

# Ultrasonic Extraction of Extra Virgin Olive Oil



Ultrasonic extraction is a non-thermal, purely mechanical treatment that allows to produce extra virgin olive oil of highest quality. The installation of a Hielscher ultrasonic extractor behind the malaxer and gramola is a short processing step that increases olive oil yield and polyphenol content thereby improving olive oil quality significantly!

## Research Proven Results of Hielscher Ultrasonic Extractors for Extra Virgin Olive Oil Extraction:

Prof. M. Servili of the University of Perugia, Italy tested the Hielscher UIP4000hdT profoundly for effects on extra virgin olive oil extraction:

- High increase of oil yield was obtained from olives at an early maturity index.
- Ultrasound positively influences the phenolic content of virgin olive oil.
- Significant physical changes, increased extraction yield (22.7%), enhanced phenol content (10.1%) were observed in ultrasonically extracted olive oil compared to control oil extracted with a traditional process at an early maturity index.

(Related publications from the University of Perugia: *Servili et al., 2019 / Taticchi et al., 2019 / Tamborrino et al., 2021*)

## Why Hielscher Ultrasonics for Premium Olive Oil Extraction?

Hielscher Ultrasonics is long-term experienced in the field of extra virgin olive oil.

In long-term partnerships with research facilities and olive mills, Hielscher Ultrasonics developed the ideal ultrasonic olive oil extraction equipment.

## Why Hielscher Ultrasonics for EVOO Extraction?

High-performance ultrasonic equipment  
Built for 24/7 operation under heavy duty / full load



We provide high-performance ultrasonic extraction equipment for olive mills, in-depth consulting and service!

Visit <https://www.hielscher.com/ultrasonic-extraction-of-virgin-olive-oil.htm>

# hielscher ultrasonics