

DESIGN CHANGE



SUSTAINABILITY
EXPERTS **design***austria*[®]

by Clemens Dus www.dus.at



RESPONSIBILITY}



RESPONSIBILITY



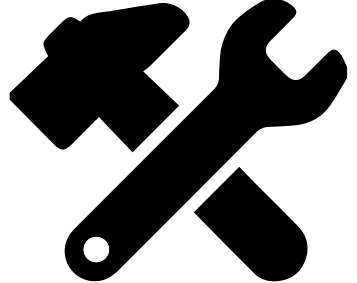
RESPONSIBILITY}

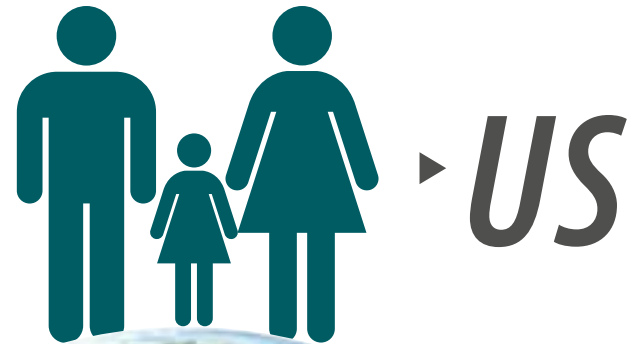


www.alohasurfguide.com

www.fairgoods.com

RESPONSIBILITY}

FORM FOLLOWS  *FUNCTION*



*THE
PLANET*

planet photo: sonnensturm.info

DESIGN CREDO SHIFTS }

GREEN DESIGN > BETTER MATERIAL



ECO DESIGN > LIFE CYCLE DESIGN



SUSTAINABLE DESIGN > + SOCIAL IMPACT



CIRCULAR DESIGN > + CLOSED LOOPS

DESIGN CREDO SHIFTS }

EFFECTIVENESS BEFORE EFFICIENCY

*Doing the **RIGHT THINGS**
before
doing things right*

DESIGN CREDO SHIFTS }

WHAT
ARE WE
AIMING FOR?



SUSTAINABILITY
EXPERTS design*austria*[®]



MISSION

**FOSTER SUSTAINABLE/CIRCULAR DESIGN
IN AUSTRIA**

**CREATE AN OVERVIEW OF ALL
INITIATIVES IN AUSTRIA**

**FIND AND INITIATE
PILOT- OR REFERENCE-PROJECTS**



Institute of
Design Research
Vienna



SUSTAINABILITY
EXPERTS designaustria®



LINEAR

CIRCULAR

DESIGN AS MARKETING

>

PRINCIPLE OF BETA VERSION

CENTRALISATION

>

DECENTRALISATION

PATENTS, COPYRIGHTS

>

CREATIVE COMMONS

FASHIONABLE AND TRENDY

>

MODERN BUT NOT FASHIONABLE

SHORT TERM PRODUCTS, NEW MODEL

>

LONGLIVING, MODULAR, RESILIENT

END OF LIFE

>

CLOSED LOOPS

REUSE NOT PLANNED

>

REUSE PLANNED,

NO EXTENSION OF LIFE CYCLE

>

ALL RESOURCES STAY IN THE LOOP

DESIGN SHIFTS }

LINEAR

PROTECTED DESIGN , COPYRIGHTS

AUTHOR & BRAND DESIGN

DOMINANCE OF EXPERTS KNOW-HOW

FIXED DESIGN PROCESS

HIERARCHY

REGULATED KNOWHOW & TECHNOLOGY

SELL KNOWLEDGE

GLOBAL MASSPRODUCTION

PRIVATE PROPERTY

HUMAN DOMINATED

CIRCULAR

OPEN DESIGN, CREATIVE COMMONS

COCREATION, PARTICIPATIVE DESIGN

COOPERATION EXPERTS > AMATEUR

DYNAMIC DESIGN PROCESS

CONCENSE PRINCIPCS, SELFORGANISED

OPEN ACCESS KNOWHOW & TECHNOLOGY

SHARE KNOWLEDGE

LOCAL PRODUCTION

COMMON GOOD

HUMAN AND NATURE COOPERATE

WORK SHIFTS }



THE GOAL IS TO ACHIEVE

- > SMART USE OF AVAILABLE RESOURCES
- > THE GREATEST POSSIBLE BENEFIT
- > FOR ALL ACTORS INVOLVED (ALONG THE VALUE CHAIN)
- > WITH MINIMAL ENVIRONMENTAL IMPACT AND
- > IN SOCIALLY FAIR CONDITIONS.

PLAYPUMP <http://www.playpumps.co.za/>

SUSTAINABLE DESIGN }

LONG-LASTING DESIGN:

- > AVOIDANCE OF DISPOSABLE AND SINGLE USE PRODUCTS,
- > USE OF HIGH-QUALITY, REPAIRABLE MATERIALS,
- > STABLE CONSTRUCTION PRINCIPLES,
- > MODULAR DESIGN,
- > REPAIR AND MAINTENANCE FRIENDLY DESIGN,
- > EASY INTERCHANGEABILITY OF COMPONENTS,
- > EASILY DETACHABLE CONNECTIONS,
- > TIME-STABLE DESIGN: NO FASHIONABLE DESIGN,
- > HIGH EASE OF OPERATION AND USE.



LONG-LASTING }

MATERIAL EFFICIENT DESIGN:

- > OPTIMIZATION OF MATERIAL USAGE THROUGH MATERIAL SUBSTITUTION,
- > LIGHTWEIGHT CONSTRUCTION,
- > TAILOR-MADE SHAPING,
- > MINIATURIZATION,
- > MULTIFUNCTIONALITY AND
- > SIMPLIFICATION (RESTRICTION TO ESSENTIAL FUNCTIONS).



MATERIAL EFFICIENT }

MATERIAL-APPROPRIATE DESIGN:

- > FIND THE “RIGHT DESIGN” FOR EACH MATERIAL,
- > PREFERENCE OF REGENERABLE AGAINST NON-REGENERABLE MATERIALS,
- > DEVELOPING NEW FIELDS OF APPLICATION FOR REGENERABLE MATERIALS,
- > ABANDONMENT OF ENDANGERED ANIMAL AND PLANT PRODUCTS,
- > USE OF LOCAL MATERIALS,
- > USE OF SECONDARY RAW MATERIALS AND
- > CONFORMITY OF MATERIAL AND PRODUCT VALENCE.



www.rubis.ch

MATERIAL APPROPRIATE }

WASTE-PREVENTING OR -REDUCING DESIGN

- > RECYCLING-FRIENDLY DESIGN:
- > DISASSEMBLY FRIENDLY DESIGN,
- > MATERIAL, COMPONENT AND DEVICE IDENTIFICATION,
- > RECYCLABLE MATERIAL SELECTION (MATERIAL RECYCLING),
- > REDUCTION OF MATERIAL DIVERSITY,
- > AVOIDANCE OF COMPOSITES AND
- > INTEGRATION OF REUSE REQUIREMENTS
- > AND UTILIZATION IN THE DESIGN
- > PREFERENCE OF REGENERABLE AGAINST NON-REGENERABLE MATERIALS,
- > DEVELOPING NEW FIELDS OF APPLICATION FOR REGENERABLE MATERIALS,
- > ABANDONMENT OF ENDANGERED ANIMAL AND PLANT PRODUCTS,
- > USE OF LOCAL MATERIALS,
- > USE OF SECONDARY RAW MATERIALS AND
- > CONFORMITY OF MATERIAL AND PRODUCT VALENCE.



www.kodak.com

WASTE PREVENTING }

STICKER FOR MAILBOX

to share your tools at home



CAR SHARING

- + *modern Technology*
- + *supported by a easy to use user interface*

DESIGN FOR SHARING }



PURCHASE OF USE: COPYMACHINE

YOU BUY THE USE/BENEFIT: COPY

+ *machine is serviced regularly*

+ *design optimised for repair*

+ *and little toner usage*

MACHINE BELONGS TO PRODUCER

THROW AWAY CAMERA ???

PHOTOS ONLY AFTER RETURN

+ *serviced and sold again*

+ *up to 25 times*

+ *better eco-balance than SLR*



PRODUCT SERVICE SYSTEMS }

HOW
DO WE
START?



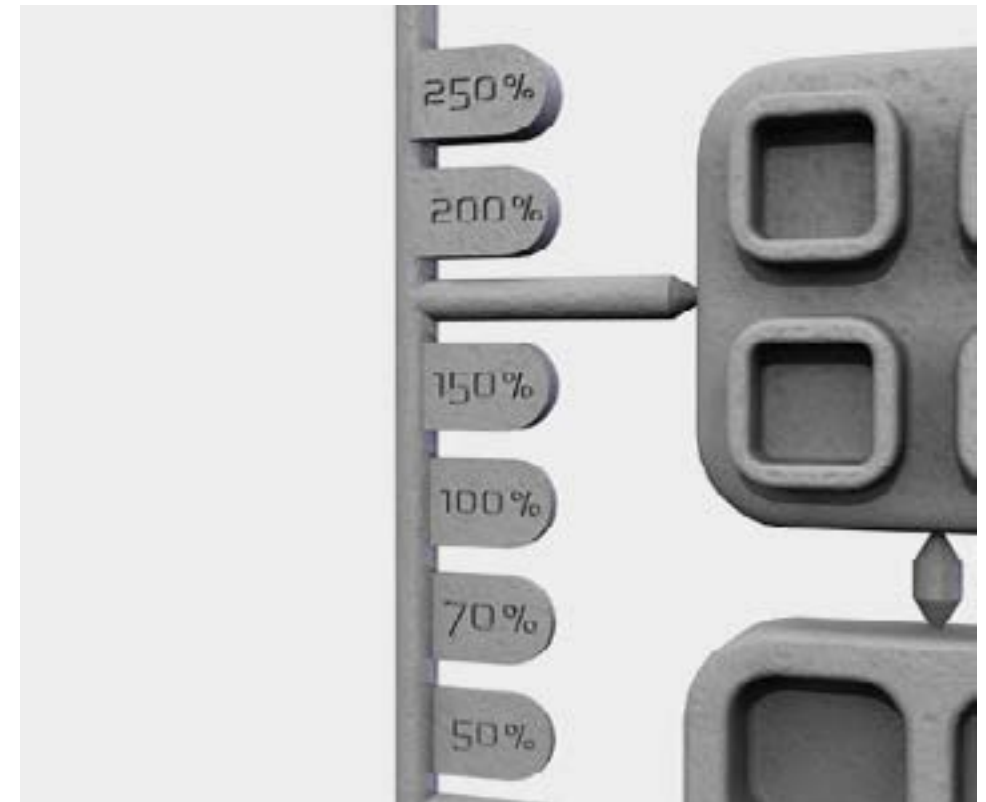
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Plastic samples for designers
to compare their properties



www.vertdesign.com.au
www.bestpracticeplastics.com



Vert

BEST PRACTICE PLASTICS



PME driving aid
for one armed people

www.vertdesign.com.au

Vert



PME SPINNER }



en.wikipedia.org



windmill wings have to be
exchanged every 6 years

glebanite BY RIVIERASCA

Glebanite is GRP (Glass Reinforced Polyester)
recycled into GRP again. It is obtained from:

GRINDED SCRAPS



www.rivierasca.it

FRESH UP RESIN



www.rivierasca.it

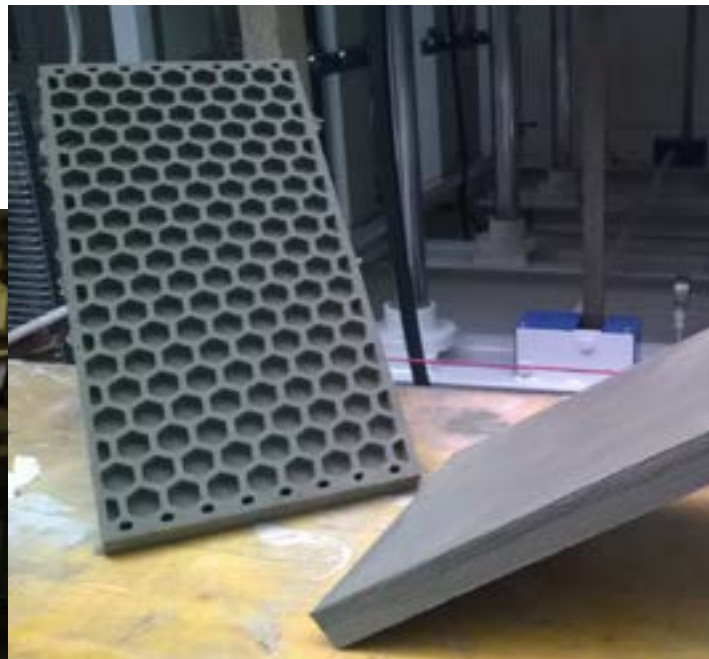
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FiberEUse }

glebanite



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www.rivierasca.it
Design by Giovanni Minelli

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glebanite



www.rivierasca.it
Design by Martina Hatzenbichler

MH martina
hatzenbichler

designaustria®
European Union
FiberEUse

Wine Cooler

from recycled fiberglass | glebanite

The starting point for the design of this Wine Cooler was the fusion of two contrary initial forms and materials. The volume of a raw and unfinished monolithic body is broken up here through the circular segments of the organic form of a glass bottle in order to create openings. These, however, are not arranged arbitrarily, revealing their design concept primarily through the addition of several wine cooler elements. The outlines and edges are extended as they respond to one another. Turning and stacking the individual elements offers a multitude of possible combinations. This results in an entirely new overall structure, with the Wine Cooler turning into a wine shelf or even into wine architecture.

martinahatzenbichler.com



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FiberEUse }

YOU
JUST HAVE
TO DO IT!



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