

Permit Reference Number: UP3831ES

Installation: TS Resins, Alyn Works

Reporting of Energy Usage for the year.....2017.....

Operator:

TS Resins Ltd

Form Number:

E1

Energy Usage				
Energy Source	Energy Usage			Units
		Quantity	Primary Energy (MWh)	CO ₂ Produced (tonnes)
Electricity*	MWh	2043	5306	881
Steam**	tonnes	3081	2950	561
Gas oil	tonnes	3240	42	11
Heavy fuel oil	tonnes	0	0	0
TOTAL		-	8595	1453

*Conversion factor for delivered electricity to primary energy = 0.385

** Steam is supplied from natural gas fired boilers.

Trends In Energy Usage			
Year	Parameter		
	Primary Energy	CO ₂ produced	CO ₂ per unit output
2017	8595	1453	0.060
2016	7739	1350	0.060
2015	7912	1312	0.061
2014	8168	1325	0.035
2013	8968.0	1573.3	0.041
2012	8484.1	1487.1	0.037
2011	7973.4	1381.2	0.023
2010	9238.4	1617.1	0.025
2009	7447.9	1318.2	0.022
2008	8738.4	1554.9	0.026

Operator comments:

Boiler efficiency = 80%

Energy use is dependent on product mix.

Signed 

Date:22/01/2018.....

(authorised to sign as representative of the Operator)