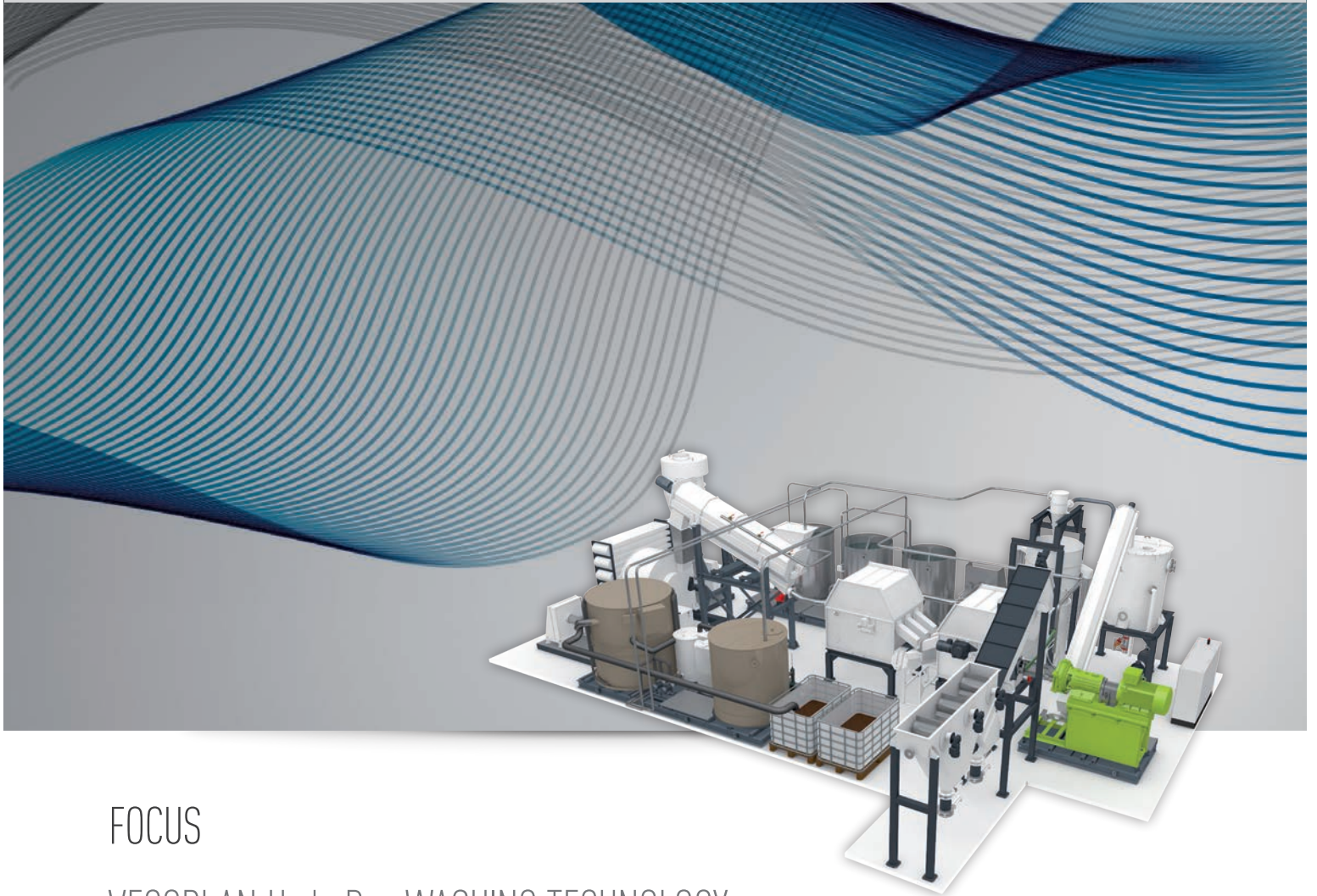


Vecoplan[®]



FOCUS

VECOPLAN HydroDyn WASHING TECHNOLOGY

A BETTER WAY –
HIGH PERFORMANCE IN
PLASTIC RECYCLING

TECHNOLOGY FOR A SUSTAINABLE TOMORROW



LATEST TECHNOLOGY IN PLASTIC RECYCLING



HydroDyn Plastics Washing Line from Vecoplan

HydroDyn produces cleaner plastic flakes, delivers lower operating costs and is more economical to install and maintain than conventional plastics washing lines.

As the name implies, HydroDyn uses the dynamic properties of water spun in a cyclonic fashion to generate horizontal friction and clean plastic flakes suspended in that water. Innovations in this technology enable the HydroDyn to produce results that are 30% cleaner than conventional washing lines.

In addition to washing the plastic flakes, friction created by centrifugal force in the water also generates heat. Since HydroDyn is a closed loop system, integrating its own water treatment, the reused water process establishes a hot wash system without additional power or gas usage. This, combined with Vecoplan's energy efficient drive systems, results in a 25% savings in operating costs including energy consumption, water usage and chemicals.

Also innovative in installation design, HydroDyn is a modular system pre-installed on platforms. These platforms eliminate the need for onsite bases or other foundation work to support individual pieces of equipment. All components are pre-assembled with piping and electrical wiring included in the platform chassis, as well as built-in drainage for spill water.

HydroDyn's modular platform units fit on flatbeds or in containers for shipping and once on site are easy to lift and set in place. Simply connect the platform units, plug them in and you're ready to make money washing plastics. HydroDyn's modular design also makes it easy and economical to retrofit into existing plants or scale-up in size when systems need to be expanded.

- Combined friction and hydrodynamic cleaning delivers the highest cleaning rates of contaminated material.
- Lower OPEX due to less water consumption, minimal chemical replacement, less power consumption
- Highest flexibility in system design
- Process a wide variety of infeed material with one flexible system
- Integrated water filtration and treatment
- Modular design ships pre-commissioned and ready to start washing
- Lower maintenance costs with less moving parts and easy access to all components



Material Processing

Size Reduction Unit



Material Preparation Unit



Plastic Cleaning Unit



Water Separation Unit



Pneumatic Pickup Unit

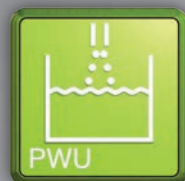


Water Treatment

Water Filtration Unit



Process Water Unit



Controls

Plant Operation System



THE HydroDyn PROCESS

The complete modular concept focused on your needs and requirements.
Easy to adapt washing line is state-of-the-art in the industry.

Material Processing

- size reduction (shredder)
- float/sink (material preparation)
- plastics cleaning unit
- dryer (mechanical and/or thermal)

Water Processing

- standard filtration
- optional water treatment

Process Controls

- included with all systems
- easy integration with addition of future modules

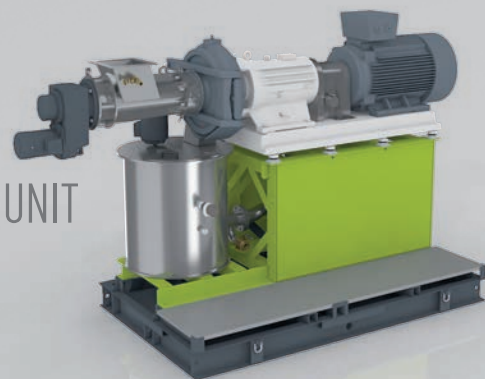
Options

A comprehensive range of options are available to ensure that the highest quality, standards and all of your needs are met.



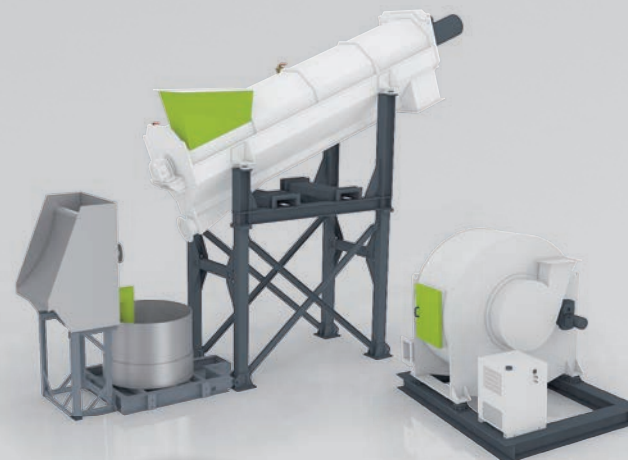
PLASTIC CLEANING UNIT

- high performance cleaning process
- friction and hydrodynamical cleaning ensure the highest level of cleaning
- heavy contaminated material is washed at the highest consistency
- eliminates the need for additives to remove stickers and labels



WATER SEPARATION UNIT

- separation unit to split water from material
- easily accessible for maintenance
- energy efficient through torque drive systems



WATER FILTRATION UNIT

- simple filtration unit to clean up the circulating water
- cellulose, minerals and other waste particles discharge out of the process



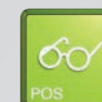
MATERIAL PREPARATION UNIT

- float / sink unit as a pre-wash step
- tramp material i.e. stones, metals or other plastics sink and discharge out of the process



SIZE REDUCTION UNIT

- high performance size reduction unit
- homogenous particles
- robust in case of tramp material



PLANT OPERATION SYSTEM

- central control system for the entire line
- monitoring and controlling on an intelligent interface



PNEUMATIC PICKUP UNIT

- easy pick up of clean material for downstream processes
- options for further processes are available



OPTIONS



DRY
CLEANING UNIT



OPTICAL SOR-
TING UNIT



PLASTIC
STORING UNIT



FINAL
CLEANING UNIT



THERMAL
DRYING UNIT



FLAKE
SORTING UNIT



BIG BAG
FILLING STATION



WATER
TREATMENT UNIT



BUFFER
TANK UNIT

REASONS FOR VECOPLAN HydroDyn

BIG BAGS



POST CONSUMER FILM



AGRICULTURAL FILM



TECHNICAL PLASTICS



BULKY RIGIDS



Highest cleaning rates



A new dimension in cleaning contaminated post-consumer and post-industrial plastics powered by VECOPLAN.

Boost your margin



Our method puts you in a position to buy heavily contaminated materials at low cost prices and sell a high quality product at a higher price as an output.

Various materials – one flexible system



The HydroDyn – system is the flexible solution for volatile and heterogeneous input streams. The system is easily adjustable to a huge variety of material streams, i.e. film, rigids, blisters.

THE SOLUTION FOR VARIOUS MATERIALS

Vecoplan's HydroDyn system is the flexible solution for volatile and heterogeneous input streams. The system is easily adjustable to a huge variety of material streams, i.e. film, rigids, blisters.

Application examples for hydrodynamic cleaning of various contaminated plastics include: film, stretch film, rigid plastics, blister packaging, technical plastics, agricultural film

Decrease operating costs to a minimum



Lower your OPEX on energy, water usage and chemicals to the minimum. Consistently save costs in the long run.

Highest availability



Ensure continuous production with high availability and simple access to all components for maintenance.

Modular design – ready to wash



The modular concept allows for quick, easy and economical modifications, expansions or upgrades whenever your needs of market requirements change.

YOUR BENEFIT IN THE EXTRUSION PROCESS:



use of smaller mesh screens in extruders



increased production efficiencies during extrusion due to lower pressures and fewer screen changes (higher throughput)

VECOPLAN, LLC
PO Box 7224
High Point, NC 27264
Tel.: (336) 861-6070
Fax: (336) 861-4329
info@vecoplanllc.com
www.vecoplanllc.com

