



CUSTOM SERVICES

PLANTS FOR **PLANTS**[®]

EXTRACTION, ISOLATION AND PURIFICATION

Indena Custom Services for extraction, isolation and purification of natural derivatives include a **full range of manufacturing capabilities for food and pharma grade ingredients** across a wide range of scales.

The combination of Indena's expertise and state-of-the-art facilities delivers products and processes **from small scale to large commercial manufacturing supplies**.

Indena's **R&D center is located in Italy**, while the production units are in **Italy, France and India**.

Indena's facilities incorporate **separated and authorized areas** for handling pharma and food grade natural derivatives and the **Quality System ensures compliance to cGMP and Hazard Analysis and Critical Control Points (HACCP) guidelines** respectively.



INDENA CUSTOM SERVICES FOR EXTRACTION, ISOLATION AND PURIFICATION OF NATURAL DERIVATIVES OFFER:

- Scientific research services in the field of botanical extracts for use in the chemical, pharmaceutical, hygienic and beauty care fields.
- Extraction, isolation and purification process development, scaling-up and manufacturing
- Phase-specific analytical development and validation
- Control of incoming raw materials and biomasses
- Characterization, certification and control of incoming raw materials and biomasses
- Agronomical development and GACP (Good Agricultural Collection Practices) compliant cultivation of food and medicinal plants
- QC testing of in-process materials
- Stability studies according to ICH guidelines
- Commercial production of APIs in Italian AIFA and US-FDA inspected manufacturing sites
- High containment areas
- Food commercial production scale in authorized areas



IFICATION OF NATURAL DERIVATIVES



FEATURES

- HAMMER AND KNIFE GRINDERS
- STATIC AND DYNAMIC PERCOLATORS
- LIQUID-LIQUID EXTRACTORS
- REACTORS
- CONCENTRATORS (ALSO THIN LAYER)
- LARGE SCALE CHROMATOGRAPHY
- CENTRIFUGES
- FILTER-PRESS
- STATIC AND DYNAMIC DRYERS
- MICROWAVE DRYERS
- ATOMIZERS
- MILLS AND SIEVES
- MIXERS
- HIGH CONTAINMENT AREAS
EQUIPPED WITH GLOVE BOXES

QUALITY MANAGEMENT

- DEDICATED QA UNITS
- TRAINED AND EXPERIENCED PERSONNEL
- ICH COMPLIANCE
- ISO14001 ACCREDITATION
- CGMP AND HACCP

SERVICES

- BOTANICAL R & D
- AGRONOMICAL R & D
- GACP CULTIVATIONS
- PROCESS DEV.
- SCALING-UP
- PROCESS VALIDATION
- MANUFACTURING
- SCIENTIFIC RESEARCH

OPERATIONS

- GRINDING
- EXTRACTION
- CONCENTRATION
- ISOLATION
- PURIFICATION
- CRYSTALLIZATION
- DRYING
- WEIGHING
- PACKAGING
- CHROMATOGRAPHY
- SEMISYNTHESIS

ANALYTICAL CAPABILITIES

- HPLC-RID
- HPLC-DAD
- HPLC-ELSD
- HPLC-FD
- ELISA
- HPLC-MS
- UPLC-UV
- UPLC-DAD
- GC-FID
- GC-NPD
- HPTLC
- TOC
- DVS
- TG/DTA
- DSC
- SUNTEST
- BIOANALYZER
- MICROSCOPY
- PPSL
- XRPD



Indena S.p.A. is the **world's leading company** dedicated to the research, development and production of **active principles derived from natural sources**.

With its capabilities and expertise, Indena covers **food supplements and pharmaceutical areas**, producing bulks of active ingredients under cGMP guidelines in **AIFA and FDA approved environment**, starting from biomasses obtained according to GACP guidelines.

Today Indena opens its **facilities** for custom services, sharing with customers its **innovative research and production capabilities** at lab, kilo-lab and industrial scale, also in the field of Highly Potent Active Ingredients (HPAIs).

More than Ninety years of Indena presence in the pharmaceutical market are a guarantee of **high quality standards and reliability**, that just a few companies in the world can claim.

Indena is a private Italian company based in Milan (Italy); it employs **more than 800 staff** distributed on **1 R&D Centre, 5 production sites and 5 international branches** throughout the world and manages sales in more than **70 countries**.



CONTACT US

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