



SCIENTIFIC ANALYSIS OF FILLERS AND VEGETABLE, ANIMAL AND SYNTHETIC FATS USED IN FILLING AND GREASING THE PLANT SKIN

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ABSTRACT

This article presents materials on the scientific analysis of fillers and vegetable, animal and synthetic fats used in filling and greasing plant skin.

The skins are fattened to give softness, elasticity and accumulation of wetness in water. For fatliquoring vegetable, animal and synthetic fats and various fat emulsions.

Chrome-tanned leathers are fattened in dyeing machines with fat emulsions at a temperature of 60-65°C and well. k. 1-1.2 for 0.7-1.5 hours. After fatliquoring, the skin is washed with warm water (temperature 35-40°C) for 10-15 minutes. Rigid leathers and yuft are fattened with fat emulsions-mixtures in fattening drums heated by blown air or in fattening machines. After squeezing, the skins are loaded into a drum and rotated without fat mixture for 20-30 minutes. Then, a fat mixture is poured through the hollow axis and the drum is rotated for 45-50 minutes when processing hard leathers and 2 hours when processing yuft. The temperature of the blown air is 70-80°C, the temperature of the fat mixture is -50-65°C.

These processes are carried out to increase the water resistance of the

leathers and give them fullness and elasticity. During impregnation, various insoluble and water-repellent substances are introduced into the skin - rosin, resins, polymers. The skins are impregnated in machines or apparatuses. Magnesium sulfite, glucose, molasses, molasses and tanning extracts are used for filling.

Filling is usually combined with greasing leather. At the same time, the wrung out skins are loaded into the drum and rotated for 10-15 minutes. At the same time, air at a temperature of 65-75°C is blown through the hollow axis. After heating the skins through the hatch, magnesium sulfite and potassium alum are poured into the drum and oxalic acid is added; 15-20 minutes later, liquid fillers (molasses, tanning extract solution), heated to a temperature of 60-70°C, are poured through the hollow axis, and the drum is rotated for another 40-50 minutes. Then the fat mixture is poured in and the drum is rotated for another 1-2 hours. Fillers and



impregnating agents are dosed according to the appropriate recipes.

Chrome-tanned leathers to be dyed, fattened and stuffed are pre-washed in a rotary apparatus with warm water and then treated with alkali (bicarbonate, sodium carbonate or sodium sulfite) to neutralize and remove from it the acid remaining from previous processes, which stiffens the leather and causes salt and grease stains.

Skin neutralize within 45-50 min. k. 2-2.5 and a solution temperature of 30-35°C. After neutralization, the skin is washed again for 40-45 minutes at a temperature of 35-40°C to remove salts formed after neutralization. The washed skins are loaded into dyeing machines.

For the organization of modern shoe production, materials of various nature and purpose are needed. In the shoe industry, the share of raw materials and materials in the cost of production is approximately 75-93%. Shoe materials are one of the determining factors in the range and quality of finished products. Among them, two classes are distinguished - basic and auxiliary materials.

The main materials are used for the manufacture of outer, inner and intermediate parts of the upper and lower parts of the shoe. Top materials include natural, artificial and synthetic leather, textile materials (fabrics, non-woven materials, knitted fabrics, felt, felt), natural and artificial fur. The materials of the bottom of the shoe are natural hard leather, rubber, rubber, plastics, cardboard and wood.

Auxiliary materials are intended for fastening parts, finishing and decorating shoes. The fastening materials are threads,

nails, screws, hairpins, glues. Finishing materials are paints, finishes and polishing materials, textile haberdashery (braid, ribbons, cords), shoe fittings (hooks, blocks, buckles, buttons, zippers, holniten rivets, eyelets, pukley, etc.).

Among all shoe materials, genuine leather occupies a special place. Natural leather is obtained from various leather raw materials. Leather raw materials are animal skins suitable for leather production.

The skin is called the outer cover, removed from the carcass of an animal (steam skin) and preserved from decay (canned skin). The main raw materials for the production of leather are the skins of mammals, mainly domestic animals (cattle, horses, pigs, sheep, goats, etc.) and less often wild animals (moose, deer, wild boars, etc.).

Skins of reptiles (snakes, lizards, crocodiles), marine animals (walruses, seals, dolphins, whales, etc.), fish (cod, catfish, sharks, eels, etc.) and birds (ostriches, etc.) are processed in small quantities.

Depending on the type of animal, the mass of the skin in a paired state, its area, raw hides are divided into small, large and pork. Small leather raw materials include the skins of calves of cattle (skin, calf, outgrowth), foals (skin, foal), sheep, goats (domestic and wild), camels and deer calves.

Large leather raw materials include the skins of adult animals: cattle (half-skin, bull, bull, bull, bullock), horses, buffaloes, donkeys, mules, camels, deer, elks. Pig skins of domestic and wild animals are divided by area into small (30-70 dm²), medium (71-120 dm²) and large (over 120 dm²).



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