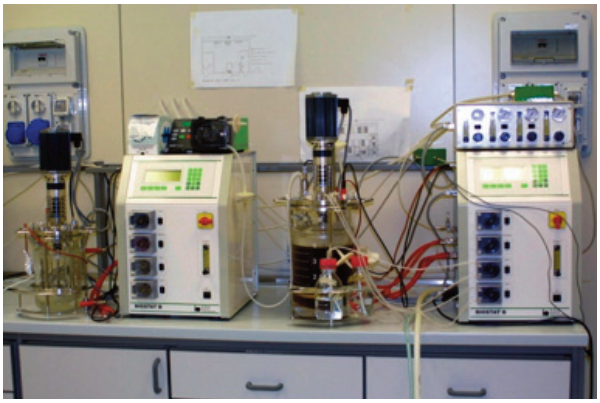
NACE CODE C10, C11, C20, C21

BIO-REACTION FERMENTATION

Innovations and Benefits - The availability of specific instruments (2 and 5 liters) and pilot plants (15, 50 and 500 Liters) dedicated to fermentation processes (culture media, biomass pre-processing and hydrolysis, inoculation, pilot scale production), makes it possible to adequately respond to the multiple needs of RD&T in the bio-industry sector, for the assessment of the sustainability of specific industrial processes too.

Uses - Development and scaling-up of fermentation processes aimed at the production of microbial biomass or substances deriving from their metabolism. This technology can be used for processes involving the use of liquid cultures of bacteria, fungi and yeasts. In particular, it can be useful for the agro-food (dairy, wine-making, bread-making, brewing, etc.) and animal feeding industries and for agriculture. It is also possible to test culture systems of plant and animal cells for the production of specific biomolecules, such as monoclonal antibodies, enzymes, growth factors and hormones, antioxidants, bio-pesticides, etc. of industrial, agro-food and pharmaceutical interest.

Past and present activities - RD&T activities are carried out within the framework of projects financed at national and international levels and thanks to the relationships with industrial actors. They include: fermentation of biomass (from phytodepuration residues, vegetable matrices, scraps and agro-industrial by-products, etc.) in order to produce microbial biomass (yeasts) to be used in plant pest control programs (microbial antagonism); process scaling-up to obtain microbial biomass to be used in various industrial sectors as well as for the production of bioethanol.



Characteristics: CUSTOM
Thanks to its flexibility, the service can be adjusted to specific needs and contexts

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