



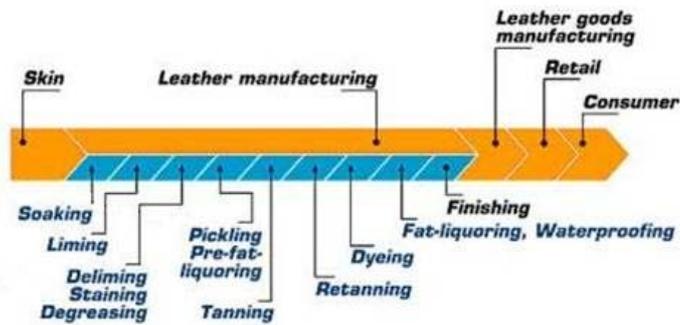
**DAMASCUS LEATHER CENTRE
ITALIAN MEETING
18th January 2010**



Leather Applications Laboratory

The purpose of an application laboratory are mainly dedicated to support the tanneries of the district for implementation and improvement of production processes.

The structure of one unit of service must be arranged appropriately with regard to the needs identified by the production units in the district, in the absence of specific allegations, we can use, in general, a systematic approach to analyzing the flow of production according to the diagram:



The endowment of machines and equipments for labs allows the execution of practical lessons in the processing of leathers destined to footwear manufacturing, to leathergoods and garment. It performs the function of supplying proper answers to every kind of problem occurring in the tanneries of the pole-district and at the same time it offers the opportunity of performing possible researches with different aims.

Machines and equipments belonging to this operative unit are shown in the table 1.





Following the above process we have the opportunity to consider the infrastructure work assuming a first phase consisting of two technology areas equipped for distinct applications:

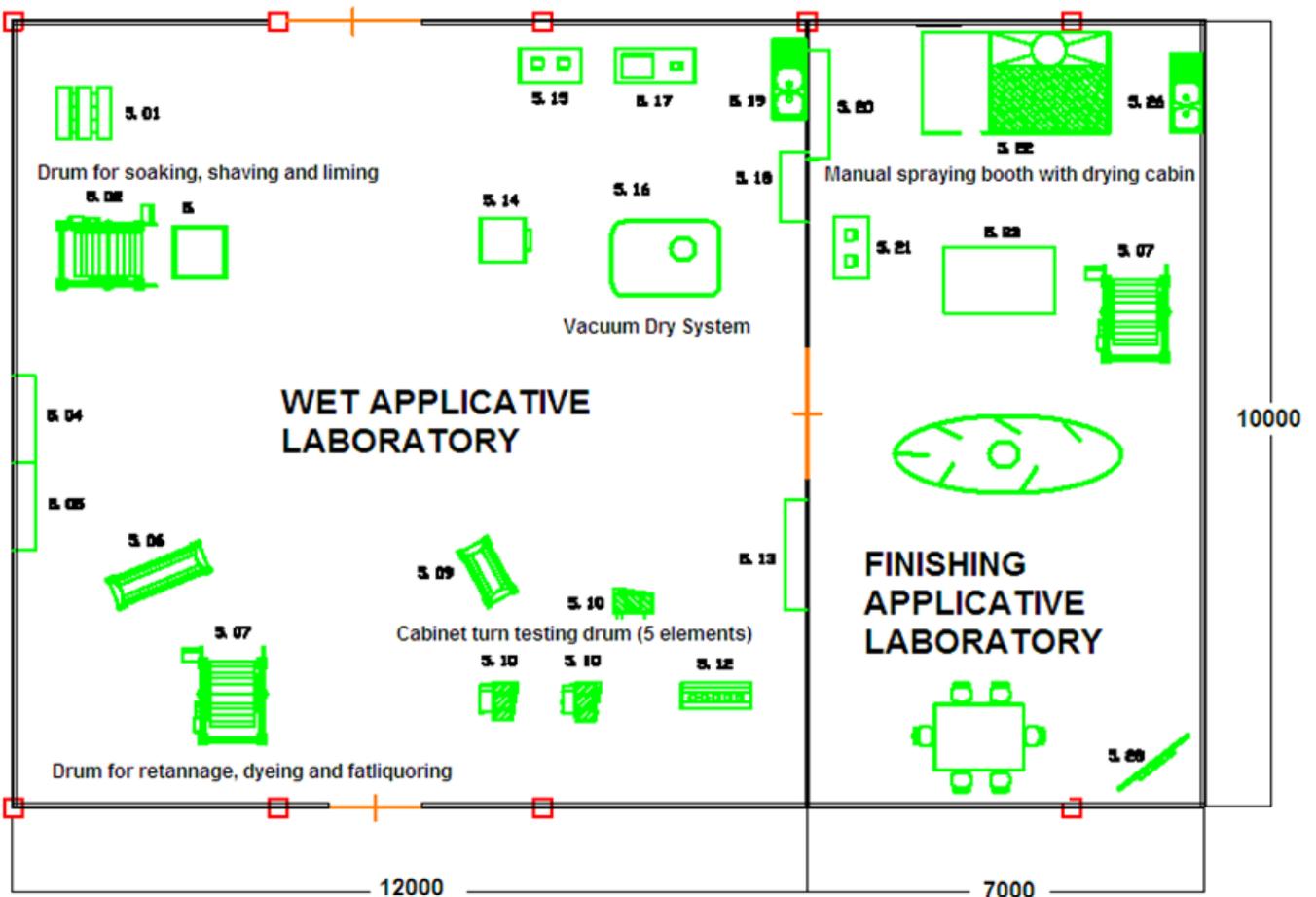
From Raw to Crust (Wet Lab)

From Crust to Finish (Finishing Lab)

This approach as outlined is able to provide the necessary angles to the type of leather work, providing a universally applied because the equipment envisaged are the basic operations of the tanning process.

The next phase of implementation using dedicated machines functional process and the type of item you want to achieve (eg Fleshing, Splitting, Shaving, Stacking) will be considered at a later date in light of the possibility for the center to expand its activities by providing productive services contract basis.

Laboratory Lay-out





Machines and equipments (tab.1)

Department	Applicative Lab		
	Wet-tannage and wet end		
Code	Machine-Equipment	Q.ty	Price €
1.01	Drum for soaking, shaving and liming 1500x1000 mm	1	
1.02	Drum for retannage, dyeing and fatliquoring 1000x500 mm	1	
1.03	Cabinet turn testing drum (5 elements)	1	
1.04	Vacuum Dry System (800x800) complete with vaccum pump	1	
1.05	Balance, capacity 10 Kg base 1000x1000 mm	1	
1.06	pH, meter	1	
1.07	Trolley-trestle to collect leathers, width 2500 mm	1	
1.08	Wheel Tank to collect wet hides (400€ cad.)	2	
1.09	Accessories (<i>cabinet-tools-vessels</i>)		
		tot.	
	Finishing		
2.01	Manual spraying booth with drying cabin (<i>complete with accessories</i>)	1	
2.02	Automatic Milling Drum with PLC set-up	1	
2.03	Drying cabinet	1	
2.04	Trolley-trestle to collect leathers	1	
2.05	Balance, capacity 5 Kg. Dimensions 1200 x 800 x 800 mm	1	
2.06	Table position for finished leathers control (2500 x 1500 x 800 mm), trolley	1	
2.07	Microscopy system equipped with imaging software and personal computer	1	
2.08	Accessories (<i>mixer device-shaker</i>)		



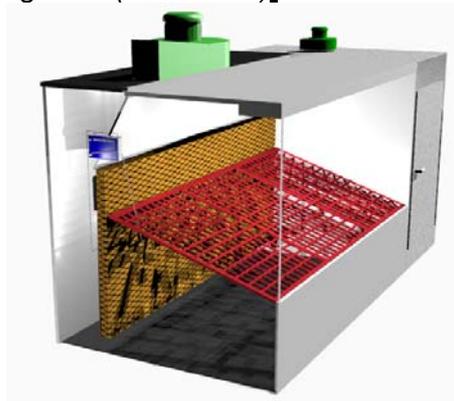
Applications Lab Drum (Code 1.01-1.02)



Vacuum Dry System (Code 1.04)



Manual spraying booth with drying cabin (Code 2.01)



Trolley-trestle to collect leathers (Code 2.04)

