## Your reliable partner for APIs packaging for over 60 years





#### **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.



#### **Quality standards**

Certified ISO 9001: 2015 and ISO 14001: 2018, Tournaire has passed many audits at GMP standards. Containers are also approved for the transportation of hazardous goods according to UN regulations.



#### **Quality control**

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

#### **Guaranteed cleanliness and** surface treatment

During washing and anodisation, the quality of components and parameters is controlled by computer. The handling of containers is also fully automated. During several years, evaluation of the efficiency of the washing process has been performed and a log 3 (1/1000) efficiency factor has been demonstrated.

#### Packing and palletisation

Each container is packed in a tight bag immediatly after washing and quality control. Palletisation includes deep trays and PE film for the protection of the containers. Specific outer packing solution can be proposed for severe logistic conditions.

#### **Batch and Unit traceability**

Batch and unit traceability are ensured through bar codes labels and ink jet printing or engraving on the containers.

# **TOURNAIRE:** Certified quality

Tournaire products meet today's most demanding quality standards and are manufactured in accordance with the strictest specifications.





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#### **DRUG MASTER FILE**

Tournaire has registered since 2000 a **Type III** (pakaging) **DMF** with the US and Chinese FDA which is updated and enriched annually.

# TOURNAIRE



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100% ALUMINIUM READY TO RECYCLE

#### PHARMACEUTICALS

## THEULTIMATE PROTECTION FOR YOUR ACTIVE PHARMACEUTICAL INGREDIENTS AND EXCIPIENTS



# stability

## TOURNAIRE

#### Major Partner for packaging APIs since the 1950s

From streptomycin to last generations of cephalosporins, Tournaire has always provided state of the art containers for sterile or non sterile APIs. Tournaire company closely supports its clients with anticipation of new regulations (DMF), and mastership of modern techniques in the frame of the most demanding quality referentials.

### Key figures:

- Over **190** years of experience.
- 300 staff in France.
- 120 000 m<sup>2</sup> of productive and sorage area worldwide.
- **5500** tons of materials transformed
- Over **90** millions € turnover
- **65%** Export worldwide through an international network of agents and distributors.
- 2 manufacturing sites.

#### Pure Aluminium: Tournaire original, the choice for supporting sustainability.

Tournaire has chosen pure aluminium because it is light, gaz and UV tight, neutral and rust free. It is also the most widespread metal on earth and it is infinitely and easily recyclable: recycling one ton of

aluminium saves five tons of bauxite. Nearly 75 percent of all aluminium ever produced is still in use today making aluminium one of the most sustainable packaging materials.







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## **Aluminium** for stability and protection

#### Easy sterilisation depyrogenation

Dry Heat Sterilisation (DHS) allows in one single step the sterilisation and depyrogenation of the container without residual moisture. Autoclaving can also be used for sterilisation alone. When tested before despatch, Tournaire containers have been found to be pyrogen free.



Depyrogenation

#### **High resistance**

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

#### Safe and reliable protection

The European Pharmacopeia considers pure (min 99.5%) aluminium containers as safe and neutral for contact with Food and Drugs when produced and used according to GMP (Good manufacturing Practice).

#### **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, described in its DMF.



Washing

## **TOURNAIRE** bottles: Full range with type III DMF to help your registration



VOL.(L)	802
2,5	✓
5,5 / 6,25	✓
12,5	✓
20	✓
25	✓
28,5 / 29,5	✓
30 / 32	✓



## Efficient design for user friendly solution

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#### **Seamless** container

Each container is made of one disc of pure aluminium. Its whole surface is continuous, smooth and has no recesses nor 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.



Filling

#### Easy sealing and opening

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

**TOURNAIRE** WORKS FOR YOU by providing close regulatory support, but also accessories in addition to its container range. Various validated closing systems and accessories provide smooth and reliable use for your comfort and safety.

#### Easy to use closing systems

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

135 mm opening with push-in chlorobutyl plug reinforced by an aluminium disc and aluminium cap for sealing.



Sealing systems

#### **Cap opener**



2nd generation stainless steel crimping tool provides reinforced crimping efficiency and still higher reliability of sealing. It is easy to sterilise and does not require maintenance nor adjustement An automation of this manual tool can be studied upon request.



Stainless steel cap opener to smoothly open the aluminium cap without touching it, thus avoiding the risk of contamination o cutting the glove.

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## Geometrical features





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





#### Tool for inserting/ removing the plug



Connected with reduced vacuum source, the stainless steel removal/insertion tool to remove/insert the chlorobutyl plug easily (no rubbing nor effort) and avoids any contact with the plug (reduces risk of contamination).

#### Sample bottles



Small sized bottles and plugs made of the same material for sampling and stability tests: from 30cc to 275cc for 10 g to 100 g sampling.