

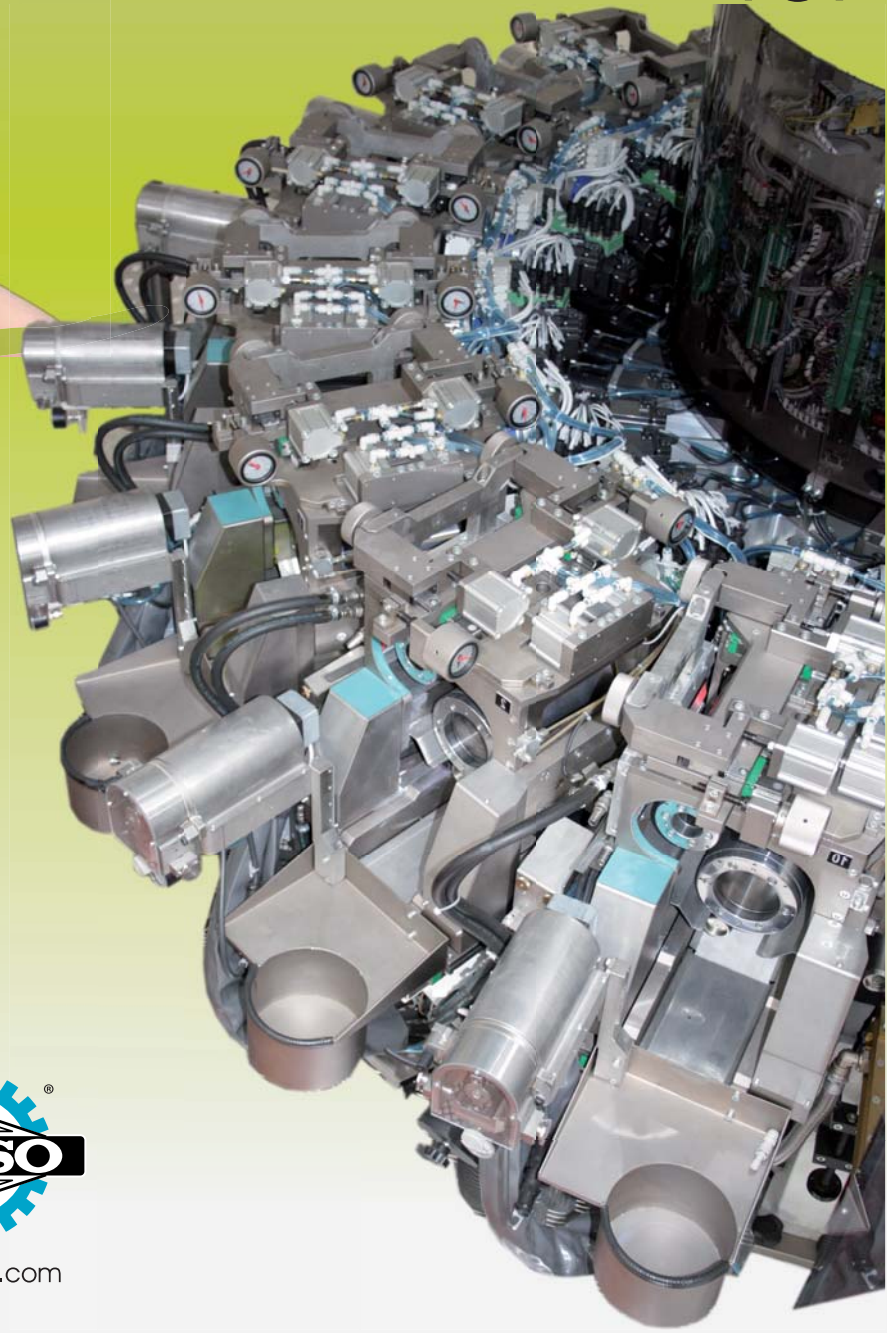


# ★ *Ultratube*

multi-color  
Flexo Graphic  
fully servo driven  
machine  
for

*Ultra quality  
decoration*

of tubes  
at  
Ultra speed



[www.omso.com](http://www.omso.com)

**CONTAINER** sleeve and tube : with or without cap, plastic or aluminum, opaque or clear.

**COLORS** max number: up to 13 colors  
graphic: unlimited decoration possibilities with direct print, any kind of effect [ metallic, relief, frost, lacquer. ... ]

**PRINTING** decoration: flexographic print quality with full control of all print related parameters from the operator panel;  
resolution: up to and over 70 l/cm [ 180 lpi ] for top quality  
density: lowest density down to 1%; very wide dynamic range  
registration: extremely accurate registration enabled by servo driven axis, +-0,02 mm guaranteed for machine life due to total & unique gear-less solution (true gear-less press );  
continuous air suction even during table index  
print/dry: curing between each color, allowing true high quality like gravure and offset  
mandrel: top precision with accurate bearing, for "kiss touch" print quality;  
compensation of the slightest pressure difference

Density reproduction down to zero



Crisp details, vibrant contrast



HD / Full HD FLEXPRESS PRINT

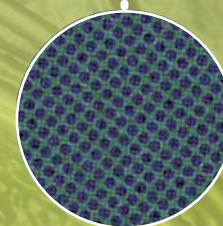


Multi-color Flexo Graphic fully servo driven machine for Ultra quality decoration of tubes at

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Soft transition



intense color and high maximum density

printing group: optimal visibility and accessibility  
plate: fast changing due to sleeve mount, off-line registration plate mount jig  
anilox: on sleeve for fast change and separate motor drive, no gear  
doctor blade: automatic pressure adjustment for consistent inking and long blade life  
ink feed: stainless steel peristaltic pump for normal run or open ink fountain for small lot  
printing parameters : most adjustment can be made "on the fly" with machine running

cleaning: deionizing with brush and vacuum to clean surface  
flame treatment: gas-air mixing and volume adjustments from operator panel

high printing speed: reliable performances up to 200 ppm, both tubes and sleeves, any diameter and length; highest speed of any print/dry machine on the market

torque motor for table indexing : very precise index angle, no wear parts, no maintenance, the table can freely turn by hand during changeover

mandrel table : very stable alloy machined from solid for top temperature and time stability

printing group: solid construction to avoid any vibration

SW & Logic: development by Omso Group, based on success of Servotube and ServoCup and ServoBottle; capability to follow customer's specific request

motors and reducer: life time lubricate

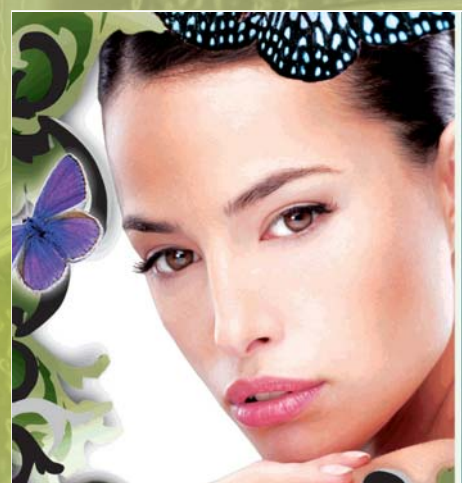
ball guides and screws: every group has specific lubricating socket with distributing hose for quick operation

mechanics: virtually no mechanical mechanism to maintain servo technology "self protecting"

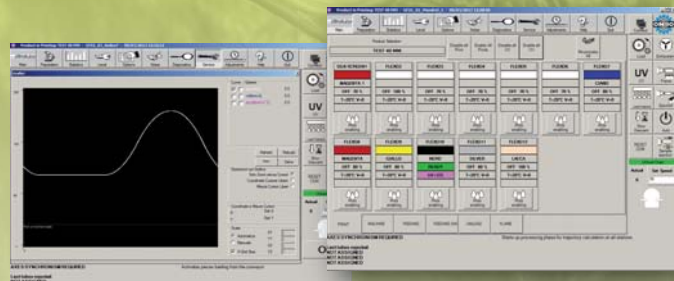
plate: no gear between plate cylinder and anilox



TRADITIONAL PRINT



**CHANGEOVER** speed: extremely fast changeover due to  
\* the large number of printing groups allows a minimal cleaning, leaving each color in position  
\* servo driven adjustment from memory  
tools: no tools required for tooling replacement (tool-less);  
mandrels : semi-automatic change function, no tools  
gears: none, full control from operator panel on all servo driven functions  
product data: complete menu for job related settings with instant recall function  
operator panel: 360 degree movement all around the machine circumference outside guarding, with fully graphics for each station, adjustments can be made with guards closed, even with the machine running.



access level: multiple operator level access in relation to skill and password protection  
easiness: fully servo driven and electronic control from terminal  
operation guide: detailed description of all features with help guide on operator panel, "picture and a paragraph" describes each function

safety: full management of all critical situations for operator and machine safety feature at tube diameter change to avoid any collision

diagnostic: auto-diagnostics features built in program, fully detailed diagnostic  
troubleshooting: possibility to easily remove the print group from the machine maintenance offline

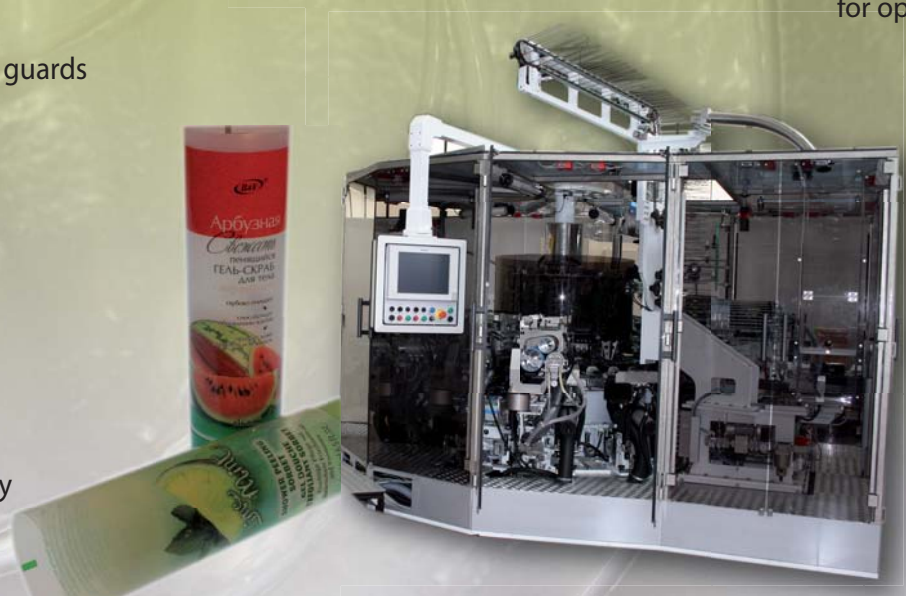
remote assistance: via customer's internet connection.

**LOAD/UNLOAD** load: 3 phase separate servomotor strokes for high speed and delicate touch for sensible tubes and sleeves  
unload: 2 phase unload servomotor strokes for high speed, optimized for sleeve

**REGISTRATION** neck thread or cap reading for precise print orientation

**UV CURING** water shield for heat removal, stand by during table index, electronic ballast

**ENERGY/SPACE-SAVER:** possibility of UV Led for energy saving and no heat on tubes, "instant on" technology and virtually no maintenance, no ozone, no visible light  
layout: very compact layout to save plant floor space



ERGONOMY

TREATMENT

PERFORMANCES

MAINTENANCE

USER FRIENDLY

SAFETY & TROUBLE SHOOTING

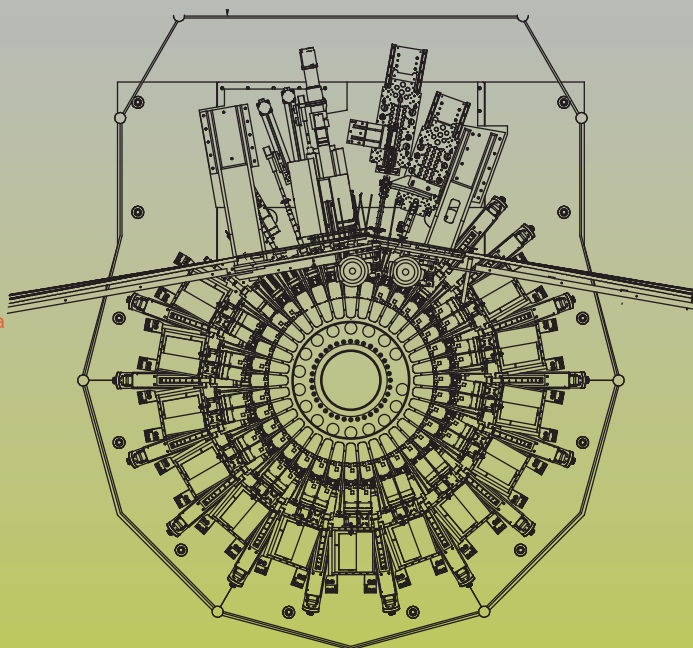


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## FLEXIBILITY

configurations: high flexibility due to totally independent groups  
investment protection: guaranteed as any decoration can be obtained  
table: 36 stations and mandrels

13 Colors	POSITION
1	Load 1
2	Load 2
3	Load 3
4	Deionizing
5	Treatment
6	Flexo 1 White 1
7	UV 1
8	Flexo 2 White 2
9	UV 2
10	Flexo 3 Yellow
11	UV 3
12	Flexo 4 Cyan
13	UV 4
14	Flexo 5 Magenta
15	UV 5
16	Flexo 6 Black
17	UV 6
18	Flexo 7 Spot 1
19	UV 7
20	Flexo 8 Spot 2
21	UV 8
22	Flexo 9 Text 1
23	UV 9
24	Flexo 10 Text 2
25	UV 10
26	Flexo 11 Metallic
27	UV 11
28	Flexo 12 Lacquer matt
29	UV 12
30	Flexo 13 Lacquer gloss
31	UV 13
32	UV 14
33	Inspection
34	Unloading 1
35	Unloading 2
36	Free



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1	Load 1
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9	UV 2
10	Flexo 3 Cyan
11	UV 3
12	Flexo 4 Magenta
13	UV 4
14	Flexo 5 Black
15	UV 5
16	Flexo 6 Orange
17	UV 6
18	Flexo 7 Green
19	UV 7
20	Flexo 8 Spot 1
21	UV 8
22	Flexo 9 Text 1
23	UV 9
24	Flexo 10 Metallic 1
25	UV 10
26	Flexo 11 Metallic 2
27	UV 11
28	Flexo 12 Lacquer matt
29	UV 12
30	Flexo 13 Lacquer gloss
31	UV 13
32	UV 14
33	Inspection
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35	Unloading 2
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## QUALITY CONTROLS

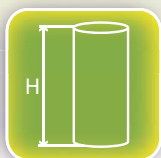
system: integrated linear color vision system for 100% quality assurance;  
illumination: both systems for opaque and clear container;  
inspecting: unprinted areas, defects in the substrate, shadows, pin holes, blurs, registration movement;  
robustness: the system can be easily set according customer quality level  
simple use: easy setup and adjustment, not requiring a specialized operator;  
statistics: to advise operator of the number of defects, location and size;

## GENERAL



container size:

Min/Max  
 $D: \geq 16 \text{ mm } D \leq 60 \text{ mm}$



print Height  
 $\leq 220 \text{ mm}$

