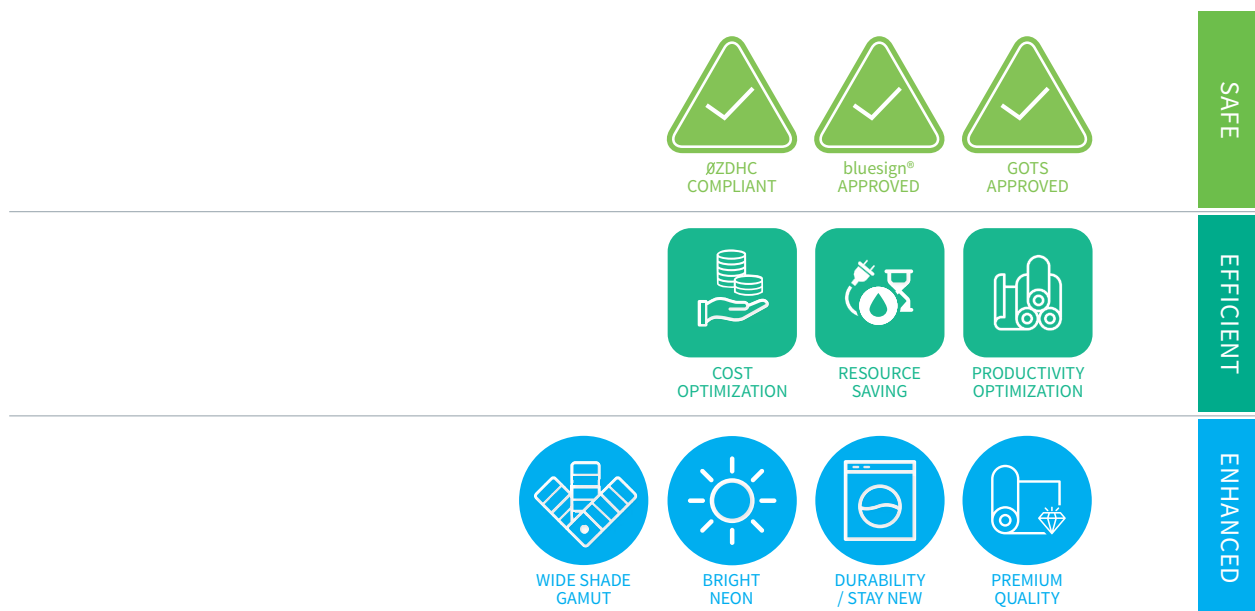
Safe – It's our nature to protect. Safe to use, safe to release and safe to wear.

Efficient – It's our nature to rethink sustainable manufacturing. Innovating application processes that minimize resources and maximize productivity.

Enhanced – It's our nature to add another level of value. Effects, functionality and aesthetics to give additional value, for a life enhanced.



Inkpresso® System



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DIGITAL PRINTING COMPETENCE CENTER

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