

# **COST OF GOODS SOLD BREAKDOWN**

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### **Q4 2023 FINANCIAL ANALYSIS REPORT**

**Polar Dynamics Robotics, Inc.**

**Confidential & Proprietary**

**Date: January 15, 2024**

#### **1. EXECUTIVE SUMMARY**

This Cost of Goods Sold ("COGS") breakdown report provides a deta

of direct costs associated with the production and delivery of Polar Dynamic Robotics, Inc.'s ("Company") autonomous mobile robot systems for Q3 2023 (October 1, 2023 - December 31, 2023). All figures are presented in U.S. States Dollars (USD) unless otherwise noted.

## 2. METHODOLOGY

1. The COGS calculations follow GAAP standards and include:

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Direct materials and components

-

Direct labor costs

-

Manufacturing overhead

-

Product transportation and deployment costs

-

Warranty accruals

2. Allocation methods for shared costs are based on:

-

Unit production volume

-

Direct labor hours

-

Machine hours

-

Square footage utilization

### **3. DIRECT MATERIALS BREAKDOWN**

## 1. Core Components

-

BlueCore(TM) navigation systems: \$2,845/unit

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Reinforced chassis assemblies: \$1,920/unit

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Cold-resistant battery systems: \$1,675/unit

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Sensor arrays: \$1,450/unit

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Motors and drives: \$985/unit

## 2. Secondary Components

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Electrical subsystems: \$725/unit

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Thermal management systems: \$680/unit

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Safety systems: \$590/unit

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Interface components: \$445/unit

3. Total Direct Materials: \$11,315/unit

## **4. DIRECT LABOR COSTS**

1. Assembly Labor

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Primary assembly: \$685/unit

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Quality control: \$245/unit

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Testing and certification: \$315/unit

## 2. Engineering Support

-

Software configuration: \$425/unit

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Custom programming: \$385/unit

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Field calibration: \$290/unit

## 3. Total Direct Labor: \$2,345/unit

# 5. MANUFACTURING OVERHEAD

### 1. Fixed Overhead

-

Facility costs: \$485/unit

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Equipment depreciation: \$375/unit

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Supervision: \$290/unit

-

Quality systems: \$195/unit

### 2. Variable Overhead

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Utilities: \$225/unit

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Consumables: \$165/unit

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Maintenance: \$245/unit

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Tool replacement: \$135/unit

3. Total Manufacturing Overhead: \$2,115/unit

## **6. QUARTERLY PRODUCTION METRICS**

1. Production Volume

-

Total units produced: 185

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Standard units: 142

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Custom configurations: 43

## 2. Efficiency Metrics

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Average production time: 22.5 hours/unit

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Yield rate: 97.8%

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Rework rate: 2.2%

## 7. TOTAL COGS ANALYSIS

### 1. Per Unit Cost Structure

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Direct materials: \$11,315 (71.8%)

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Direct labor: \$2,345 (14.9%)

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Manufacturing overhead: \$2,115 (13.3%)

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Total COGS per unit: \$15,775

## 2. Quarterly Aggregate

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Total COGS: \$2,918,375

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Average margin: 42.3%

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Cost variance from Q3: -2.1%

## 8. COST OPTIMIZATION INITIATIVES

### 1. Current Programs

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Component sourcing optimization: 3.2% projected savings

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Labor efficiency improvements: 1.8% projected savings

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Overhead reduction initiatives: 2.4% projected savings

### 2. Planned Initiatives

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Supply chain consolidation

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Automated testing implementation

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Lean manufacturing adoption

## **9. DISCLAIMERS AND LIMITATIONS**

This COGS breakdown represents management's best estimates and on available data and established accounting principles. Actual costs based on production volumes, component pricing, labor rates, and other factors may vary. This document is confidential and proprietary to Polar Dynamics Robotics.

## **10. CERTIFICATION**

The undersigned hereby certifies that this COGS breakdown accurately reflects the Company's cost structure for Q4 2023 to the best of their knowledge and belief.

Prepared by:

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Chief Financial Officer

Polar Dynamics Robotics, Inc.

Date: January 15, 2024

[ELECTRONIC SIGNATURE]

Victoria Wells, CFO

