



# How to Make More Money Buy Adding Infrared Repair to Your Services

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# Overview

## Making Money With Infrared Asphalt Repair



- **What is Infrared Repair?**
- **When and Where Infrared Can be Used**
- **Benefits of IR Repair**
- **Getting Started and The IR Process**
- **Integrating IR Into Your Existing Business**
- **Diversifying Your Business and Selling IR Repair**
- **Keys to Profitability**
- **Job Costing and Real-World Example**



# What is Infrared Asphalt Repair?

## In Place Recycling of Asphalt

Simply put IR is the process of in place recycling the existing asphalt by means of an infrared heater

## Infrared Repair Process

The heated area is scarified, rejuvenated, new material is added, leveled, then compacted.

## Seamless Thermally Bonded Repair

IR repair is so effective because it leaves a creates a thermal bond between the repair area and surrounding asphalt.

# When Can Infrared Be Used





# Overselling the Capabilities of IR Repair

## **Infrared is NOT a Fix All**

Many people have the misconception infrared is a fix all for any type of asphalt repair. However, there are certain scenarios, such as base failure, where infrared may not be the best option.

## **Be Honest and Upfront With Customers**

If you choose to infrared or your customer insist, make them aware that the infrared repair will only be temporary, and it may be some time until they are able to repave their entire lot or driveway.

# Benefits of Infrared Repair

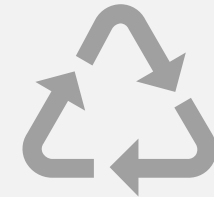
## Save Time & Make Money

- 1/3 the time and costs of traditional remove and replace methods
- Increase job profitability
- Entry into patching and repair market (no more subcontracting repair work)
- Keep crews working year round



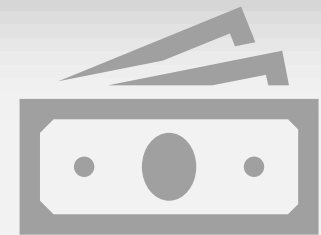
## Green Technology

- 1/3 the carbon footprint of traditional methods
- In place recycling existing asphalt. Requires minimal new material



## Long Lasting Repair

- Thermally bonded weld around outside edges prevents future water penetration
- Seamless transition between repair area and surrounding pavement





# Getting Started

## Equipment



Truck

Infrared Machine

Asphalt Hotbox

Plate Compactor or Roller

## Hand Tools



Lute

Asphalt Rake

Shovel

Broom or Backpack Blower

## Materials



Hotmix Asphalt

Rejuvenator



## HEAT

Allow 7-10 minutes for area to reach a workable temperature



## REWORK AREA & APPLY REJUVENATOR

Once area is heated, "picture frame" the outside edges.

Move in 3" from outside edge to maintain seamless weld and seamless repair

Apply heavy mist of rejuvenator across entire repair area



## SHOVEL & LEVEL AREA

Add or remove material as necessary

Lute repair area leaving it about 1/4" above grade



## COMPACT

Compact the repair area.

Starting at the edges first and working your way across the repair area



IR REPAIR PROCESS



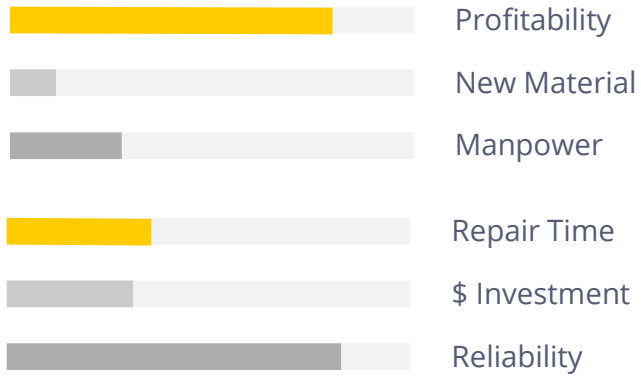


# IR vs Saw Cut



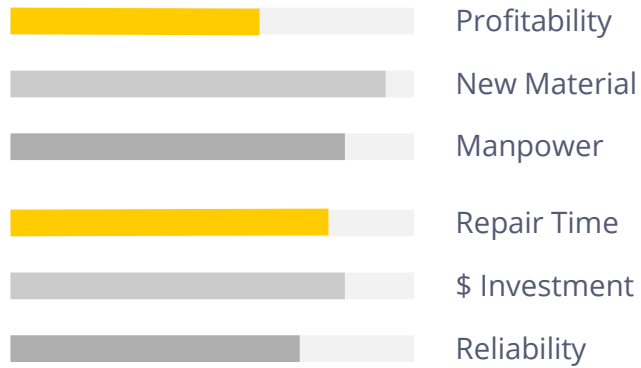
## Infrared Repair

- Truck, IR Heater, Hotbox
- Hand Tools
- Plate Compactor Roller
- 2 Man Crew
- 4-5 IR Repairs an Hour
- Asphalt: 10 Shovels x 20 LB per Shovel = Avg 200LBS. /40 sq. ft.



## Saw Cut R&R

- Asphalt Saw, Dump Truck, Excavator/Skid Steer
- Hand Tools
- Roller
- 4-5 Man Crew
- 2-3 Repairs an hour
- Asphalt: 1500 LBS (40 Sq. Ft @ 3" = ¾ Ton)





# Integrating IR Into Your Business

## Sealcoaters

Are you constantly subbing out repair work? Add an additional revenue stream to your business and become a one stop shop

## Pavers

Easily repair paving defects such as roller marks, low spots, cold seams, etc.

## Line Stripers

You already have a list of contacts and can sell infrared repair work to existing clients and expand your customer base.

## Other Related Businesses

- Property Management Companies
- Landscape Companies
- Concrete Companies

# Diversifying Your Existing Business

## The Hardest Part is Already Done

In most cases the hardest part of any business model is obtaining and keeping customers. The more services you offer the bigger your target market becomes.

## One Stop Shop

Most customers want a one stop shop. They don't want to call three different companies to come repair and sealcoat their parking lot. By offering a full line of pavement services you become that one stop shop



# Selling IR Repair

## Less Disruption and Downtime

With IR repair you can be in and out within 30 minutes causing less of a disruption to the customers traffic flow and parking downtime

## More Reliable Repair

Seamless weld between repair area and existing pavement.

## Economical Option

An IR repair offers a low costs alternative to other options while maintain your profit margin percentages.





# Pricing out IR Repairs

## **Price Per Heat (Recommended)**

Most contractors will charge a mobilization fee for the job and then charge “per heat”. Essentially having a set price for every time, you turn on the machine no matter if you use all heating zones or only one heating zone.

## **Price per Sq. Ft.**

This pricing structure is less common but still used.



# Keys to Profitability



**A**

## Efficiency

Strive for 3-4 repairs per hour.



**B**

## Job Costing

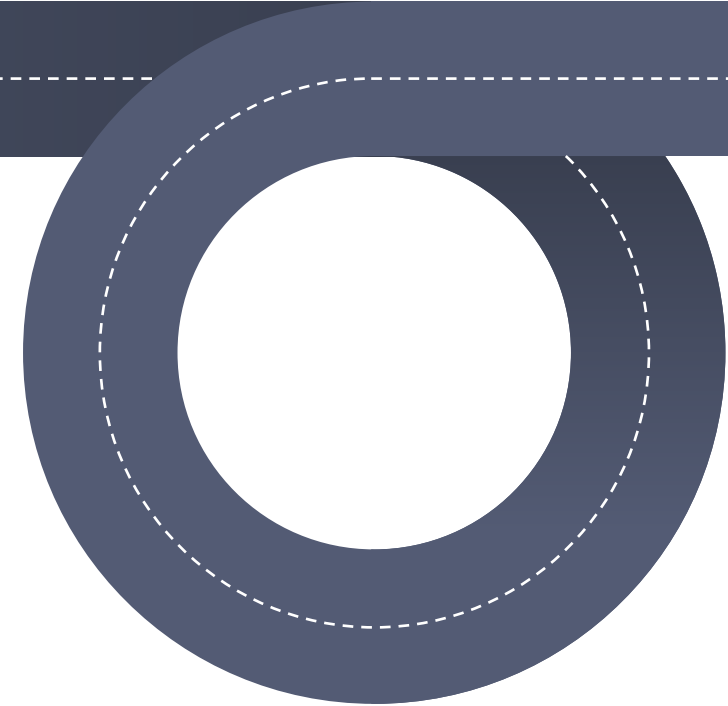
Know your cost per repair and have a set profitability margin in mind.



**C**

## Quality

Do the job right the first time. Referral business is your greatest asset. A happy customer will tell 10 people and unhappy customer will tell 100.



# Job Costing Example

**Revenue = \$6,000/ Daily**

3 Repairs per hour

\$250 per repair (conservative)

8 Hour Day

**Expense = \$1,120.00**

2 Man Crew @\$25/hour x 8 Hours = \$400 Labor

New Material = \$240 ( \$10 per repair)

Miscellaneous = \$500 (Insurance, Fuel, Hand Tools, etc.)



**Profits = \$4,880.00/Daily**  
Season (150 Working Days) = \$732,000.00

# Real World Example

## 60 Infrared Heats

Local contractor hired to perform 60 infrared heats around manholes before winter.

## 4 Days to Complete

Contractor performed work over 4 days. Average Expenses per day with a 2-man crew were \$984.

## \$550 Per Heat

Because this was "winter work" customer paid a premium for the work and was charged \$550/heat.

## Profit of \$29,000 in 4 Days

Revenue = \$33,000

Expenses = \$3,936

Profits = \$29,064





# Online Resources



KM International along with other IR manufacturers offer several online resources about the infrared process and what it can do for your business. We recommend speaking with a manufacturer before purchasing a machine to make sure the machine you choose is right for your business.

**KM International Website**





# Thank You For Your Time Questions?

## **Infrared Asphalt Repair**

Infrared repair is becoming widely accepted by the pavement maintenance industry as a low cost and highly reliable alternative to traditional asphalt repair methods. Because infrared asphalt recyclers can be used in a variety of applications many contractors are finding a small investment in a machine returns a substantial ROI.

