



الابتكار بارك  
Innovation Park

ACTVET

Abu Dhabi Centre for  
Technical and Vocational  
Education and Training | مركز أبوظبي  
التعليم والتدريب  
التقني والمهني

NEW  
GENERATION



# INNOVATION OF THE FUTURE

BUILT FOR ENTREPRENEURS

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## About ACTVET

The Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET) was established in 2010 by the directive of His Highness Sheikh Mohammed bin Zayed Al Nahyan, President of the United Arab Emirates.



ACTVET is committed to establishing policies and standards that effectively regulate technical and vocational educational institutions in the emirate of Abu Dhabi. ACTVET is also responsible for the licensing of trainers and tutors that meet the demands of the UAE's local market.

In 2014, the National Qualifications Authority (NQA) and the Vocational Education and Training Awards Council (VETAC) of the UAE have authorized Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET) as the first Awarding Body in the United Arab Emirates. ACTVET Awarding Body oversees the quality assurance of qualification development and delivery processes for Abu Dhabi and the Northern Emirates.

The Centre aims to boost training and educational opportunities for young nationals within the qualification framework of the Emirate. ACTVET's ultimate goal is to increase the number of skilled Emirati youths in rewarding career paths and to foster life-long learning and personal development.



# About Innovation Park

Innovation Park provides short and long term learning and development solutions to address the needs of UAE Nationals, industry and labor market, to serve the community and its commitment to build future workforce skills for UAE nationals to meet job market needs.



## MISSION

To build a community of positive change-makers who practice socially responsible and mindful leadership



## VISION

To be the community hub stimulating innovation, entrepreneurship and skills development, being the bridge between research and industry



## Innovation Park Objectives

- Implement training programs and endorsed qualifications according to labor market needs.
- Meet the professional development needs for different sectors and the individual learning requirements for the community.
- Build future technical skills required by the industry.
- Establish and maintain partnership with various industry sectors.



## Areas of Specialization



- Leadership & Workforce Development
- UAE Nationals Integration & Career Path

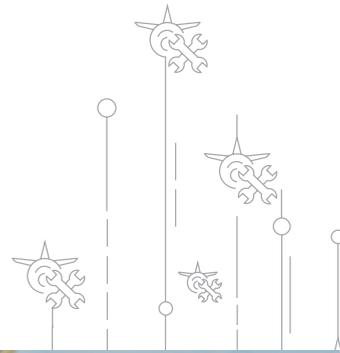


# Training Methodology



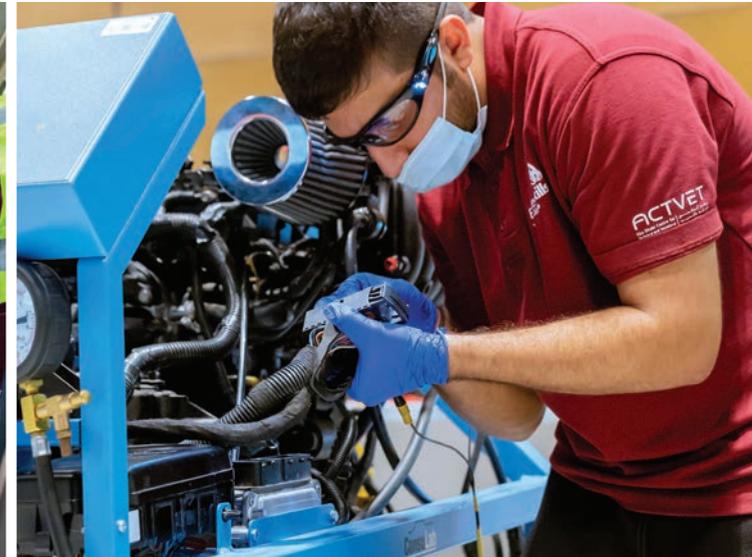
## Aircraft Maintenance

“Key attributes required by all aircraft maintenance technicians wherever they work are efficient work organization, self-management, communication, interpersonal skills, and problem-solving. They must have the ability to work safely and rigorously adhere to industry regulations and manufacturer’s instructions. They will undertake a number of processes including inspection, servicing, modifying, troubleshooting, removal, installation, rigging, testing, and repairing. An aircraft maintenance technician may work on particular aeronautical products such as helicopters and airliners UAVs (Unmanned Aeronautical Vehicles). As a part of a global industry, Aircraft Maintenance technician faces rapidly expanding opportunities and challenges such as maintaining drones or space vehicles.”



## Automobile Technology

Automobile Technology is a highly skilled occupation that requires a thorough understanding of how they work. Maintaining light vehicles from various manufacturers, diagnosing complex mechanical problems, and delivering solutions within commercial cost and time constraints. Automobile technicians must be able to work quickly and efficiently without compromising the high standards expected by employers and customers. They must also keep up-to-date with technological advances as modern vehicles get increasingly complex.

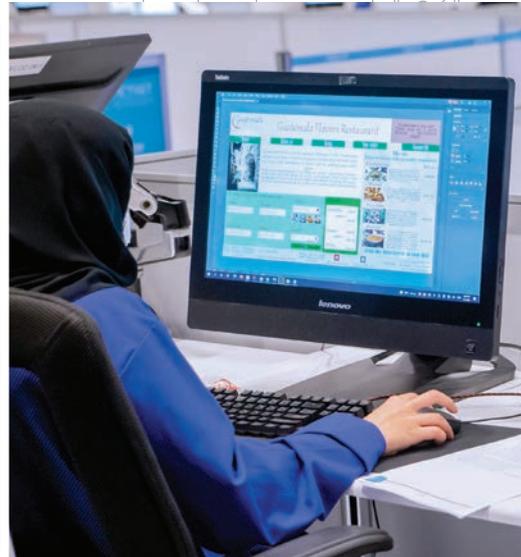
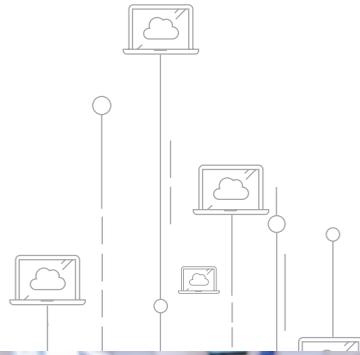


## Web Technologies

Working with web technologies is a key skill in a world that increasingly places the web at the heart of a modern platform. It is also one of the most complex and diverse of all skills.

Planning and designing, as well as testing websites, maintaining them, incorporating third party platforms, and integrating social media platforms.

Web designers and developers will first establish a professional relationship with clients to develop a deep understanding of the requirements for their website. Strong design and communication skills, coupled with a grasp of target audiences, markets, and trends are all essential. During the development process, web designers and developers create databases, build softwares, as well as test and debug websites.

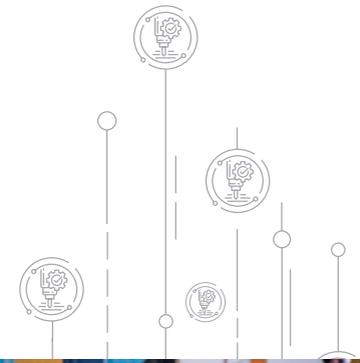


## Mechanical Engineering CAD

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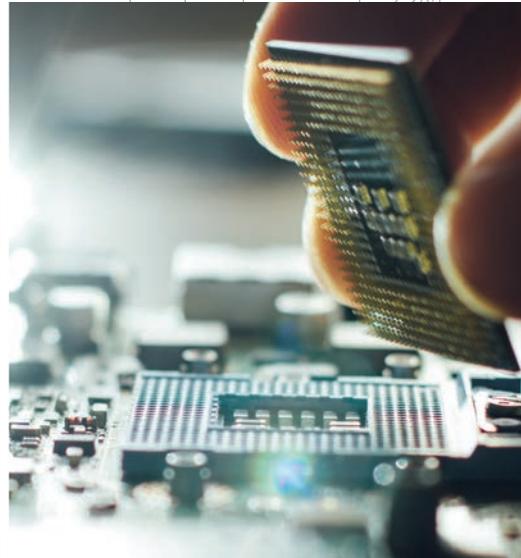
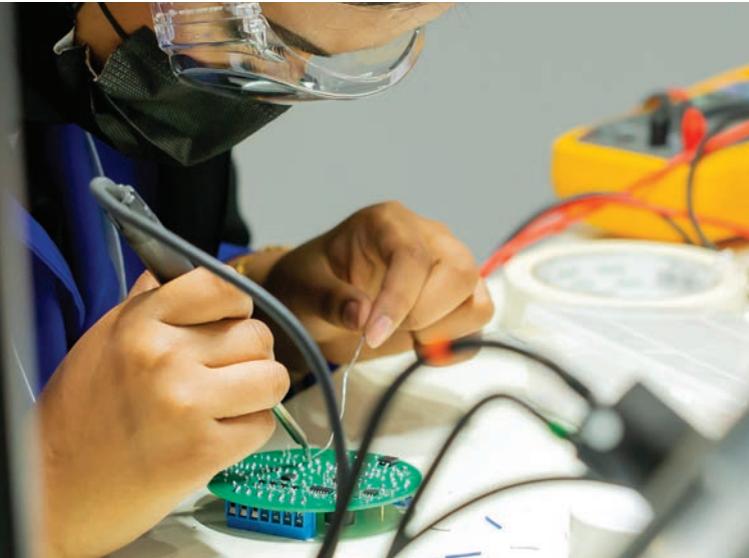
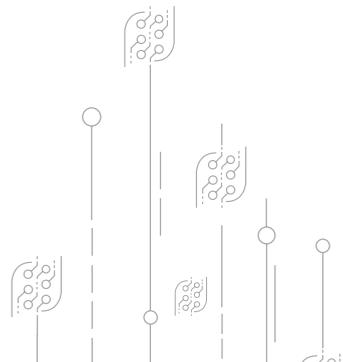
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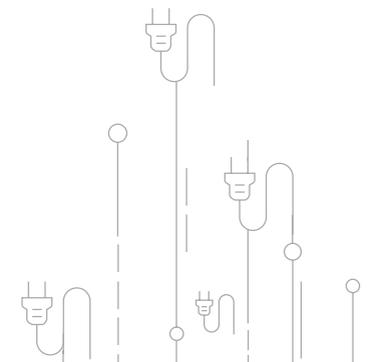
## Electronics

Design prototypes, assembly and wiring, schematic capture and board layout, embedded system programming, analyses and repair of electronics circuits, these are some of the habilities required for the Electronics specialist. The area is diverse, and many are the possibilities in this field, once almost every aspect of today's world relies on, or directly uses, electronics technology.



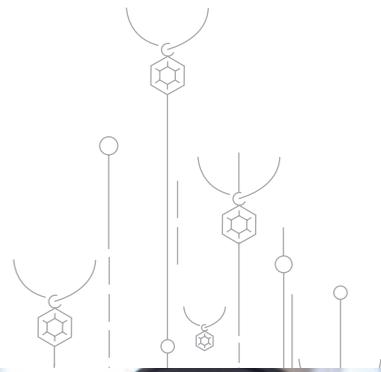
## Electrical Installations

"Electricians are needed wherever there is electricity. They can expect to work in homes, offices, factories, and even farms, carrying out maintenance and repairs, and sometimes designing and installing new systems. Given the risks associated with electricity, offering a safe and reliable service to customers is paramount. Electricians need to have an intimate knowledge of the latest safety standards and work to a strict code of safety conduct."



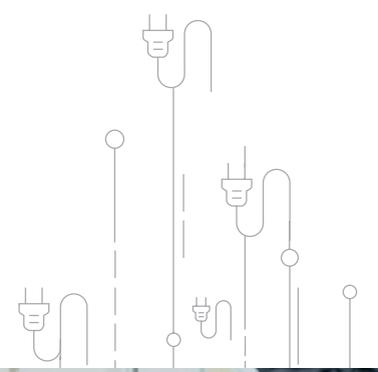
## Jewellery

Jewelry manufacturing skills consist of the manufacture of fashion accessories using precious metal. A jewelry maker may manufacture individual unique pieces for use, ready to wear pieces with precious stones. A jeweler may also be required to replicate a piece directly, use jewelry making skills to renovate or repair an existing piece. A jeweler will usually work from detailed designs created through direct consultation with a client or by a jewelry designer. These drawings may be developed by the jeweler through the use of hand sketches or the use of computer-aided design. Excellent communication skills and sufficiently deep knowledge in many areas of jewelry production and design are critical to understanding what the client or designer wants to achieve.



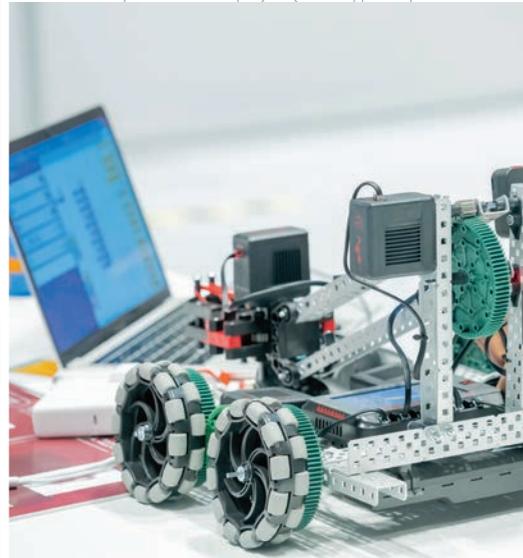
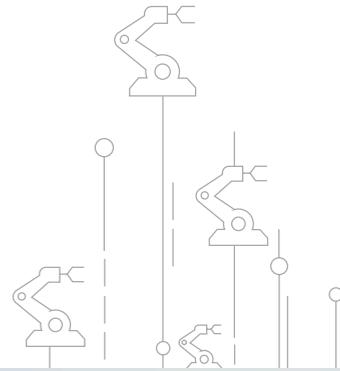
## Painting and Decorating

“What does the Trade of Painting and Decorating mean? It’s a trade related to the construction and building technology sector, which mainly uses decorative coatings, paints, wallpaper, sign writing and many other materials, in a wide variety of interior and exterior working projects and environments. What does a Painter and Decorator do? A Painter and Decorator works as entrepreneur in construction, decoration, restoration, maintenance and conservation projects, mainly as employees in companies of the field, offering a wide range of high standards of master craftsmanship finishes.”



## Mobile Robotics

“Designing, building, and maintaining robots to solve problems in industries from manufacturing to aerospace, mining to medicine. Robots play an increasing role in our lives and places of work in areas as diverse as manufacturing, agriculture, aerospace, mining, and medicine. Mobile robots begin with a design and then a prototype which must be programmed and tested to make sure it offers a high and consistent level of performance. The mobile robotics engineer must be familiar with logic, microprocessors, and computer programming and prepare specifications for the robot’s capabilities as they relate to the work environment. They are also responsible for the cost-efficient design, cost-price calculations, and quality control.”

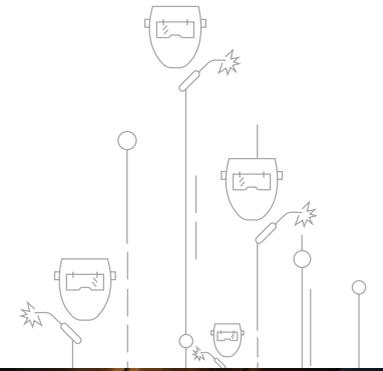


## Welding

“Welders work with different metals to cut and join everything from steel beams to pipes, plates, and pressurized vessels.

Being able to operate the various types of welding equipment both safely and accurately is of the highest importance. This can include the latest types of submerged arc, plasma arc, stud welding, and laser welding.

Welders need to prepare and finish joints in a wide ranges of industries and locations, from a factory workbench or construction site to a power station or ship at sea.



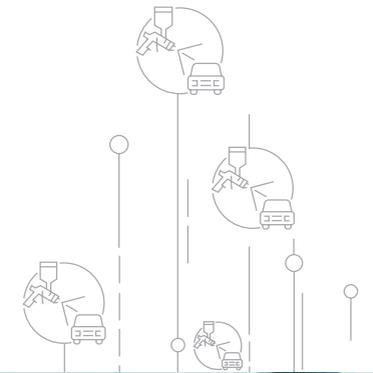
## Health and Social Care

"A health and social care practitioner offers a range of support to individual clients and their family and has a continuing responsibility to work professionally and interactively with the client in order to ensure their holistic care needs are met. Whilst the health and social care practitioner may work directly for the client they are normally employed by an organization within the health and social care sector. Health and social care is closely associated with the medical profession. The health and social care practitioner works in diverse environments, including the homes of clients, hospitals, community day care, and residential and nursing homes. He or she manages health physical, and psychosocial well-being, support of growth and development, caring and rehabilitation. The support provided is based on assessing, planning, delivering, and evaluating a care programme. Work organization and self-management, communication and interpersonal skills, problem solving, innovation and creativity, the ability to understand, empathize and work with clients to improve the quality of their life, are the universal attributes of the outstanding practitioner.



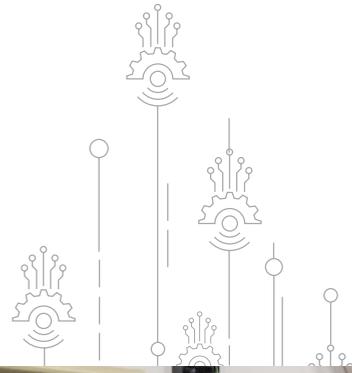
## Car Painting

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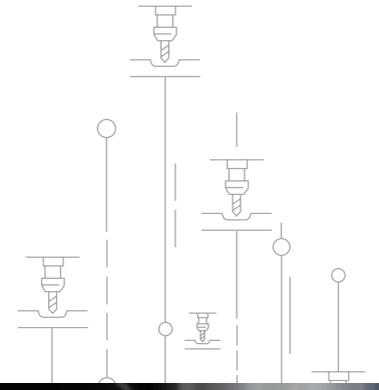
## Industrial Control

“Automation is of increasing importance in the industrial control of production systems. It requires the ability to troubleshoot, both during installation and in working systems, either across industries or in a specialist area. Industrial control electricians will need a wide range of skills, learning the installation of cables, instruments and control centers, circuit design and programming. Automation technology is developing rapidly, requiring a strong interest in keeping up with the very latest developments.”



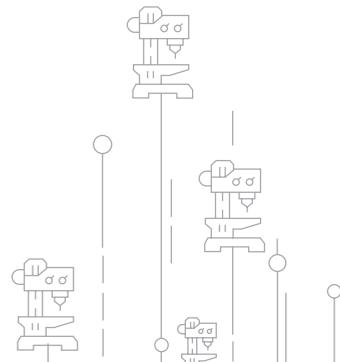
## CNC Milling

CNC Milling area is where we transform a piece of raw material into a final product, by using a cutting process named milling. These products can be used in cars, airplanes, phones, etc. Technologies such as CAD/CAM are highly used for CNC machinists. Also CNC milling machinist must read and interpret complex technical drawings and specifications, and work to a high degree of precision and detail to get the best results.



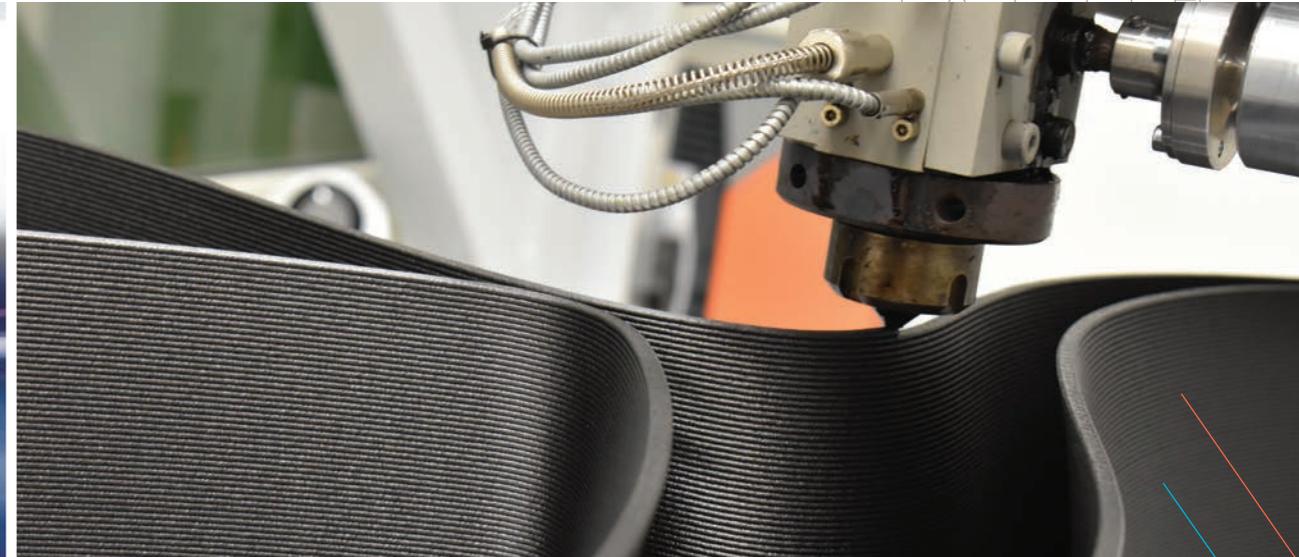
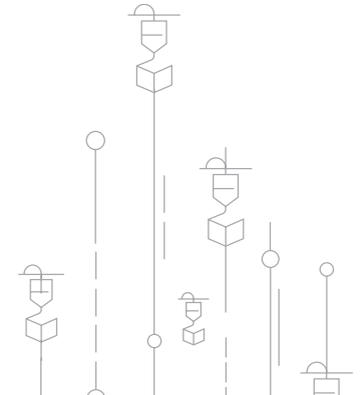
## CNC Turning

“Creating prototypes from technical designs using a computer controlled lathe that cuts to ultra-fine specifications. When engineers want to know if a specific part of a design is going to work, they look to CNC Turning. The finished article is used to create pieces of machinery that are often highly-complex. A typical car has around 10,000 parts alone. A trained operator will be familiar with many types of materials, ensuring the dimensions of the finished piece exactly match the design specifications.”

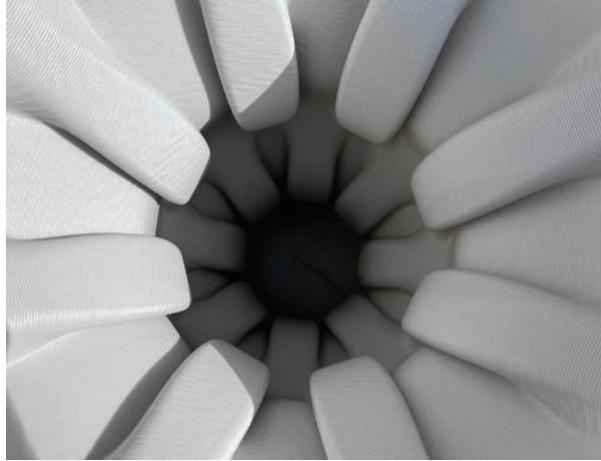
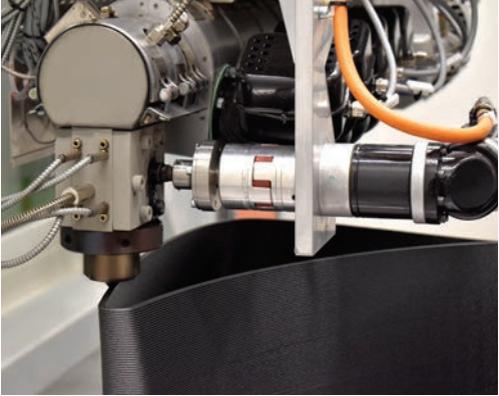


## 3D Printing

“3D printing is a process of making a physical object from a digital model. It is achieved by laying down successive layers of material until the object is created. 3D printing has been in use for decades, but it has only recently become mainstream because the price of 3D printers has dropped significantly, and the quality of 3D printers has increased. The technology has many potential applications, including rapid prototyping, education, architecture, engineering and construction, industrial design and more. At innovation Park 3D Printing Department, we have some amazing and different types of Printers that uses different types of technologies. Like FGF, FDM, SLS, SLA to name a few.”



# 3D Printing



## Specifications

- Large build volume of 5 m<sup>3</sup>
- Granulate fed extruder print head (FGF)
- Mobility: easy to move the printer to location
- Incredible print speed/ retraction enabled
- Use of 8 specially designed FGF materials (pellets)
- First big printer to use recycled PET, RPP





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