The effective technology and complex services

Farmet®

STATE-OF-THE-ART TECHNOLOGY OF PHYSICAL REFINING FOR DECENTRALIZED VEGETABLE OIL PROCESSING

- Get refined vegetable oil by purely physical process, without use of chemicals
- Low process oil losses – no soapstock produced
- Uses deep vacuum below industry standard – 2 mbar
- High level of antioxidants and low content of trans-unsaturated fatty acids and process contaminants
- Refining of specialty oil already from 100 kg of oil per hour

HEXANE FREE TECHNOLOGIES®

REFINING

At developing of the refining technology, we have focused on reaching the best possible quality of the final product – refined vegetable oil. We have achieved excellent quality results: low content of trans-unsaturated fatty acids, which are harmful to human health (cause atherosclerosis) and low content of process contaminants (3-MPCD a GE), which are carcinogenic.

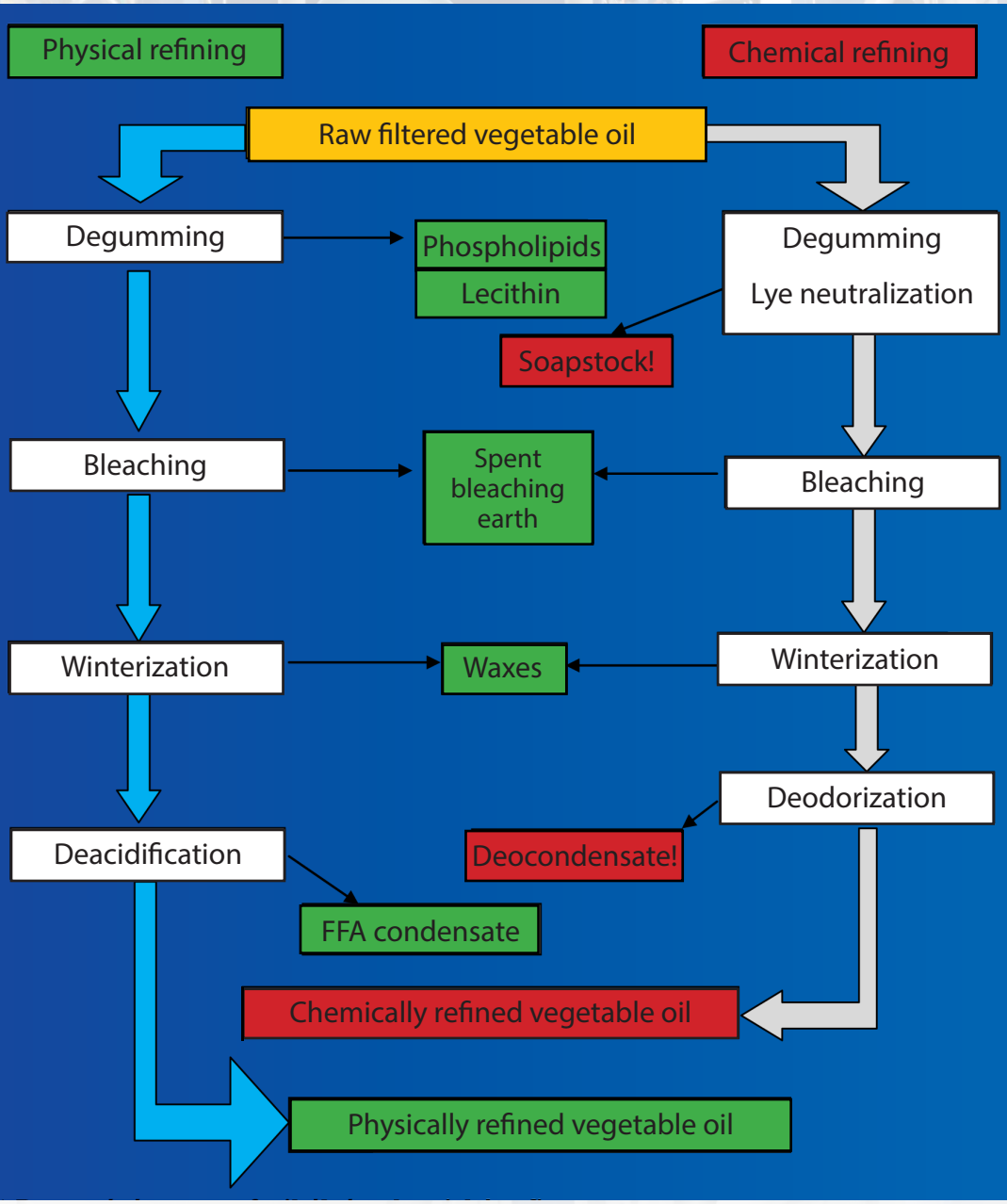
We have received oil, which is not only of higher quality and healthier, but due to gentle refining method it preserves maximal content of natural antioxidants (namely tocopherols). The antioxidants also improve the shelf life of the refined oil. Such results were achieved due to decreasing the thermal exposition, which minimizes thermal degradation of oil.

The process of refining consists of 4 steps: Degumming, Bleaching, Deacidification. Further, the technology of **Dewaxing** is offered for removal of waxes from sunflower oil. There technologies can be supplied as standalone units as well.

ADVANTAGES OF PHYSICAL REFINING OF VEGETABLE OILS

- Minimizes use of chemicals;
- Maximal heat recovery is achieved due to complex solution;
- Deep vacuum is used;
- Low demand of energy for vacuum production due to optimized freezing system;
- Minimization of wastes due to effective use of byproducts (lecithin, waxes, FFAs).

COMPARING THE PROCESSES OF PHYSICAL AND CHEMICAL REFINING



Effective byproduct use at physical refining (phospholipids, lecithin, spent bleaching earth, waxes, FFA condensate).

Unusable byproducts from chemical refining (soapstock, deocondensate).