Study on the Dry Thermal Properties of Micro-Zone and Fibers of Dechroming Skin

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Abstract: The dry thermal properties of micro-zone and fibers are studied by determining the shrinkage temperature, shrinkage ratio and curves of skin grafts and fibers on different layers of dechroming skin using thermal platform microscope. The results showed that: the thermal stability of micro-zone relates to cross bonding, but the fiber relates to amorphism and crystal regions. When the cross bonding is more, the structure stability of micro-zone and shrinkage temperature both are higher, the shrinkage ratio is lower too. The thermal stabilities on the same layers after the dechroming of wet blue leather are: micro-zone > fiber, and the micro-zone and fibers on different layers both are: middle layer > flesh layer > grain layer.

Abstract: thermal platform microscope; dry thermal property; micro-zone; fiber