

Technical features

	C250/LG	C600	C600hp	C600denim	C800
Power supply	19kw	20kw	22kw	22kw	22kw
Average consumption	6-7kw	7-8kw	7-8kw	8-9kw	8-9kw

	FLEXO 180x175	FLEXO 180x210	FLEXO 210x175	FLEXO 210x210	FLEXO 225x175	FLEXO 225x210	FLEXO 240x175
Effective cutting width	1,80 m	1,80 m	2,10 m	2,10 m	2,25 m	2,25 m	2,40 m
Effective cutting length	1,75 m	2,10 m	1,75 m	2,10 m	1,75 m	2,10 m	1,75 m
Overall width A	2,80 m	2,80 m	3,00 m	3,00 m	3,15 m	3,15 m	3,30 m
Overall length B ①	3,90 m	4,40 m	3,90 m	4,40 m	3,90 m	4,40 m	3,90 m
Overall lenght B ②	4,40 m	4,80 m	4,40 m	4,80 m	4,40 m	4,80 m	4,40 m

Electric requirements: three phases+Neutral 400V 50Hz+/- 10%
Compressed air: Consumption 150 l/m 6BAR
Working temperature: from +10°C to +45°C | **Humidity:** from 30% to 80%
Rumorosity: <75dbA | **Accelerations:** 0,5g | **Cutting speed (maximum):** 60m/min

SPEED: Drastic reduction of production time.
QUALITY: Precision and elimination of human errors in cutting and marking.
ADVANTAGES: Increase of the profits and faster return of investment.
FLEXIBILITY: Direct insertion of cutting data parameters through personalized software or through CAD systems in ISO 6983AAMA.
RELIABILITY: After sales, qualified and dedicated technical service support.

ROBOT FLEXO: A CONCENTRATE OF INNOVATIVE TECHNOLOGY

The completely independent cutting beam Robot Flexo, built in strong and light mechanic, incorporates the cutting head which benefits from the intelligent management of CNC control combined to the most advanced eletronic system with brushless motors of last generation. The beam moves along the logitudinal axe on the cutting bed while the cutting head moves simultaneausly on the transversal axe. The eletronic and the software interact with mechanic creating a dynamic speed movement and high precision. High frequency oscillating knife goes into the fabric to cut in rapid and precise way. On board touch screen display makes easier the operating functions and allows the use of machine in a simplified and intuitive way ■

INTEGRATED TECHNOLOGY

The conveyor cutting machines include Robot FLEXO, a stand alone cutting unit with intelligent management and integrated power. The control of the movement adjust the cutting speed in order of the angles and the curves of the figures to cut so the knife cannot skid out of the preset trajectory even with high average cutting speed. Using the latest eletronic and mechanic technologies makes the Orox FLEXO a flexible machines, the best choice for different applications such as apparel industry, upholstery furniture, automotive interiors, nautical and in any case suitable for all the necessities for cutting fabrics and materials with mechanical knife ■

HOLDING DOWN PERFECTLY

The conveyor cutting surface is made of a flexible and compact top composed of a particular QUAD MULTIAGHI on purpose studied for supporting the material to cut and contemporarily to facilitate the penetration of the knife. A patented vacuum section canalization distributes the level of vacuum suction on the all cutting surfaces, the porosity of the special bristles QUAD MULTIAGHI allow to concentrate the vacuum in the cutting zone (vacuum concentrate). A special system EVAS (Eletronic Vacuum Sensor) allows to optimize the suction. Using a sophisticated sensor the air leakages are detected during the cutting phase. The eletronic system regulates the vacuum pump increasing or decreasing the suction allowing the maintain always stopped the fabric on the plan of cut with the correct holding down pressure ■

POWER SAFE CONSUMPTION

In order to reduce the costs of maintenance of the machine, a particular attention has been reserved to the costs of the energy for the operation of the machine. The eletronic systems controlled by inverters, don't allow to ever reach the peak of eletric absorption. Moreover the intelligent system for controlling the vacuum modulates continuously the speed of the vacu um turbine and therefore the required power consumption to hold down the material on the cutting table. With the supplementary automatic cover devide of the cutting area, the dispersion of the vacuum is reduced subsequently reducing the eletric consumption ■

SELF-SHARPENING KNIFE

An innovative system of sharpening cutter knife with eletronic control and with only one grindstone always keeps the knife well sharpened. Moreover, with the eletronic system, it is possible to modify the angle of sharpening. This particular charateristic facilitates the cut of resinous fabrics or treated with trimmings and particular dyes, fabrics with inserts of metallic threads, etc. The wear of the knife is automatically corrected, the knife lasts for a longer time and the cut is always precise and clean ■

PRECISE AND CLEAN CUT

The special cutter knife guide with opposite mechanical rollers and other devices keep the orthogonality of the knife with cutting surface. The cutting speed is managed to maintain an uniformity of dimentsional precision between the top and bottom ply even with hard materials as Denim. If it is desired to further increase the performances (rising of the number of plies and cutting speed) the special device FLESE (Flexion Sensor) is available. Modifying electronically in automatic and in real time the position of knife reduces the bending and the impact of the same knife with the material to cut ■

FACILITATED TAKE OFF CONVEYOR TABLE

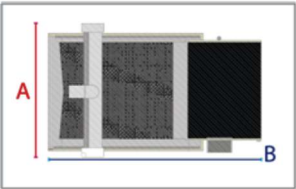
The unloading conveyor made of rubber cloth, with free environment space, facilitates the picking up of the cut pieces; the garbage can be unloaded in proper containers. The unloaded conveyor works in synchronous way but it can be controlled separately in order to full unload machine while at the same time a new phase of cut can start ■

CUTTING TIME SAVING

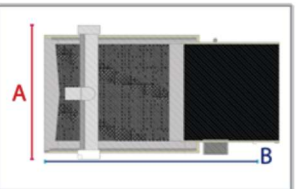
The easy way of data input and the special CSM program (Control Step Motion) for a continuous step movement of the conveyor reduce the cutting time and increase the global productivity of the machines FLEXO conveyor ■

ANOMALY AND FAULT DISPLAY

Each component of the system is continuously monitored and the possible anomalies are detected and displayed allowing a prompt service in order to restore the working condition. The advice of error or anomaly make easier the fault detection allowing a prompt technical service through qualified teleservice by Orox technical experts ■



① Unloading table 150



② Unloading table 200

Flexo Falcon

robot | cutting machines



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Flexo Falcon

robot | cutting machines

CAD/CAM systems

High technology
on cutting fabrics

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Conveyor Machine

- C250** CUT FABRICS FROM SINGLE PLY AND COMPRESSED LAYER UP TO 2.5CM THICKNESS
- C600** CUT FABRICS FROM SINGLE PLY AND COMPRESSED LAYER UP TO 6CM THICKNESS
- C800** CUT FABRICS FROM SINGLE PLY AND COMPRESSED LAYER UP TO 8CM THICKNESS
- C1100** CUTTING MACHINE DESIGNED FOR SOFT MATERIAL, CUT UP TO 11CM THICKNESS
- C600 DENIM** CUTTING MACHINE DESIGNED FOR HEAVY DUTY LIKE DENIM

Features

High technology on cutting fabrics

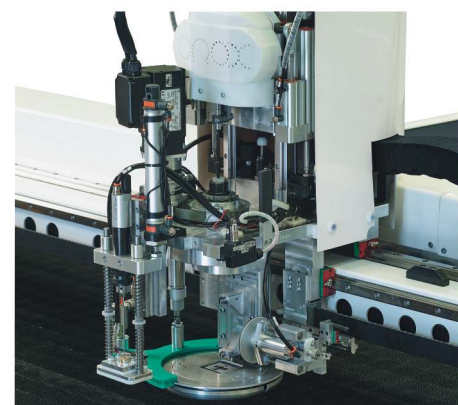
- Oscillating knife with «Flexo» device
- Operative control by means of computer
- Cutting simulation of a single shape for error prevention
- Autoagnosis system to identify and advice eventual errors
- «EVAS»: Eletronic Vacuum Sensor System to optimize the suction for firmly holding the fabric with correct pressure and reducing electric consumption
- Air exhaust with filter and silencer
- Knife control with variable speed
- Cutting with variable knife speed to reduce and eliminate the sticking of resin pieces
- Vacuum pump suction system for holding pieces to be cut
- AllCut: the software
- «CLED»: Automatic cleaning system of the cutting conveyor
- Drill holder device with interchangeable drill bits of different dimensions
- Cutting Conveyor and ununloading conveyor with reverse movement
- Unloading conveyor with combined and separate movement



• ROBOT • MACHINES • CAD/CAM SYSTEMS

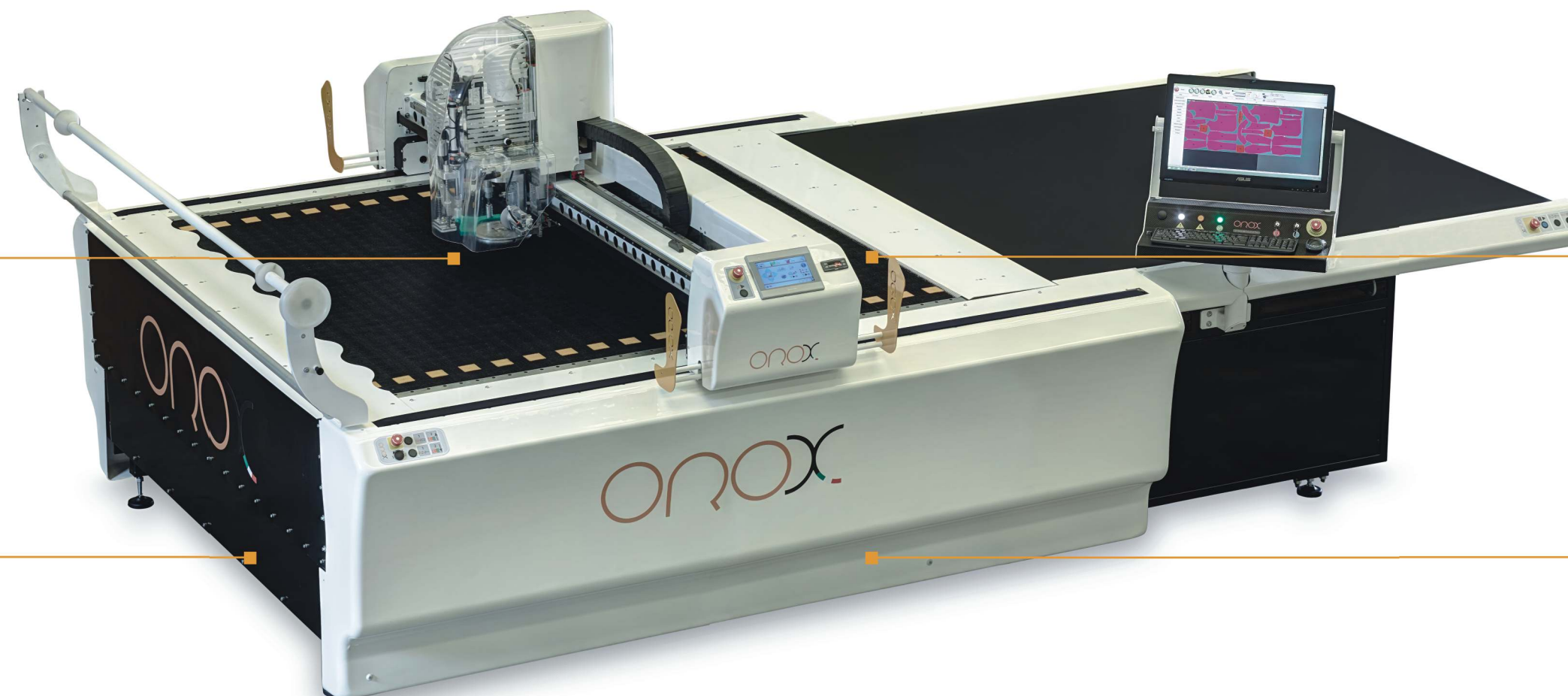
Optional

COLDE	Knife cooling system with frozen air
PD	Punching Device , supplementary drill for die hole
RIVER SYSTEM	Continuous cut system
EDITCUT	The software for ISO editing
POPS	Post Print label System
FLESE	Flexion Sensor knife control device in real time



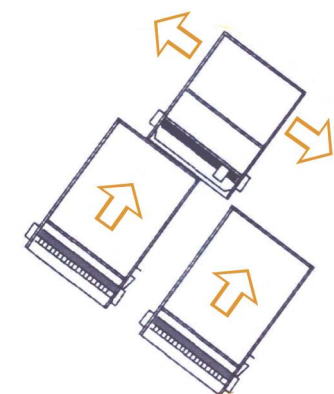
ROBOT FLEXO

The beating heart of the machine. Oscillating knife with high-frequency, sharpening angle of the knife with electronic control and dynamic movements quick and precise with very high operational reliability. ■



TOUCH SCREEN

The multifunction keypad. Operator panel with immediate and intuitive commands which save time and greatly improve the working efficiency. ■



T.MOV

Lateral motorized travel kit movement. Motorized traslation to move the cutting machine between several spreading tables: the machine cuts in continuous. ■

OROX ECOLOGY

The attention to the enviroment and the continuous research brought us to develop innovative solutions for the optimization and reduce the power consumption. ■

