Industrial Design Capabilities
We Are MistyWest.

An engineering design consultancy that exists to create an inclusive and prosperous global community enabled by technology, with a focus primarily on developing intelligent connected devices that advance the **UN Sustainable Development Goals**.

Our core areas of technology expertise are **Embedded Intelligence**, **Deep Tech** and **Connected Sensors**. We support companies in Mining, Clean Tech and Smart Infrastructure.

MistyWest is founded on years of successfully solving hard problems across numerous industries. Our multidisciplinary team of engineers, designers and developers provides full-stack hardware solutions that allow our clients to turn concepts into products.
The industrial design process helps customers identify competitive advantages over other products in the market, and considers the manufacturability and production processes of development.

MistyWest’s goal is to design products that are not only functional but also visually appealing, user-friendly, and ergonomic.
Understand the *Existing* User and Market Research

- Avoid learning the same lessons twice
- Surface quiet opinions from across the company
- Inform user research to follow
## Competitor Analysis

### Compare Your Product With Its Competitors

- Identify competitive advantages
- Prioritize key product features
- Highlight gaps in market offering

<table>
<thead>
<tr>
<th>Company</th>
<th>Client</th>
<th>Product weight (g)</th>
<th>Battery weight (g)</th>
<th>Battery location</th>
<th>Battery life (hr)</th>
<th>Display</th>
<th>Scanner points/sec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emesent</td>
<td></td>
<td>3150 (including battery)</td>
<td>680</td>
<td>On-board</td>
<td>3</td>
<td>2x16 LCD screen</td>
<td>600,000</td>
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<td>Leica</td>
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<td>1570 (excluding battery)</td>
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<td>GeoSLAM</td>
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<td>1450 (excluding battery)</td>
<td>570</td>
<td>Off-board</td>
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Interview Users In Their Environment

- Understand the people who use your product
- Discover user expectations for a successful product
- Challenge assumptions about users
[User interview alternative] Interview Hard-to-Reach Users

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Extract Research Findings From Raw Data

- Synthesize actionable insights to address unmet user needs
- Uncover problems you didn’t know existed and explore novel solutions
- Evaluate incremental to out-of-the-box ideas for designing a successful product
- Invite input from business and technical stakeholders
In-Depth Physical Product Assessment

- Identify product usability issues and challenges
- Discover product-based blind spots
Mood board for concept generation

- Magnetic Charging port
- Rounded & minimalist form
- Non-bulky
- Minimal UI

Avoidable Display

Inclination

Shortlisted Concept

Concept Generation

- See multiple product forms quickly
- Down-select from the most compelling concepts
- Get early buy-in for the strongest concept

Concept Sketches in 2D Format

Design
Translate 2D Concepts into 3D Digital Formats

- Predict and mitigate risk through increased realism
- Boost stakeholder confidence
- Share renders, animations and detailed storyboards for internal and external use
Translate 3D Concepts into Physical Form

- Receive quick feedback on a tangible concept
- Test concept viability with minimum investment
- Build hype
User Interaction Assessment Using Prototypes

- Flag concept usability issues early
- Refine concepts for user acceptance
- Gain confidence in product feasibility ahead of manufacturing

Prototype

Usability Review

Checking LED visibility in bright daylight

Checking the wearable’s ease of charging during usage

Testing device ergonomics

Testing device performance in water
Quantitative Study of User Acceptance

- Test product reliability, believability, and users' willingness to buy
- Predict how well the product will resonate with users
- Scrutinize concept viability before detailed design

**Concept Validation**

**Prototype**
Let’s make impact.

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