Environmental Product Declaration

solutions in movement

Thomas Regout and the Environment

In 1834 Thomas Regout founded the Thomas Regout Nail Factory and within a decade this factory had evolved into a modern industrial plant. During the 1950's the company becomes the leading producer of telescopic slides.

Thomas Regout is a reliable and flexible partner who can co-design with the customer. We design high quality sliding systems in our own R&D department. Incorporating the highest ISO international and environmental standards that ensure that our products and services are safe, reliable, sustainable and of high quality.

Next to this we have a very strict environmental policy in order to reduce the use of energy as much as possible and to decrease the amount of waste.

Thomas Regout is certified according:

ISO 14001 (Reg.No.: RQAA663747)
ISO 9001:2008 (Reg.No.: RQA943534)
ISO 16949:2009 (Reg.No.: RQA661488) quality standards.

For further information visit www.thomasregout.com

Life Cycle Assessment Environmental Product Declaration

The environmental impact of the telescopic slides throughout their entire life cycle, from raw material extraction, manufacturing, transport to end-of-life is analyzed in this Life Cycle Assessment (LCA).

The functional unit chosen for this LCA is a "pair of telescopic slides". This means 1 pair of slides used for 15 years, which represents the average time spent on a total of 100.000 cycles (opening and closing drawers 20 times/day). This EPD was made according to the ISO 14021 standard.

1. Material allocation of a pair of slides

Material allocation of a pair of slides

metal parts	94%
plastic parts	5%
other (lubricants and oil)	1%

Metal parts

low alloyed steel	96%
aluminium	3%
chromium steel	1%

Plastic parts

Nylon 66	66 %
LDPE	17 %
Nylon 6	11 %
ABS	5 %
miscellaneous	3 %

Environmental aspects of the slides
throughout their life cycle

type II declaration, according to ISO 14021

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2. Description of the Life Cycle Stages

Manufacturing. All production phases and processes are included in this stage, from raw material extraction and transformation to the slide production at the factory situated in Maastricht (Netherlands). This includes the whole circle from production of supplier to production at our company.

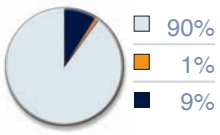
Transport. This phase includes the transport of the rolled coils and other components to Thomas Regout and also the delivery of the assembled product to the final customer.

Use. No relevant environmental exchanges occur during the use stage of the product since it doesn't require energy or maintenance.

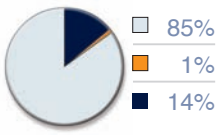
End of Life. This phase includes different options for the end-of-life of the slides (recycling, incineration and landfill) and their components after its service life (the number of cycles).

3. TOP 5 main contributors

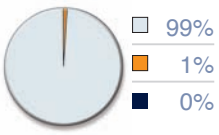
Global Warming



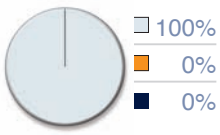
Fossil Fuel



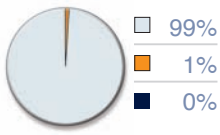
Carcinogenics



Non Carcinogenics



Ecotoxicity



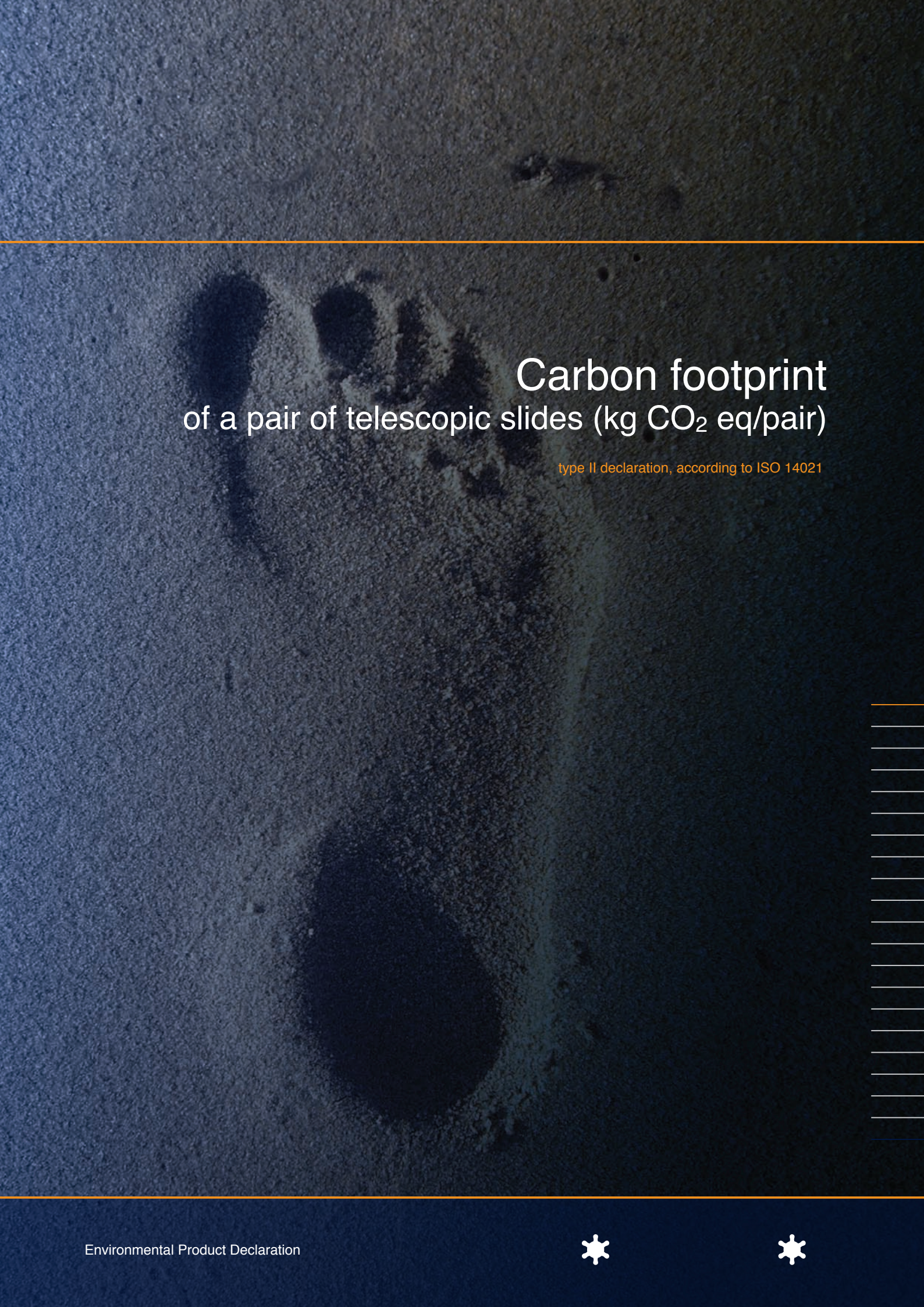
Global Warming. Global warming is the increase of the average temperature of the Earth's atmospheric temperature due to human generated emissions into the air.

Fossil Fuel Depletion. Fossil fuel depletion is the extraction of natural gas, oil and coal reserves at a rate higher than nature replenishes them.

Carcinogenics. Human carcinogens, teratogens and mutagens are chemicals that alter the genetic structure of human DNA in such a way as to cause abnormal cell growth that the human body cannot counteract.

Non Carcinogenics. Toxic chemicals that damage the health of or kills a person. Thousands of synthetic chemicals that circulate in our everyday lives cause cancer and birth defects.

Ecotoxicity. Ability of a chemical or substance to damage the health of or to kill plants, animals and microbial organisms.



Carbon footprint
of a pair of telescopic slides (kg CO_2 eq/pair)

type II declaration, according to ISO 14021

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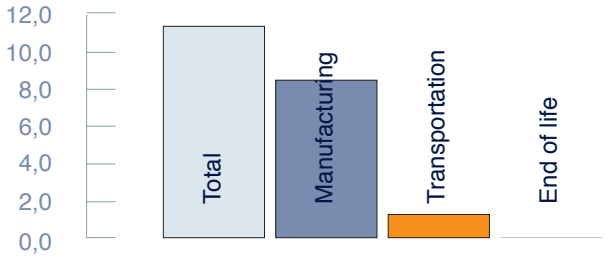
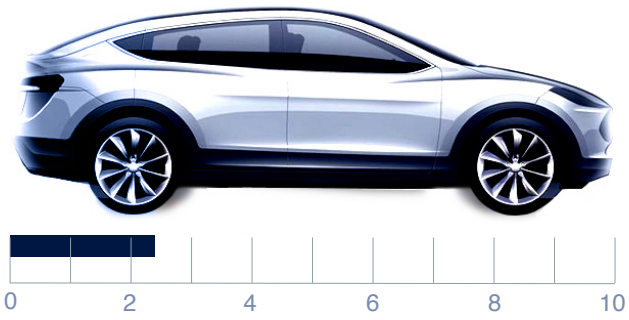
The transportation and end-of-life stages have a small contribution of the total carbon emissions, emitting 9% (1,0kg) and 1% (0,12kg) respectively.

For a typical order of 1000 pairs of telescopic slides 11,4 tons of CO2 are emitted throughout their entire life cycle, which corresponds to the emission of: 2,4 passenger vehicles.

Carbon footprint
of a pair of telescopic slides (kg CO_2 eq/pair)



Annual greenhouse gas emissions from



The impact units of the carbon footprint are in kilograms (kg) of carbon dioxide (CO_2) equivalent, accounting for all the gasses that contribute to global warming.

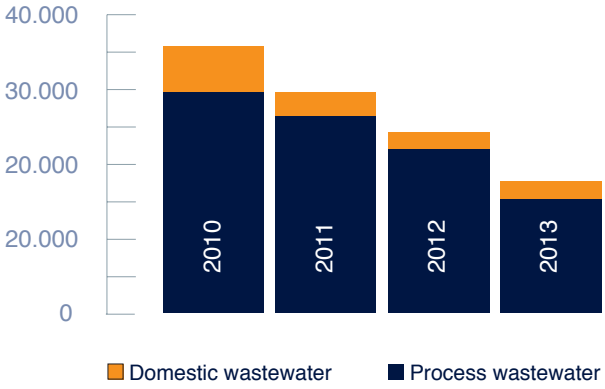
The emissions of CO_2 throughout the life cycle of a pair of telescopic slides happen mostly during the manufacturing stage, accounting for 89% of the emissions (10,2kg of CO_2eq).

Thomas Regout International BV
Wastewater - Energy - Metal waste

Wastewater

The galvanization process, along with the sanitary facilities of the factory, are the biggest contributors to the wastewater discharged into the sewer. Thomas Regout was able to reduce the emissions of domestic wastewater by 62% and process wastewater by 49%, in a total of 46% reduction since 2010.

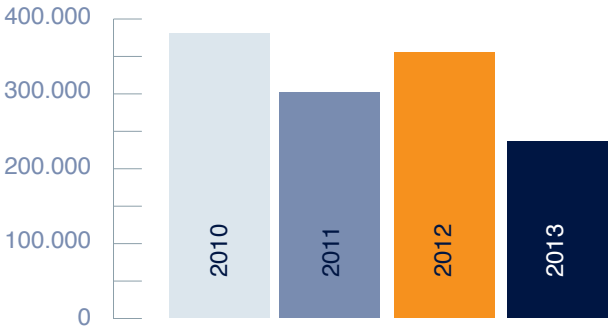
Types of wastewater productions (m^3)



Energy

Thomas Regout has focused in reducing its energy consumption. Switching to more efficient lighting, improving the efficiency in electrical motors and other solutions have resulted in a reduction of the total energy spent in the factory

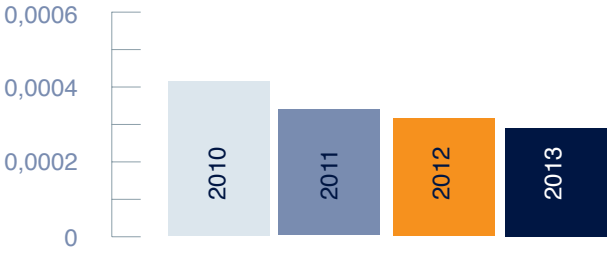
Natural gas consumption (m^3)



Metal waste

In the past four years, the company was able to decrease waste generation by 41%. In addition to the waste reduction targets, great improvements were also made thanks to sustainable initiatives such as a “waste competition”. The competition focused on the amount of steel waste that could be reduced within the production of the slides.

Metal waste (kg/pair)



RoHS/REACh compliance

The management team of Thomas Regout International BV pays a lot of attention to the environment. The health of its employees and its end-users are of high priority. The company undertakes many actions of eliminating hazardous and sensitive substances, beyond what is demanded by regulations.

Thomas Regout International works ROHS and REACh compliant.

- RoHS (Restriction of Hazardous Substances)
- REACh (Registration, Evaluation, Authorization of Chemicals)

Liability

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References:

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Palerm, Juan R, "Guidelines for Making and Assessing Environmental Claims", Report No. 67/94/22/1/00281, December 2000

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