

# AlphaFlux Machinable Flux Concentrators



Increase your profits, productivity and efficiency while reducing energy costs and cycle times. That's the key to any successful business. AlphaFlux machinable flux concentrator will help you do just that with your induction heat treating and brazing applications. It can be machined to the needed shape and bonded or screwed onto the work coil.



## What does concentrator do?

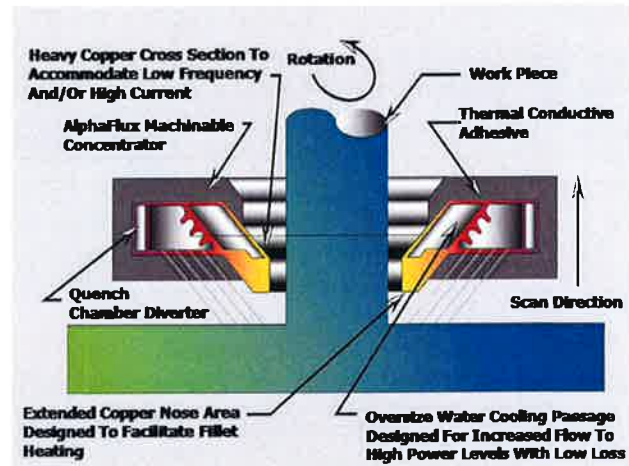


The induction heating process is a method of heating where a magnetic flux field is generated around an inductor. Wherever the part intersects the flux field heating will occur. The diagram at the left shows the field without and then with concentrator. By trapping and focusing the flux field we can intensify the energy supplied to the area to be heated.

## How does buying AlphaFlux save you money?

Because the energy field is focused it allows several options:

1. Since more energy is going where it's needed, the power settings can be reduced.
2. You could keep the power setting higher and decrease your cycle times.
3. It could allow larger parts to be produced on existing equipment.
4. It will reduce heating any tooling near the work area caused by the stray field.
5. You can achieve tighter heating patterns, especially with flanged parts.



| AlphaFlux Data Table             |   |                 |
|----------------------------------|---|-----------------|
| AlphaFlux Grades                 | LF (Low Frequency)  | 1kHz – 50 kHz   |
|                                  | MF (Medium Frequency)   | 20kHz – 450 kHz |
|                                  | HF (High Frequency)   | 450kHz +        |
| Energy Rating                    | A thickness of 0.25" will support an electro-magnetic field density of 40 kW/SqIn |                 |
| Continuous Operating Temperature | 600 degrees Fahrenheit Max.   |                 |

For more information, call 614-253-8900 or visit us at [www.alpha1induction.com](http://www.alpha1induction.com)

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