



## Brown Shrimp Beam Trawler Small Wadden Cutter DEU-CSH-30

- German Bight, southern North Sea -



@Thünen-Institut/Lasner

### BACKGROUND

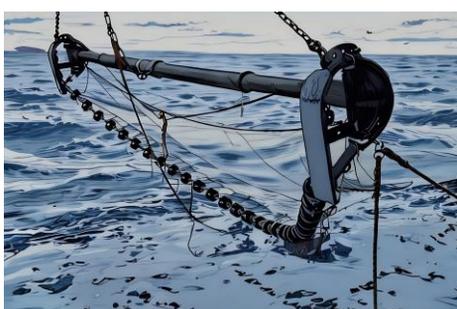
Due to its shallow draft of approximately 1.50m, a Wadden cutter typically operates in the 3sm zone, where it faces no competition from larger vessels with deeper drafts. While uncommon, it is also possible for the smallest Wadden cutters to be used for solo fishing operations. The brown shrimp fishery is characterized by significant price fluctuations and highly variable catch rates. Regarding the German brown shrimp fleet (comprising approximately 150 vessels in 2024), there was a negative trend in landings and returns from 2019 onwards.

### AT FIRST GLANCE

|                   |   |
|-------------------|---|
| Length (m)        | 14.5                                      |
| Gross tons (GT)   | 30  |
| Engine power (kW) | 221                                       |
| Days-at-sea       | ~ 125                                     |
| Target species    | Brown shrimp ( <i>Crangon crangon</i> )   |
| Crew size         | 2   |
| Company structure | Single Entrepreneurship with family labor |



@Thünen-Institut/Sulanke



@Thünen-Institut/Stepputis

| FISHING TECHNIQUE                         |            |
|---|------------|
| Season                                    | Mar – Dec  |
| CPUE (kg/h)                               | ~20-40     |
| <small>(catch per unit of effort)</small> |            |
| Trip duration (h)                         | 12-18      |
| Fuel use (l/h)                            | 21         |
| Gear                                      | Beam trawl |

| FISHERY PERFORMANCE   | 2022    | 2023    |
|-----------------------|---------|---------|
| Fishing hours (h)     | 1,500   | 1,200   |
| Total landings (kg)   | 50,000  | 36,700  |
| Average price (€/kg)  | 6.00    | 6.80    |
| Revenue (€)           | 300,000 | 250,000 |
| Net vessel income (€) | 93,131  | 64,882  |
| ROI (%)               | 2.4     | 0.44    |

| FTE & PRODUCTIVITY   | 2022 | 2023 |
|--|------|------|
| FTE (h/LU)   | 1.67 |      |
| Economic productivity<br><small>(€ returns per € labour costs)</small> | 2.18 |      |
| Physical productivity<br><small>(kg per h labour input)</small>        | 16.6 |      |
|  | 7    |      |

| CASH COSTS<br>(€/kg LW) | 2022 | 2023 |
|-------------------------|------|------|
| Fixed costs             | 0.80 | 1.12 |
| Wages                   | 1.25 | 1.42 |
| Diesel                  | 0.91 | 0.88 |
| Other variable costs    | 0.29 | 0.31 |
| Gear maintenance        | 0.16 | 0.24 |
| Crew catering           | 0.04 | 0.05 |
| Interests               | 0.10 | 0.14 |

| COSTS & RETURNS<br>(€/kg LW) | 2022 | 2023 |
|------------------------------|------|------|
| Cash costs                   | 3.55 | 4.17 |
| Depreciation                 | 0.59 | 0.87 |
| Opportunity costs            | 1.55 | 1.86 |
| Market returns               | 6.00 | 6.80 |

## Profitability DEU-CSH-30

