

Permit Reference Number: DP3430LX

Operator: ZF Automotive UK Ltd.

Installation: ZF Automotive UK Ltd., Pontypool

Form Number: E1

Reporting of Energy Usage for the year: 2022

Energy Source	Energy Usage		
	Quantity	Primary Energy (MWh)	CO ₂ Produced (tonnes)
Electricity *	2285 MWh	5485	910
Natural Gas	6135 m ³	5	1
Gas Oil	0 tonnes		
TOTAL	-	5490	911

* Conversion factor for delivered electricity to primary energy = 2.4

Trends in Energy Usage		
Year	Parameter	
	Primary Energy usage	CO ₂ produced
2017	8843 MWh	1470 Tonnes
2018	8252 MWh	1371 Tonnes
2019	6933 MWh	1152 Tonnes
2020	6499 MWh	1079 Tonnes
2021	5945 MWh	987 Tonnes

Operator's comments:

Gas Conversion $m^3 = ((m^3 \times 29.31) / 35) / 1000000$ MWh

The conversion factors used to calculate the CO₂ produced were taken from the sector guidance H2 section 3.1 and were 190 for natural Gas and 166 for electricity. $((MWh \times \text{Co}_2 \text{ factor}) / 1000)$

	Units	2017	2018	2019	2020	2021	2022
Zinc Plated	Pieces	1,283,653	911,033	817,591	643,606	350,589	205,135
Zinc Nickel	Pieces	4,099,560	4,210,039	4,205,077	3,460,852	3,363,011	3,071,409
Caliper Anodised	Pieces		391,298	643,658	691,180	1,324,387	1,836,842
Drum Anodised	Pieces	2,625,969	757,260	215,240	228,480	168,293	0
Electricity (Processes)	Kwh/1000 parts	455.727	543.892	487.965	537.408	474.635	446.944
Gas (Processes)	M ³ /1000 parts	12.321	12.873	9.121	4.590	3.408	1.200



Signed:
(Authorised to sign as representative of ZF Automotive UK Ltd.)

Date: 25/01/23

Date of form: 05/12/2013

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Form Number: R1

Reporting of Waste Disposal and Recovery for the year: 2022

Waste Description	Disposal Route	Tonnes	Recovery Tonnes
1a) Hazardous Wastes - Solid	Landfill	66.02	6.32
1b) Hazardous Wastes - Liquids	Chemical Treatment	1905.18	
2) Non-Hazardous Wastes			
TOTAL WASTE	-	1971.20	

Trends in Waste Disposal and Recovery		
Year	Parameter	
	Named Waste	Total Waste
2017	1262.34	1262.34
2018	1172.50	1172.50
2019	1359.60	1359.60
2020	1401.28	1401.28
2021	1694.54	1694.54

Operator's comments:

Waste increases due to:

- Hydroxide Sludge Disposal – Increase of 30% - The inability of being able to use the effluent sludge press due to the inability to dispose of the filter cake resulting in the sludge being tankered offsite. Alternative disposal routes are being sourced to allow the pressing of the sludge to produce a filter cake.
- Plating solution disposal – decrease of 37% - This waste is partly due to the inefficiencies of the zinc nickel plant when running lower volumes on 6 tanks. Currently working with supplier to look at options to help reduce this waste.
- Disposal timing – Some waste produced in 2021 but disposed of in 2022 as there was not enough for a full load in 2021.



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Form Number: WU1

Reporting of Water Usage for the year: 2022

Water Source	Usage (m ³)	Specific Usage (m ³ /1000 parts)
Main's water	17975	3.52
TOTAL WATER USAGE	17975	

Trends in Water Usage		
Year	Parameter	
	Named Water source	Total Water usage
2017	Town's Mains	44685
2018	Town's Mains	35201
2019	Town's Mains	29109
2020	Town's Mains	23617
2021	Town's Mains	18773
2022	Town's Mains	17975

Operator's comments:

	Units	2017	2018	2019	2020	2021	2022
Zinc Plated	Pieces	1,283,653	911,033	817,591	643,606	350,589	205,135
Zinc Nickel	Pieces	4,099,560	4,210,039	4,205,077	3,460,852	3,363,011	3,071,409
Caliper Anodised	Pieces		391,298	643,658	691,180	1,324,387	1,836,842
Drum Anodised	Pieces	2,625,969	757,260	215,240	228,480	168,293	0
Effluent Water	M ³ /1000 parts	5.579	5.615	4.949	4.701	3.606	3.515



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