



AICO Limited was established in 2005, to manufacture and trade in construction commodities such as plywood, nails, tiles and steel parts etc. from Asia to Europe and Australia.

To reach international standards and to fulfill our clients' expectations, the transfer of specific product knowledge is necessary most of the time. In addition to a very strict production control, all our products are certified by a third party for compliance before being shipped.

In parallel, AICO was and is constantly searching for sustainable products, substituting and improving on traditional, hazardous solutions and methods.

Two of our strongest products in this sector are:

- RECOVERIT - a fully recyclable industrial oil spill product
- AICO-LOG - a substitute for firewood, made out of agricultural waste.

Our aim at AICO is to provide the highest quality products, the most efficient solutions and the best customer centric service. For further information please visit www.aico.hk.

AICO-LOGS - RICE HUSK COMBUSTIBLE BRIQUETTES

Overview

AICO-LOG is a new combustible product to enter the worldwide market. However, the technology behind the rice husk briquettes has been used domestically within Vietnam over decades as a simple cooking fuel for the local farmers, working the land and utilising waste natural product around them. Our team at AICO-LOG realised the potential of the concept and application of this product and began researching and optimising this technology to allow mass production and entry to the worldwide markets as a sustainable fuel.

All raw materials and therefore also the final products are 100% natural in source, using bio-waste rice husk plant material through a concise and controlled industrial process to produce the final AICO-LOG briquettes.



Product Specification

Typical Technical Parameters

Characteristics	Unit	Test Method	Test Result
Total Moisture	%	TCVN 172:1997	6.8
Ash Content	%	TCVN 173:1997	12.3
Sulfur Content	%	TCVN 175:1997	0.07
Gross Calorific Value on Air Dried Basis	MJ/kg	TCVN 200:1997	16.24
	Kcal/kg	TCVN 200:1997	3,880

AICO-LOG Product and Packaging

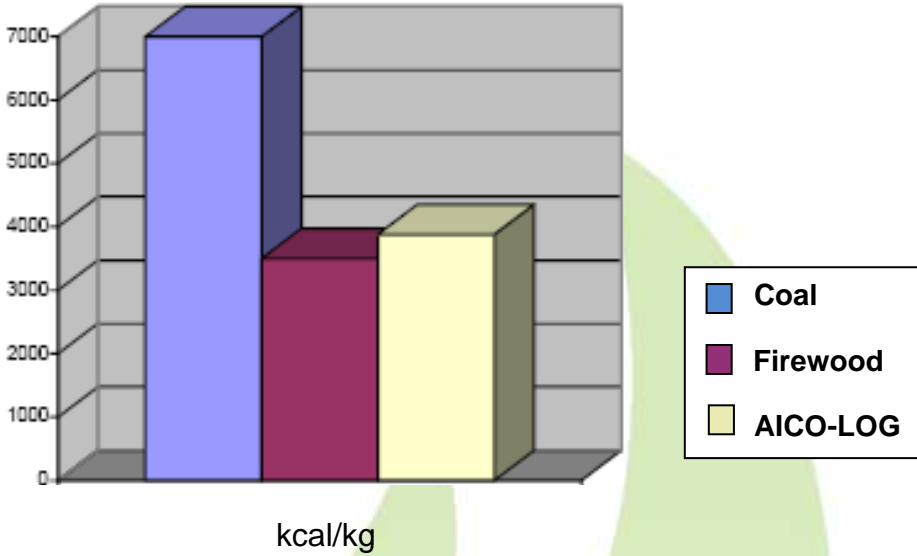
Characteristics		Remark
Type	Briquette	(Pellets on request)
Vertical Section	Hexagonal	
Length	Optional	About 30 cm
Diameter	Optional	8 cm
Packing	Optional	Tied to bundles; packed in PP bags

Burning Specifications

The composition of the combustible AICO-LOG briquette is 99.9% rice husk, after burning the residual product remaining is the natural lignin from the rice husk itself known as ash. The actual burning characteristics of the AICO-LOG are a low controlled flame, a high calorific value of heat (3500 to 4200 kcal/kg) and low smoke levels from the natural combustible. The average calorific burning value of coal is 7,000 kcal/kg and logs offer 3,500 kcal/kg – in comparison AICO-LOG is a truly remarkable and sustainable combustible fuel.



AICO-LOG calorific value comparisons



Environment

Combustible Components

	%C	%S	%N
Coal	63.3	1.6	0.7
Firewood	39.6	0.6	0.3
AICO-LOG	37.1	0.07	0.3

CO2 Comparisons

	CO ₂ (g/kg)	Calorific Value (kcal/kg)	gCO ₂ /kcal
Coal	2,310	7,000	0.33
Firewood	1,470	3,500	0.42
AICO-LOG	1,360	3,880	0.35

AICO-LOG briquettes are a totally clean and stable finished product, allowing easy transportation, storage and indeed burning. The actual burning process of AICO-LOGS gives off lower smoke and general emissions, with slightly lower CO₂ levels produced

but also interestingly the SO₂ emissions are minimum in comparison to other fuels due to the lower sulphur content of the AICO-LOG briquettes themselves as a product and therefore less polluting to the environment.

The remaining ash levels after burning are approximately 16% mass and the additional benefits are that the ash itself offers excellent potential as a fertilizer, a product actually sold domestically within Vietnam itself.

In use, the AICO-LOG briquettes offer high calorific burning values, excellent densities and hardness, optional sizes for various applications and therefore a natural replacement for logs or coal within any marketplace.

	GCV, ar	EFCO ₂
AICO-LOG	3636.7 Kcal/Kg	136.3 tCO ₂ /TJ
Firewood	3606.7 Kcal/Kg	169.8 tCO ₂ /TJ

Conclusion

AICO-LOG briquettes are more cost effective than other combustible fuels, burn with less smoke, less ash, more environmentally friendly, sustainable and can offer a waste product with an associated value and use.

AICO-LOGs are a direct replacement for logs or indeed coal without any consequences or implications and simply a more sustainable and consistent product for all markets.

AICO-LOG burns hotter than normal firewood, it omits a huge 20% less CO₂ into the environment when burning than firewood.

A truly environmentally friendly product that not only replaces, but also out performs it's environmentally damaging traditional solution!