



/Original
industrial solutions
for drying and neutralizing



NEWTON'S

Our aim → Our aim is to be the technical reference adviser to help you to choose the best solution in desiccant drying.

/Experience support and design



With over 50 customers worldwide, Newton's specializes in the optimization of existing drying units and the design of new units in the refinery sector of the gas, chemical and petrochemical industries. Faced with ever-increasing demands for quality, Newton's provides their technological expertise throughout their engineering projects - from the design of installations right through to the supply of consumables adapted to each customer's specific needs - notably by:

- auditing existing units (salt driers, sweetening units, etc.) and proposing customers recommendations for improvements (load plan, distribution, etc.),
- designing new installations (Process Design Package),
- supplying support and long-term performance monitoring (follow-up analysis of process data, operating technical assistance, etc.)

An approach founded on dynamic research and development. //



/Newton's drying by liquid/solid transfer

Newton's technology dehydrates water-saturated liquid hydrocarbons inline by using varying shapes of desiccant briquettes in a process called Water Trap. The water content in the fluid is absorbed (liquid/solid transfer operation) by a Water Trap fixed bed. The briquettes dissolve progressively in the absorbed water forming brine that drains to the bottom of the column and is purged at regular intervals.

This type of technology is used in chemical and petrochemical refining plants for kerosene, heavy and light gas oil, LPG, LCCO, butadiene, TBX, alkyl chlorides, EDC/VCM, fuels, etc.

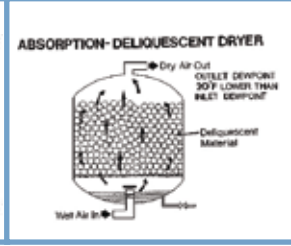
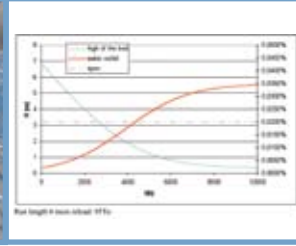
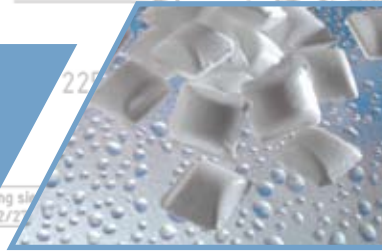
The desiccants serve not only for drying fluids but also for neutralizing any acid compounds that may be present (HF, HCl, H₂S).

The advantages to this technology are multiple:

- the process is simple,
- running costs are reduced,
- Reduce negative effects on health, safety, and the environment.



/Dynamic research to reality



In partnership with the Institut Français du Pétrole (IFP), Newton's has invested in two pilot units to lead their research program. One unit measures drying and neutralizing performances and the other carries out hydrodynamic tests.

They have also developed a control system to design new drying installations and to optimize existing equipment.

Tests carried out in the pilot units serve to:

- validate pilot unit performances,
- optimize load plans,
- develop new applications.

Newton's – a scientific and technical guarantee //

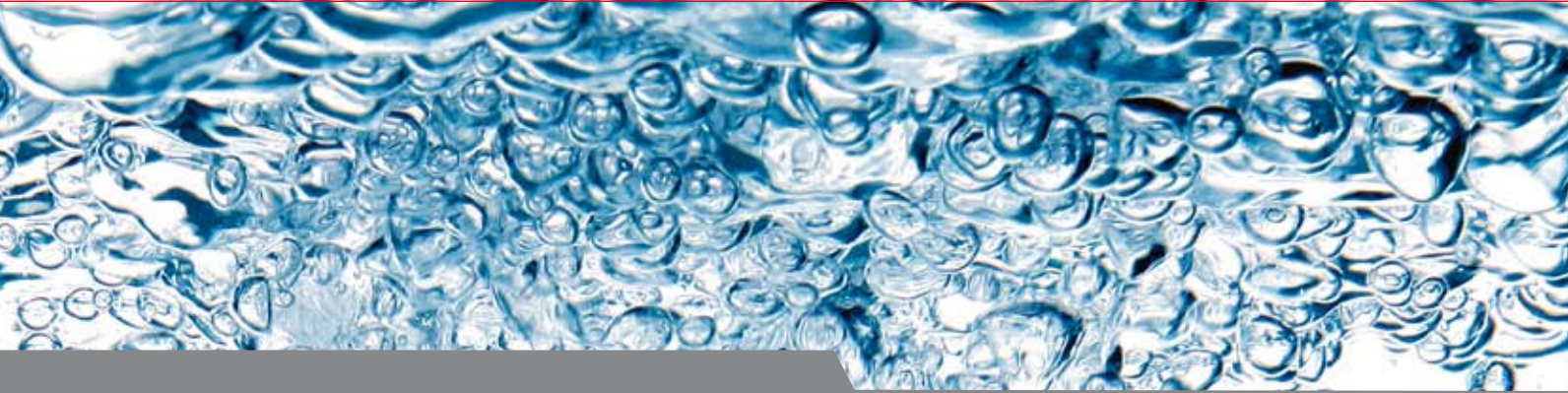


/Advantages of our system

Your drying unit is an investment. Our aim is to help you get the best from it and control its running costs. Using process data, production goals and existing (or future) equipment, our teams can provide you with an action plan so that you can:

- increase productivity,
- reduce maintenance costs,
- plan for consumable orders - meet HSE obligations and requirements.

Our key asset → a comprehensive offer of supplies and support services ensuring optimal use of your installation.



Newton's is a company on a human scale at the forefront of desiccant dryer research. In just a few short years, Newton's has become acknowledged as a major presence in the field of drying units for refining industries (petrochemicals, chemicals, gas).

Newton's is backed by the expertise of the Quadrimex group working in the field of chemical specialties and the exploitation of by-products.

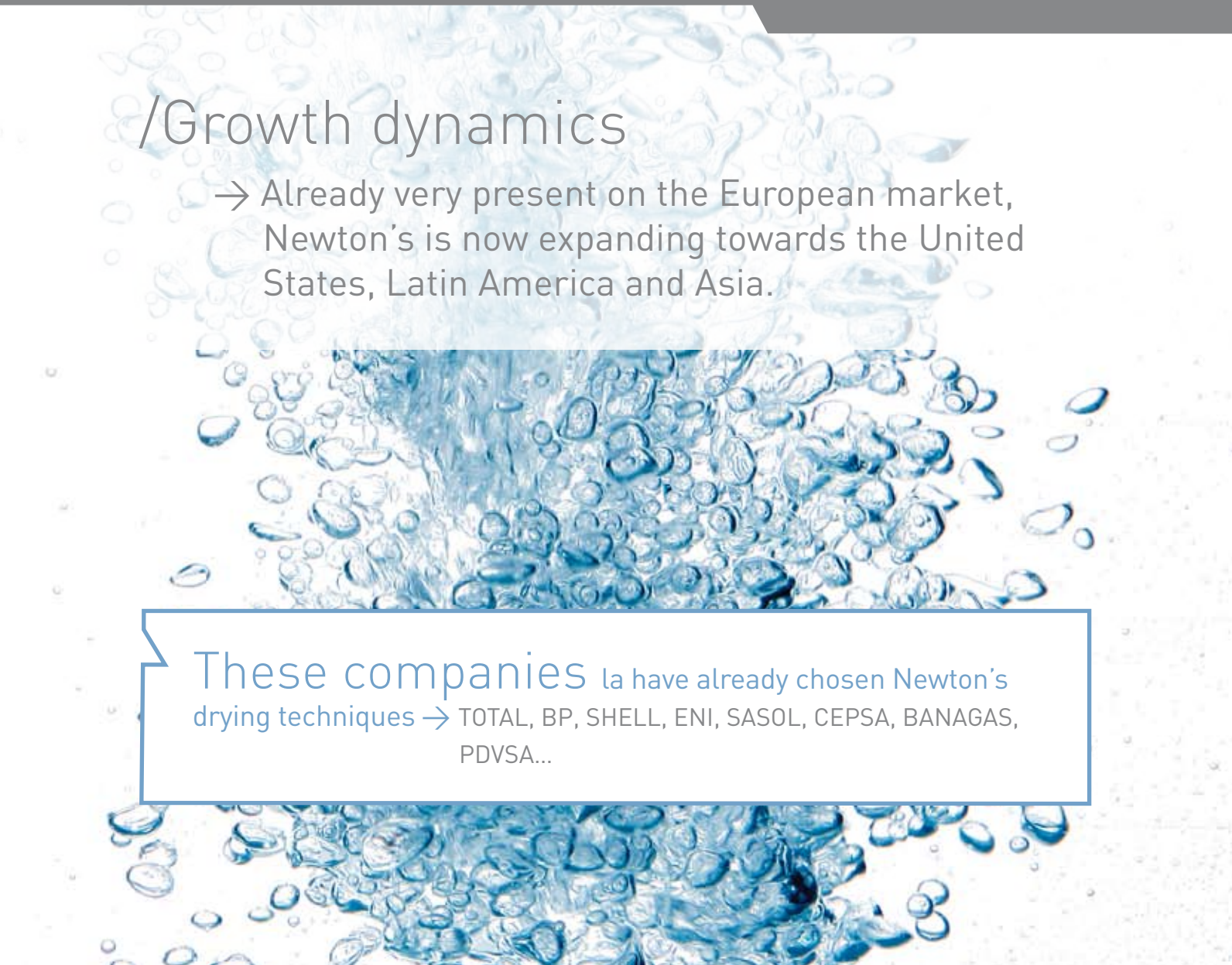
This partnership is all to our customers' advantage, combining the creativity, dynamic and reactivity structure like Newton's and the long-term stability of the Quadrimex group.



/Growth dynamics

→ Already very present on the European market, Newton's is now expanding towards the United States, Latin America and Asia.

These companies la have already chosen Newton's drying techniques → TOTAL, BP, SHELL, ENI, SASOL, CEPESA, BANAGAS, PDVSA...



/Our process in petroleum industries

Hydrotreater:
Gas oil dehydration

FCC unit:
LGP/Gasoline
sweetening units
LCCO dehydration

HF Alkylation unit:
C3/C4 Dehydration and HF
neutralisation

**Kerosene
sweetening unit**

Steam-crackers
Butadiene,
Reffinats TBX
dehydration

Down stream units
EDC/VCM
dehydration, Hcl
neutralisation





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