

Environmental Objectives and Target Information

Data presentation: 12 months to February 2021

Data available on server at : S:\Quality, Health and Safety & Environment\Environmental & 14001\ISO14001\Targets and objectives ER 04 & EP 08

ER 04 rev 22

Website version / Customer references removed.

Solvent Use in Vapour Degreaser & purchase of IDA (ethanol)

Not just an “Objective” as we have legal requirements to limit our solvent usage . We are currently allowed to “use” 1000 Kilos per year.

We have purchased ZERO volume of Perchloroethylene since we filled up our new degreaser in July 2020



Industrial Denatured Alcohol (IDA) licence ...Due to Covid-19 and the increase in hand sanitizers the government has increased the amount that companies can purchase to allow home manufacture of hand cleaners (as we are doing for use at work) ...we have a permit limit of 270 litres per year

Objective: Reduction in “Waste”

A number of SMART systems have been introduced that reduce paper waste (E systems for payroll & payslips , holiday booking and approval system , purchasing requisition approval , records and check sheet systems in coatings department)



Target(s): Hardide should be targeting areas of their business where active reductions can be made to waste streams within their business . There are variables that influence us that we cannot alter such as : energy costs , work load from our customers , product mix , size and shape of loadwe have targeted “paper mail & circulars ” as an area we can directly influence.

Objective: Reduction in CO2 Footprint

There are significant reductions in our CO2 footprint by avoiding air freight CO2 implications and using road & rail freight locally in USA . Supply from USA facility has a much lower CO2 impact than supplying USA customers from UK.



Throughout 2020 all screen/ mesh product was coated out of USA , Pump parts were all processed in the USA apart from sleeve series parts which have to be coated and finished in UK.....a finishing concept and new machine was ordered in September 2020.

Commissioning trials started in UK February 2021 with the plan to have this series of parts transferred to USA by the end of 2021. We also increased the volume of drilling bores we coated in USA significantly during 2020SG 03/03/21

Target(s): Reduce CO2 footprint by supplying USA customers directly from USA plant where practical

Objective: Reduction in CO2 Footprintcontinued



When people have to travel for business purposes, methods are considered.

Our lease cars are diesel which on average, are lower in CO2. On average, this equates to around 200g CO₂/km for petrol and 120g CO₂/km for diesel.

Train is used when travelling into London. Train CO2 3.56kg vs Car CO2 9.22kg (Based on 50 miles).

When air travel is unavoidable, economy tickets are purchased. Using the 2019 UK Defra Carbon Factors for a long haul flight, the emissions per passenger km for first class travel are 0.60kg CO₂, for business class 0.43kg CO₂ and for economy 0.15kg CO₂. This is calculated by the amount of space taken up per seat on the plane.

Other ways in which we aim to reduce CO₂:

We offer the bike to work cycle scheme as part of the employee benefits package.

Hardide plans to look at installation of charging points for EVs at Longlands site in 2021

Its first fully electric company car is on order for June 2021



Objective: Reduction in CO2 FootprintCompany Cars

We now have just two leased vehicles. The last new vehicle lease was in November 2019 with a slight increase in g/km emissions. These are both high mileage sales cars so have a considerable impact of reducing our CO2 footprint overall.



The increase in CO2 due to the most recent lease (Volvo V60) is still lower than our other lease vehicle (Mercedes GLC).

Current Lease Cars from 2018	Mercedes GLC at 129g/km	↓	previous car at 138g/km
	Volvo V60 at 119g/km	↑	Previous car at 106g/km

Target(s): Use / Purchase vehicles with lower emissions if possible.....

Objective: Reduction in Energyuse of natural gas & electricity

With the company relocation plans moving forward we have tried to utilise / recover and save as much heat / light energy as feasible within the practical cost of the building budget.



We have recirculated ALL coating process heat extraction so we can heat the main working area of the factory (including heating the vented fresh air that is entering building)

Energy efficient LED lighting has been used throughout the whole building. Extraction and air ventilation systems are on timers so we can optimise their use and minimise wasted energy by running them when not needed. The water cooling system for the coating process is designed around an external heat exchanger. Longlands Road will not be using water chillers with FGas inside.

Target(s):be more energy efficient , recover heat energy where possible , reduce waste energy (timers / shutoffs)

Noise – There have been two noise complaints in the last 12 months , both due to a noisy vent valve operating at Wedgwood Road site. The reduction in plant usage at Wedgwood has meant we need to check pressure more frequently (daily). Site activity is greatly reduced with very little manufacturing operations happening at Wedgwood Road but we cannot remove manufacturing capability completely until we have Longlands site aerospace approved , currently planned for 3rd quarter 2021. No issues from Longlands site.



Target(s): No complaintsAs well as our legal commitments we want to be considerate and thoughtful neighbours within the local community.....we take noise issues very seriously and want to avoid issues that may concern or upset our neighbours. Procedures to avoid plant noise (pumps / delivery drivers) are effective but require your vigilance to ensure we maintain good practice.

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Objective: Water discharge permit

Date	Issue	Resolution
January 2020	Breach of nickel effluent limit reported by external Thames Water analysis. No official breach notification received from Thames Water	Internal test results showed no breach Closed
August 2020 And Feb 2021	Noise complaint from local resident at Wedgwood Rd – Argon & Nitrogen vent valve blowing due to reduced site manufacturing	Gas bleed rate increased and check frequency increased to daily
August 2020	Thames Water tests indicated limits on fluoride & Phosphorous had changed although our permit limits had not been revised. Hardide applied for a revised discharge permit.	New discharge permit agreed by Thames Water with higher limit of 20mg/l for fluoride and 13 mg/L for phosphorous .
February 2021	Breach reported by Thames Water showing Chemical Oxygen Demand (COD) limit exceeded	Problem traced to stagnant water containing organic matter in downstairs sink. Cleaning regime implemented pending discussions with installation contractor

Target(s): Compliance with our permit requirements . No Breaches