

Permit Number: WP3931SD Operator: Kennametal UK Ltd
 Installation: Newport Ceramics Form Number: Energy1

Reporting of Energy Usage for the year 2016

Energy Source	Energy Usage		Specific Usage (MW/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	7876 MWh	18902	45.3 MWh/tonne product
Natural Gas	0 tonnes	n/a	n/a
TOTAL	7876 MWh	18902 MWh	45.3 MWh/tonne product

* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments :

The specific energy usage has been calculated based on powder production and hot pressing. Although powder production and hot pressing are responsible for the majority of the electricity consumed on site, this is a slight over estimate as some of the electricity used on site is used in the production of other products.

The specific energy usage is lower than last year. However, this figure is significantly affected by differences in the quantities of different products that are produced. Some products require more energy to produce than others.

Signed *Jewhan* Date *26/1/17*
 (Authorised to sign as representative of Operator)

Permit Number: WP3931SD Operator: Kennametal Manufacturing UK Ltd
Installation: Newport Ceramics Form Number: WaterUsage1

Reporting of Water Usage for the year 2016

Water Source	Usage (m ³ /year)	Specific Usage (m ³ /unit output)
Mains water	2895 m ³	16.65 m ³ /tonne of product

Operator's comments :

Signed *Jawha*
(authorised to sign as representative of Operator)

Date..... 26/1/17.....

Permit Number: WP3931SD Operator: Kennametal UK Ltd
Installation: Newport Ceramics Form Number: Performance1

Reporting of other performance indicators for the period 01/01/2016 to 31/12/2016

Parameter	Units
Water usage	2895/173.863
Energy usage	7876/173.863
Effluent released	2605/173.863
	m3/tonne product 16.65
	MWh/tonne product 45.3
	M3/tonne product 14.98

Operator's comments :

Effluent released calculated as 90% of total incoming water (mains)

Signed *Jenhan*
(Authorised to sign as representative of Operator)

Date..... *26/1/17*