



# UNLOCK THE VALUE OF SPENT COFFEE GROUND

**ANDRITZ Turbex extractor for sustainable valorization**

Spent coffee ground (SCG) is a significant waste product from the coffee industry, with an estimated 60 million tons generated annually. While only 10% of coffee beans are converted into valuable products, SCG offers untapped potential for valorization because of its bioactive compounds with various health benefits: antioxidant properties for cosmetics, dietary fiber, which promotes digestive health and

reduces fat and sugar absorption, and proteins suitable for functional food development. Used in two configurations, ANDRITZ Turbex is an innovative extraction system that can unlock the full potential of SCG:

- **Single-Stage extraction:** Extract a phytocomplex (mixture of lipids, polyphenols, proteins, and dietary fiber using a water-based solution)

- **Two-Stage extraction:** Extract lipids and polyphenols, and isolate proteins and dietary fiber

With the ANDRITZ Turbex extractor, which easily valorizes this abundant waste resource, you can transform SCG into valuable products, thus promoting sustainability and contributing to a circular economy.

# Get the most from your spent coffee ground

Generate additional revenue from your by-products

## A COMPREHENSIVE SOLUTION FOR YOUR EXTRACTION NEEDS

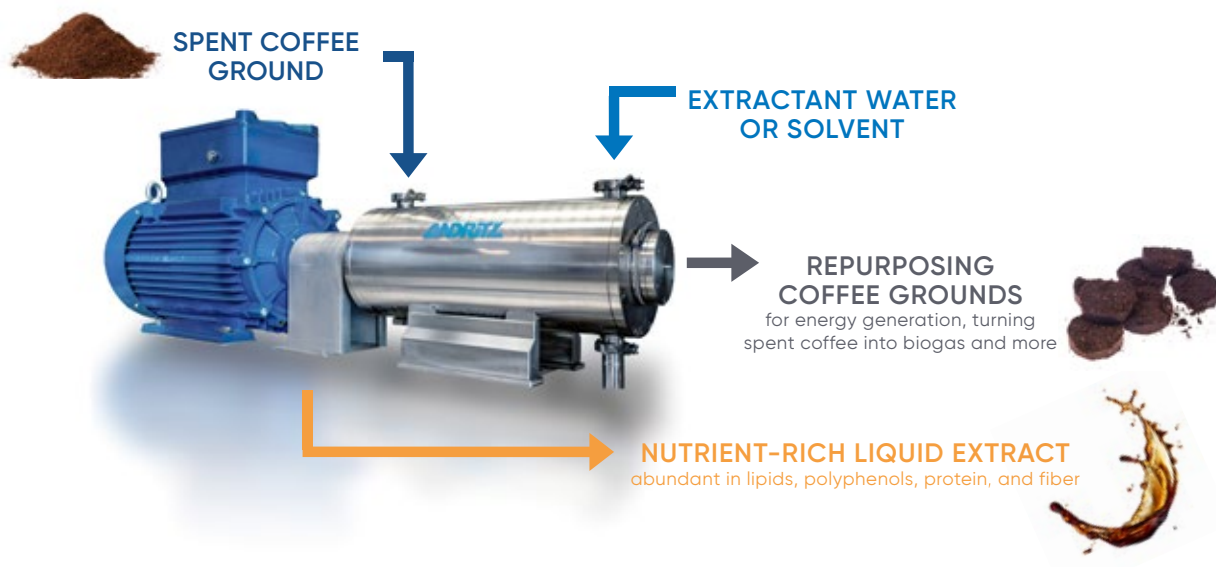
The ANDRITZ Turbex extractor is available in several configurations to extract substances from spent coffee ground:

- **TURBEX PILOT UNIT:** The Turbex pilot unit is equipped with a soaking/feed unit, a liquid recycling/solid dewatering system, and liquid extract filtration to facilitate the complete extraction cycle, including pre- and post-processing of inlet/outlet streams.
- **TURBEX MOBILE UNIT:** ANDRITZ can provide a skid-mounted rental unit to conduct tests to validate your specific process or simply to allow you to enjoy the benefits of meeting your extraction needs on time. Fully equipped with inlet/outlet pumps, this unit is able to process pre-soaked materials.

## TURBEX BENEFITS\*

- One-step extraction instead of multiple processes, which reduces solvent costs
- Delivery of the highest quality functional ingredients, active principle elements, and vegetable proteins thanks to low extraction temperatures that avoid oxidation
- Cavitation ensures faster extraction compared to conventional processes, which means more production in less time
- Up to 50% higher yield for better profitability
- Up to 30% less energy consumption compared to traditional processes, leading to a faster return on investment

\* Results proven by in-house and on-site tests



## CONTACT

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# ANDRITZ

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