

# **An Instructive Case History**

Several years ago, one of our major clients noticed that the profitability of one of his Midwest distribution centers had dropped significantly. He traced the decline to reduced productivity in the material handling operation and purchased several new vehicles that would carry heavier, larger loads. Six months later a follow-up study by his industrial engineers revealed there had been no productivity improvement, but there had been a troubling increase in vehicle repairs and parts replacement, especially for the new vehicles. This study also revealed the true culprit... defects in the concrete floor.

It seems the five year old floor had numerous defects that were going unrepaired. Joints in the narrow, high bay aisles had deteriorated to the point where vehicle drivers would slow down for each one to avoid the impact. One joint had spalled so badly that drivers would detour by going through the next aisle. There were three spots in the dock area where the top 1/4" of concrete had delaminated, exposing rough aggregate. No one had ever repaired the random cracks throughout the facility, thus allowing the ragged edges to get wider.



The industrial engineer's study concluded that concrete floor deficiencies had caused or greatly contributed to the following productivity-draining factors:



- 1. An overall slow down in vehicle flow
- 2. Costly detours to avoid impact
- 3. Damage to transmissions, axles
- 4. Excessive wheel/tire wear
- 5. Vibratory loosening of wires/cables
- 6. Two incidents of load tipping
- 7. Two worker compensation claims for lower back distress
- 8. A decline in driver morale
- 9. Drivers taking less-than-full loads for fear of load tipping.

Soon after the engineer's study was completed, the client retained Metzger/McGuire to survey the floor, determine the best repair procedures, work up a budget estimate and write repair specifications. A professional repair contractor was subsequently hired to perform the work in two phases to minimize interruptions to normal facility operations. The facility is now one of the company's most productive and profitable, and the cost of repairs has long since been recovered in vehicle maintenance expenses alone.

This case study conveys two critical messages; first, that floor defects can greatly reduce a facility's productivity, and second, that floor repairs should not be viewed as an expense, rather they should be viewed as an investment in long term productivity and profitability.

# The FIRMS<sup>®</sup> Program

The Metzger/McGuire FIRMS® program is structured to offer the client maximum flexibility, allowing him to select only those services that meet his needs and his budget. We can develop a long or short term repair program to be implemented on a corporate-wide basis or focused on just one or two troublesome facilities. We can handle everything from analysis through to contractor completion, or we can train your personnel how to self-perform repairs.

#### Corporate-Wide Floor Improvements

After a consultation with you and your key staff members to identify your long and short term objectives, we will conduct detailed inspections of every facility you designate, determining the extent of deficiencies and the facility priority ranking in the eventual repair program. We will then write your repair specifications, provide you with a budget estimate, identify capable bidders, supervise the start-up and inspect the completed repair.

# Facility-Specific Repairs

If a single facility is your primary concern, we will inspect the floor conditions, identify the problems and the best means of correction. We will then advise on whether the problem(s) can be repaired with in-house staff or if an outside contractor is best. If handled in-house, we will help your personnel obtain any necessary equipment and materials and provide the necessary training to perform the repairs via fax, phone or on-site training.

#### Real Estate Due Diligence

Are you considering buying or leasing an existing facility? *Metzger/McGuire* will conduct a thorough floor evaluation and give you a detailed report on the existing floor condition. The floor is the work surface for your entire operation. Its condition should be a primary consideration prior to acquisition.

# In-House Maintenance Training

Many corporations have attempted their own floor repairs, only to have the repairs fail repeatedly. *Metzger/McGuire* offers inhouse, hands-on floor repair training seminars. We bring the power equipment, tools, repair products and knowledge gained through experience right into your facility.

# Advocacy on New Construction Projects

Despite best efforts in the design stage, problems can still develop in the construction phase. *Metzger/McGuire* can be your expert at any point during the construction process. Or have us attend your one year warranty walk-through and look for hidden problems you might not discover until it's too late.

Whether you have one warehouse or a dozen regional distribution centers, *Metzger/McGuire* can assist you in achieving maximum productivity by improving the quality of your concrete floors. Let us sit down with you and show you why *Metzger/McGuire*, with our FIRMS<sup>®</sup> Program, can be one of your most valuable resources.

I've attended many conferences on improving warehouse productivity and profits, but this was the first time I've heard any of the speakers address the importance of the floor. It seems that we're always relying on advances in technology, like barcoding and better material handling vehicles, to achieve efficiency. But we forget that to get product from rack to truck, we need to cross the floor. I'm convinced that repairing our floors, while decidedly a low tech solution, might bring us more productivity than many of the other technologies discussed at the conference. It just seems like good common sense.

#### V.P. Operations Major Grocery Chain

For years I tried to get corporate to release funds to fix our warehouse floor, but I kept getting turned down. The repairs we made by siphoning money from the maintenance budget would make things better for a while, but ultimately they wouldn't last and we'd end up with situations the same or worse than they started. It took a tipped load and an injured worker threatening a lawsuit before corporate finally decided to give me \$20,000 to fix the floor. The contractor you recommended did an excellent job, the floor looks better, and I just found out that we saved almost \$10,000 in forklift maintenance costs in the three months since the repairs were done. Now corporate is talking about releasing additional money. Thanks for all your help.

> Facility Manager Pharmaceutical Warehouse

Our facility floor was so bad that I thought nothing short of complete replacement was worthwhile. But I'm glad to report that after we completed Phase 1 of your recommended repairs (about 20% of all problems), we noticed a big difference in our operations right off the bat. Now that the worst defects are fixed, the drivers are more productive and we're definitely saving money in lift repairs. Now all the guys seem really excited about the repairs and are anxious for Phase 2. I know it sounds corny, but I really think that the level of "pride" has increased around here. I can't thank you all enough for your training and for helping us figure out where to start. We look forward to working with you in Phase 2 and beyond.

Facility Manager Furniture Distribution Center



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