### **Moffitt**

**Case Study** 

## Basin Holdings & Basin Material Handling



#### Introduction

## Basin has made significant strides in optimizing its operational excellence through the implementation of the Basin Business System (BBS).

In 2018, Moffitt collaborated with Basin Holdings, a prominent private holding company operating in the oilfield service and industrial sectors, to develop the Basin Business System, inspired by lean methodologies from industry leaders like Toyota and Danaher. This case study explores Basin's journey towards operational excellence, detailing the inception, implementation, and impact of the Basin Business System on their diverse business portfolio.



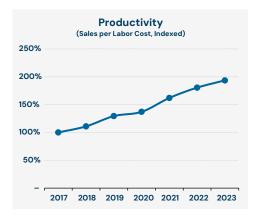
#### The Challenge

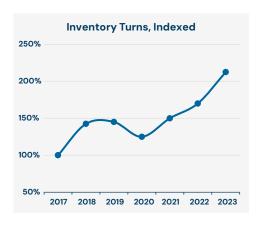
When Moffitt began its engagement with Basin Holdings, the company faced a series of challenges across its five operating units across the US, Canada, and Mexico. These challenges encompassed the need to improve:

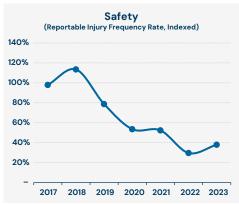
- Quality
- Delivery
- Cost

The challenges underscored the need for Basin Holdings to adopt a systematic approach to operational improvement, laying the groundwork for the collaborative endeavor with Moffitt to develop and implement the Basin Business System.











#### **Implementation**

The Basin Business System (BBS) embodies a holistic management approach focused on continuous improvement and operational excellence. It emphasizes being present, respecting, and learning from employees' insights. BBS strategically targets waste reduction through value stream analysis, daily improvement efforts, and Kaizen events. It implements fundamental principles like working to Takt Time, one-piece flow, and pull systems while ensuring workplace organization and accountability through 5's methodology and visual controls. BBS sets clear targets across safety, quality, delivery, productivity, margin, and working capital, driving the organization towards sustained improvement and success.

Through targeted initiatives and rigorous performance metrics, Basin Holdings and Moffitt embarked on a journey to address the challenges head-on, driving tangible results and unlocking new levels of operational excellence within the organization:

- 1. Productivity: Productivity, measured by sales per Total Labor Cost, holds significant importance at Basin, encompassing both Production and SG&A (Selling, General, Administrative) labor. Basin believes if a company has industry-leading quality, delivery, service, and cost structure they should grow revenue, gain market share, maximize price increases, and do it all more efficiently. With this principle in mind, Basin Holdings embarked on a journey to elevate productivity across its diverse operating units, aiming to drive revenue growth, secure market share, optimize pricing, and enhance overall operational efficiency. Central to this effort was a focus on improving the sales per Total Labor Hour metric, aligning with Basin's belief in translating quality, delivery, and efficiency into tangible productivity enhancements.
- Safety: Ensuring the safety of its workforce remained a paramount concern for Basin. While pursuing operational improvements, Basin was

committed to maintaining and even enhancing its safety standards. The challenge lay in fostering a culture of continuous improvement without compromising on safety, as any gains in productivity were non-negotiable if they came at the expense of employee well-being.

**3. Profitability:** Basin aimed to bolster its profitability by increasing variable profit

- margins. This involved relentlessly eliminating waste throughout the value stream.
- **4. Inventory Management:** Basin recognized the need to optimize its inventory management practices to improve on time delivery and service. By increasing inventory turns, Basin aimed to reduce excess inventory, free up working capital, and unlock resources for reinvestment in growth initiatives and debt reduction.







#### Results

#### After implementing the Basin Business System to address operational challenges, Basin witnessed remarkable results.

#### **Sales per Total Labor Cost:**

From 2018 to 2023, sales per labor cost increased by nearly 200%.

#### Safety

Basin's frequency of injuries declined by ~60%.

#### **Inventory turns**

Inventory turns increased by over 100%. Over \$20 million in "Sleeping cash" was pulled out of working capital and redeployed into growth initiatives.

#### Variable profit margins

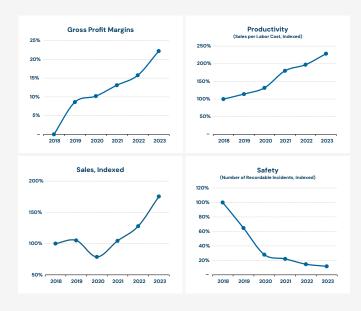
Basin increased variable profit margins by 20%, which represents nearly \$50 million to the bottom line.

#### Basin Material Handling: A Lean Success Story

# Since the initiation of lean implementation in the second half of 2018, Moffitt's ongoing partnership with Basin Material Handling has yielded substantial results.

As a testament to the effectiveness of the Basin Business System, Basin Material Handling, a subsidiary of Basin Holdings headquartered in Sturgis, Michigan, exemplifies the transformative impact of lean principles ignited by Moffitt's collaborative efforts.

Since 2018, Basin Material Handling has organized over 100 kaizen events and executed numerous small projects across all process steps from order to cash, enhancing quality, delivery, service, and cost structure. This effort has yielded a remarkable 20% increase in gross margin, equating to a \$25 million boost in EBITDA, alongside maintaining a flawless 100% On-Time Delivery record. Sales have surged by 80%, while OSHA safety recordable incidents have plummeted by 88%.



Basin Material Handling's exceptional performance has been recognized with the prestigious recognition of being awarded Toyota Supplier of the Year, a testament to its unwavering commitment to excellence and customer satisfaction.



#### Key Kaizen Events at Basin Material Handling

Example Kaizen events at Basin Material Handling exemplify the ongoing dedication to continuous improvement and operational excellence. Each event strategically targets specific challenges, highlighting how a commitment to lean principles and collaboration with Moffitt can yield remarkable results, contributing to the organization's success and industry recognition.



Mapped value streams and created an improvement plan with 79 action items. Reduced saw setup time by 83%. Improved facility flow, leading to a 50% reduction **Sep 2019** in forklift usage. Reduced annual maintenance expense by \$20 thousand and re-assigned fulltime equivalent to value-adding processes. Reduced movement on the weld line by 50%, resulting in a 67% increase in labor hours per rack. Improvements to workplace organization, coupled with improved productivity, reduced quality rejections at inspection by 65%. **Dec 2019** Re-mapped value stream and created improvement plan with 48 action items. **Sep 2020** Improved weld flow, resulting in a 44% increase in labor hours per rack. Reduced movement required per rack by 146 feet. Implemented one-piece flow in paint function, eliminating all downtime due to waiting and reducing rack transportation by 70%. Mar 2022 Reduced saw fabrication process steps by 25%, leading to a 15% reduction in labor hours.

Improved layout of fabrication and laser activities, leading to a 60% reduction in outsourced labor.

Designed and kicked off a project to build and staff a weld line that specializes in specialty metals.

#### Conclusion

## As Basin Holdings continues to evolve, the partnership with Moffitt remains pivotal, ensuring ongoing success and innovation.

The collaboration between Basin Holdings and Moffitt has driven significant advancements in operational efficiency through the implementation of the Basin Business System. Overcoming multifaceted challenges, the journey towards operational excellence has fostered a culture of continuous improvement. Basin Material Handling's exemplary performance, exemplified by its recognition as the Toyota Supplier of the Year, underscores the transformative impact of the BBS.

Mar 2023

May 2023