

Универзитет Св. “ Кирил и Методиј “
Машински факултет - Скопје



Одбрани проекти по предметот :
КОНСТРУИРАЊЕ СО ПОМОШ НА КОМПЈУТЕР

Летен семестар 2014/2015

Професор: Доц. д-р Иле Мирчески
Демонстратор: Ангелина Јорданоска

FUTURISTIC ROTATING BENCH

PARK BENCH

FINE-LOOKING
ROTATING BENCH.
SIMPLE, REFRESHING AND
ERGONOMIC DESIGN.



"Ss. Cyril and Methodius" University
Faculty of Mechanical Engineering
Industrial Design, Ergonomics and Applications Lab



Student: Milan Mitev 126
Course: Computer Aided Design
Leader: Doc. Dr. Ile Mirceski
School Year: 2014/2015

FUTURISTIC PARK BENCH_

A NEW, INNOVATIVE AND OPEN-MINDED APPROACH TO DESIGNING PARK BENCHES



- Gaps are made so users can intuitively explore the design and find the spot which is most suiting for them and their style of sitting. Couples can make a great use of this too.



- The seats are made out of ABS plastic, thus bypassing the problems of them warming up to extreme temperatures during the summer, or staying freezing cold in winter



- Chrome-plated steel brings up the idea of a futuristic and clean theme and also brightens things up.



SEAT & SWING

seating bench



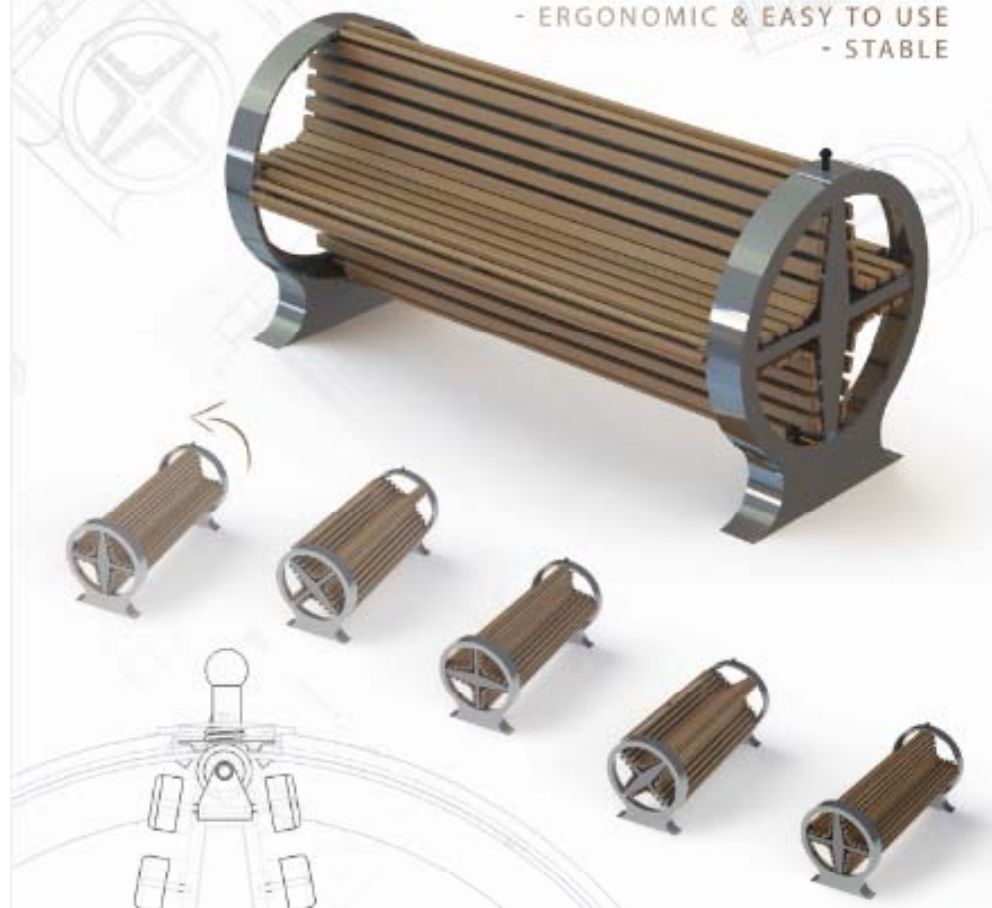
SEAT&SWING
modern design
ergonomic
perfect sitting position
future bench
swing function
unique look



BENCH DE ROTAÇÃO

SÉCULO 22

- UNIQUE DESIGN OF BENCH
- ROTATING POSSIBILITY
- EASY TO MAINTENANCE
- ERGONOMIC & EASY TO USE
- STABLE



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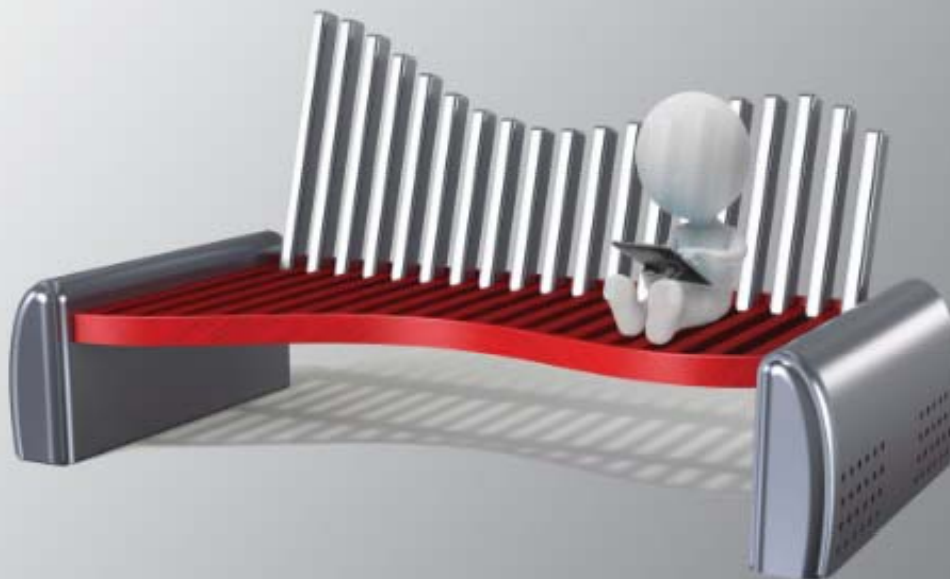


Skopje 2015

Student: Mile Despotovski
Course: Computer Aided - Design
Leader: Docent Ili Mirceviski
School Year: 2014/2015

VERTEBRA

OUTDOOR BENCH



- Modern, charming and innovative designer's park bench
- Inspired by the curves of the human spine
- The movable vertebrae give a unique experience allowing you to create a bench-shape of your own desire
- Made of oak and aluminum, 'Vertebra' is amazingly comfortable and long lasting
- Ideal for people who enjoy tranquil outdoor environments



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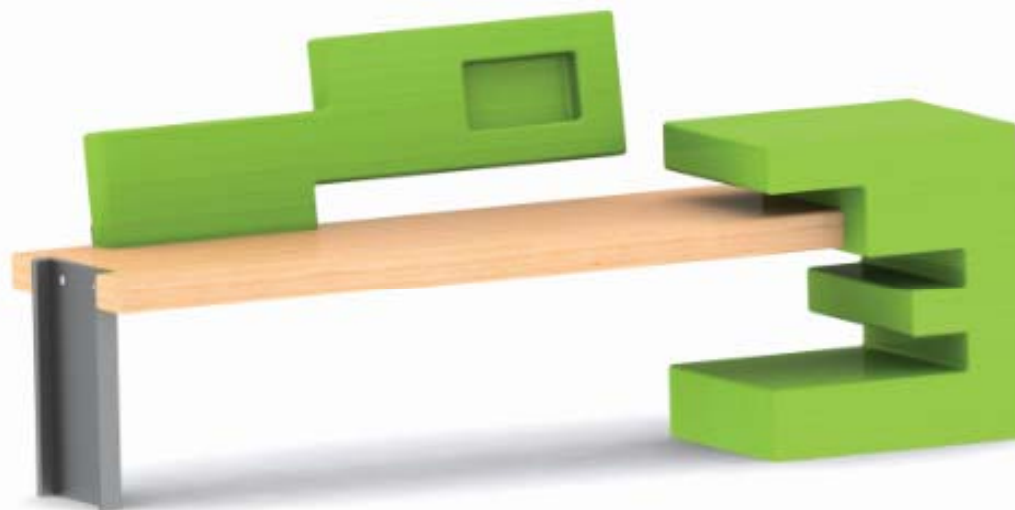
Skopje 2015



Student: Anastasija Gikarska
Course: Computer-Aided Design
Leader: Docent dr. Ili Mircevski
School Year: 2014/2015

ECO BENCH

MODERN BENCH



One of the most innovative benches in the world.
The discovery of the 22 century.



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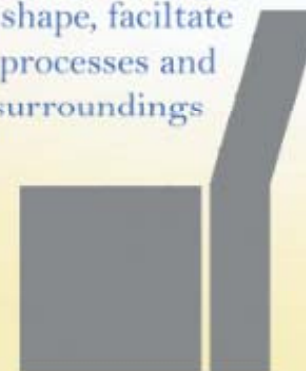
Student: Tamara Baldazarova
Course: Design with Plastics
Leader: Prof. Dr. Ilie Mirceski
School Year: 2014/2015

ANGULARIS

park bench

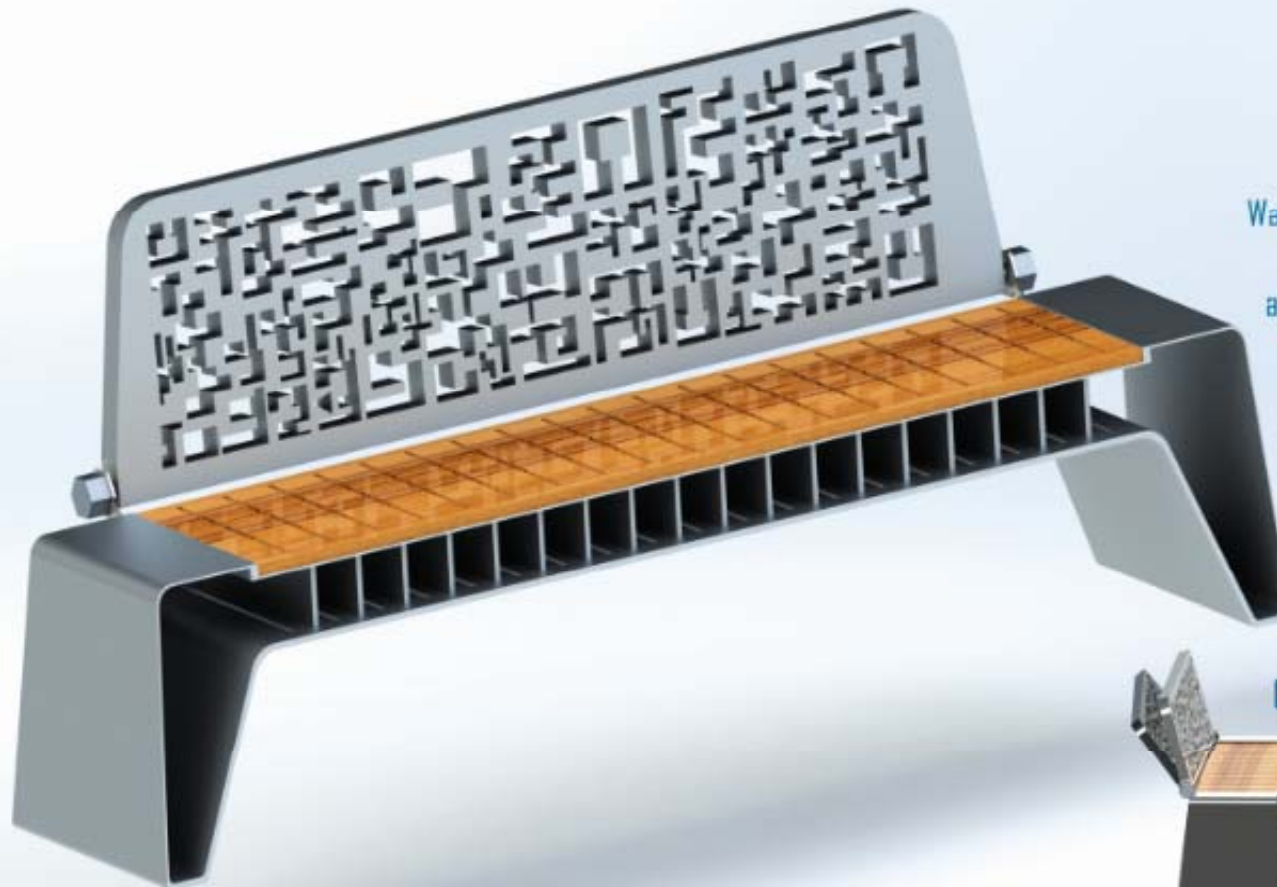


comfortable bench with fresh look,
advanced form and shape, facilitate
producing processes and
adjustable to surroundings



THE CHALLENGE BENCH

Sophisticated park bench offering a challenge



Want to check how precise are you?
The back of the bench contains
a hidden QR code. Take your phone
try, to capture the code and win
the challenge of the day

Comfortable and ergonomic bench
People who want to sit could
adjust the back of the bench
just with angle voice input

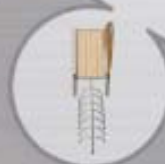


City Bench

Park Bench



- Modern
- Elegant
- Inspired by fish spine
- Fitted with bike parking
- Can withstand external influence
- Made of aluminum and oak it is long lasting



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Skopje 2015

Student: Jovan Molkoski
Course: Computer-Aided Design
Leader: Doc. Dr. Ilie Miroevski
School Year: 2014/2015

The Fibonacci bench

Inspired by the past as a gift to the future



The Fibonacci bench is following the trail of a spiral shape as a simple design with purpose to gather up to 10 people. Its best feature is the lowering curve making it suitable for people of all ages.



THE ELLIPSE BENCH

FUTURISTIC PARK BENCH CONCEPT

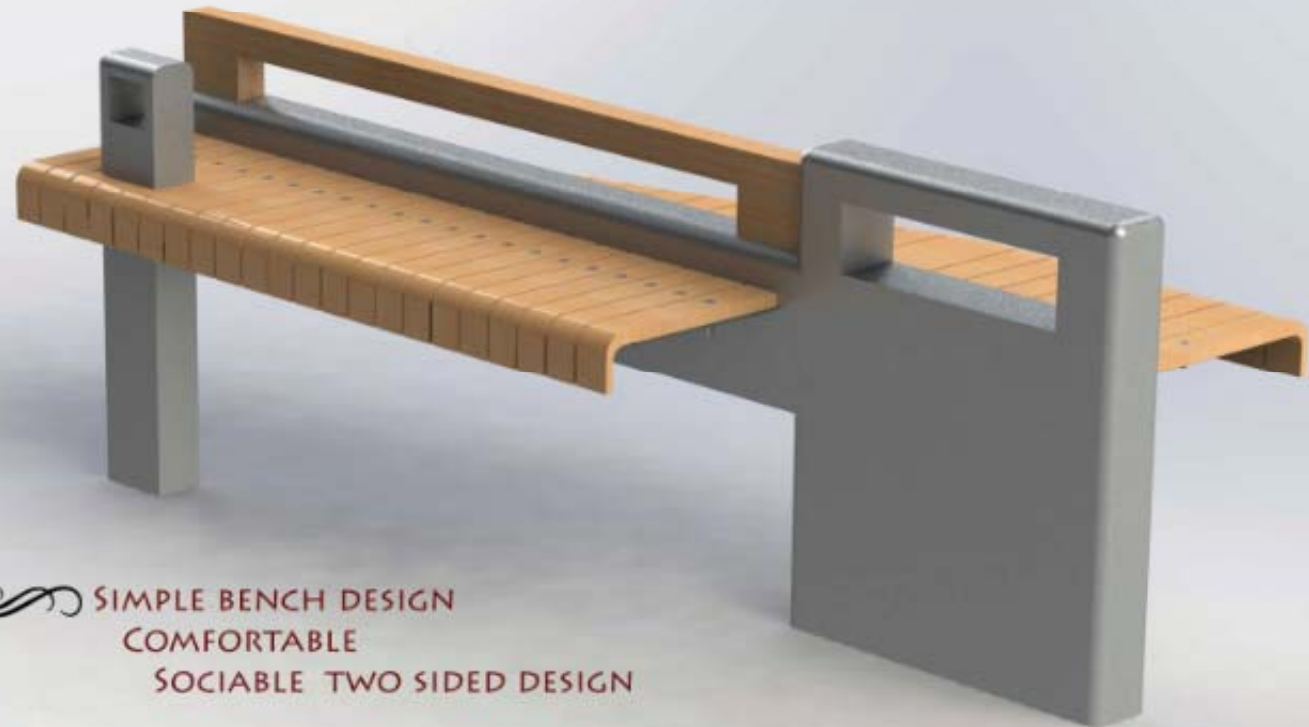
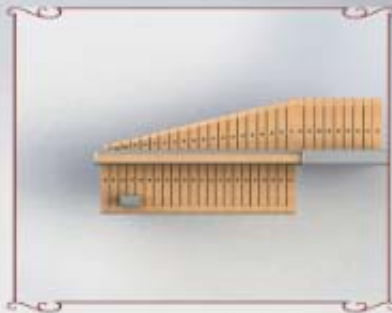


INSPIRED BY THE ELLIPSE, A SHAPE PREDOMINANT
IN A NUMBER OF REIMAGININGS OF THE FUTURE
THE ELLIPSE BENCH STRIVES FOR
A SIMPLE, UNOBTRUSIVE AND TIMELESS DESIGN,
FITTING SEAMLESSLY INTO ANY ENVIRONMENT



FUTURISTIC PARK BENCH

Two Sided BENCH



SIMPLE BENCH DESIGN
COMFORTABLE
SOCIABLE TWO SIDED DESIGN



Bat Bench

PARK BENCH



ELEGANT NEW WELL BUILT
STRONG FUTURISTIC POWERFUL MODERN



PREDICTING THE FUTURE...
BATMAN INSPIRED DESIGN
... BENCH OF THE 22 CENTURY



"Ss. Cyril and Methodius" University
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Skopje 2015

Student: Angela Laboska
Course: Computer-Aided Design
Leader: Doc. Dr. Ilie Mirdheski
School Year: 2014/2015

RUBIK'S BENCH

Futuristic, comfortable bench

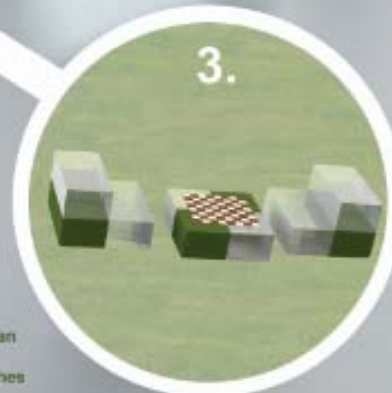


Modern
Waterproof
Adaptive



We merge the cube blocks the same way like a Lego's cubes. With that merge we gain big stability and statically. From cube blocks we can make three different benches:

1. Normal Bench
2. Resting Bench - Where you can stretch out your legs.
3. Club Bench - Two small benches and table.



XTAL

PARK BENCH



A design with a clear form
which perfectly fits in with
the modern times



"Ss. Cyril and Methodius" University
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Student: Ema Velkavskia 706
Course: Computer-Aided Design
Leader: Ili Mirceski
School Year: 2014/2015

BENCH TO THE FUTURE

SOPHISTICATED
BUT SIMPLE



*High quality, elegant, comfortable
made for any outdoor or indoor setting.*



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Student: Dragan Jordanov 1038
Course: Computer Aided Design
Leader: Doc. Dr. Ili Mirceski
School Year: 2014/2015

Future comfort elegant outdoor bench

- Comfortable bench perfect for any kind of elegant and modern outdoor designs.
- The perfect combination of metal and wood gives a warm and strict effect all at once.



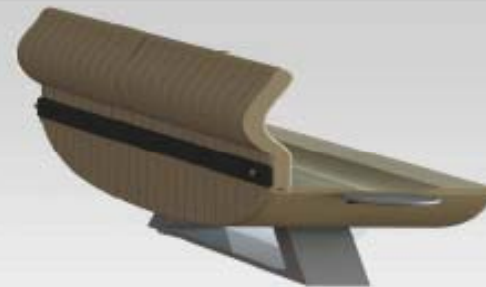
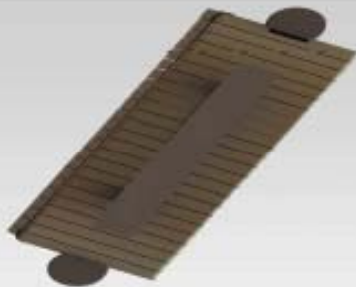
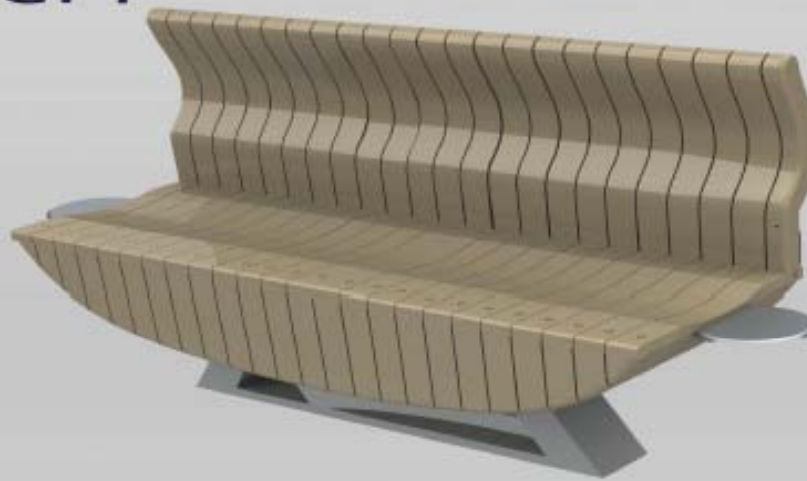
Modern city bench

This bench is designed for big metropolises.
Where people can take rest, and enjoy in their design.
The banch is very comfortable.



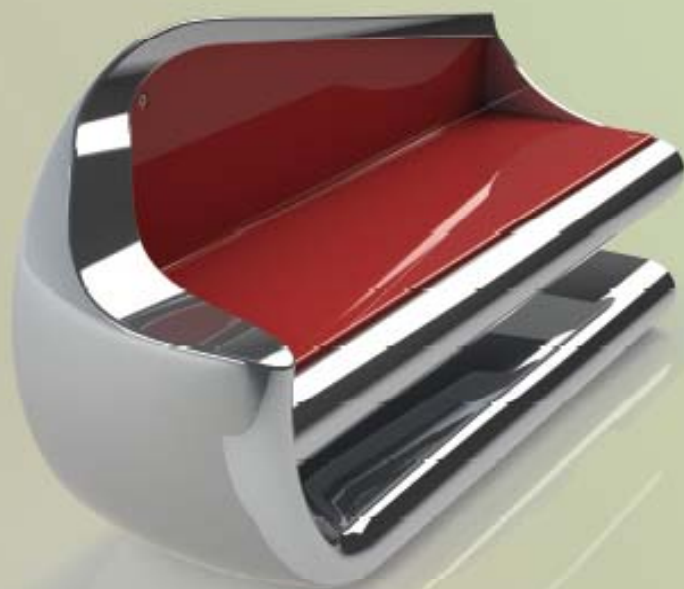
Urban Bench

This bench is for usage in big city, near the bus station, railway station, parks, near the big supermarkets and ect.



SNAPY

bench for 22th century

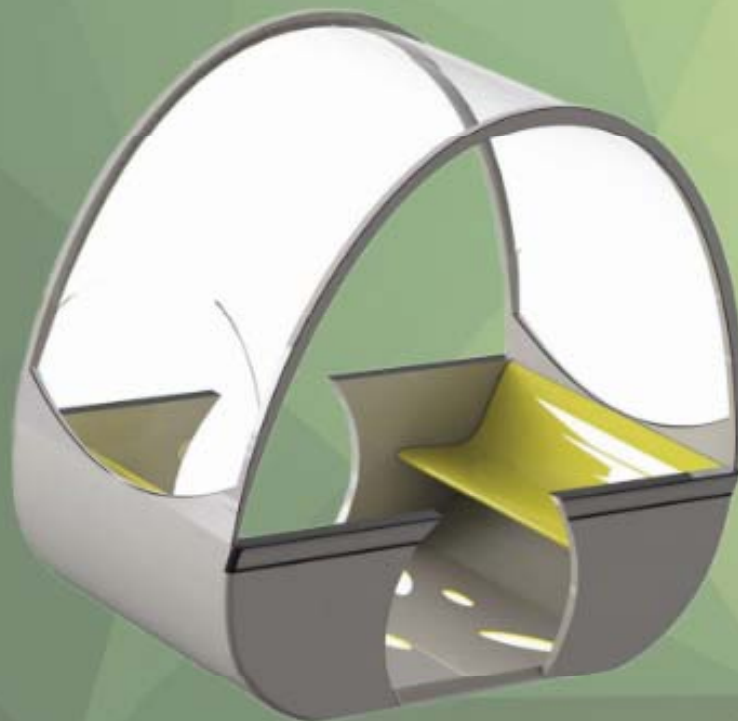


This bench has organical forms.
It is made from sheet metal and
plastic and it is comfortable and
very futuristic.



Layla

Design for the 22th century



*A comfort place to relax
and have a view of the outdoor*

Urban Hazard

Park Bench

New and modern design for a park bench.



Sleek and eye catching design that fits all surroundings.

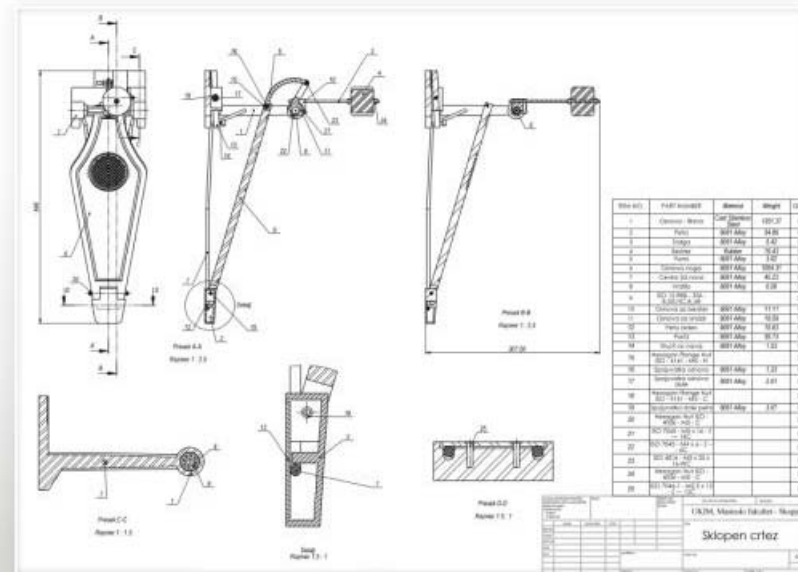


Perfect angle that guarantees a comfortable sitting position.



BASS DRUM PEDAL

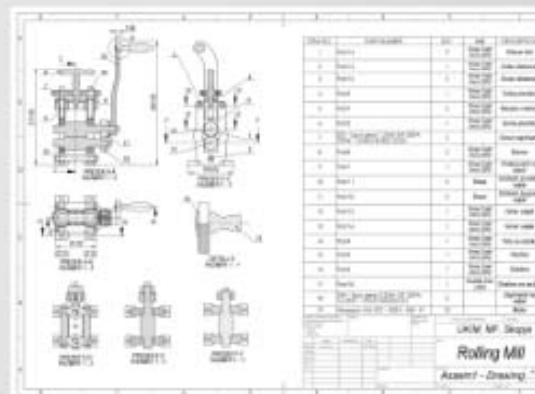
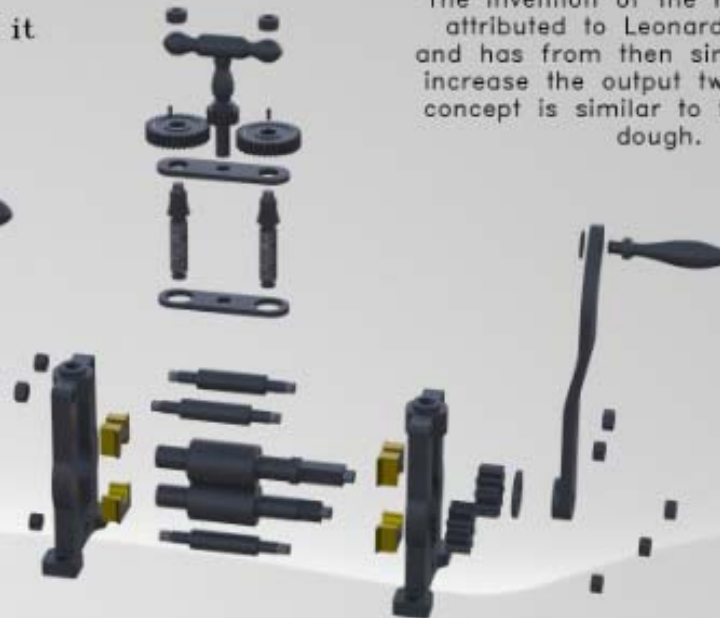
- *modern design
- *minimum friction
- *ultimate control
- *adjustable



Rolling Mill

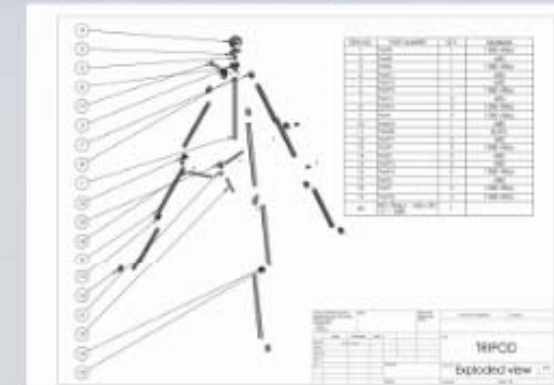
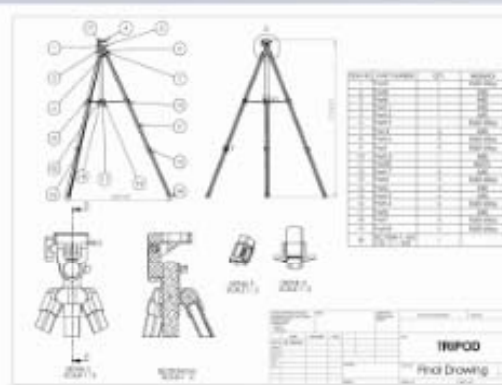
Reduces the thickness of sheet metal, making it uniform.

The invention of the rolling mill is attributed to Leonardo da Vinci, and has from then since evolved to increase the output twentyfold. The concept is similar to the rolling of dough.

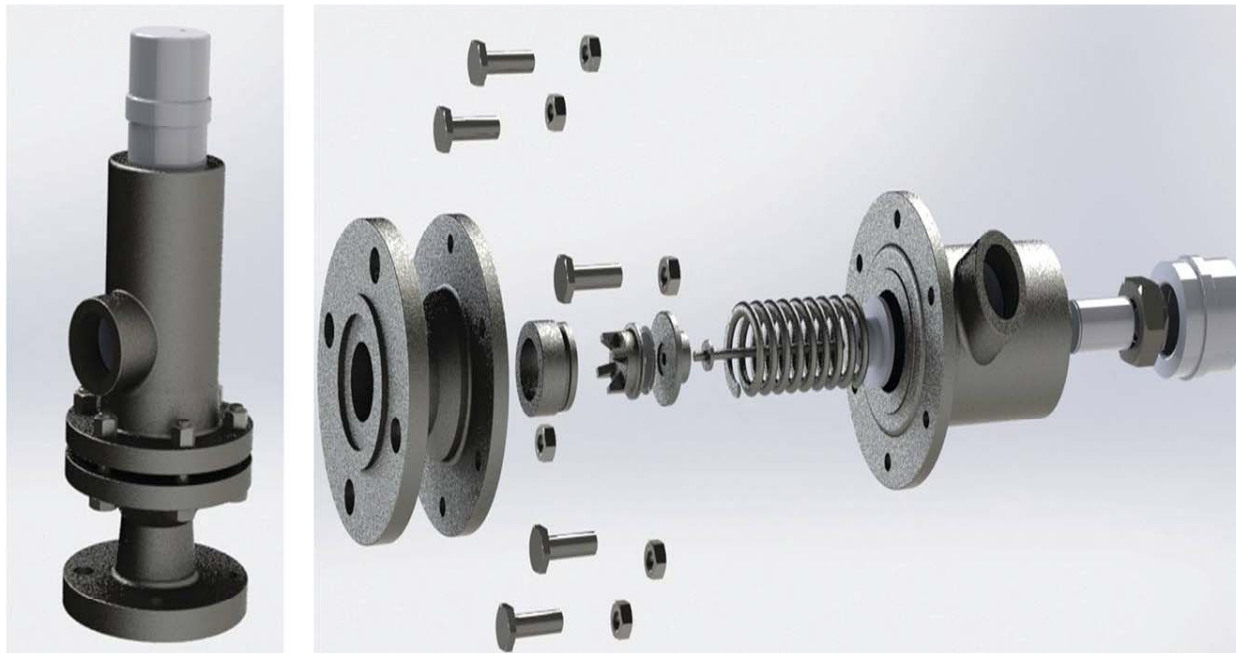


TRIPOD

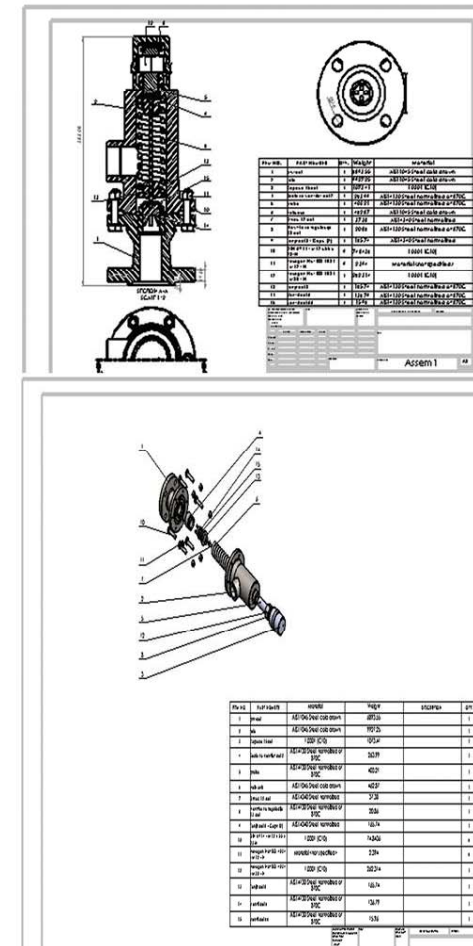
IN PHOTOGRAPHY, A TRIPOD IS USED TO STABILIZE AND ELEVATE A CAMERA, A FLASH UNIT, OR OTHER PHOTOGRAPHIC EQUIPMENT. ALL PHOTOGRAPHIC TRIPODS HAVE THREE LEGS AND A MOUNTING HEAD TO COUPLE WITH A CAMERA. THIS TRIPOD'S LEGS ARE MADE FROM ALUMINUM, WHICH PREVENT ANY CAMERA MOVEMENT. THEY ARE NECESSARY WHEN SLOW-SPEED EXPOSURES ARE BEING MADE, OR WHEN LENSES OF EXTREME FOCAL LENGTH ARE USED, SO THE PRODUCTION OF BLURRED IMAGES CAN BE AVOIDED.



Valve for cistern with chlorine

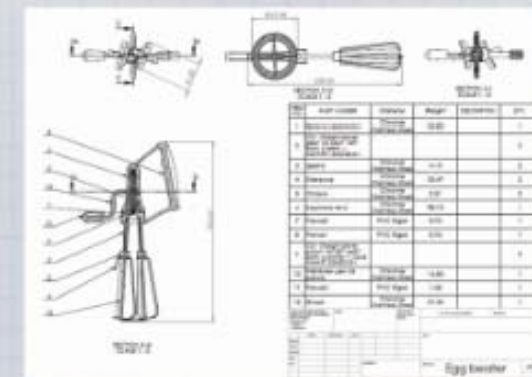
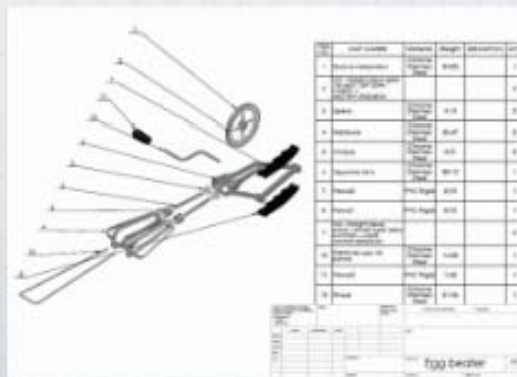


This is a device that regulates, directs or controls the flow of a fluid, in this case water with chlorine. It has spring for spring-loading, to normally shift the disc into some position by default but allow control to reposition the disc.



EGG BEATER²

- vintage style -



- Smoothly rotating gears;
- Stainless steel with plastic handles;
- Beaters are elevated and continue to work while device rests on bottom of bowl;
- This hand mixer is still perfectly useful in any kitchen;
- Much quicker than pulling out your electric beaters for small jobs like beating eggs or pancakes.

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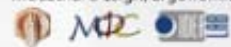
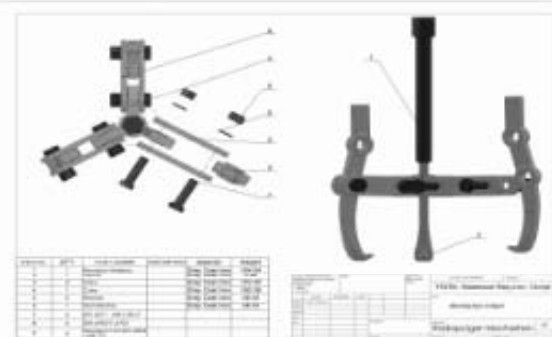
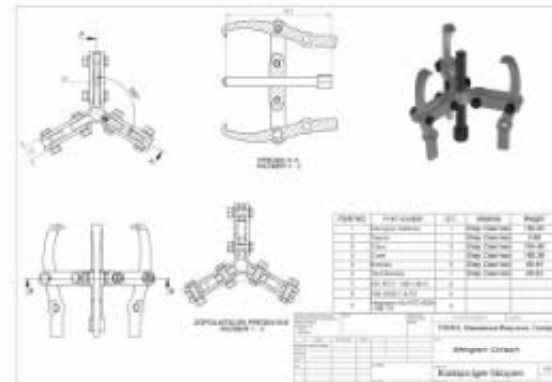
Student: Aleksandar Atanasov
Course: Computer Aided Design
Leader: Doc. Dr. Ilie Mircevski
School year: 2014/2015

Bearing Puller

Safe & Effective Bearing Displacement

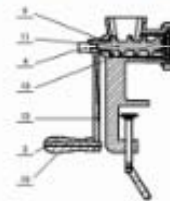


The bearing puller allows for the removal of latitudinal components for maintenance, repair, and replacement. Two clamp settings and a long threaded screw base allow for flexibility in the bearing puller's capabilities



Grinding machine

Manually usable

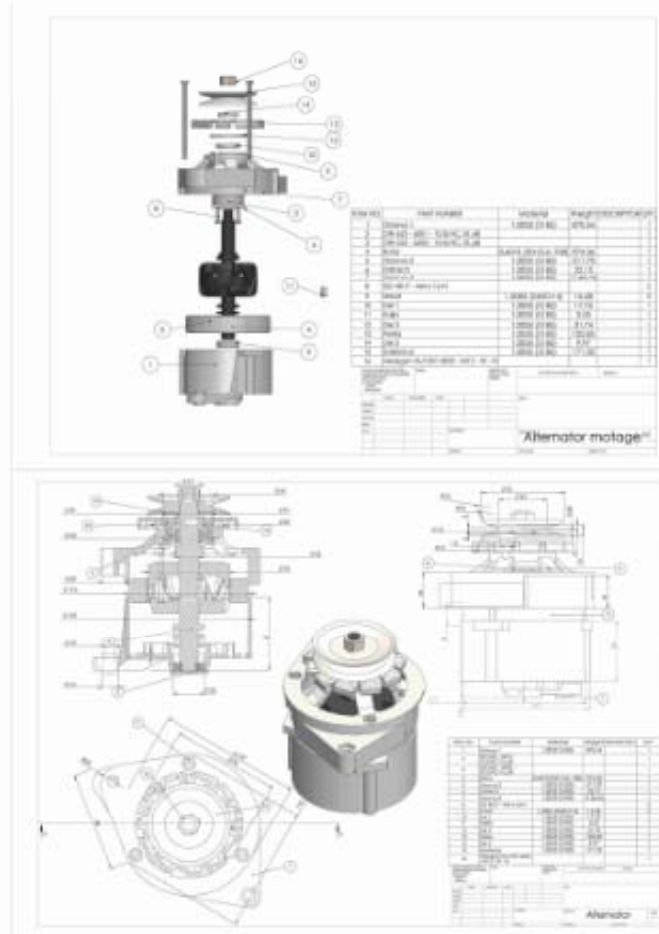


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5	5	1000000000	1000000	1	1
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97	97	1000000000	1000000	1	1
98	98	1000000000	1000000	1	1
99	99	1000000000	1000000	1	1
100	100	1000000000	1000000	1	1

Cheap and reliable grinding machine for your kitchen. Can be used for grinding nuts, meat, biscuits, etc. Comes with 1 pair of spare parts and in different colours.



Alternator



An alternator is an electrical generator that converts mechanical energy to electrical energy in the form of alternating current. This one is from Yugoslavian car Zastava 101.



Ice Cream SCOOP



How serious are you about ice cream?

If you want pretty, perfectly rounded scoops, you're going to need the right tool. Ice cream scoop features a sturdy stainless steel 1-ounce head that delves right into the hardest ice cream.

It also has a spring-loaded squeeze handle for easy release of food. Its a must have for any ice cream lover.



MC

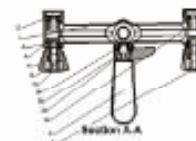
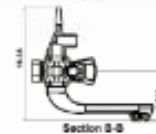
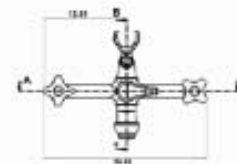
St. Cyril and Methodius University
Faculty of Mechanical Engineering

Katerina Blazheva

2015

FAUCET

*Bathroom/kitchen
Wall mount faucet
Watersaving
Stainless Steel*



Part No.	Part Name	Material	Quantity	Unit
1	Spout	Stainless Steel	1	PC
2	Handle	Stainless Steel	2	PC
3	Mounting Base	Stainless Steel	1	PC
4	Ball Valve	Stainless Steel	1	PC
5	Cartridge	Stainless Steel	1	PC
6	O-ring	NBR	2	PC
7	Seal Ring	Stainless Steel	1	PC
8	Set Screw	Stainless Steel	2	PC
9	Washer	Stainless Steel	2	PC
10	Lock Washer	Stainless Steel	2	PC
11	Lock Nut	Stainless Steel	2	PC
12	Spout Nut	Stainless Steel	1	PC
13	Spout O-ring	NBR	1	PC
14	Spout Seal	Stainless Steel	1	PC
15	Spout Gasket	Stainless Steel	1	PC
16	Spout Flange	Stainless Steel	1	PC
17	Spout Bolt	Stainless Steel	2	PC
18	Spout Nut	Stainless Steel	2	PC
19	Spout Washer	Stainless Steel	2	PC
20	Spout Lock Washer	Stainless Steel	2	PC
21	Spout Lock Nut	Stainless Steel	2	PC
22	Spout Gasket	Stainless Steel	1	PC
23	Spout Seal	Stainless Steel	1	PC
24	Spout O-ring	NBR	1	PC
25	Spout Nut	Stainless Steel	1	PC
26	Spout Washer	Stainless Steel	1	PC
27	Spout Lock Washer	Stainless Steel	1	PC
28	Spout Lock Nut	Stainless Steel	1	PC
29	Spout Gasket	Stainless Steel	1	PC
30	Spout Seal	Stainless Steel	1	PC
31	Spout O-ring	NBR	1	PC
32	Spout Nut	Stainless Steel	1	PC
33	Spout Washer	Stainless Steel	1	PC
34	Spout Lock Washer	Stainless Steel	1	PC
35	Spout Lock Nut	Stainless Steel	1	PC
36	Spout Gasket	Stainless Steel	1	PC
37	Spout Seal	Stainless Steel	1	PC
38	Spout O-ring	NBR	1	PC
39	Spout Nut	Stainless Steel	1	PC
40	Spout Washer	Stainless Steel	1	PC
41	Spout Lock Washer	Stainless Steel	1	PC
42	Spout Lock Nut	Stainless Steel	1	PC
43	Spout Gasket	Stainless Steel	1	PC
44	Spout Seal	Stainless Steel	1	PC
45	Spout O-ring	NBR	1	PC
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69	Spout Lock Washer	Stainless Steel	1	PC
70	Spout Lock Nut	Stainless Steel	1	PC
71	Spout Gasket	Stainless Steel	1	PC
72	Spout Seal	Stainless Steel	1	PC
73	Spout O-ring	NBR	1	PC
74	Spout Nut	Stainless Steel	1	PC
75	Spout Washer	Stainless Steel	1	PC
76	Spout Lock Washer	Stainless Steel	1	PC
77	Spout Lock Nut	Stainless Steel	1	PC
78	Spout Gasket	Stainless Steel	1	PC
79	Spout Seal	Stainless Steel	1	PC
80	Spout O-ring	NBR	1	PC
81	Spout Nut	Stainless Steel	1	PC
82	Spout Washer	Stainless Steel	1	PC
83	Spout Lock Washer	Stainless Steel	1	PC
84	Spout Lock Nut	Stainless Steel	1	PC
85	Spout Gasket	Stainless Steel	1	PC
86	Spout Seal	Stainless Steel	1	PC
87	Spout O-ring	NBR	1	PC
88	Spout Nut	Stainless Steel	1	PC
89	Spout Washer	Stainless Steel	1	PC
90	Spout Lock Washer	Stainless Steel	1	PC
91	Spout Lock Nut	Stainless Steel	1	PC
92	Spout Gasket	Stainless Steel	1	PC
93	Spout Seal	Stainless Steel	1	PC
94	Spout O-ring	NBR	1	PC
95	Spout Nut	Stainless Steel	1	PC
96	Spout Washer	Stainless Steel	1	PC
97	Spout Lock Washer	Stainless Steel	1	PC
98	Spout Lock Nut	Stainless Steel	1	PC
99	Spout Gasket	Stainless Steel	1	PC
100	Spout Seal	Stainless Steel	1	PC



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The right valve for the job



A wide selection of Forger ball valves are available in high quality bronze. The connections are threaded. Find your distributor, get catalogs and submittals, place and track your order.



Bronze ball valves for use in commercial and light industrial applications. Typical services include; hot and cold domestic water, HVAC, low pressure steam, compressed air, LP gas, natural gas.

