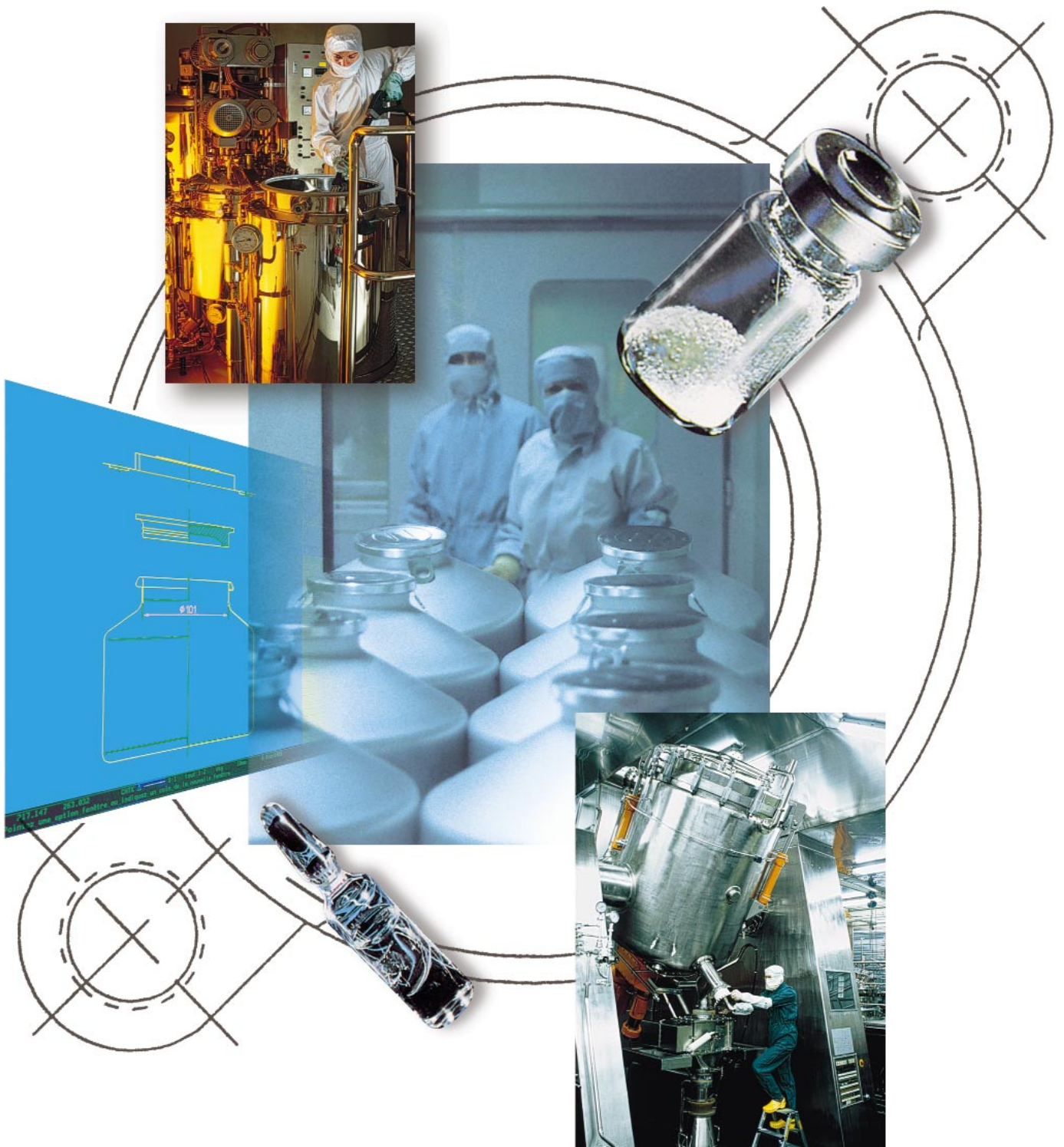


STERILE BULK PACKAGING



ALUMINIUM FOR STABILITY AND PROTECTION

ALUMINIUM CONTAINERS, ESPECIALLY WHEN ANODISED, ARE IDEALLY SUITED FOR CONTACT WITH PHARMACEUTICAL INGREDIENTS. THEY ARE INDEED COMPLETELY NEUTRAL FROM A MECHANICAL AS WELL AS A CHEMICAL POINT OF VIEW.

SAFE AND RELIABLE PROTECTION

The European Pharmacopeia and USFDA consider containers of pure aluminium (minimum 99,5%), when produced and used according to GMP (Good Manufacturing Practices), as safe and neutral for contact with Foods and Drugs.



washing



sterilising

EASY STERILISATION / DEPYROGENATION

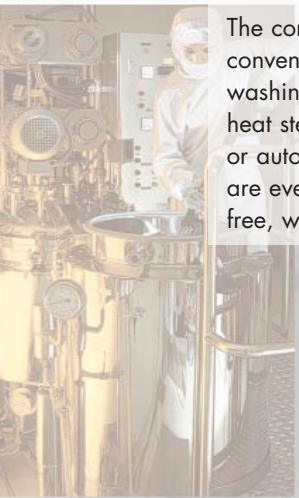
The containers can be conveniently sterilised, after washing and rinsing, using dry heat sterilisation (180-200°C) or autoclaving (123°C); they are even found to be pyrogen free, when tested.

HIGH RESISTANCE

Seamless aluminium containers are resistant to shocks, perforation, cuts, cold and heat. They also give absolute protection to light and gas permeation.



filling



CREATIVE AND COMPREHENSIVE DESIGN

GEOMETRICAL FEATURES

large opening

half rolled edge

rounded shape



SEAMLESS CONTAINER

Each container is made of one disc of pure aluminium; its whole surface is continuous and smooth and has no recesses or seams.

OPTIMISED TIGHTNESS

The calibration of the neck together with the elasticity of the rubber plug provides an hermetic seal, even with extreme variation of pressure.

EASY SEALING AND OPENING

Different closure systems are available, which provide user friendly sealing and opening as well as efficient tamper evident features.

SPECIFIC SURFACE TREATMENT

Scouring and anodisation according to an approved process give a clean, smooth and resistant surface. Tournaire has worked closely with major pharmaceutical users over the years to standardise the best surface treatment.



consistent thickness

protection against gas and light

resistance to oxidation and shocks

no seam



GLOBAL PACKAGING SOLUTION

EASY TO USE CLOSING SYSTEMS



-102mm and 135mm opening with push-in chlorobutyl plug and aluminium cap for sealing.



-220mm opening with aluminium lid, nitrile ring wad and clamping ring.



SAMPLE BOTTLES

Small containers and plugs made of the same material for sampling and stability tests (50cc and 125cc for 10 to 50 grams).

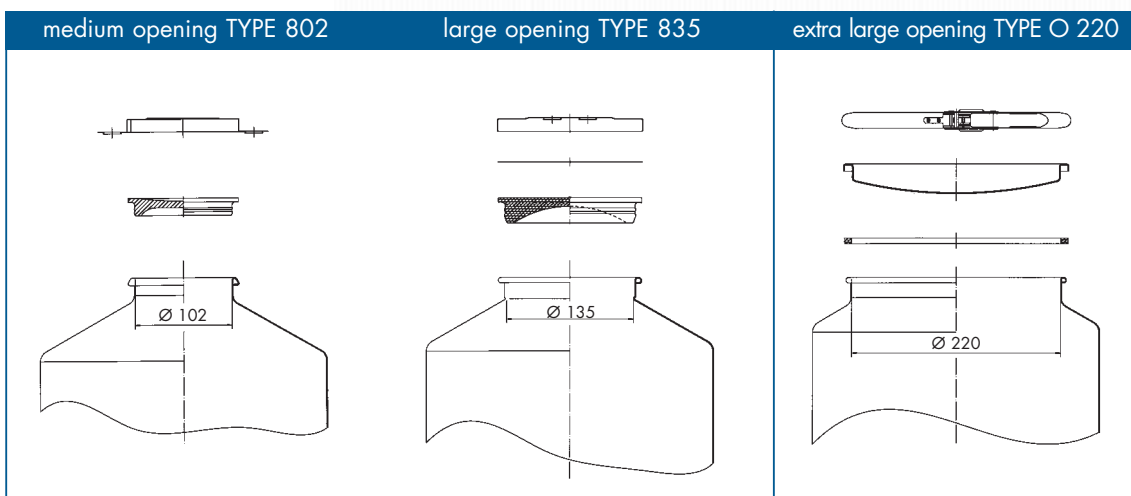


SEALING SYSTEMS

With a manual stainless steel crimping tool easy to sterilise or with a semi automatic sealing machine.

Chlorobutyl Plug + Aluminium Cap

Aluminium Cover lid + clamp



Capacities from 2,5 litres to 30 suitable for 1 to 10kg of sterile bulk.

RELIABLE MANUFACTURING WITH TECHNICAL EXPERTISE

40 YEARS OF EXPERIENCE

SERVICING THE STERILE PHARMACEUTICALS INDUSTRY HAVE GIVEN TOURNAIRE A WORLDWIDE IMAGE OF QUALITY AND RELIABILITY

RELIABLE SUPPLY CHAIN

Raw material suppliers are regularly evaluated and provide a certificate of analysis for each delivery; they also must be able to accurately trace their production process.



AUTOMATED MANUFACTURING

Levels of performances are continually monitored and maintained.



QUALITY STANDARDS

Certified ISO 9002 in 1996, Tournaire has passed many audits at GMP standards. Containers are also approved for the transportation of hazardous goods according to UN regulations.

GUARANTEED CLEANLINESS AND SURFACE TREATMENT

During washing and anodisation, the quality of ingredients and parameters is controlled by computer. The handling of containers is also fully automated.



PACKING AND PALLETISATION

Each container is packed in a tight bag immediately after washing and quality control. Palletisation includes deep trays and PE film for the protection of the containers.



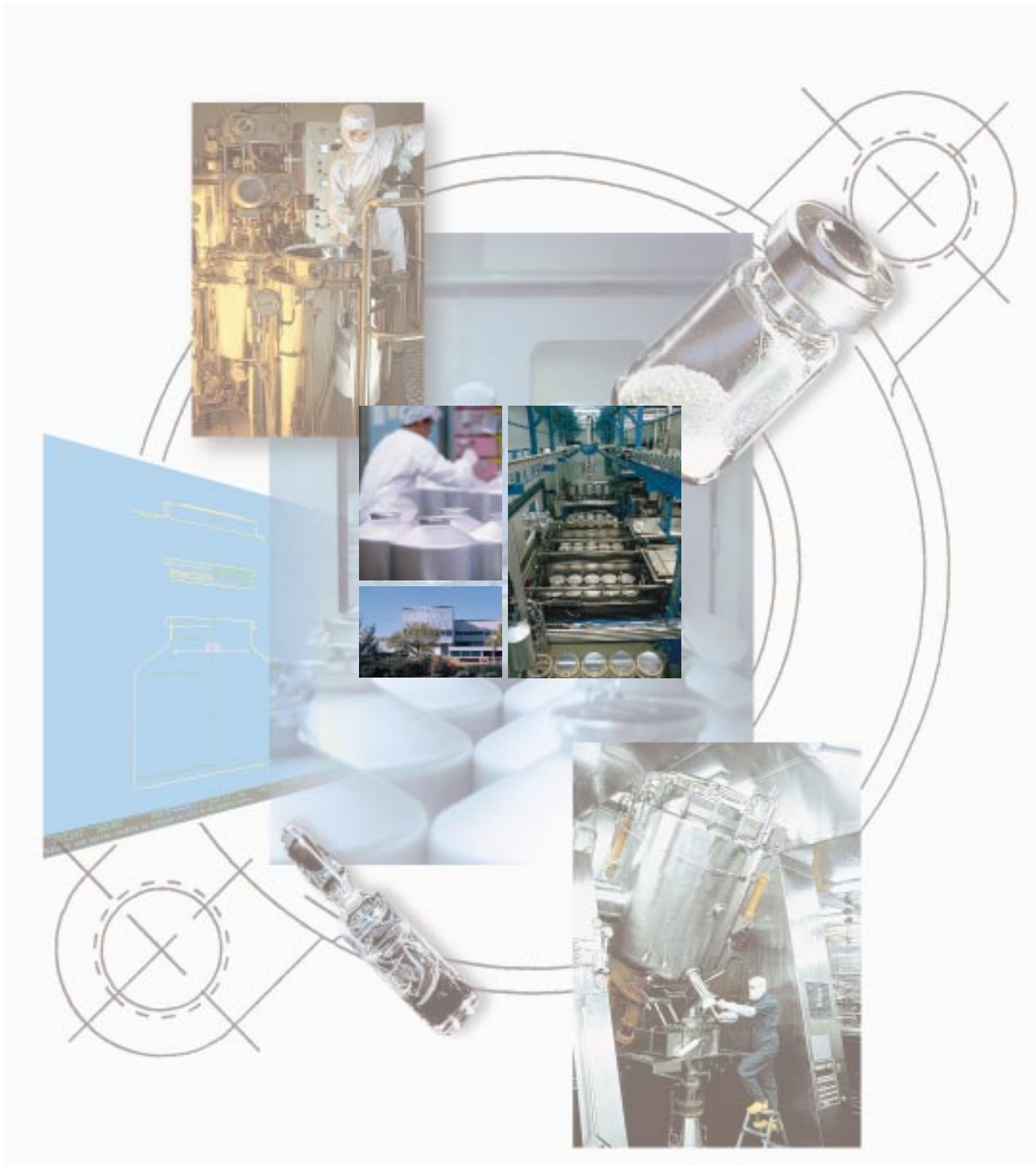
QUALITY CONTROL

100% on-line inspection of dimensions and surface treatment.



BATCH AND UNIT TRACEABILITY

Through bar codes labels and ink jet printing or engraving on the containers.



Agence Conicule - Photos : Fobgram - Stock - Pix - Rousset UCIAF - J.J. l'heritier.