



Airco DIET has been involved in more than 100 DIET (Dry Ice Expanded Tobacco) and Impex Projects worldwide presenting a +95 % uptime with a dry yield above 98.5 % through the plant. Many of these have been turn-key projects inviting us to continue refining our processes.

We are a flexible organization with matchless expertise within our field. Airco DIET is the global leader within Tobacco, Expansion and CO₂ technology.



360° pure quality



360° REFINEMENT SOLUTION

Imagine a process that doubles your tobacco volume, saves 50% tobacco and concurrently enhances your product by giving it a consistent taste and reducing the tar. Airco Dry Ice Expanded Tobacco is just that.

The Airco DIET process utilizes the unique thermal-physical properties of carbon dioxide to expand tobacco by more than 100% and with the economical, high quality, high-performance generation of extra filling power, DIET reduces filler costs.

The Dry Ice Expanded Tobacco process treats cut filler by impregnating the cell structure with liquid carbon dioxide under pressure.

Furthermore, the DIET process is an effective tool for tar and nicotine reduction in cigarettes using tobacco laminar; it also reduces the bulk density of the cigarette blend which significantly reduces the cost of manufacturing with utility production costs of less than €1/kg of produced DIET tobacco.

Therefore, today's inclusion rate of DIET in premium cigarettes is 20-30%. DIET provides product designers and

developers with a true tool with which to achieve the desired cigarette taste, quality and delivery properties.

In other words, the Airco DIET process will increase your economic gain as well as the quality of your tobacco product. That is why we call Airco DIET a 360° refinement solution.



PIPE TOBACCO BLENDS



SHISHA TOBACCO BLENDS



CIGARETTE TOBACCO BLENDS



CIGAR TOBACCO BLENDS



RYO TOBACCO BLENDS



MYO TOBACCO BLENDS

World leading partner in Dry Ice Expanded Tobacco and 360° relevance to the entire tobacco industry.

The Airco DIET process is in no way reserved for a certain category of tobacco but is relevant to the entire tobacco industry. DIET expanded tobacco is highly suitable for cigarettes, cigars, RYO and MYO products, pipes and shisha tobacco.

Actually, the current market offers various tobacco products entirely consisting of 100% DIET expanded tobacco.

The unique Airco DIET technology performs equally well and secures an

economic gain when used in the preparation of tobacco products and categorizes the DIET process as a powerful tool in the design of modern tobacco products, where consistent taste and performance is a key factor.

360°

OF TECHNOLOGY AND INNOVATION

As part of our natural working processes, we continuously focus on technology improvements that result in a DIET plant even more profitable for the manufacturer. Our dedicated commitment to innovation within Airco DIET has led to the introduction and commercialization of the "C" Tower in the DIET Plant Hot End which provides a highly improved heat transfer during the drying process. The result is a considerably higher product yield and significantly less degradation of the expanded tobacco product.

Other recent improvements include the use of CO₂ as the refrigerant in the refrigeration system hereby securing a more environmentally friendly operation.

Airco has also been able to lower fuel consumption and minimize CO₂ usage making the latest Airco DIET plants cost effective to operate.

DIET facts

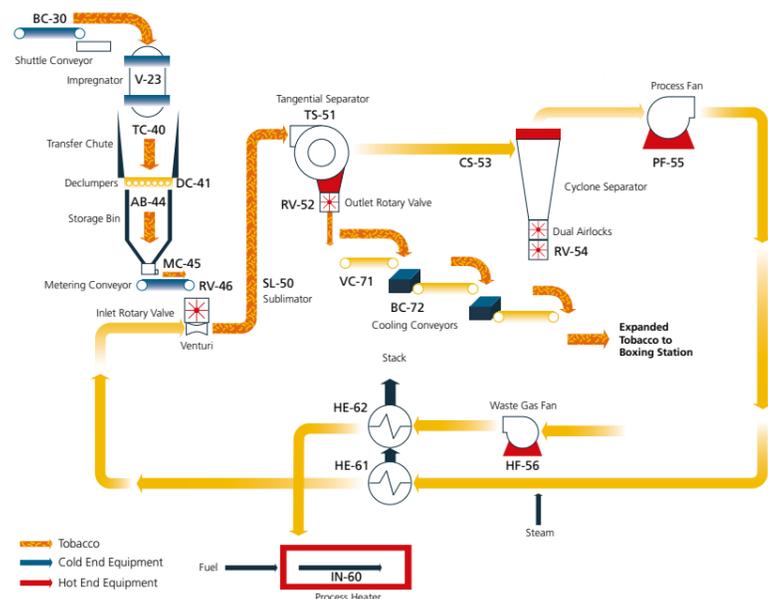
- As carbon dioxide is a naturally occurring product of metabolism in plants, tobacco expanded by DIET is unquestionably pure and natural.
- Any proportion of tobacco in a blend can be expanded and a corresponding increase in the filling capacity will be achieved.
- DIET helps the tobacco product stay within tar and nicotine legislation limits at burn level and does not leave any traces in the final product.

Achieve significant cost savings when using Airco DIET facilities

- Airco DIET facilities are now even more environmentally friendly and present the lowest utility consumption per kilo of produced DIET.
- Airco DIET's third stage CO₂ recovery provides considerable savings in CO₂ usage, amounting to use less than 0,2 kg of CO₂ per kilo of produced DIET.
- Airco also offers an additional Heat Recovery system which provides up to 30 % savings in fuel with a lowered stack temperature of just above 200°C.

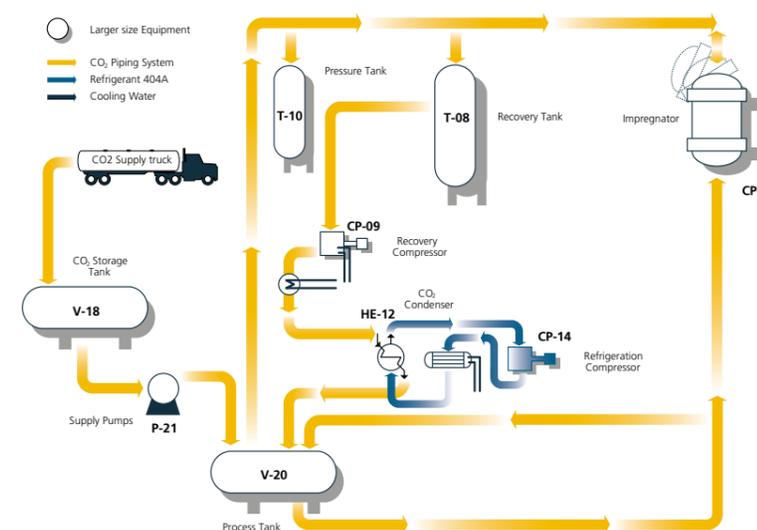


Tobacco from Storage Bin



< A modern DIET plant has an uptime above 95 % with a DIET dry weight yield above 98.5 %.

300 kg/hr DIET Cold End Process Flow Diagram



Airco DIET is the World Leader in Tobacco Expansion with more than 35 years of experience and more than 100 DIET projects worldwide. During the past 10 years, we have completed more than 40 DIET projects, enabling continuous product development while supplying the market's most advanced and reliable DIET plants, producing the best possible DIET product.

The first DIET plants were 35 years ago by Airco DIET. These first plants were significantly different even though the basic process remains the same.

The design of the DIET plants has evolved radically over the years and significant improvements have currently been introduced with set-off in know-how and innovational focus.

At the same time, utility requirements have been significantly lowered making the DIET plant even more profitable for the manufacturer.

Standard sizes vary from
300 – 2400 kg/hr.

- Our plants are custom designed to fit any existing buildings
- We meet all international and local standards and regulations
- The plant size is optimized in regard to costs
- All pressure vessels according to required pressure code such as PED
- All plants are designed as building blocks and pretested
- The DIET plant and equipment is CE marked

We always use advanced project management techniques to provide DIET turnkey installations within budget on schedule.

The Airco DIET plants offer a lot of advantages, guaranteeing a fast and uncomplicated installation. Full production is achievable within a few months from arrival on site. We offer unconditional turnkey projects, including control panels and control room. The plants require no special buildings and can be installed in regular tall warehouses. The installation time has become exceptionally short.

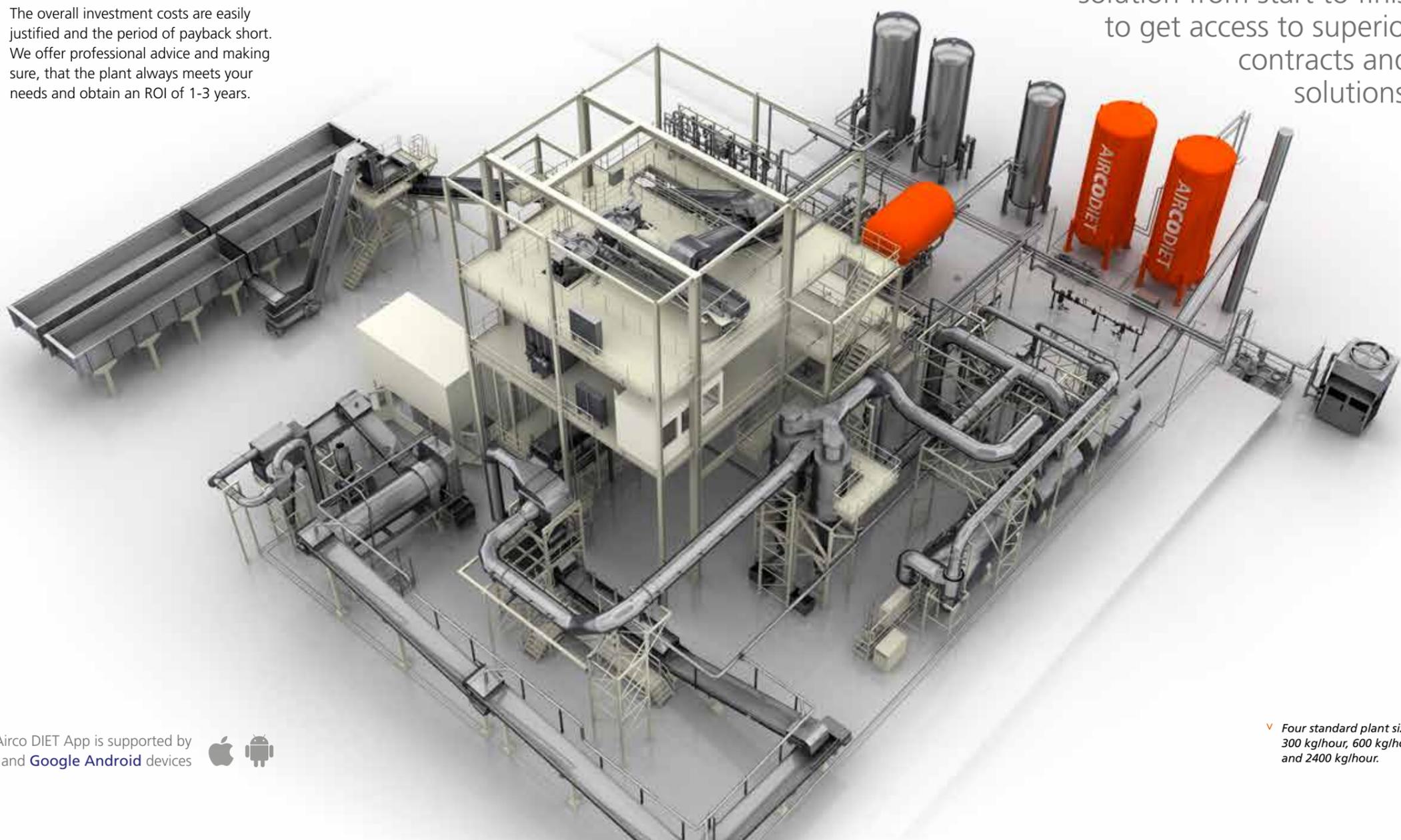
Investment security

The plants are fully proven, easy to install and commission and Airco DIET has experience with DIET plant installation worldwide, thereby making it possible to optimize and secure your investment.

The overall investment costs are easily justified and the period of payback short. We offer professional advice and making sure, that the plant always meets your needs and obtain an ROI of 1-3 years.

360° PARTNER FROM START TO FINISH

When choosing to install an Airco DIET Plant, you can expect us not only to be part of the solution from start to finish – but also to get access to superior full-service contracts and spare parts solutions worldwide.



The Airco DIET App is supported by
Apple iOS and Google Android devices



▼ Four standard plant sizes are available:
300 kg/hour, 600 kg/hour, 1200 kg/hour
and 2400 kg/hour.