

VAV TECHNOLOGY



DA VINCI OB48 ROBOTIC SPRAYING SYSTEM

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WHAT DOES "DA VINCI OB48" DO?



From "Human" to "Robots"



VAV Technology's Robotic Systems are complementary elements of sustainable denim finishing processes. By the help of Da Vinci OB48 Robotic Spraying System; any kind of water based chemicals application like potassium permanganate (PP), resining and coating are possible and you can eliminate harmful impacts of water based chemicals on human and environment.

In addition, application of ecological enzymes is possible which replaces PP and that makes Da Vinci OB48 "The Very First Local Enzymatic Bleaching System" and it makes a safe and ecological bleaching in a closed system possible.

Besides increasing productivity, Da Vinci OB48 gives you the chance to remove all unhealthy and non-standard manual spraying processes on denim, it complies the requirements of sustainable production while saving human & nature health.

ROBOTIC SPRAYING SYSTEM FOR DENIM INDUSTRY



From "Human" to "Robots"



REPLACING HUMAN WITH ROBOTS

Thanks to Da Vinci Robotic Spraying System, there is no more need to manpower for daily mass production operations.



ROBOTIC SPRAYING SYSTEM for all!



STANDARDIZATION IN PRODUCTION

Achieve the same spraying quality on the garment is fast and easy via 4 Robotic Arms with 6 axes working synchronously.





HIGH PRODUCTION HIGH EFFICIENCY HIGH ACCURACY

Non-stop operation via 4 robotic arms, 8 mannequins and easy to use cloning and software system bring highest benefits of all times.





MORE SUSTAINABILITY? ECOLOGICAL ENZYME

To be more sustainable you can use ecological enzymes instead of PP. Da Vinci OB48 is the one and the only robotic system that ecological enzymes can be applied with.

CONTRIBUTION TO SUSTAINABILITY



From "Traditional" to "Sustainable"



CHEMICAL SPRAYING TECHNOLOGY

for Sustainability!



ELIMINATING
CHEMICALS
RISK FOR
HUMAN HEALTH



>%40 LESS
CHEMICALS
CONSUMPTION



NO PP - SAFE &
ECOLOGICAL
BLEACHING IN A
CLOSED SYSTEM

*The saving percentages stated above may differ with local conditions, process, recipe, type of fabric and chemicals.

HOW DOES DA VINCI OB48 WORK?



From "Robots" to "Garment"



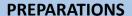






PREPARATIONS

CHEMICAL TANK: The suitable chemicals for the desired application is loaded to the tank(s) which feeds the robotic arms continuously.



CLONING: The operator records the spraying parameters (distance, angle, quantity, speed, etc) via cloning unit.

SAMPLE TESTING

- The accuracy of the cloned parameters are tested on some sapmles to check the accuracy of positioning and application.
- If fine tuning is needed you can easily make adjustments over the main control panel.





- No extra operations after spraying.
- Only neutralizing agent as usual.
- Daily and easy maintenance for long life.



MASS PRODUCTION

- More than 7.000 garments per day.
- Non-stop spraying and operation cycle.
- Identical results at all lots and designs.

DA VINCI OB48 ROBOTIC SPRAYING TECHNOLOGY



PRODUCTIVITY

-Non-stopoperation with

4 ROBOTS

&

8 MANNEQUINS

EFFICIENCY

Less

-CHEMICAL

-LABOUR

-FAILURE

VERSATILITY

-Easy **CLONING**

-User friendly **SOFTWARE**

-Different

processes like

RESINING

-Assigning MULTIPLE TASKS

DURABILITY

-Best

COMPONENT QUALITY

-ROBUST DESIGN

SAFETY

-CLOSED CHAMBER

-High
STANDARDS and
PRECAUTIONS
for MAXIMUM
SAFETY

DA VINCI OB48 ROBOTIC SPRAYING TECHNOLOGY





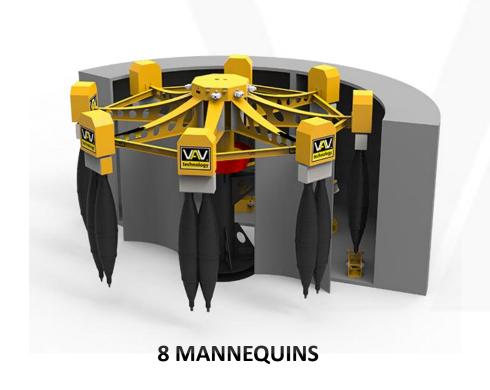
DA VINCI OB48
1,2 kW/h
1 / 78,5 kg
4 / 8,4 kg
0,3 - 8 gr/sec
6,500 - 6,750 kg
3 Phase 1N 1 PE -380 Volt UPS 1 Phase 1N 1 PE -220 Volt
4 / Upper: 32 kg - Lower: 200 kg / 100
Lt/min
7.500 m ³
142 cm

EQUIPMENT	LENGTH (mm)	WIDTH (mm)	HEIGHT (mm)
DA VINCI OB48	7384	5707	2695
CLONEMAC 10AX AN	2500	3220	2410
CLONEMAC 10AX AN VERS. SCR. & KEYB. CONSOLE	800	700	1162
CHEMICAL UNIT (FOR CLONEMAC 10AX AN VERS.)	1441	822	1703
DA VINCI OB48 CHEMICAL UNIT	2966	1290	2480

DA VINCI OB48 COMPONENTS



From "Good Components" to "The Best Robotic Spraying System"



WATER CURTAINS



4 ROBOTIC ARMS
WITH 6 AXES

DA VINCI OB48 COMPONENTS



From "Good Components" to "The Best Robotic Spraying System"







CONTROL PANEL



CHEMICAL UNIT

DA VINCI OB48 COMPONENTS



From "Good Components" to "The Best Robotic Spraying System"





CHEMICAL FILTERS FLOWMETERS

WHY DA VINCI OB48?



We Are Always One Step Ahead!

- **1.** HIGH PRODUCTION CAPACITY: Non-stop operation via 4 robotic arms and 8 mannequins always in use, never lose time.
- 2. <u>SMART LEARNING TECHNOLOGY:</u> "Clone Mac 10AX AN" clones operators path of motion and transfers it to 4 robotic arms. 4 robotic arms with 6 axes do exactly the same cloned movements whicgh <u>eliminates faulty workmanship</u>.
- **3. STANDARDIZATION IN PRODUCTION:** Thanks to 4 Robotic Arms with 6 axes and flowmeters, you always achieve the **same garment quality**.
- **4. FLOWMETERS:** Thanks to **0,3 8 gr/sec** precise flowmeters, you can spray the same amount of chemicals to every garment on mannequins via robotic arms. This leads you to **less chemical consumption, product standardization** and **cost calculation**.

WHY DA VINCI OB48?



We Are Always One Step Ahead!

- 5. <u>CHEMICAL FILTERS:</u> The chemicals are triple filtered before spraying to the garment. For this reason, high durability and long life for robotic arms and chemical unit can be achieved.
- 6. <u>SAFETY:</u> Thanks to automatic isolation doors, ventilation system and water curtains, maximum human and environment.org/environment.org/human and environment.org/environment.org/human and environment.org/environment.org/human and environment.org/human and environment.org/human.org/environment.org/environment.org/human.org/environment.org/human.org/
- 7. <u>VERSATILITY:</u> You can <u>modify</u> cloned operator behaviour to different sizes and lengths via <u>3D editor</u>. Spraying robot can be used with all <u>water based chemicals</u> and <u>resining</u> is also possible with suitable components.
- **8.** <u>CONTROL PANEL & SOFTWARE:</u> User friendly control panel, easy cloning technology, mannequin adjustment mechanism and advanced operating system ensure <u>fast</u>, <u>identical</u> and <u>low cost</u> production.

CONCLUSION



We Are Always One Step Ahead!







We as VAV Technology are proud to be developing and manufacturing new technologies for sustainable denim industry. Thanks to our R&D team and leading suppliers, we are one step ahead of the other manufacturers in the denim market.

- ❖More than 40 years of experience,
- Customers at more than 30 Countries,
- **❖**Over 1.000 Machineries globally,
- Expert Sales and Aftersales Teams,
- **❖** Global Service Network: Fast Recovery&Spare Parts Support
- ❖Denim Academies for New Trends&Technologies,
- **❖** Member of SAC to achieve & contribute to Goals of Sustainability,

With Da Vinci OB48 Robotic Spraying Technology, we assure **high production capacity & standardized products**, less chemical consumption and long life.

We use the **best components** like mannequins, robotic arms, cloning unit and chemical unit which are made of durable materials.

Together with that we are glad to be in the market with our software, know-how and service coverage.

For further details please email to sales@vavtechnology.com





www.vavtechnology.com

Thank You!