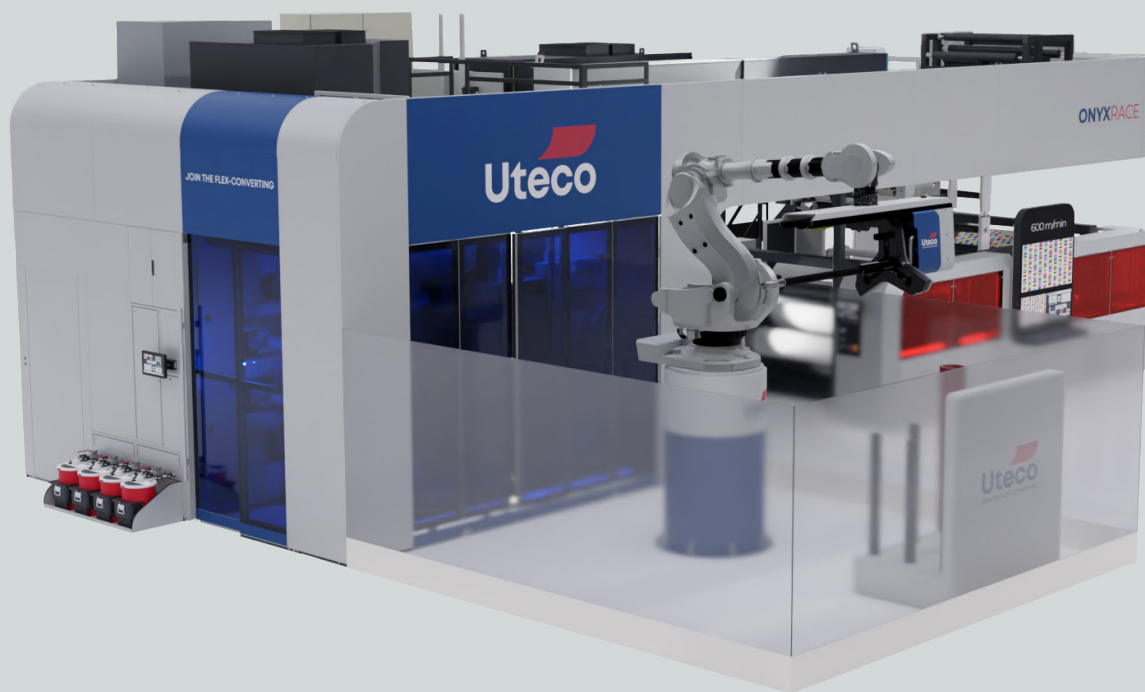# **Onyx**RACE

SETTING THE PACE FOR SUSTAINABLE PRINTING

Uteco
JOIN THE FLEX-CONVERTING

OnyxRACE

Setting the Pace for Sustainable Printing.

Why **Onyx**RACE?

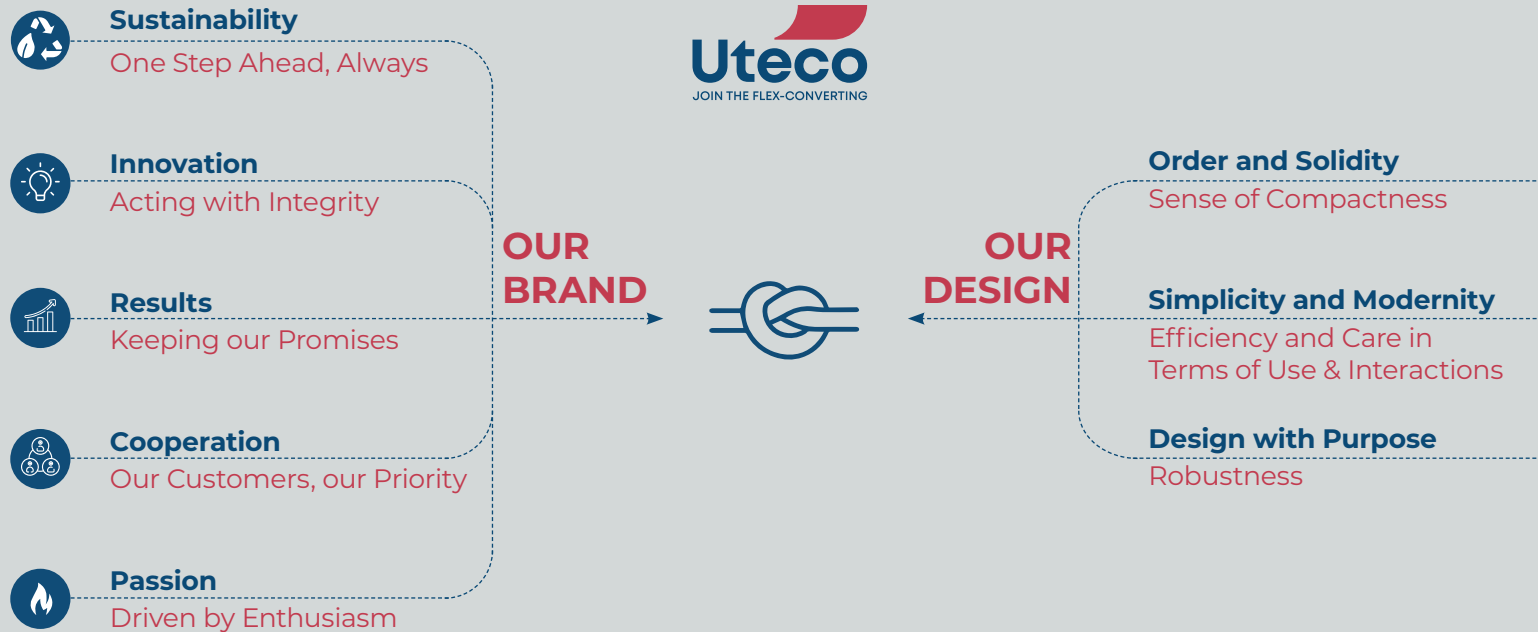**ONYX**RACE

1. The Greatest **Industrial Design**
2. The Most **Productive**
3. The Most **Sustainable - ACTIVE PACK**
4. The Most **Compact**
5. The Most **Robust**
6. The Most **Versatile**
7. The **Easiest** and **Safest** to Operate & Maintain
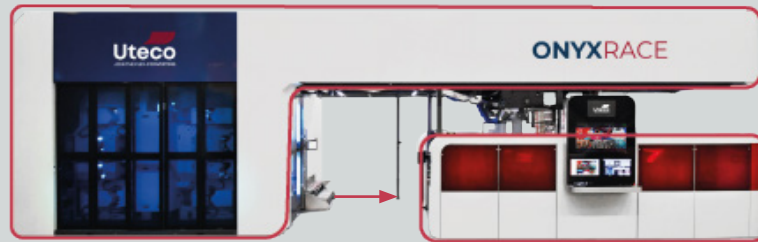8. The Most **Automated**

1. The Greatest Industrial Design

The **Strong Bond** between **Brand Values** and **Industrial Design** creates and enhances the perception of **Uteco's Brand** and its values.

Uteco
JOIN THE FLEX-CONVERTING

Sustainability
One Step Ahead, Always

Innovation
Acting with Integrity

Results
Keeping our Promises

Cooperation
Our Customers, our Priority

Passion
Driven by Enthusiasm

OUR BRAND

OUR DESIGN

Order and Solidity
Sense of Compactness

Simplicity and Modernity
Efficiency and Care in
Terms of Use & Interactions

Design with Purpose
Robustness

1. Order and Solidity, Simplicity and Modernity

Overall shape obtained by a **Distruption** of a **Unique Solid Block**.

Core Print Unit

Complementary High-Tech Unit

The separation generates **coherency between** the two **complementary shapes**.

All parts enclosed in a simple and **unified volume** and **unique macro and solid shape**.
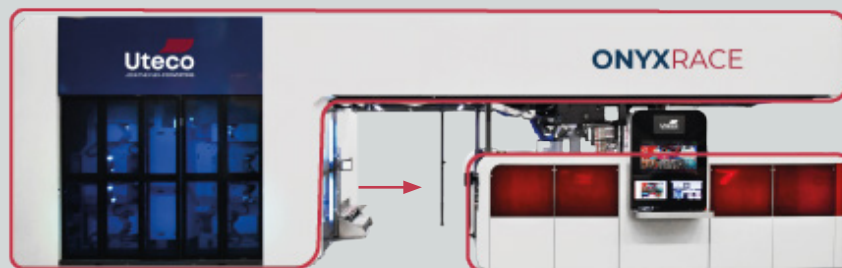
ICONIC DISTINCTIVE SHAPE

TIMELESS DESIGN

1. Design with Purpose

Designed according to Principles that are Functional to the greatest productivity.

DESIGN WITH PURPOSE, PERFORMANCES DRIVEN

Our **modus operandi** is strictly connected to great **printing performances**.

The hub of Uteco's printing technology deserves a special role in the design system.

DESIGN AS SEAL OF QUALITY ON THE PERFORMANCE DELIVERED

ROBUSTNESS

1. Performance Driven Design

The **Operator** is at the center of our new **Design**, giving the Onyx Race **Unique Ergonomic** features.

2. The Most Productive

The **Fastest** Printing **Speed** in the Medium Runs Flexo Segment, **Ever**!

**Printing up to
140 M sqm / year**

Max Speed **600 mpm**.

Max Material Width 1650mm
(5 configurations: 1050mm - 1250mm - 1350mm -1450mm - 1650mm).

**BEST FOR MEDIUM
AND LONG RUNS**

2. The Most Productive

The **Fastest Changeover** in the Flexo CI Medium Market Segment, **Ever**!

< 3 Min for Automatic Printing Pressures and Register Setup[*]

Up to 50% Faster Printing Setup[*]

UP TO 1,9M€ HIGHER REVENUE / YEAR OF EXTRA PRODUCTION[*]

Gain Up to 270 Extra Hours of Production/year

(*) Considering Full Colors Change and Vs Comparable Technologies in the Market

2. The Most Efficient Drying Tunnel

2 High performing drying tunnels.

Semi-floating technology: drying the material on both sides.

New Nozzles Design to increase air turbulence and reduce residual solvent.

Our Semi-Floating Technology for greatest drying performances

2 DRYING TUNNELS

6+ METERS LENGTH

3. The Most Sustainable - Our New Active Pack

Active Pack allows to equip our new flexo CI press **Onyx**RACE with top-notch technologies for **sustainability**.

ONYXRACE
ACTIVE PACK

Active Start

Active Dry®

Active Dry - T

Active Ink

ESG
UTECO FOR SUSTAINABILITY

Active Pack Configuration

3. The Most Sustainable - Our New Active Pack

With **Active Pack** your new machine is **FOR FREE**!

Active Pack enables savings up to **300+ k€** each year on energy and material consumption and actively have **your machine repay for itself with time**.

Our Active Pack techs are unique in the flexographic industry for **energy saving** and **consumable material saving**, making **Onyx**Race the **most sustainable** CI flexo press in the market.

Save up to 300+ k€ per year with Active Pack

ACTIVE PACK

ESG ENABLER

3. The Most Sustainable - Active Pack: Our New Active Start

The **Lowest Material Waste** in the Medium Run Flexo Segment, **Ever**!

Just 8m of Material Wastes at each Startup, thanks to Fast Setup Phase in **< 3 Minutes**

The **Active Start Engine** ensures precise positioning of printing plates and anilox rolls, **optimizing print quality** while also **identifying and automatically adjusting machine settings based on real-time geometry** variations for peak performance.

ACTIVE PACK

Active Start
Active Dry®
Active Dry - T
Active Ink

ESG ENABLER

ACTIVE START
SAVE UP TO 40 K€/YEAR OF WASTED MATERIAL

Up to 230 km/year of Material Saved

The **Most Sustainable** Drying System, **Ever**!

ACTIVE PACK

Active Start

Active Dry®

Active Dry - T

Active Ink

Save Up to 50%/Year of Energy Consumption

Active Dry® **new patented Smart&Intelligence System** to optimize **Energy Consumption** on Drying System
- **Drying power** is **regulated** according to the printing characteristics detected by Active Start System.
- **Ventilation system** guarantees **perfect insulation** of environment for the operator.

Active Dry-T automatically identifies the **Optimal Drying Temperature for the Tunnel** given info coming from the printing setup process such as substrate type, thickness, width. This automation system optimizes the energy consumption during the drying phase.

ESG
ENABLER

3. The Most Sustainable - Active Pack: Our New Active Ink

The **Most Sustainable** Inking System, **Ever**!

Smart Ink Pumping: automatically regulate pumping cycles according to Printing Characteristics detected by Active Start System.

Significantly **Reduce Solvents Consumption** at each washing cycle, up to 40% thanks to special Inking System.

· **2x Times** pumps lifecycle.

· **Optimized positioning** on the side of the CI drum.

ESG ENABLER

ACTIVE INK

(*) Vs Comparable flexo press on the market without Active Ink

ACTIVE PACK

Active Start

Active Dry®

Active Dry - T

Active Ink

Save Up to 60% / Year of Energy Consumption thanks to inking pumps cycles optimization (*)

3. The Most Sustainable - Our New Sprint Wash

The **Most Sustainable** Washing System, **Ever**!

Constant Washing Performance on all the printing units, regardless of their position

- **Fast**: complete washing cycles completed in < 3 minutes.

- **Efficient**: new positioning on the side of the CI Drum guarantees saving of solvents consumption(*).

Save Up To 40% / Year Of Solvent Consumption (*)

SPRINT WASH

ESG ENABLER

(*) Vs Comparable flexo press on the market without Sprint Wash

4. The Most Compact Flexo CI in Flexo Medium Market Segment

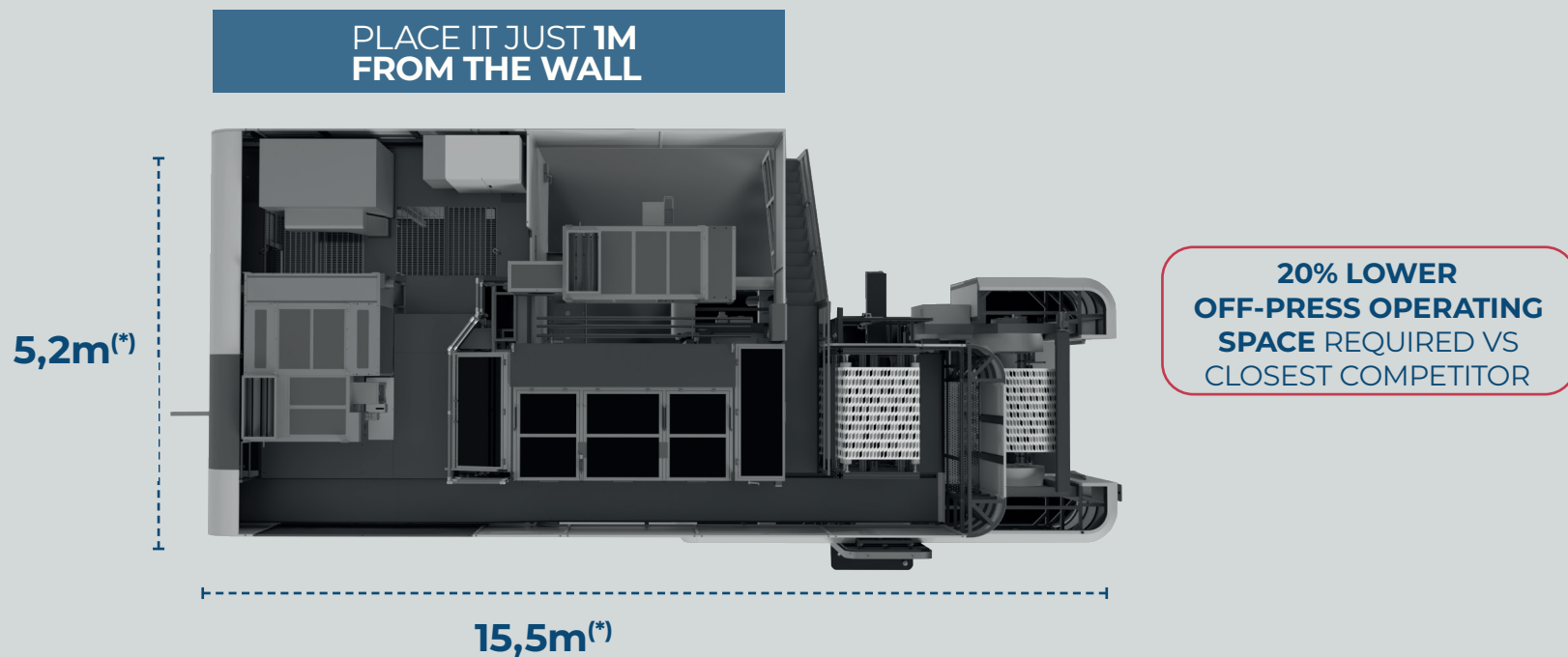## Just 80 sqm Footprint!

5m(*)

15,5m(*)

5,2m(*)

(*) Figures refer to machine smallest configuration 8C, Mod. 100, Repeat max 850 mm

4. The Most Compact Flexo CI in Flexo Medium Market Segment

OnyxRACE minimizes the Off-Press Operating Space.

PLACE IT JUST 1M FROM THE WALL

5,2m(*)

15,5m(*)

20% LOWER OFF-PRESS OPERATING SPACE REQUIRED VS CLOSEST COMPETITOR

(*) Figures refer to machine smallest configuration 8C, Mod. 100, Repeat max 850 mm

5. The Most Robust CI Flexo Press – Our BounceVoid Plus Technology

The **Most Advanced Technology** to Eliminate the Bounce Effect.

New and **innovative geometry** of the **printing deck frame**, reinforced on the points more subjected to mechanical stress, reducing bouncing and vibrations effects.

· Highest quality printing at 600 mpm.

3x Higher Robustness
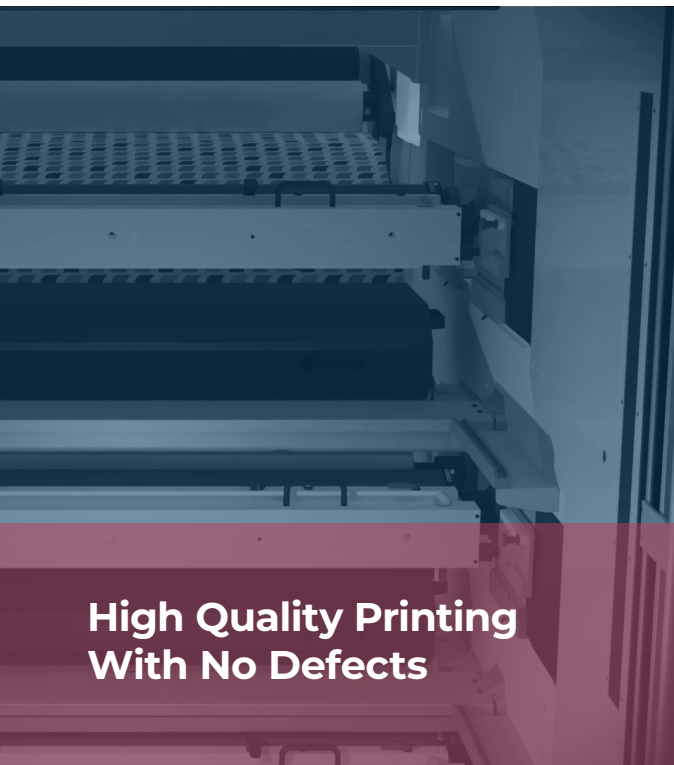of Printing Group

BOUNCEVOID PLUS TECHNOLOGY

BounceVoid Plus allows great Machine Robustness

5. The Most Robust CI Flexo Press – Our BounceVoid Plus Technology

The **Most Advanced Technology** to Eliminate the Bounce Effect, **Ever**!

Our **new frame** is **reinfoced** in correspondence of each plate cylinder with higher thickness and innovative geometries to guarantee maximum **robustness**:

- **Carbon Fiber Printing Shafts**.
- **Double Guide System** for Color Units with **innovative patented Materials** for enhanced rigidity and lightness.
- **Reinforced Mandrels' Supports** with **High-Performance Bearings**.

High Quality Printing With No Defects

BOUNCEVOID PLUS TECHNOLOGY

6. The Most Versatile CI Flexo Press

THE MOST VERSATILE PRESS

MULTI-INDUSTRY

- ✓ Food (incl. pet)
- ✓ Beverages
- ✓ Pharma
- ✓ Healthcare
- ✓ Personal Care
- ✓ Home & Office
- ✓ Industrial

MULTI-MATERIAL

- ✓ Plastic Films
- ✓ Aluminium
- ✓ Paper
- ✓ Cardboards
- ✓ Laminates

MULTI-INK

- ✓ Water-based
- ✓ Solvent-based

6. The Most Versatile CI Flexo Press

6 Kits Configurations For The **Widest End-use Applications**.

KIT TYPE		PURPOSE
KIT Water-Based	>	**Water-based** printing inks entail special requirements, for example: stainless steel, pH control, anti-foam.
KIT Water + Solvent Based	>	Additional printing enhancements for combining **both Solvent & Water based printing**.
KIT Paper & Cardboard	>	**Tensioning Adjustment** and web threading mechanism to menage heavy materials.
KIT Tropicalization	>	Cooling systems and substrates treatment adjustment to manage **Warm Areas Production Sites**.
KIT Aluminium	>	Specially Treated Rolls and assembling revision to treat **Aluminium Substrates**.
KIT Altitude	>	Advanced system designed to enhance the performance and safety of electrical panels operating at **High Altitudes**.

6. The Most Versatile CI Flexo Press - Downstream Units

Our Downstream Units for **Special Applications**.

- In-line **Finishing application** - embellishment or functional.
- In-line **Coating & Laminating** applications.

WHY OUR DSU?

Proprietary Technology

Fully Integrated

Smooth In-Register Printing

High-Quality Printing at High Speed

Short Web Path

6. The Most Versatile CI Flexo Press - Downstream Units

Our Downstream Units for **Special Applications**.

Combine 1 or 2+ DSUs to Enrich the Printing Process

- **FINISHING APPLICATION** – EMBELLISHMENT OR FUNCTIONAL
- **COATING & LAMINATING** APPLICATIONS

DSU$_R$	$\longrightarrow$	Roto
DSU$_F$	$\longrightarrow$	Flexo
DSU$_X$	$\longrightarrow$	Flexo/Roto
DSU$_K$	$\longrightarrow$	Stack

6. The Most Versatile CI Flexo Press - VDP PACK

Our **In-Line Digital Printing Solution**.

VDPPACK

Our in-line **Digital Module** for **Variable Data Printing (VDP)** with **VDP Software to Code & Track the VDP Data**.

Data Matrix

Bar Code

QR Code

And more!

- **"Plug & Play"** modules up to 3 **Digital Printing Lines**

- **UV-Led** Curing System

- **Equipped with Automatic Washing** System

6. The Most Versatile CI Flexo Press - CI Drum for over print Varnish

Use the **CI Drum** to apply over **Print Applications**.

CI Drum with Coating Unit for OPV

The **last Unit of OnyxRACE CI Drum** can be equipped with **Roto Technology** to apply **Over Print Coatings**:

- Best fit for end-use applications with **high-grammage** OPV (e.g. functional, embellishment)

- Very Short web path Vs In-line Solutions

- In-continuous Applications

OVER PRINTING COATINGS

7. The Easiest and Safest to Operate - Dynamic Tension

Automatic Regulation of Material Tensioning.

Innovative Automatic System for material tension control allowing the machine to automatically identify the correct material tension, according to the information concerning, among others, the **substate type, thickness, width**.

Set the Perfect Tensioning without Operator Intervention for **Faster Setup Times** and **Safer Operations**.

ESG ENABLER

DYNAMIC TENSION

3x Times Faster Set-Up with 100% accuracy for material tensioning (*)

(*) VS Manual

7. The Easiest and Safest to Operate - Dynamic Pressure Roller

Sleeve Pressure Roller.

20x Times Faster Pressure Roller Changeover Operations (*)

Sleeve applied on the pressure roller easily replaceable and accessible for a safe and high quality cleaning.

The operator can easily reach the color unit for the pressure roller sleeve extraction and cleaning.

Pressure Roller Sleeve change in **< 1 min**

DYNAMIC PRESSURE ROLLER

ESG ENABLER

(*) VS Manual

7. The Easiest and Safest to Operate - Dynamic Web Threading

Fully Automatic Web Thread.

The system allows to **automatically thread the web** throughout the whole machine (from unwinder to rewinder, **Central Drum included**) without operator's manual operation.

Full Web Threading
in **< 10 min**

ESG ENABLER
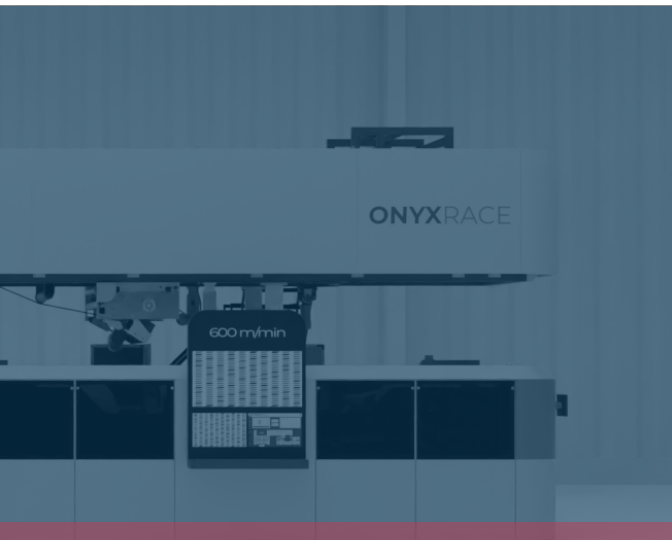
DYNAMIC WEB THREADING

3x Times Faster Web Threading vs Manual Operations (*)

(*) VS Manual

7. The Easiest and Safest to Operate - Dynamic Cockpit

The **Most Ergonomic** Cockpit.

Adaptive Cockpit can be regulated according to the operators' heights for maximum ergonomics

- HMI is centralized and fully touch screen: the operator **Manages** the whole **Machine from a Unique Spot**.

- Easy to monitor and control the Printing Process.

- Centralized Management of all Operations.

- Great ergonomics for the operator.

Adaptive Cockpit for The Greatest Ergonomics

DYNAMIC COCKPIT

ESG ENABLER

7. The Easiest and Safest to Operate - Dynamic Drying Box

The **Most Ergonomic** and Functional Drying Box.

Fully Removable Drying Box (Toolless)

- **The operator** can easily remove the drying box with a single move. This allows **direct access** to the **Central Drum** which becomes easier to clean and maintain.

- **Fully Replaceable Nozzles:** substitute the nozzles and change their shapes. We introduce different nozzles' shape to enhance the drying power of the inter-color drying since they create more air turbulence.

- **Enhance the drying power** when needed. especially for drying solid colors (e.g. white).

ESG ENABLER

DYNAMIC DRYING BOX

Fully Removable and Upgradable Drying Box

7. The Easiest and Safest to Operate – Sprint Splash Guards

The **Easiest** Attaching and Detaching System For **Magnetic Splash Guards**.

The New Magnetic Splash Guards Designed for Easy Removal

Splash Guards with Magnetic attach and detach mechanism: no need for fixing screw or bolts

· **Easier** and **Safer** for the **Operator** to **Substitute** the **Scraper** fo**r Washing** and **Maintenance** Purposes.

· **Faster** and **Toolless** Substitution of the Scraper.

SPRINT SPLASH GUARDS

ESG ENABLER

7. The Easiest and Safest to Maintain – Fully Accessible Catwalk

The **Most Accessible** Catwalk for a Flexo Press, **Ever**!

The Operator can easily access the **upper part** of the **machine** by means of a catwalk, extended to the total length of the machine

- **Easier** and **safer** web monitoring of the **print result**.

- **Easier access** to CI drum and drying system for **cleaning** and **maintenance**.

- **One fixed ladder** is positioned on the rewinder rear side.

ESG ENABLER

FULLY ACCESSIBLE CATWALK

Easier Access for Maintenance and Cleaning

7. The Easiest and Safest to Maintain - Dynamic Doctor Blade

Guarantee Constant Inks Flows to Units for Highest Quality Printing.

Dynamic Doctor Blade For Ink Flow Optimization

Dynamic Ink flow Regulation

- **Inks' Flow Optimization** by **Dynamic Dumpers** positioned on the sides of the Doctor Blade.
- **Light Weight, <10kg**: the crossbar stays on the press but can be removed for cleaning or maintenance purposes.
- **Optimize inking system pressures**, for greatest and constant printing quality over print runs.
- **2x Lighter Doctor Blade** than traditional ones
- **Reduced Blades Wear** and consumption.

DYNAMIC DOCTORING®

ESG ENABLER

7. The Easiest and Safest to Maintain – Dynamic Door

Sensors for **Automatic Doors Opening**.

This device allows the operator to open the **printing units doors with free hands**. The system is simple and safe, being activated by sliding the foot on the bottom of the doors.

Sensors for Automatic Doors opening activated by foot.
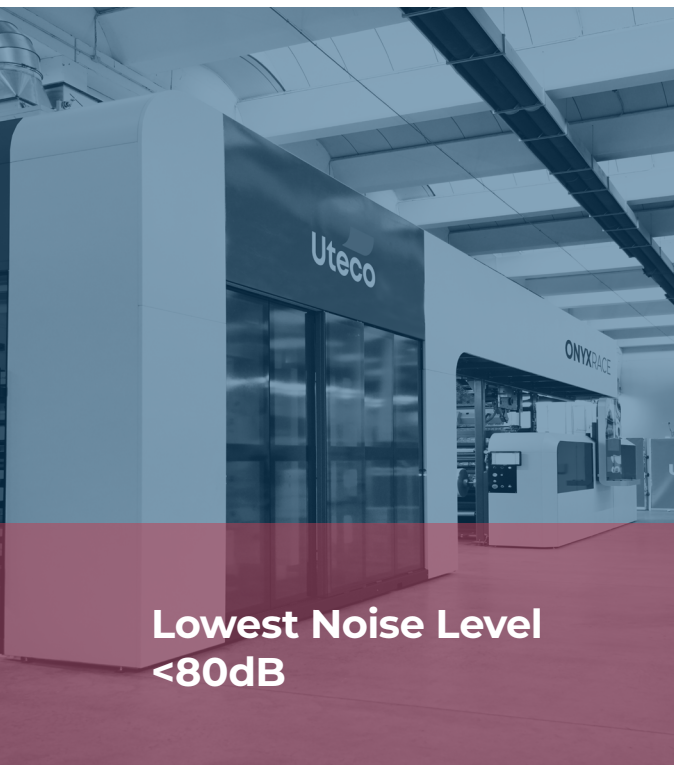
ESG
ENABLER

DYNAMIC DOOR

Carry out Sleeve Change Operations with automatic door opening

7. The Easiest and Safest to Maintain – Noiseless Design

The **Innovative Machine Casing** is designed to **Contain Noises**.

Lowest Noise Level <80dB

The selected materials are the most performing for noise and vibration reductions

- **The resulting noise level is <80dB**: similar to the best vacuum cleaner in the market.

- **Combine more machines** in the same production site due to lower noise.

- **Healthier work environment** for the operator – especially for long hours shifts.

REDUCED NOISE LEVEL

7. The Easiest and Safest to Maintain – Pipeless Unit

Fully Pipeless color units.

The new system allows **tool-free insertion** of the **chamber doctor blade** into the machine, automatically connecting the chamber to the ink **supply and return tubes without any operator operation**.

Guarantee **easy access for cleaning and maintenance to printing unit**, **drying boxes** and **doctor blades**.

PIPELESS UNIT

Doctor blade with pipeless unit

8. The Most Automated - SleeveBOT®

The **Best Robot** for **Automatic Sleeve** Changeover, **EVER!**

Arm for **Automatic** Positioning

The front and the back are equipped with **Adaptable Grippers** that go Inside the Sleeves

Innovative **Patented** Gripper

8. The Most Automated - SleeveBOT®

Our Innovative Fast **Patented Gripper**.

Our **New Innovative Gripper** is unique in the market: it adapts to any sleeves' internal diameter.

- **The Most Cost-effective Ecosystem:** single gripper needed while using existing sleeves. **Save up to 658 K€** over Machine Lifetime Vs Comparable solutions in the market.

- **Fast Gripping Sleeve Changeover: < 10 min** (*).

- **Press Minimized Downtime**: add up to **6.9 M€ of Extra Production** over Machine Lifetime Vs non robotic Solutions.

Robotics Automation Technology guarantees process quality, robustness and repeatability regardless of operators' skills

Safe Working Environment since operator does not handle heavy sleeveson elevated platform from high above ground position.

Adaptable and Single Gripper

(*) Considering 8 Color Flexo Press - Considering the Change of 3 Sleeve Aniloxes + 8 sleeve Clichés

8. The Most Automated - Flying Deck (FD)

FD allows to work on **Selected Units** while the **Press is Printing on Others**.

FlyingDeck (FD) with selective Units Automatic Opening

Change the Job on Selected Units while others are still printing in total safety.

Minimize Downtime During Job Changeovers.

Flying Deck Technology

FD Technology

Technical Specifications

Parameter	Unit of Measurement	Value
Material width	[mm]	1050 ÷ 1650
Min/Max print repeat ranges	[mm]	320 ÷ 850 360 ÷ 1200
Max speed	[mpm]	600
Color Units	-	8/ 10
Material tension	[daN]	2 ÷ 40
Inks	-	Water/solvent Water+ Solvent

ONYXRACE
Technical Specifications

Robustness for Value Over Time

Our **Best Value** yet: **Robustness**.

ROBUSTNESS FOR VALUE OVER TIME

At Uteco, we understand the importance of investing in machinery that not only delivers cutting-edge technology and design but also **stands the test of time** thanks to its **robust build**. Our machines are meticulously crafted in Italy, blending exquisite aesthetics with the latest advancements in technology. With an average of 15 years, **our machines ensure the longest lifespan in the market**.

We take pride in providing our customers with beautifully designed, technologically advanced machines that **provide optimal operation for an extended period of time**.

Robustness for Value Over Time

What does **Robust** mean for **Uteco**?

Unmatched Durability

With an average lifespan of 15 years, **Uteco machines are solidly built to withstand the test of time**, delivering **exceptional performance** and **consistent results** year after year.

Timeless Innovation

Uteco machines embody the perfect fusion of Italian craftsmanship, advanced technology, and enduring design, resulting in **robust machines that remain relevant and reliable for longer and longer periods of time**.

Optimal Operation

Uteco empowers businesses to operate at their full potential by providing machines that **optimize production efficiency, reduce downtime, and enhance overall profitability**.

Sustainable Investments

By choosing Uteco, companies make a **sustainable investment** and **reduce the total cost of ownership**, lowering the probability of non-planned interventions and maximizing their return on investment.
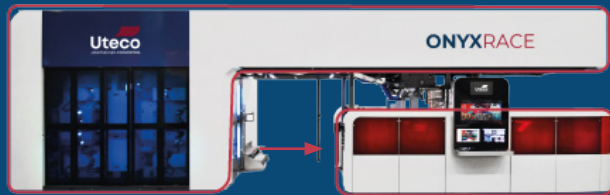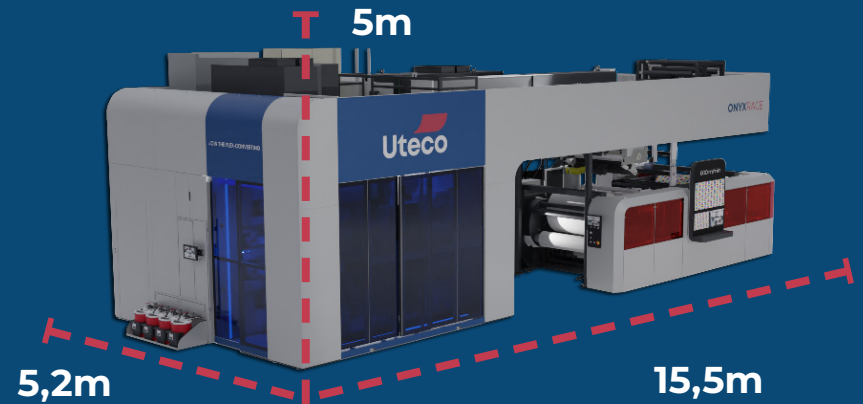
Up to

600

mpm max speed.

Just

8m

material waste during job start-up.

Just **80 sqm Footprint**

5m

Uteco | ONYXRACE

5,2m | 15,5m

Uteco | ONYXRACE

Designed according to **principles** that are **functional** to the greatest productivity.

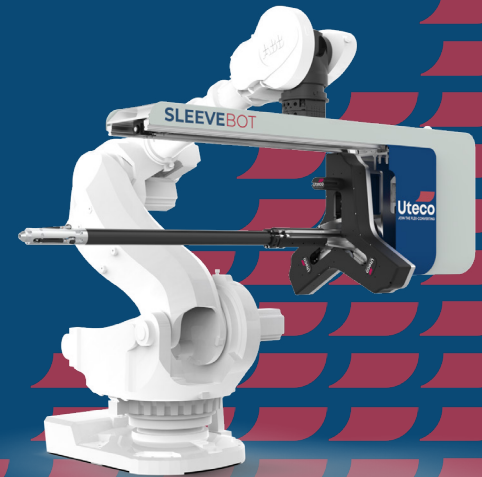The **Most Sustainable** in the Medium Run Flexo Segment, **EVER**!

ACTIVE PACK

Active Start
Active Dry®
Active Dry - T
Active Ink

Save up to **300K€/Year** in Energy and Material Consumption Costs

BounceVoid

3x Higher Robustness of Printing Group for Higher Printing Quality.

The **Best Robot** for **Automatic Sleeve Changover**.

Fully Integrated with our Downstream Units for **Special Applications**.

Proprietary Technology

Fully Integrated

Smooth In-Register Priting

High Quality Printing

Short Web Path

ACTIVE PACK

+

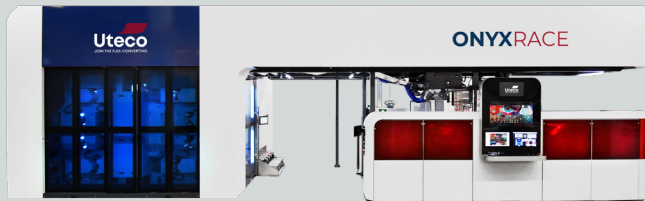**DYNAMIC PACK**

+

SLEEVEBOT

Save up to **400K€/year** in energy consumption and consumable material while adding productivity!

OnyxRACE - Total Cost of Ownership

Our Technologies enable amazing **Savings** and **Productivity**.
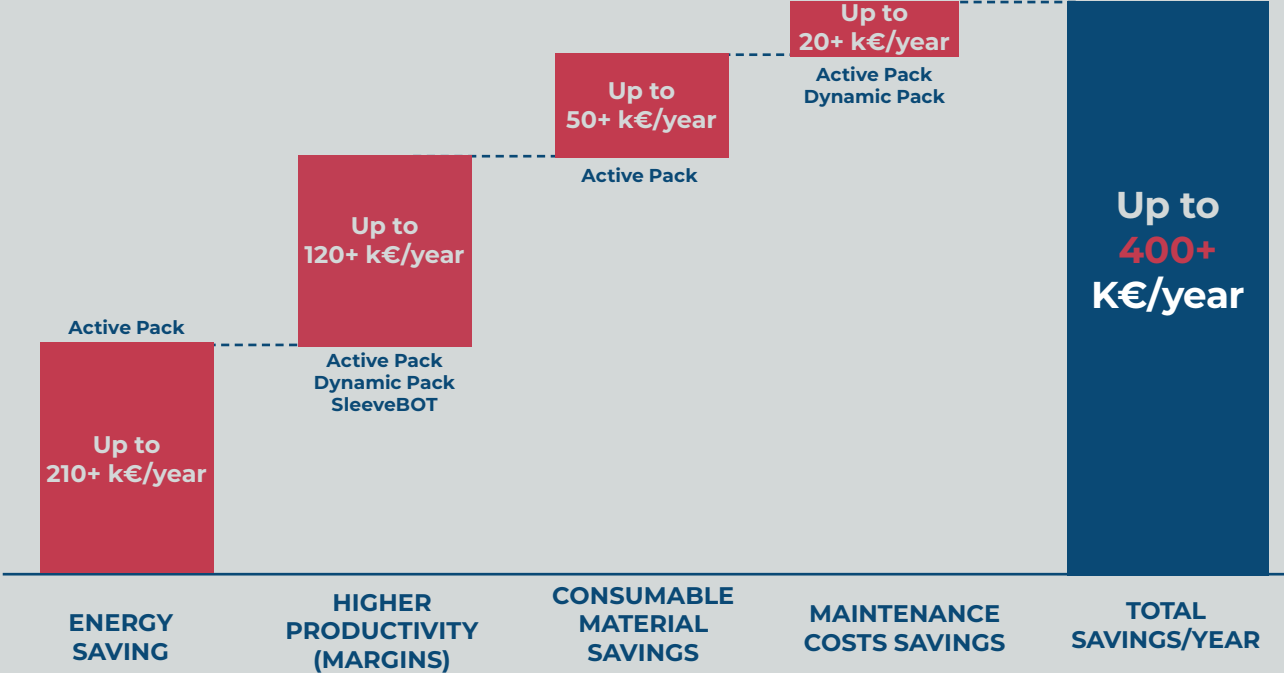
ONYXRACE is for FREE!

Discover the best **ESG**-oriented techs in the market.

ACTIVE PACK
DYNAMIC PACK
SLEEVEBOT

Save up to **400+ K€/year** in energy consumption and consumable material while adding productivity!

OnyxRACE - Total Cost of Ownership

Our Technologies enable amazing **Savings** and **Productivity**.

Energy Saving — Active Pack — Up to 210+ k€/year

Higher Productivity (Margins) — Active Pack, Dynamic Pack, SleeveBOT — Up to 120+ k€/year

Consumable Material Savings — Active Pack — Up to 50+ k€/year

Maintenance Costs Savings — Active Pack, Dynamic Pack — Up to 20+ k€/year

Total Savings/Year — Up to **400+** K€/year

Our Company

Printing and Converting: All Round **High Tech Innovation**.

We provide innovative and flexible solutions from a wide range of **flexographic**, **rotogravure**, **digital printing**, **laminating and coating machines** and a corollary of comprehensive training and support services.

We develop **special and customized configurations** of high technological value, with an ongoing commitment to research and **innovation**, **organizational flexibility**, **engineering capabilities for final solutions**, optimization of production processes, and a fast and efficient worldwide service network.

Our Customer Service

Our Customer Service has **Everything You Need**.

Our expert **Customer Service teams** are **available 24/7** to respond quickly and effectively to requests for maintenance, repairs and operational renovations to machinery and systems, **both on-site and remotely (My Portal).**

Ready for your new machine? Don't forget about our customer service

Find out more!

On Field Assistance
We provide complete **life-cycle support services and printing processes** to ensure maximum performance throughout the entire lifespan of the machine.

Remote Assistance
Thanks to the newest technologies available on the market we guarantee **the best real-time support**.

Upgrades Service
We provide improvements of the efficiency and performances of your machine's processes, aligning them to the **latest technological market trends**.

Spare Parts
We have a series of spare parts checked and guaranteed by us.

Equipment
We offer equipment solutions to be added to your specific machine to **boost its performance and efficiency**.

JOIN THE FLEX-CONVERTING