

## ***UNISAND: multi-purpose sanding machine***

*The UNISAND project is able to meet the most widely different client needs by supplying sanding machine solutions with up to 4 sanding units. One such need is that of a machine capable of ensuring precision, high-speed production, low abrasive belt wear and reliability of mechanical parts, all indispensable features in a calibrating/sanding machine. A different need is, instead, that of machine flexibility, both as regards its components and the type of sanding units, that is, able to guarantee notable finishing quality and operate with defects or imprecisions of thickness.*





*Both goals can obviously be reached by equipping the Unisand machine with the most suitable sanding units, chosen according to the type of work to be carried out.*

*Just consider the sturdiness of the structure or take a look at the care taken with every detail, as well as the compactness and harmony of the system as a whole: without doubt balanced and rational, the confirmation that when an industrial product is technically correct, it can also become aesthetically pleasing.*

*UNISAND is the result of a rigorous development project and exploits the most reliable choices available; it has been designed for rugged use and the most sophisticated work quality requirements.*





belt tensioning.

The advantages become decisive on automatic lines, especially on finishing lines, for which stoppage of the machine leads to stoppage of the entire line, with the inevitable corresponding increase in non-productive «dead» times.

▼ **ACP system (Automatic Compensating Platens): to ensure optimum results even with irregularly thick pieces**

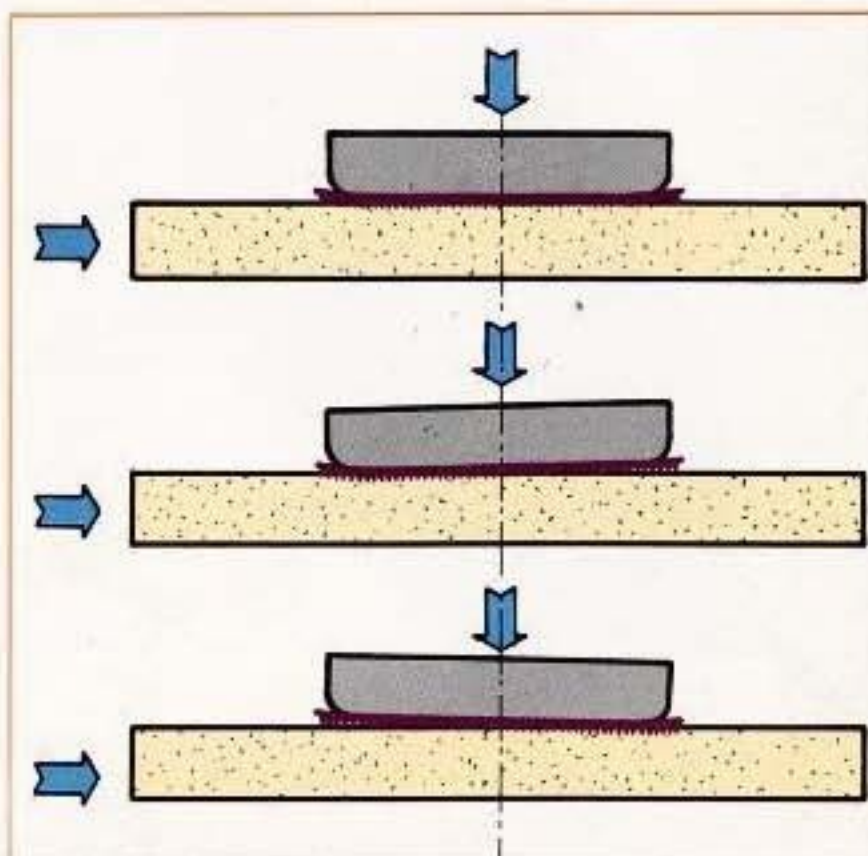
This system allows working of variable-thickness pieces with roller sanding machines. Two height-adjustable smooth pressure bars, one in front of and the other behind the sanding roller, ensure parallelism between the roller and the surface to be worked, while on the work surface 92 counter-pressure elements with pressure-adjustable pneumatic operation, organized on 4 lines, maintain a uniform «push» which is distributed against the pressure bars, adjusting to variations in thickness.



Automatisches Meßsystem für die Plattendicke  
Automatic detecting device of panel thickness

▼ **Instant Adjustment of Pad Trime (DMC Patent)**

A slight correction of the pad work angle with respect to the work surface makes it possible to «dose» the aggressiveness of abrasion so as to obtain the type of finish desired without having to replace the belt or compromise by varying pressure or work speed.



## **UNISAND: an expression of the most advanced technology**

### *The Sanding Roller Unit.*

*Made up of a large diameter sturdy steel cylinder; such cylinder is rubber coated with spiral grooving.*

*The hardness of the rubber (from 20 to 90 shore) depends on the type of sanding required and the angle of grooving in correlation with the desired aggression; the pressure on the surface to be worked is adjustable.*

*As for the calibration, with deep stripping, the roller may only be of the ground spiral-grooved steel type: this guarantees maximum precision on the final thickness after the calibrating operation.*

*An electronically controlled two-sector «contact optimizer», located under the conveyor, ensures excellent performance on laquered surfaces.*

*Belt cleaning is ensured by an oscillating blower which has been specially designed to favour dust suction; a disc brake sees to automatic stoppage in any emergency.*

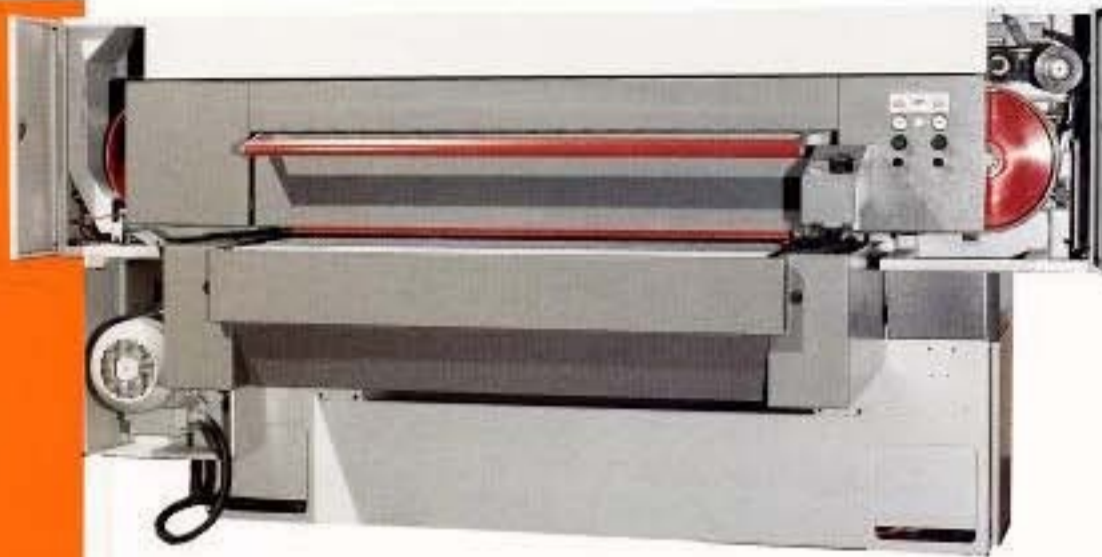
### **ALS (Automatic Locking System): system for rapid and automatic locking of the belts**

*Available in an automatic or semiautomatic version, it makes belt replacement on UNISAND incredibly simple, reducing change-over times by up to 30%; furthermore, it eliminates the risk of operation with unlocked work units, avoiding damage to the machine and resulting poor quality. The automatic ALS version carries out locking and unlocking of the stays by means of simply activating/disactivating*



ALS: verriegeltes Schnellbefestigungssystem  
«ALS»: quick locking system closed

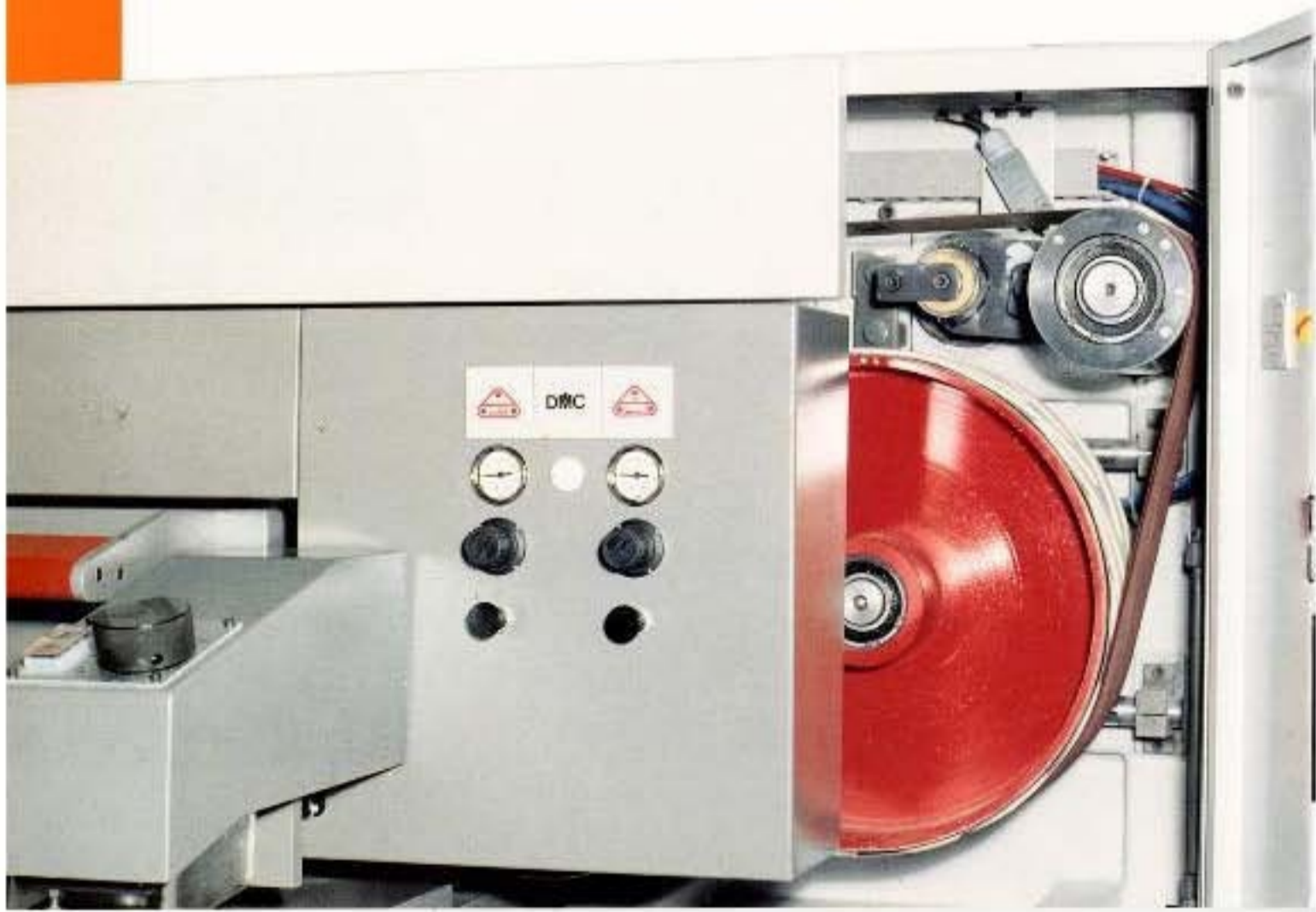


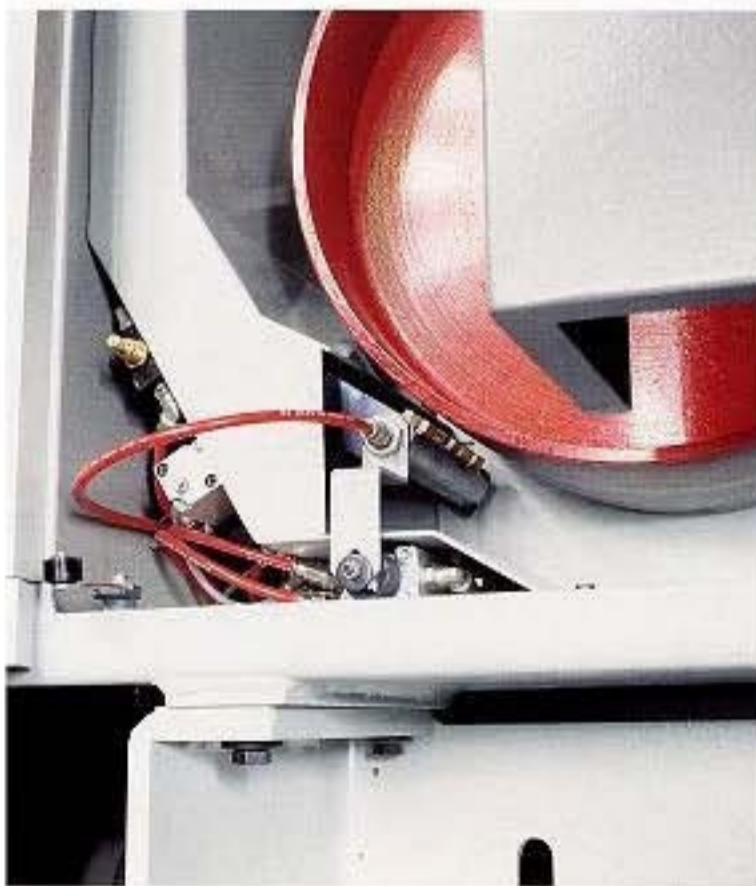
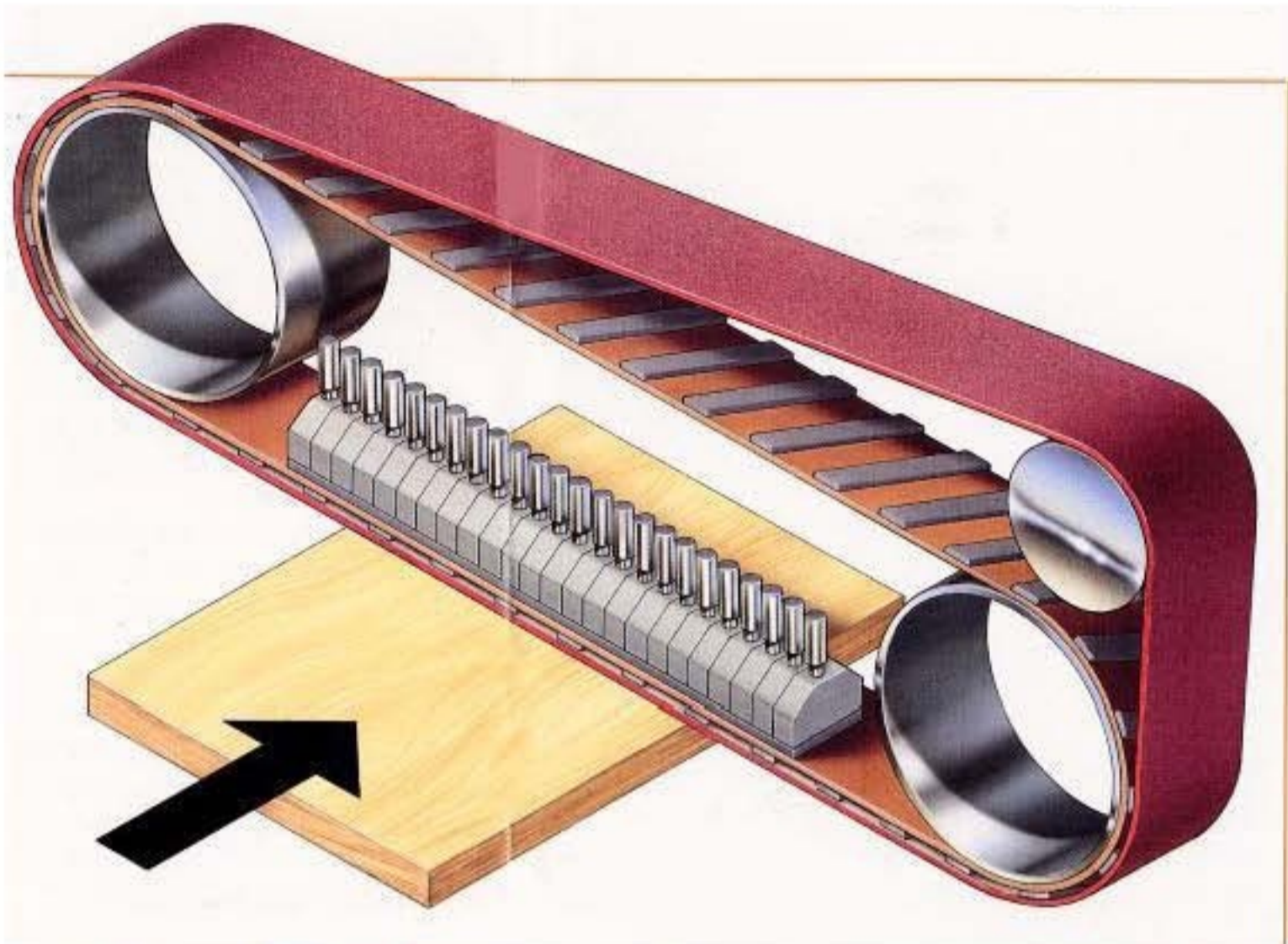


## ***The Crossbelt Unit***

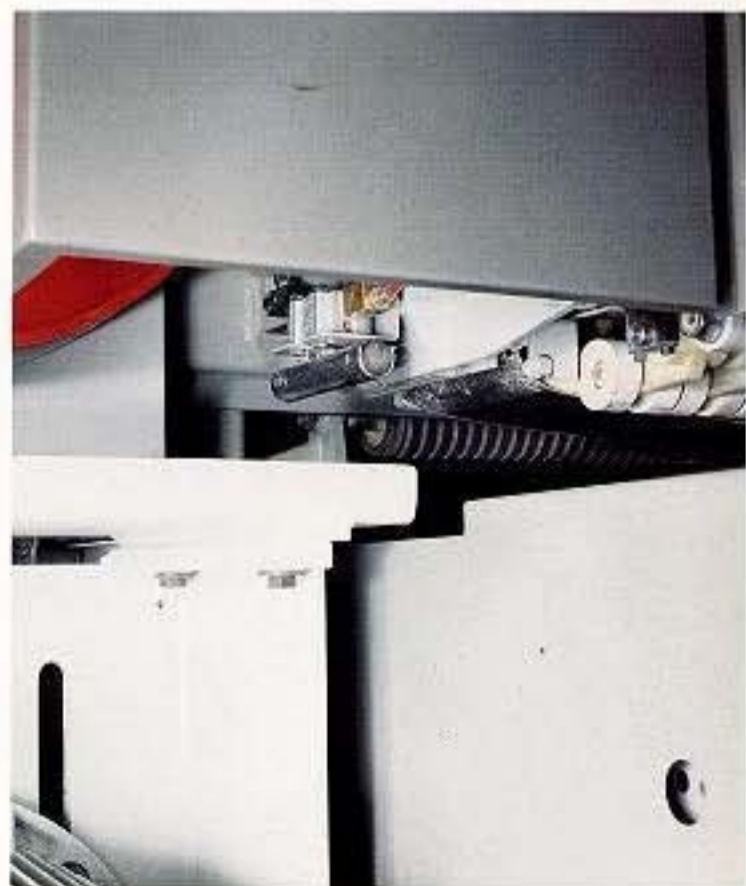
*The constructive geometry allows unification of traditional aggression with improved sensitivity, thus allowing realization of perfectly uniform contact with the surface even where ripples are evident. This is possible thanks to the use of the electronic EPICS pad, an internal lamellar belt, which acts as a soft support for the abrasive belt and two supplementary automatic pressure*

*elements, positioned at the two pad ends. These pressure elements ensure correct trim along the whole width and even pressure on the panel side edges. An oscillating blower and an efficient dust suction system see to thorough cleaning of the belt so as to give the best possible yield. The possibility of employing various types of lamellar belt allows adaptation of performance to any need.*





*Abrasive belt cleaning blower*



*Additional automatic pressure unit*