# **Ring of Fire Kiln®** from Wilson Biochar





### **Biochar expert and consultant Kelpie Wilson**

is now offering the new and improved Ring of Fire Biochar Kiln for converting your waste wood into soil-building biochar.

### **Sequester Carbon in the Soil**

- Easy to measure the volume of biochar in the kiln
- Use the Ikhala app to calculate carbon sequestration and climate impact

### **Reduce Smoke Emissions**

The Ring of Fire is designed to pull smoke back into the kiln where it burns up.

> **Price Drop!** \$1.895 WilsonBiochar.com Made in the USA 💻

### The Ring of Fire Kiln is used by a wide variety of farms, small woodland owners, forestry contractors, fire-safe councils, ecological restoration groups, tribes, universities and research institutions, and state and federal agencies.

### **Our customers include:**

- US Forest Service
- Bureau of Land Management
- Oregon Department of State Lands
- Wisconsin Department of Natural Resources
- Potter Valley Tribe
- Coeur d'Alene Tribe
- Velte Forestry and Arboriculture
- Campti Field of Dreams, Inc.
- California Conservation Corps
- Sonoma State University
- Skagit Conservation District
- Bell Springs Fire Department
- VanDuzen/MadRiver Fire Safe Council
- Permaculture Institute of North America
- Lost Valley Education Center
- Quivira Coalition
- Reyneke Wines (South Africa)



Fits in the back of a Subaru.



The Ikhala Impact Platform is a web-based platform to manage biochar production, generate reports, and store all project information. The "CHARR" mobile app feeds into the Ikhala platform and supports biochar producers and contractors to collect, manage, and report data on their biochar production - everything you need on-site, in one app. The platform is designed to be easy to use and it provides a number of features that can help producers and contractors save time and money.

#### Some of the key features of the Ikhala Impact Platform include:

- A 1-stop-data-shop, your own centralized database for storing biochar-related data, information, and images, including feedstock, pyrolysis process, charging, and application data.
- A data preview section that allows producers and contractors to view real-time data being uploaded from the field, helping you track and manage your teams in the field
- Tracking your biochar production volumes, volume biochar charged, biochar stored as inventory, and where you've applied biochar - tracking the "how much" and "where" during every step
- Cloud storage of all information, media, data and reports, including Carbon Removal Certificates

The "CHARR" mobile app 💥 is a valuable tool for biochar producers and contractors who want to improve data quality, efficiency, and transparency of their operations. The CHARR app has a predefined workflow for the ROF kiln to capture all data from feedstock to the final application. This app saves time and money, and it can help you to produce high-quality biochar reports to accurately track biochar production and benefits



In addition to the features listed above, the Ikhala Impact Platform also offers a number of other benefits, including:

#### • Improved efficiency:

The mobile app guides you through all the data that needs to be submitted in the field and uses this data to generate reports for each day of biochar production, saving you time by consolidating data, pictures, and videos into visual reports.

#### • Improved traceability:

The platform helps to track the movement of biochar from production, charging and inventory, to final application of the biochar, which improves monitoring and traceability.

#### Increased transparency:

The platform provides a transparent view of biochar production and reports on how your Carbon Removals are calculated, which builds trust with stakeholders.

#### • Enhanced communication:

The platform provides a way for producers and contractors to communicate project information, and share data with stakeholders, which can help to improve collaboration and coordination.



At Ikhala, in collaboration with Wilson Biochar, we are innovating a new methodology for biochar production. Our primary goal is to increase funding for these vital biochar production activities, which play a crucial role in carbon removal and sequestration.

As we navigate the complexities of unlocking external funding for carbon contributions, we are developing a unique model of "carbon insetting." This approach enables our clients to integrate the carbon benefits of biochar production into their own voluntary carbon footprint assessments and climate action targets, thereby promoting sustainability within their operations.







Scan this QR with your smartphone to view the Ikhala CHARR App for more information on how you can manage your biochar data and reporting, and learn about the latest progress on carbon funding

### The Ring of Fire makes Biochar

The Ring of Fire Kiln® is a metal container for converting waste wood and brush into biochar, a valuable soil amendment.

The kiln consists of an inner ring composed of six sheets of mild steel that are bolted together. An outer ring of lighter gauge steel bolts onto the brackets that hold the inner ring together. The purpose of the outer ring is to serve as a heat shield that holds in heat for better efficiency. Total volume of the kiln is 5.6 cubic yards.

### How the Ring of Fire® Biochar Kiln Works:

- The outer heat shield holds in heat for a faster burn
- Heat shield protects the operator from radiant heat
- Air moving through the annular gap pre-heats for more efficient combustion
- Air flow tends to suck smoke back into the kiln for a cleaner burn



**Ring of Fire Biochar Kiln** Airflow and Flames – Counter-flow air from the top keeps embers contained and flame lengths low.







### **Ring of Fire Kiln® features:**

### Usability

- Large capacity 5.6 cubic yards
- Easy to ship, move and store
- Quick and secure field assembly
- Perfect for hand crews. No heavy machinery required.

### Productivity

- Converts biomass to biochar with 10-20% efficiency
- Makes 2-3 cubic yards of biochar in 4-5 hours
- Burns the smoke
- Faster, cleaner and safer than an open burn pile

Ring of Fire Biochar Kiln® Specifications	
Kiln diameter	7.6 feet
Kiln height (with heat shield)	44 inches
Kiln total volume:	5.6 cubic yards
Kiln weight (fully assembled)	335 pounds
Number of kiln body sections	6
Weight of one kiln body section	37 pounds
Number of heat shield sections	6
Time to assemble in the field	15 minutes
Burn time to make 2-3 cubic yards biochar	4-5 hours
Time to quench and load finished biochar	1/2 hour
Number of workers needed	two

## The CHARR App

THE CHARR APP IS A DIGITAL TOOL THAT GUIDES YOU TO COLLECT, MANAGE, AND REPORT DATA ON YOUR BIOCHAR PROJECTS.

### **STEP 01**

Gather feedstock and confirm suitability

## **STEP 02**

Assemble. load, and light the kiln

### **STEP 03**

Feed and tend the kiln

### **STEP 04**

Finish, quench, measure and apply the biochar

### Step 05

Generate automated digital biochar reports



Assemble your ROF Kiln



Load biomass & start burn



Add biomass as needed



Almost time to quench



Quench your biochar



Rake out and you've got ready biochar!



Scan this QR with your smartphone to view the **Ring of Fire** Gallery for more information



Email us at admin@ikhala.tech for early access to the CHARR App