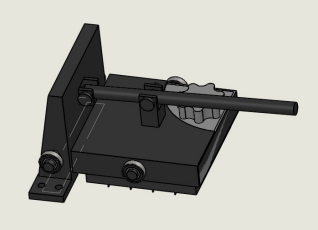
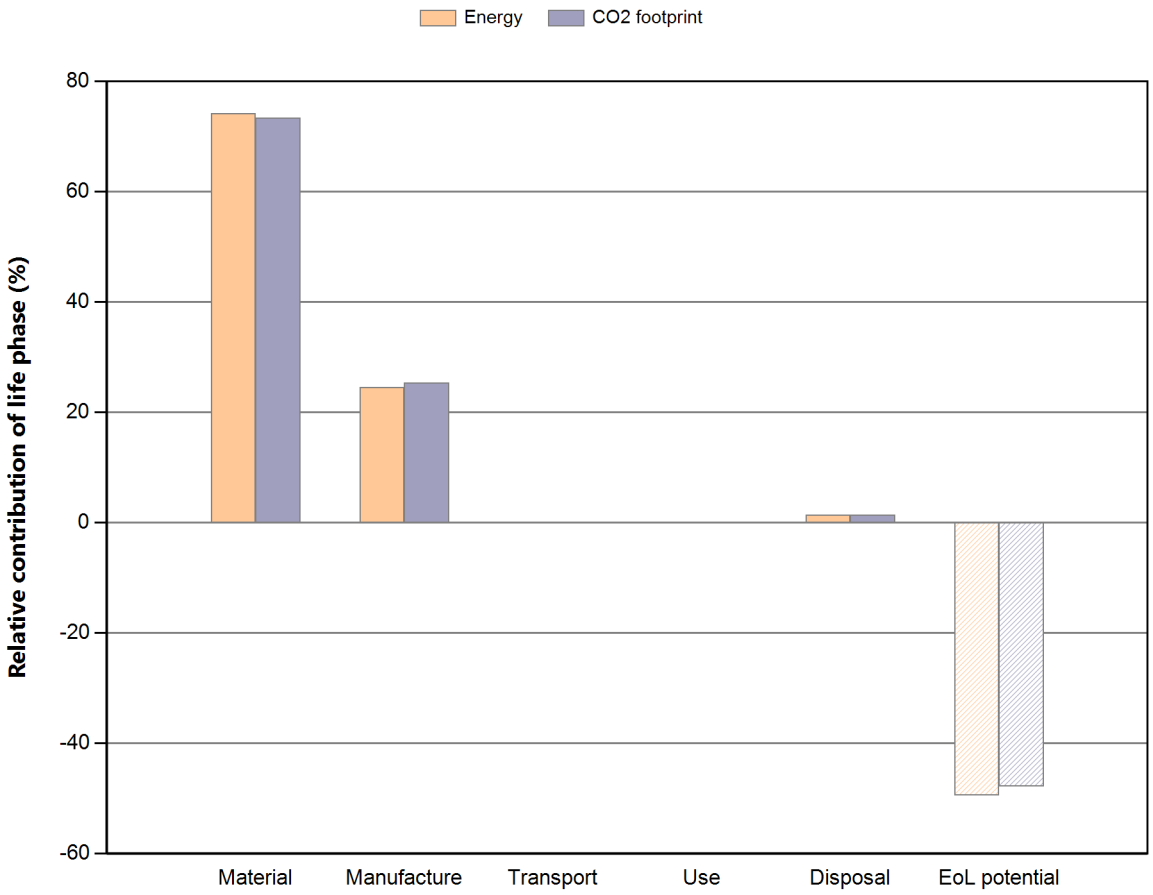
Eco Audit Report



Product name	Stamping Part
Country of use	The Whole World
Product life (years)	10

Summary:

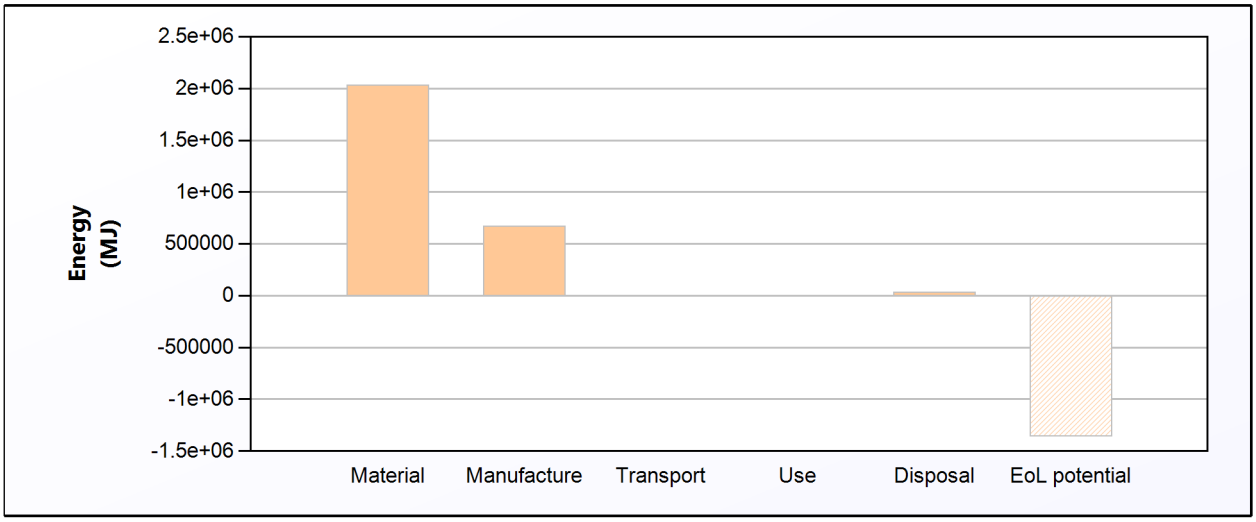


Energy details CO2 footprint details

Phase	Energy (MJ)	Energy (%)	CO2 footprint (kg)	CO2 footprint (%)
Material	2.04e+06	74.1	1.46e+05	73.4
Manufacture	6.73e+05	24.5	5.04e+04	25.3
Transport	0	0.0	0	0.0
Use	0	0.0	0	0.0
Disposal	3.9e+04	1.4	2.73e+03	1.4
Total (for first life)	**2.75e+06**	**100**	**1.99e+05**	**100**
End of life potential	-1.36e+06		-9.52e+04	

Energy Analysis

Summary



	Energy (MJ/year)
Equivalent annual environmental burden (averaged over 10 year product life):	2.75e+05

Detailed breakdown of individual life phases

Material:

Summary

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass (kg)	Energy (MJ)	%
Stamp	Brass	Virgin (0%)	9.1e+02	1	9.1e+02	5.1e+04	2.5
Tank	Polypropylene (PP)	Virgin (0%)	5e+02	2	1e+03	6.8e+04	3.4
Tank Lid	Polypropylene (PP)	Virgin (0%)	62	3	1.9e+02	1.3e+04	0.6
Tank Cover	Cast iron, ductile (nodular)	Virgin (0%)	1.3e+03	4	5.3e+03	1.7e+05	8.4
Bearing 6002	Cast Al-alloys	Virgin (0%)	29	5	1.4e+02	2.8e+04	1.4
Arm	Cast iron, ductile (nodular)	Virgin (0%)	1.7e+02	6	1e+03	3.3e+04	1.6
Holder	Cast iron, ductile (nodular)	Virgin (0%)	6.7e+03	7	4.7e+04	1.5e+06	74.8
Handle	Cast iron, ductile (nodular)	Virgin (0%)	5.4e+02	8	4.3e+03	1.4e+05	6.9
Tank pin	Cast iron, ductile (nodular)	Virgin (0%)	32	9	2.9e+02	9.4e+03	0.5
Total				**45**	**6e+04**	**2e+06**	**100**

*Typical: Includes 'recycle fraction in current supply'

***User-defined material

Manufacture:

Summary

Component	Process	Amount processed	Energy (MJ)	%
Stamp	Casting	9.1e+02 kg	8.1e+03	1.2
Tank	Polymer molding	1e+03 kg	2.1e+04	3.2
Tank Lid	Polymer molding	1.9e+02 kg	3.9e+03	0.6
Tank Cover	Casting	5.3e+03 kg	5.8e+04	8.7
Bearing 6002	Casting	1.4e+02 kg	1.6e+03	0.2
Arm	Casting	1e+03 kg	1.1e+04	1.7
Holder	Casting	4.7e+04 kg	5.2e+05	76.9
Handle	Casting	4.3e+03 kg	4.7e+04	7.0
Tank pin	Casting	2.9e+02 kg	3.2e+03	0.5
Total			**6.7e+05**	**100**

Transport:

Summary

Breakdown by transport stage

Stage name	Transport type	Distance (km)	Energy (MJ)	%
Total				**100**

Breakdown by components

Component	Mass (kg)	Energy (MJ)	%
Stamp	9.1e+02	0	
Tank	1e+03	0	
Tank Lid	1.9e+02	0	
Tank Cover	5.3e+03	0	
Bearing 6002	1.4e+02	0	
Arm	1e+03	0	
Holder	4.7e+04	0	
Handle	4.3e+03	0	
Tank pin	2.9e+02	0	
Total	**6e+04**	**0**	**100**

Use:

Static mode

Energy input and output type	
Country of use	The Whole World
Power rating (W)	0
Usage (hours per day)	0
Usage (days per year)	0
Product life (years)	10

Relative contribution of static and mobile modes

Mode	**Energy (MJ)**	**%**
Static	0	
Mobile	0	
Total	**0**	**100**

Disposal:

Summary

Component	End of life option	Energy (MJ)	%
Stamp	Re-manufacture	1.8e+02	0.5
Tank	Recycle	7e+02	1.8
Tank Lid	Recycle	1.3e+02	0.3
Tank Cover	Landfill	1.1e+03	2.7
Bearing 6002	Landfill	29	0.1
Arm	Recycle	7.2e+02	1.8
Holder	Recycle	3.3e+04	84.5
Handle	Recycle	3e+03	7.7
Tank pin	Recycle	2e+02	0.5
Total		**3.9e+04**	**100**

EoL potential:

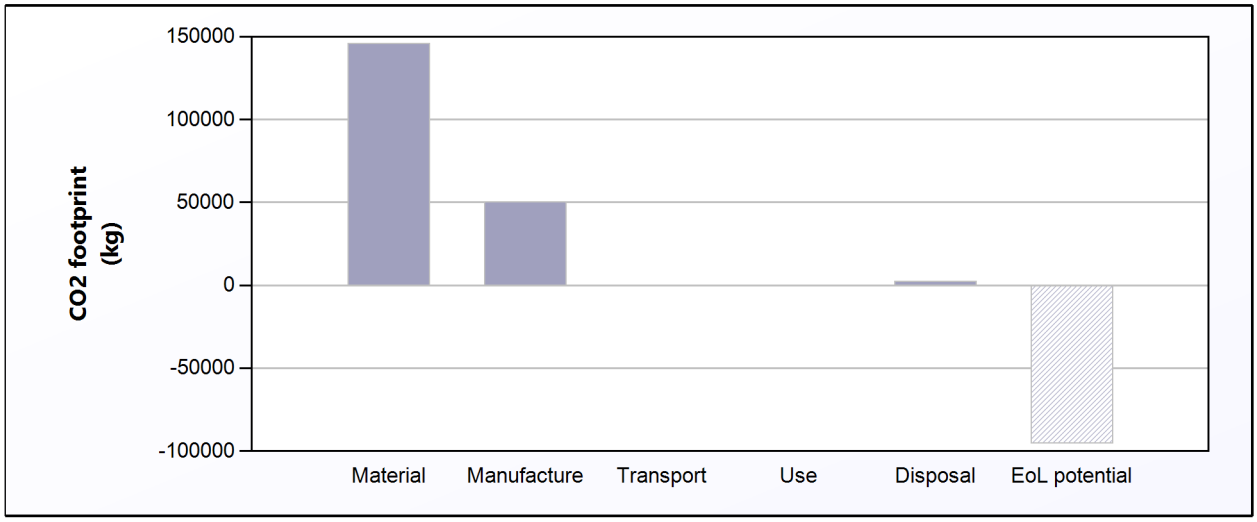
Component	End of life option	Energy (MJ)	%
Stamp	Re-manufacture	-4.8e+04	3.6
Tank	Recycle	-4.5e+04	3.3
Tank Lid	Recycle	-8.3e+03	0.6
Tank Cover	Landfill	0	0.0
Bearing 6002	Landfill	0	0.0
Arm	Recycle	-2.4e+04	1.8
Holder	Recycle	-1.1e+06	82.7
Handle	Recycle	-1e+05	7.6
Tank pin	Recycle	-6.9e+03	0.5
Total		**-1.4e+06**	**100**

Notes:

Summary

CO2 Footprint Analysis

Summary



	CO2 (kg/year)
Equivalent annual environmental burden (averaged over 10 year product life):	1.99e+04

Detailed breakdown of individual life phases

Material:

Summary

Component	Material	Recycled content* (%)	Part mass (kg)	Qty.	Total mass (kg)	CO2 footprint (kg)	%
Stamp	Brass	Virgin (0%)	9.1e+02	1	9.1e+02	3.4e+03	2.3
Tank	Polypropylene (PP)	Virgin (0%)	5e+02	2	1e+03	2.9e+03	2.0
Tank Lid	Polypropylene (PP)	Virgin (0%)	62	3	1.9e+02	5.3e+02	0.4
Tank Cover	Cast iron, ductile (nodular)	Virgin (0%)	1.3e+03	4	5.3e+03	1.3e+04	8.6
Bearing 6002	Cast Al-alloys	Virgin (0%)	29	5	1.4e+02	1.8e+03	1.2
Arm	Cast iron, ductile (nodular)	Virgin (0%)	1.7e+02	6	1e+03	2.4e+03	1.7
Holder	Cast iron, ductile (nodular)	Virgin (0%)	6.7e+03	7	4.7e+04	1.1e+05	76.4
Handle	Cast iron, ductile (nodular)	Virgin (0%)	5.4e+02	8	4.3e+03	1e+04	7.0
Tank pin	Cast iron, ductile (nodular)	Virgin (0%)	32	9	2.9e+02	6.9e+02	0.5
Total				**45**	**6e+04**	**1.5e+05**	**100**

*Typical: Includes 'recycle fraction in current supply'

***User-defined material

Manufacture:

Summary

Component	Process	Amount processed	CO2 footprint (kg)	%
Stamp	Casting	9.1e+02 kg	6.1e+02	1.2
Tank	Polymer molding	1e+03 kg	1.6e+03	3.2
Tank Lid	Polymer molding	1.9e+02 kg	3e+02	0.6
Tank Cover	Casting	5.3e+03 kg	4.4e+03	8.7
Bearing 6002	Casting	1.4e+02 kg	1e+02	0.2
Arm	Casting	1e+03 kg	8.5e+02	1.7
Holder	Casting	4.7e+04 kg	3.9e+04	77.0
Handle	Casting	4.3e+03 kg	3.6e+03	7.1
Tank pin	Casting	2.9e+02 kg	2.4e+02	0.5
Total			**5e+04**	**100**

Transport:

Summary

Breakdown by transport stage

Stage name	Transport type	Distance (km)	CO2 footprint (kg)	%
Total				**100**

Breakdown by components

Component	Mass (kg)	CO2 footprint (kg)	%
Stamp	9.1e+02	0	
Tank	1e+03	0	
Tank Lid	1.9e+02	0	
Tank Cover	5.3e+03	0	
Bearing 6002	1.4e+02	0	
Arm	1e+03	0	
Holder	4.7e+04	0	
Handle	4.3e+03	0	
Tank pin	2.9e+02	0	
Total	**6e+04**	**0**	**100**

Use:

Summary

Static mode

Energy input and output type	
Country of use	The Whole World
Power rating (W)	0
Usage (hours per day)	0
Usage (days per year)	0
Product life (years)	10

Relative contribution of static and mobile modes

Mode	**CO2 footprint (kg)**	**%**
Static	0	
Mobile	0	
Total	**0**	**100**

Disposal:

Summary

Component	End of life option	CO2 footprint (kg)	%
Stamp	Re-manufacture	13	0.5
Tank	Recycle	49	1.8
Tank Lid	Recycle	9.1	0.3
Tank Cover	Landfill	74	2.7
Bearing 6002	Landfill	2	0.1
Arm	Recycle	50	1.8
Holder	Recycle	2.3e+03	84.5
Handle	Recycle	2.1e+02	7.7
Tank pin	Recycle	14	0.5
Total		**2.7e+03**	**100**

EoL potential:

Component	End of life option	CO2 footprint (kg)	%
Stamp	Re-manufacture	-3.2e+03	3.4
Tank	Recycle	-1.9e+03	2.0
Tank Lid	Recycle	-3.5e+02	0.4
Tank Cover	Landfill	0	0.0
Bearing 6002	Landfill	0	0.0
Arm	Recycle	-1.7e+03	1.8
Holder	Recycle	-8e+04	84.2
Handle	Recycle	-7.3e+03	7.7
Tank pin	Recycle	-4.9e+02	0.5
Total		**-9.5e+04**	**100**

Notes:

Summary