SEAPIX-BT FOR
BOTTOM TRAWLING

![exail]

SPECIFICATIONS

Acoustic power	4KW
Frequency	150 KHz
Number of beams per swath	512 beams (256 per swath)
Volumetric resolution	0.6m³
Pelagic fish coverage	120°x120° (650m wide @200m depth)
Bathymetry coverage	120°x120° (650m wide @200m depth)
Bottom demersal fish coverage	30°x30° (100m wide @200m depth)

RANGE

Pelagic fish	Up to 450m
Bathymetry	Up to 600m
Bottom echograms	Up to 750m

RANGE FOR NEAR BOTTOM FISHES

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Horse Mackerel	250m
Hake, Atka Mackerel	280m
Red fish, Atlantic Cod, Pollock, Withing	330m
Pacific Cod	380m

3D VOLUME SONAR FOR BOTTOM TRAWLERS

Seapix-BT carries out real-time full 3D biomass assessment and bathymetry. It provides unique sea-tested fish classification results for demersal fish species. With highly accurate and reliable information, skippers can conduct more efficient and selective bottom trawling operations.

Seapix-BT enables the formation of Across and Along track sonar swaths and Echograms, from Port to Starboard and from Fore to Aft. Skippers can see valuable near-bottom fishes all around the vessel.
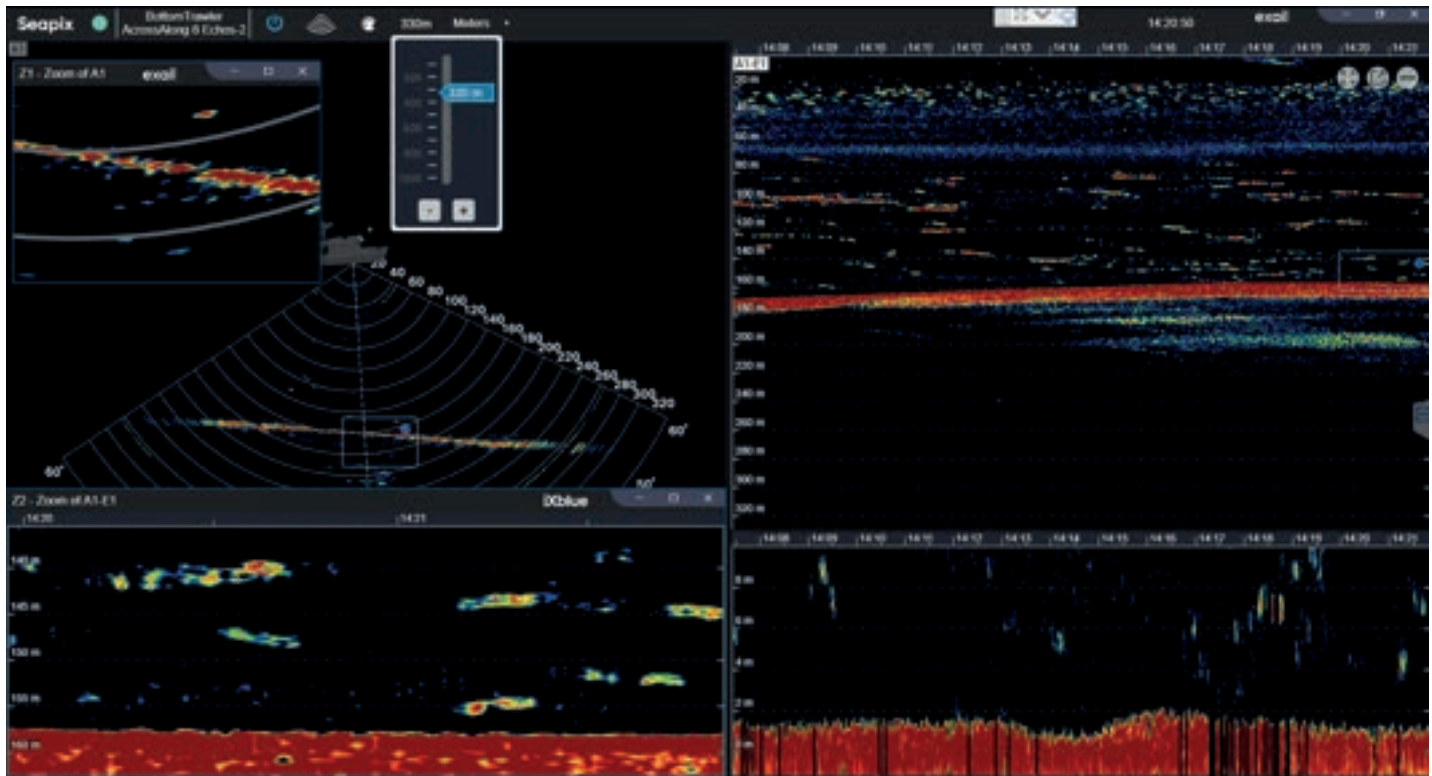

Along track sonar swath

Across track sonar swath
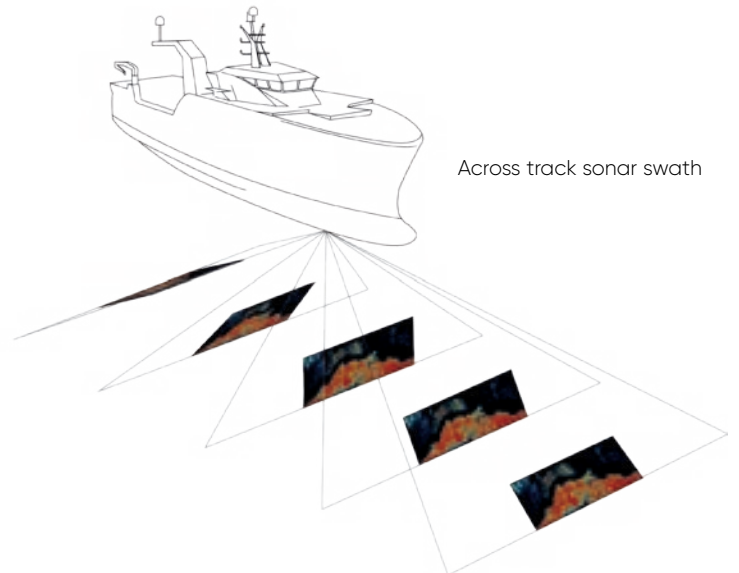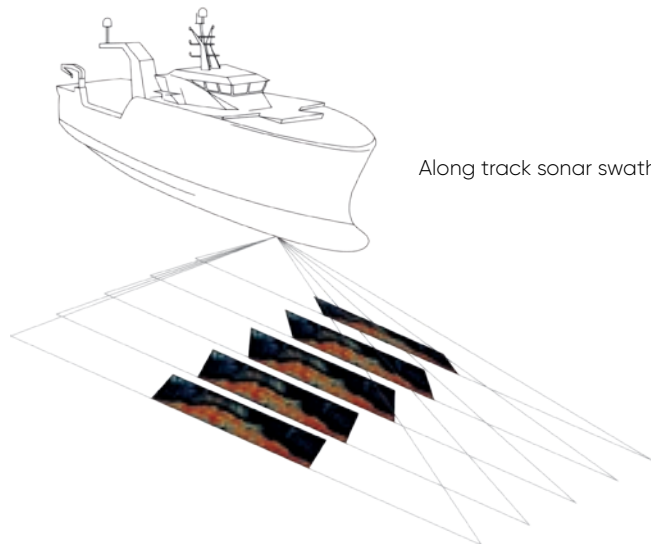
OMNIDIRECTIONAL FISH FIND SYSTEM

Enables the longest detection distance over bottom in all directions

- Biomass control Fore, Aft, Port and Starbord
- 30° cone coverage at 5m above seafloor (representing 100m range at 200m depth)

Offers volumetric assessment & unique « all range » fish finding system

- Volumetric sonar swaths and volumetric echograms
- 3D vision of the fish detection over seafloor
- 512 sharp pencils operating in high frequency with 4Kw power
- Covering « all range » up to 400m near bottom depth

REALISTIC BIOMASS EVALUATION

Provides true abondance estimation

- Pencils of 1.6° forming 256 Split beams in Across track and 256 Split beams in Along track
- 0.6m³ volumetric resolution
- Full 4K acoustic resolution available in sonar Swath and Echogram windows including zooms facilities

Classifies fishes in real-time

- Calibrated TS split beam in all beams allowing qualitative fish sampling for all individuel detections from the whole volume
- Classification by species in GBA analyzer
- Species and abundances shown by areas, layers or duration to trawl gear
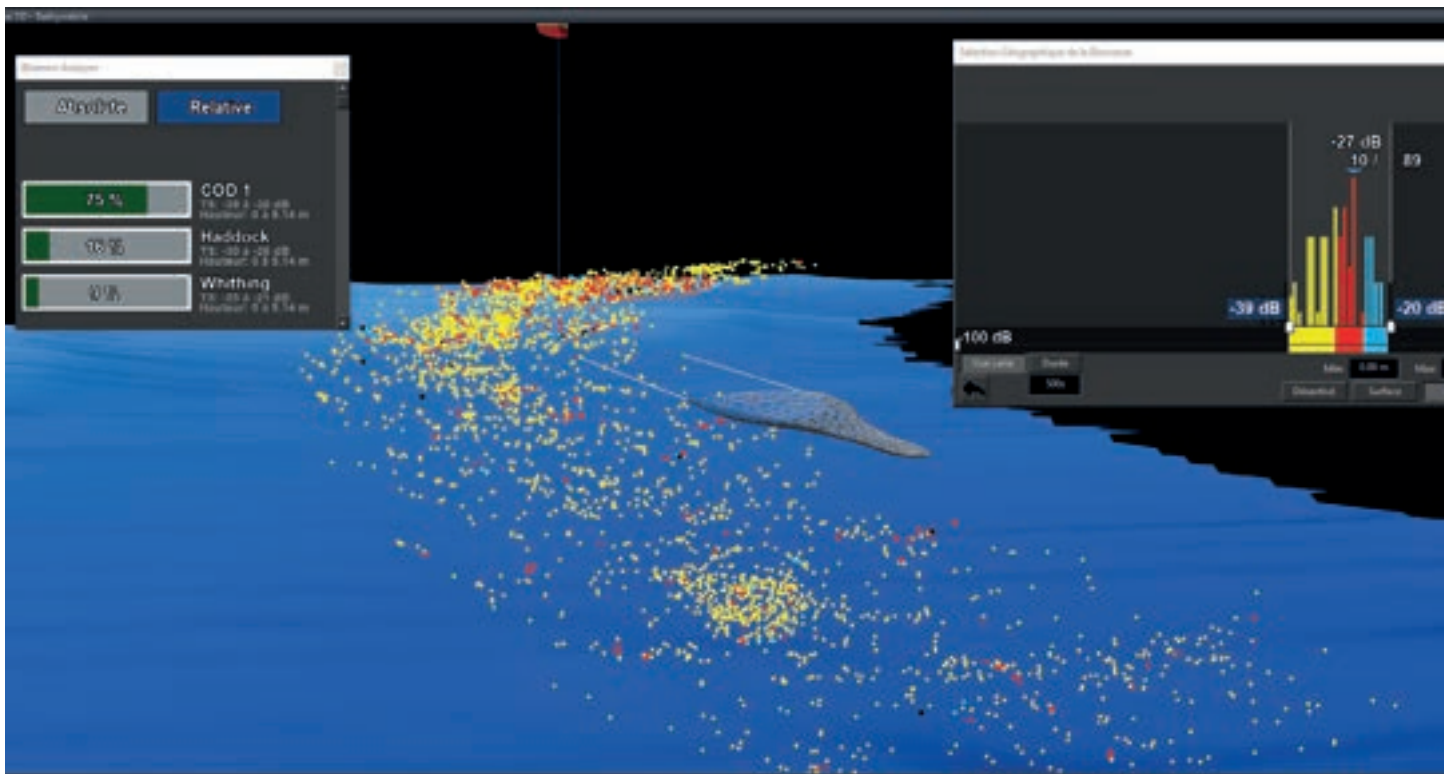
COMPLETE FISHING OPERATION AT A GLANCE

Records high resolution bathymetry

- Port/Starboard bathymetry made by 256 beams
- Fore/Aft bathymetry made by 256 beams
- Bottom Hardness mapping from 256 beams
- Roll and Pitch beams stabilization with embedded IMU motion sensor

Correlates seabed, biomass and gear with vessel navigation

- Data merged into 2D/3D navigation plotter
- 2D and 3D synthetic view to help decision-making for maneuvering
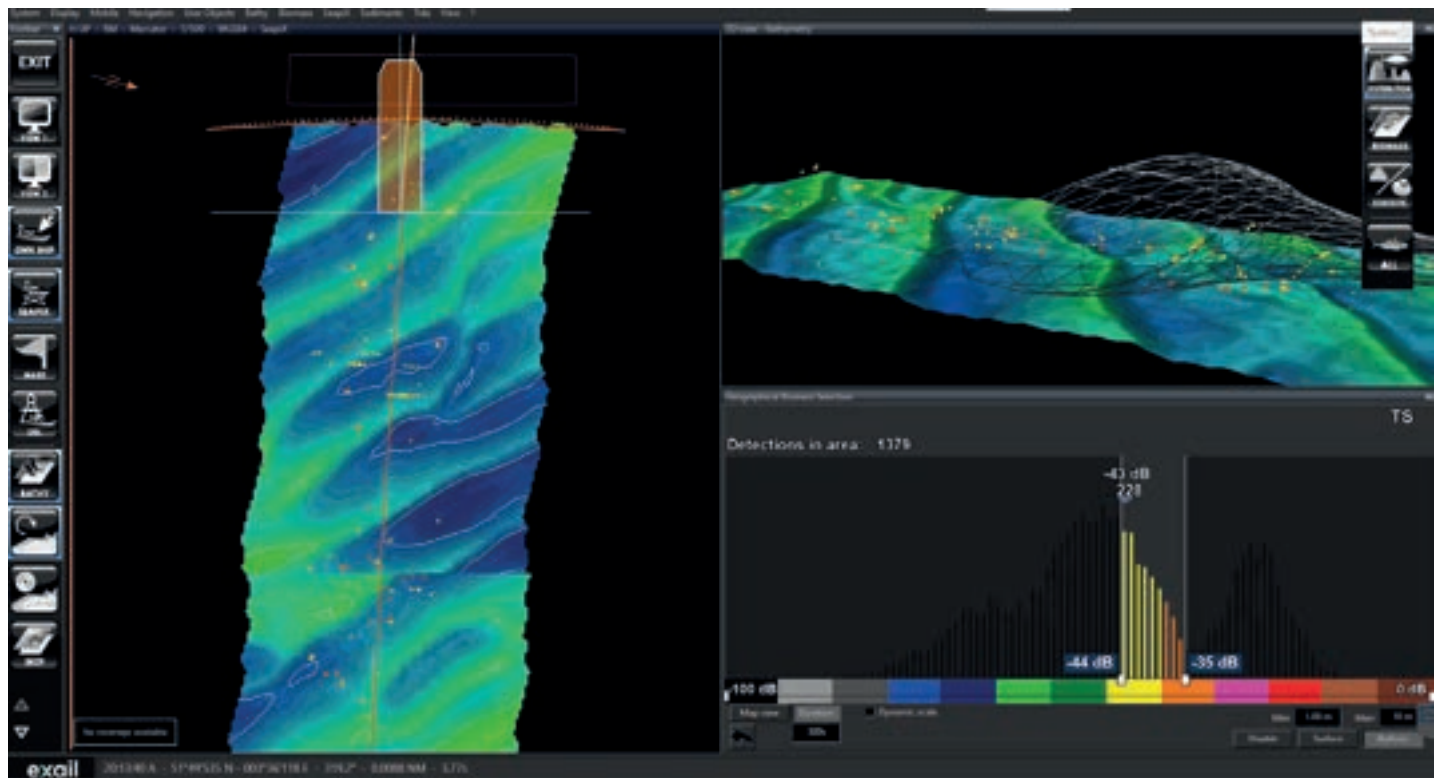
SMART OPERATIONS MODES

Seapix-BT offers both preconfigured operation modes and customizable ones by adding Echograms and Sonar swaths.
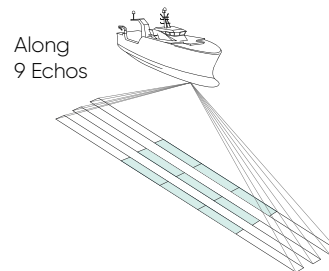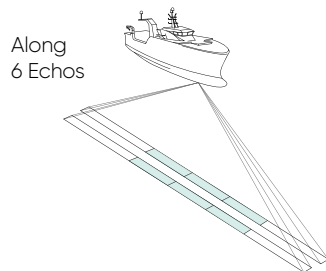
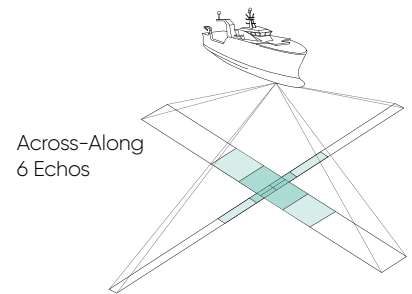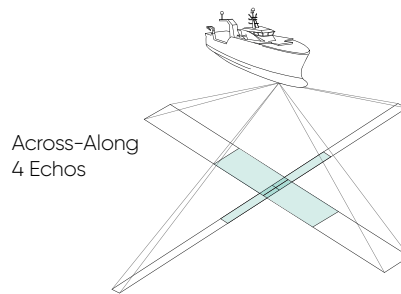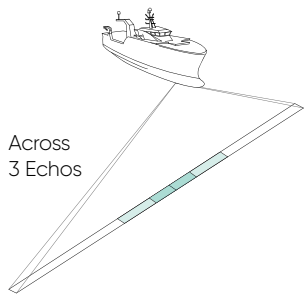## Narrow and Volumetric Echograms

- 3 to 9 Echograms or more, from Aft to Fore and Port to Starboard
- 1.6° narrow Echograms
- 6°, 10°, 15°, 40°, 50° volumetric Echograms (adjustable from 1.6 to 220°)

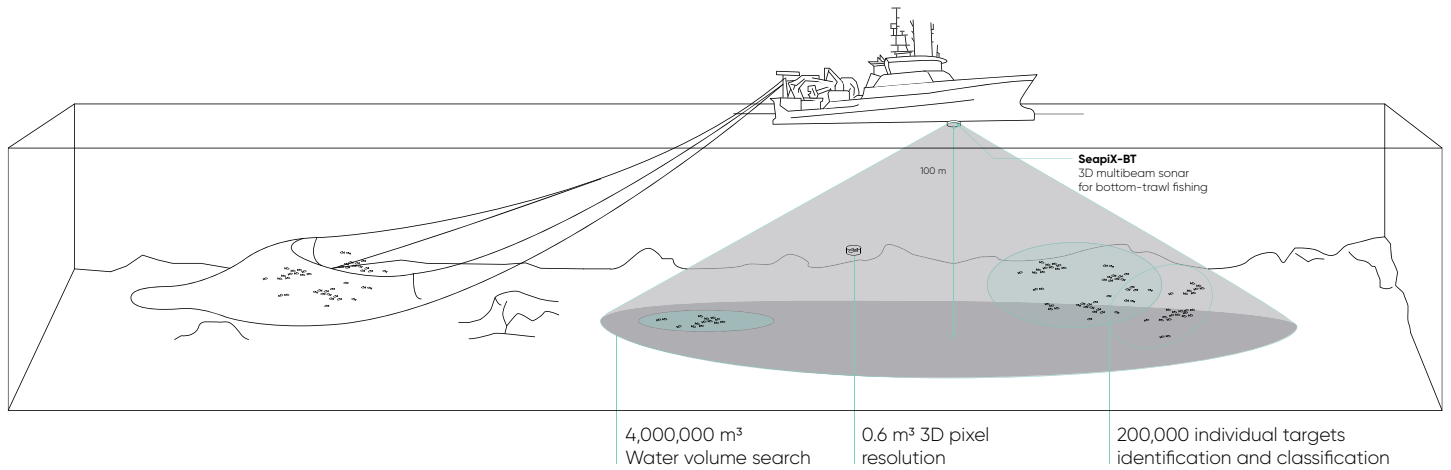## Flexible fish and ecosystem analysis

- Biomass analysis from selected Echograms or Sonar swaths
- Bathymetry from selected Sonar swath, from Port to Starboard or Aft to Fore

Sonar swaths in all directions

- 1 to 3 Sonar swaths or more, from Aft to Fore and Port to Starboard
- 1.6° narrow Sonar swath

Across
3 Echos

Across-Along
4 Echos

Across-Along
6 Echos

Along
6 Echos

Along
9 Echos

SOLUTION FOR BOTTOM TRAWLING

100 m

SeapiX-BT
3D multibeam sonar
for bottom-trawl fishing

4,000,000 m³
Water volume search

0.6 m³ 3D pixel
resolution

200,000 individual targets
identification and classification