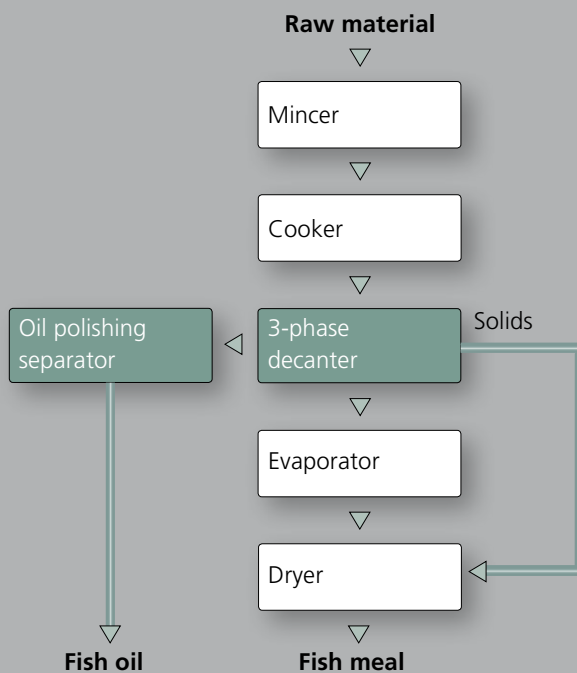


Liquids to Value



Fish Meal and Fish Oil Recovery – The Whole Fish Process for Small Capacities

The processing of very small capacities requires an adaption of the traditional whole fish process. GEA Westfalia Separator has modified the process accordingly to ensure an economic production. Historically, this process has been developed especially for raw materials which are difficult to process in expeller presses. For small capacities the raw material is at first carefully minced. The subsequent cooker

coagulates the protein whilst the fat-containing cells are gently disintegrated so that the oil is released. The cooked raw material is then directly fed to the decanter. For small capacities the cooked raw material is fed to a 3-phase decanter which separates the suspension cleanly into solids, water and oil. The separated solids are directly conveyed to the dryer. The stick-water from the decanter is evaporated before it

is dried and processed into fish meal. As the oil phase may still contain small residues of free water and solids, a polishing separator is recommended downstream to remove even those tiny impurities. The result is purest fish oil. For bigger capacities the cooked raw material is fed to a 2-phase decanter. The recovered press water is then de-oiled by a 3-phase self-cleaning separator before it is evaporated and dried.





3-phase decanters for separation

- Complete decanter range from 0.2 – 15 m³/h
- Customized solutions
- Robust design, particularly designed for hot operation processes
- Sophisticated wear protection for long operation lives
- Special bowl concepts for maximum throughput and clarifying efficiency
- Westfalia Separator® varipond® for always optimal separation results even with different feed conditions
- Made in Germany – Quality assurance system, CE conformity, DIN EN ISO 9000:2000 and 14001



2-phase decanters for clarification

- Complete decanter range from 0.5 – 30 m³/h
- Customized solutions
- Robust design, particularly designed for hot operation processes
- Sophisticated wear protection for long operation lives
- Special bowl concepts for maximum throughput and clarifying efficiency
- Westfalia Separator® varipond® for always optimal separation results even with different feed conditions
- Made in Germany – Quality assurance system, CE conformity, DIN EN ISO 9000:2000 and 14001



Separators for oil polishing

- Complete polisher range from 0.5 – 30 m³/h
- Customized solutions
- Optimized disc stack for top fish oil quality
- Minimum number of parts and seals for minimum wear
- Very service-friendly flat belt drives
- Assembly-friendly design for fast service
- Low vibration machine installation for an easy integration into the process
- Made in Germany – Quality assurance system, CE conformity, DIN EN ISO 9000:2000 and 14001



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