

PET RECYCLING PLANT PLARUS

PET recycling plant "PLARUS" is the first enterprise running at bottle-to-bottle technology in Russia. Now the plant is equipped by the leading European manufacturers: "SOREMA" (Italy), "BUHLER AG" (Switzerland), "RTT GmbH", "TITECH GmbH" (Germany), "BOA" (Holland).

The plant is located in Solnechnogorsk, Moscow Region.



The construction of PLARUS started in year 2007.
Start up and first product received in year 2009

Number of employees: 180

Processing volume: 1,500 t of used PET bottles per month with possibility of increase till 2,500 t per month

Volume of final products per month: up to 850 t of PET bottle grade "ClearPET" and currently up to 100t PET flakes per month with possibility of increase up to 900 t of PET flakes per month if 2,500 t of bottles are processed

Incoming raw materials are used PET bottles. Main suppliers of the plant are waste fields and waste sorting stations.

SORTING

Bales of used PET bottles are manually relieved from package (wire, card-board) and with the help of automatic movable floor are fed to bale-breaker. Bottles are sorted by automatic sorters into four colors: colorless, blue, brown and green.

GRINDING AND WASHING

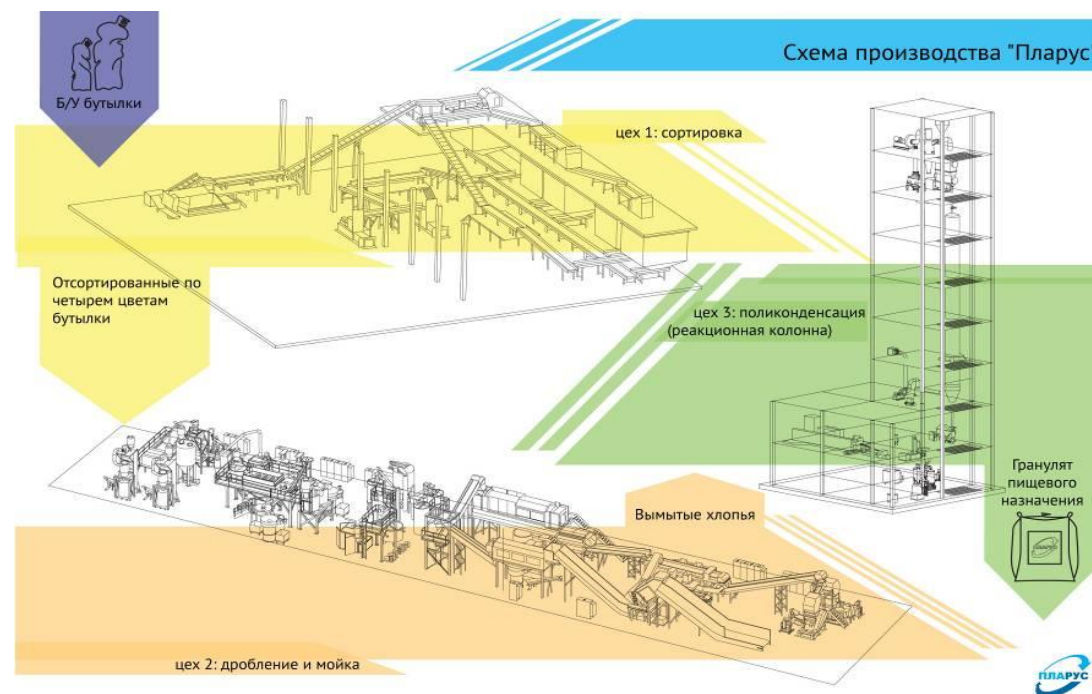
Bales of sorted by color bottles are fed into washing line SOREMA (Italy) and pass 5 stages: rinsing in cold water, magnet conveyor, rinsing in hot caustic solution, manual sorting, metal separation. All bottles are coming through 2 inductive metal separators.

Rinsed bottles are conveyed to grinders and grinded into flakes. Then flakes are washed with hot caustic solution with special washing liquid. Washed flakes are thoroughly squeezed and rinsed.

Clean and dry flakes come through final metal separator and unloaded into 2m big-bags. All flakes pass quality control.

EXTRUSION AND GRANULATION

Clean flakes are delivered via air conveyor to extrusion and granulation line: metal separation, pre heater, extrusion, degassing (elimination of steam, AA and other impurities), filtration, granulation, dehydration, sorting, storing silos



"ClearPET" has got Food Approval (Expert opinion No. 27.02.2012 326-18 from the Federal budgetary healthcare institution "Center of hygiene and epidemiology in Moscow region).