DAISY.WORLD.MEDIAFACADE

SPACE-CAPTURING-KINETIC MEDIASYSTEM WITH PNEUMATIC ACTUATORS

cooperation:

Illuminate Productions. London,
COCA Center for Outdoor Contemporary Art. San Francisco,
Media Architecture Group Vienna,
The Sheldon Art Galleries St. Louis

AAA. ARTS AND ARCHITECTURAL APPLICATIONS

BÜRO FÜR KUNST UND ARCHITEKTONISCHE ANWENDUNGEN

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CONTENT

wandering flower landscapes on the CANNON STREET TOWER / LONDON / River Thames

MEDIAFACADES

- The rapid development of the NEW MEDIAS and their growing influence on building in our society caused a new understanding of architecture:

  MEDIA ARCHITECTURE.

- Mediaarchitecture is the complex convergence and fusion of building structure and media technology. Media applications consider the inner building space as well the outer architectural surface as MEDIAFACADE.

- Architecture is no longer known as an unchangeable constant appearance.
  The static impression of a building will disappear.

- The dynamic behaviour and the diversity of aesthetic opportunities gradually changes the image of modern architecture.

ABOUT THE REQUIREMENTS IN FACADES

- The facade of a building is a far visible business card.
- The facade is the face and the image of the building in the public.
- It reflects the representative needs of the building owner and the people which live in it.
  A facade sends messages towards the outer world.
- The facade plays a key role in the emotional and rational communication
  between the building and the public.
- The facade can influence and dominate the urban space.

MEDIAFACADES COMPARED TO CONVENTIONAL FACADES

- Mediafacades are an additional option to the conventional building shell.
  They reach out and extend the ways of expression of architecture.

- They achieve a much higher level of attention than static facades.

- Mediafacades have a high recognition value in the public awareness.

- Mediafacades dominate more the urban environment as with the abilities of conventional facades.
  They are eye catchers in the cityscape.

- The visual aesthetic appeal of mediafacades increases the attractiveness of a building.
  It catches and keeps the attention of the pedestrians passing by.

- Otherwise mediafacades are able to veil or to dissolve undesirable characteristics like mass and solid space.

- Companies use mediafacades to connect ideas like progress, technology, innovation, dynamic, vitality and youth with their corporate identity. In so far to show a positive image to their customers and the society.

interactive illuminant facade on the Dexia Office Tower, Brussels

BIX facade on the house Potsdamer Platz 10, Berlin

BIX facade, Kunsthaus Graz

display facades at Time Square, New York

BASIC VERSIONS OF DYNAMIC FACADES

2-dimensional systems, current stage of development:

1.	passive mediafacedes	(dynamic results by spatial movement of the visitor)
2.	projection facades	(projection on the outer surface or backside projection from inside of the rooms through translucent areas)
3.	window-grid animations	(control of the interior room light at night, windows as grid-display)
4.	display facades	(superimposed major video screens)
5.	illuminant facades	(facade components with integrated illuminants, digital skin)
6.	mechanic surface	(mechanic movable elements in the flat building shell, not durable until now because of fragility and maintenance requirements)

3-dimensional systems, next generation of mediafacades:

7.	SPACE-CAPTURING-KINETIC MEDIAFACADES	(movable elements, which grow into the space in front of the building)

DAISY.WORLD MEDIAFACADE

official patent label: space-capturing-kinetic mediasystem with pneumatic actuators

1. visual, spatial-changing, physical mediasystem
in contrast to conventional flat, disembodied image mediasystems
(screens/projection walls, the visible medias are currently 2-dimensional)

2. system consisting of:

2.1. computersimulation/data processing service/(brain) = processing/handling outer and inner constitutional changes + calculation behavior of the actuators from the data

2.2. sensors/receptors/(sense organs) = detecting outer and inner constitutional changes + transmitting the data to the media network

2.3. media network/(nerve tract) = data connection between data processing service, sensors and actuators

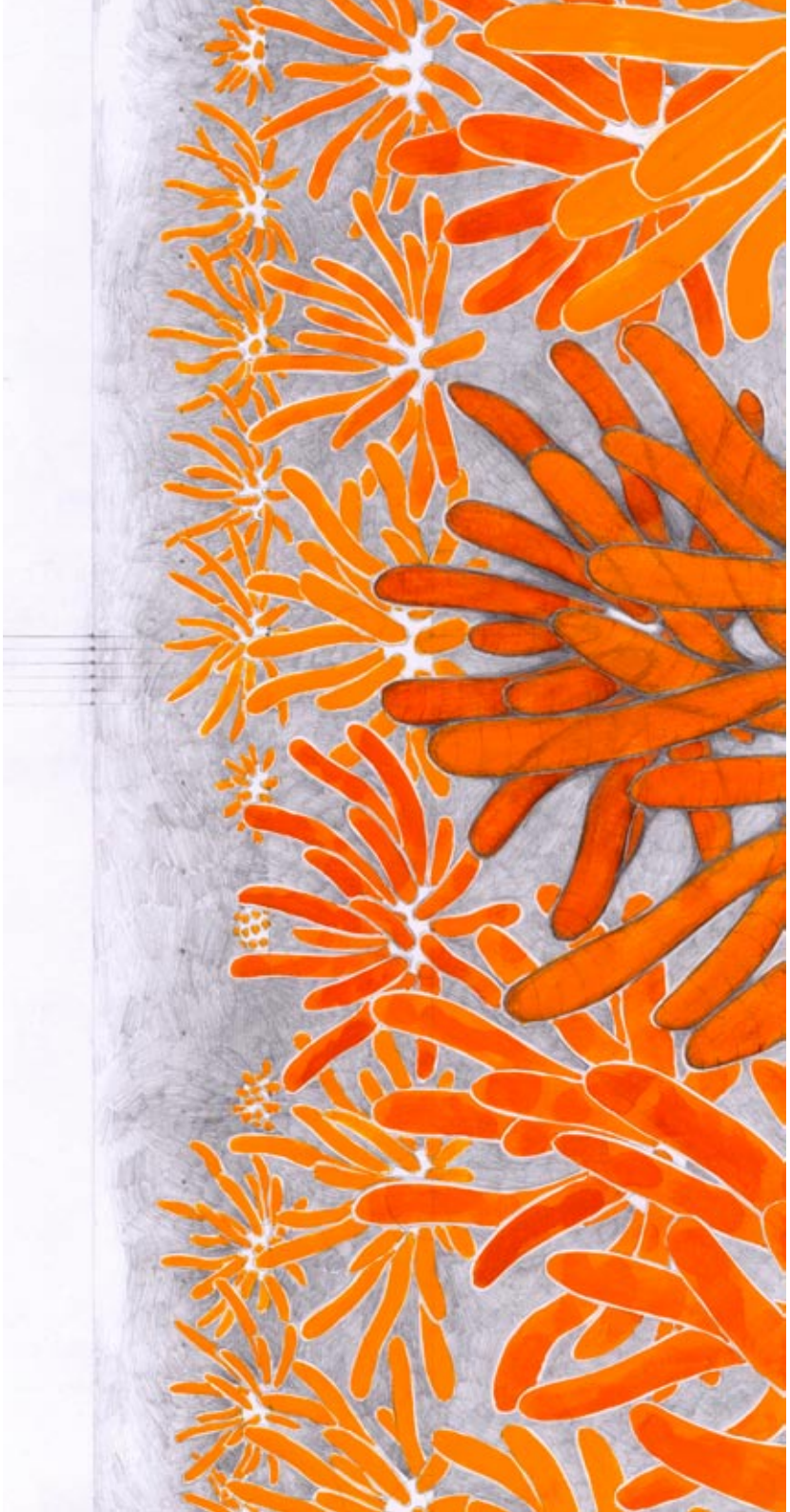
2.4. actuators/extremities/(Hands and feet of the system, tentacles for robots) = executive organs of the system / tools to react to changes and to interact with the environment / opportunity to interfere with reality

3. the actuators (colored flower heads) cause the spectacularly appearance of the installation;
size and shape are controllable/changeable specifically by air pressure;
apparently wandering of fields of flowers over the building surface

4. robustness of the mediafacade system because avoiding fragile details;
reliability by changing weather conditions; outdoor and height suitability

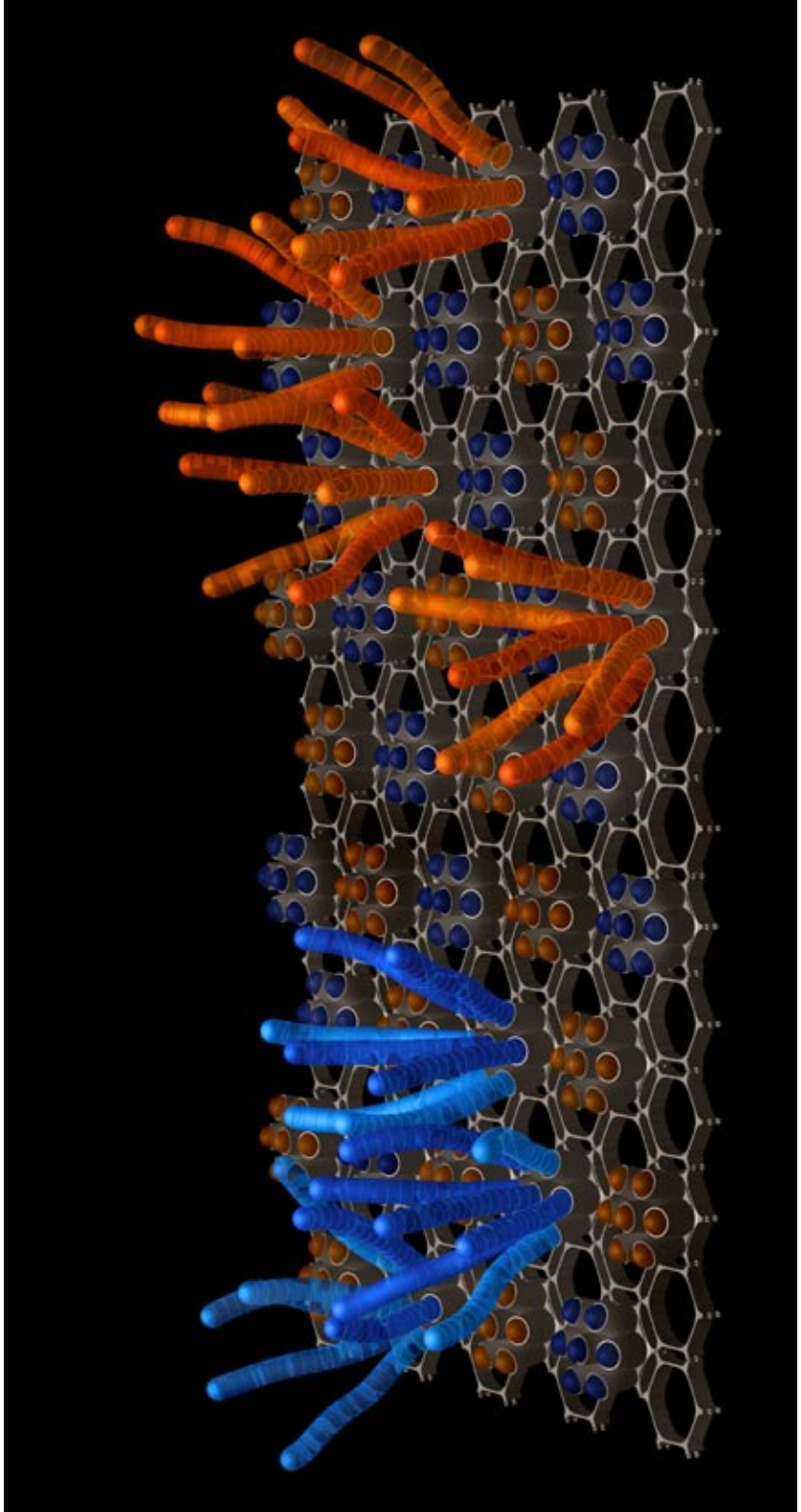
DAISY.WORLD Mediafacade

wandering fields of flowers



DAISY.WORLD Mediafacade

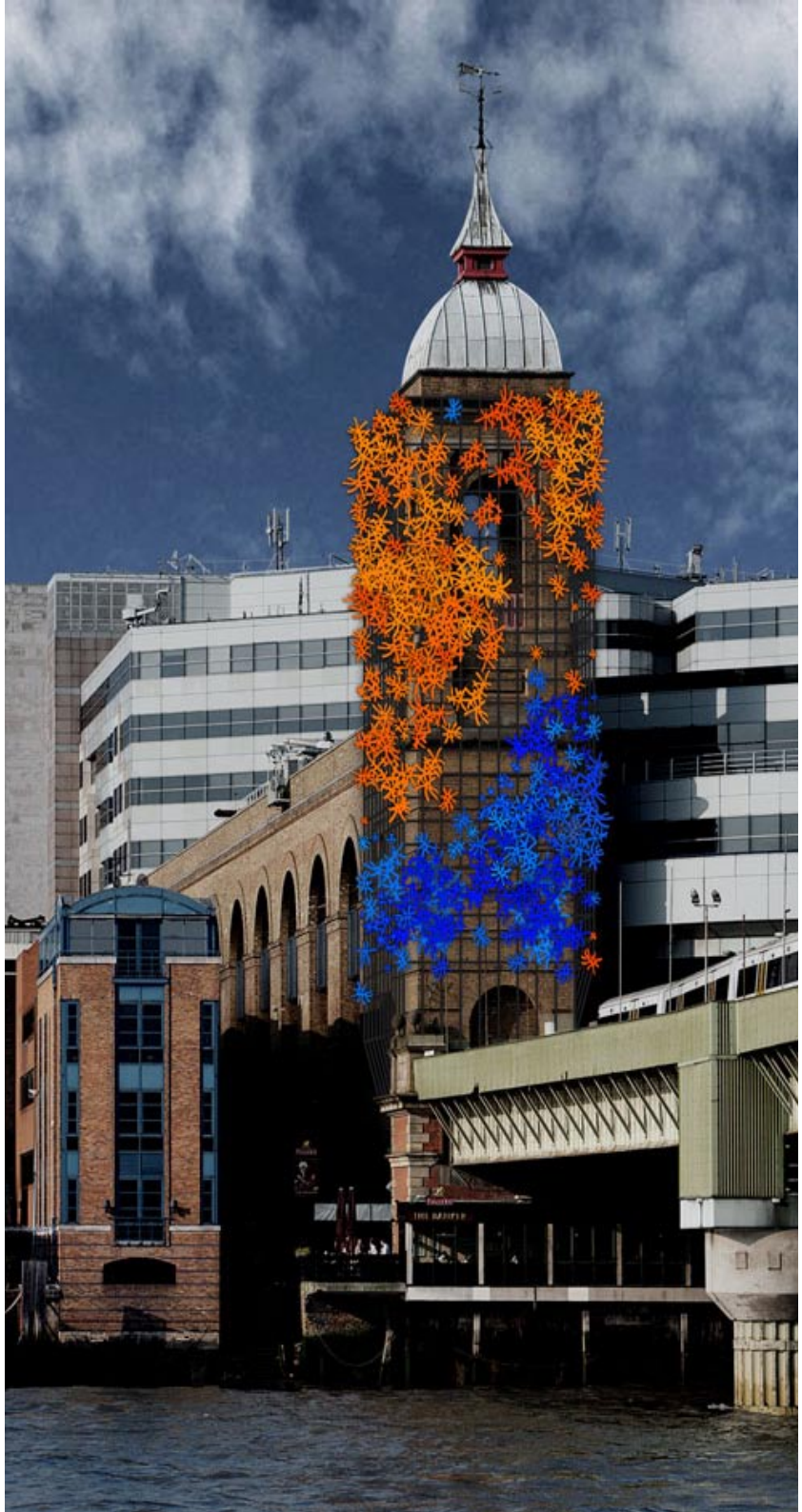
field from the side



DAISY.WORLD Mediafacade

CAD visualization

tommophoto

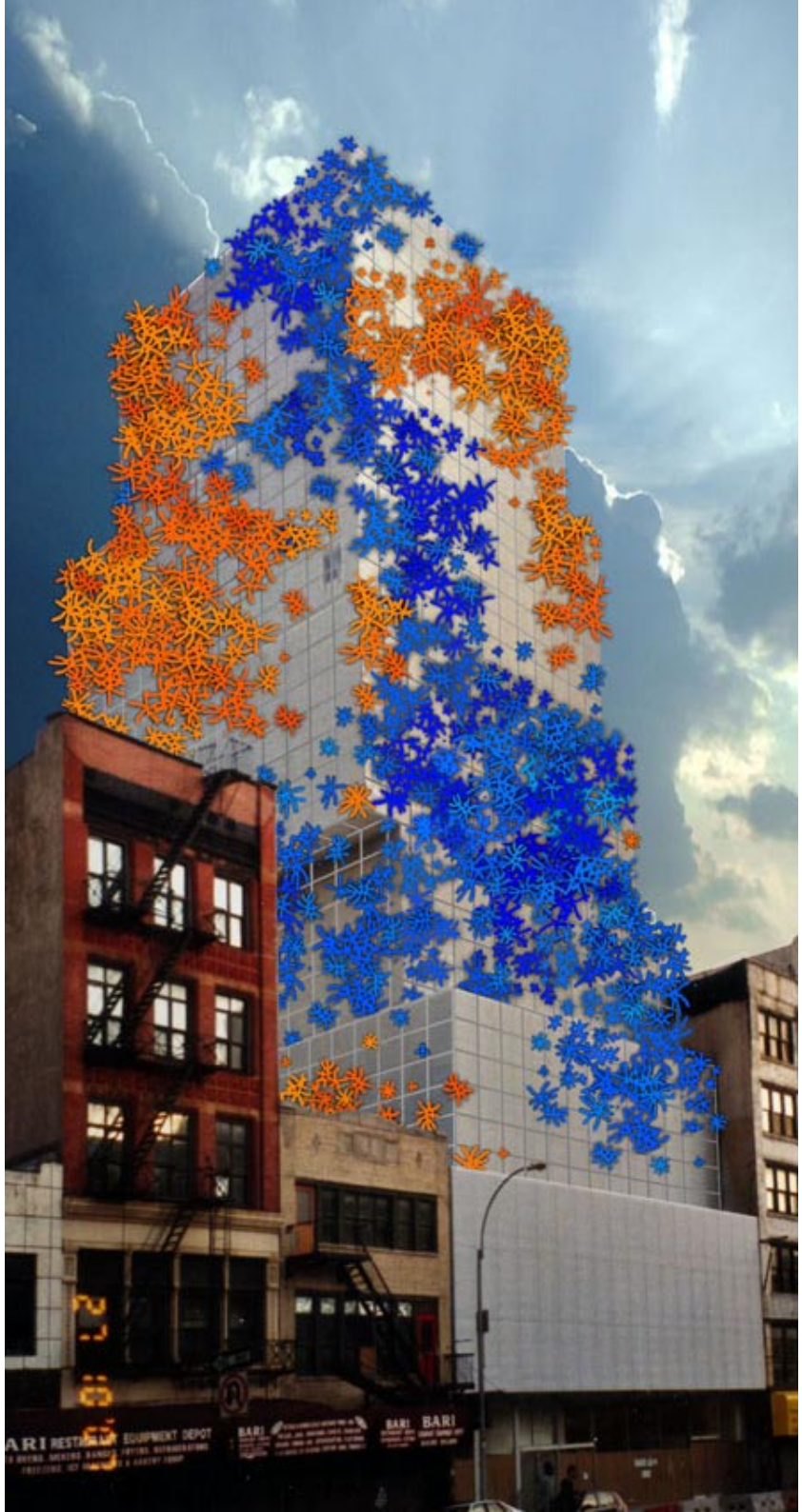


DAISY.WORLD Mediafacade

Cannon Street Station, London

DAISY.WORLD Mediafacade

Ferry Building, San Francisco



DAISY.WORLD Mediafacade

New Museum of Contemporary Art, New York

ASSESSMENT

- There is an international demand for the development of the DAISY.WORLD Mediafacade -
  various institutions are interested to show the installation. (Dubai, San Francisco, Sydney, New York City, Berlin)

- Patentability respectively commercial launch of the invention get a very positive feedback
  after evaluation by patent attorneys.

- Patent registration of the prototype should be done as quickly as possible -
  consequently keeping/protecting the trade mark rights of the invented product.

- development of two ways of applications:
  1. mediafacade system for outdoor use - covering whole building facades - far distance visibility effect
  2. interior design and illuminating elements - small groups/patterns of flower fields - short distance visibility effect

- The invitation to the MEDIAFACADE 08 an international festival in Berlin promoting the high standard of contemporary
  mediafacade technology is an official acknowledgement by recognized experts.

- Opportunity to introduce the new product development to the community of international experts.

- Possibility to contact the industrial sector or prospective users.
  (development and license contracts)

- *„Your project is very fascinating and poetically.“*
  Dr. G. Tscherteu, Media Architecture Group. Vienna, project manager MEDIAFACADES 08

www.mediaarchitecture.org/mediafacades2008
www.mediaarchitecture.org

WORKING SCHEDULE

- launching patent registration on national stage = basic patent
- building the prototype and coordinating the pilot production
- small testrun 5x5 aerial units including network control indoor
- introduction of the technological development to international experts at the MEDIAFACADES 08 in the German Centre for Architecture Berlin
- big testrun 10x20 aerial units under real outdoor conditions
- opening of the DAISY.WORLD public art installation at the Tower in London, 30x20 aerial units
- further technological development of the pneumatic actuators for serial production
- license contract for manufacturing by interested companies or own manufacturing
- keeping international trade mark rights
- gradual methodic technological development of FCMS (Formcontrolling Mediasystems)

TECHNICAL REALIZATION

1. SUPPORTING STRUCTURE:

- standard scaffolding appropriate to the special building surface in the first stage of testing (DAISY.WORLD London)
- later hanging steel cable net/ curtain or integrated facade components
- intersection point = aerial unit = 1 m^2

2. PNEUMATIC SYSTEM:

- pneumatic tube network linked to all intersection points of the matrix
- two outlet branches at every intersection of the pressure system to connect with a blue and an orange flower head/actuator
- the tube net for compressed air supply is constantly pressurized and equal at every outlet branch

3. PNEUMATIC ACTUATORS / FLOWER HEADS:

- the pneumatic flower head is consisting of a convex metal casing/container with a suitable convex cover plate and a flat baseplate
- two electric controllable valves are fixed in the baseplate
  1. air inlet valve connected to the pneumatic system
  2. air outlet valve to the open space
- (possibly connection to a second pneumatic system with negative pressure to support the contraction/relaxation of the rubber tubearms)
- in the upper metal casing as well in the cover plate are round openings for inflatable rubber tubes

- the rubber tubes are in relaxed/contracted state kind of small tube round ends (finger stalls) and have a thickened edge at the open side
- 1. opening of the air inlet valve - expansion/inflating to 1 m long tube arms (coral, sea anemones) - *flower individual grows / blooming*
  2. opening of the air outlet valve - shrinking/relaxing back to the initial state - tube arms disappear - *flower individual dies / withering*

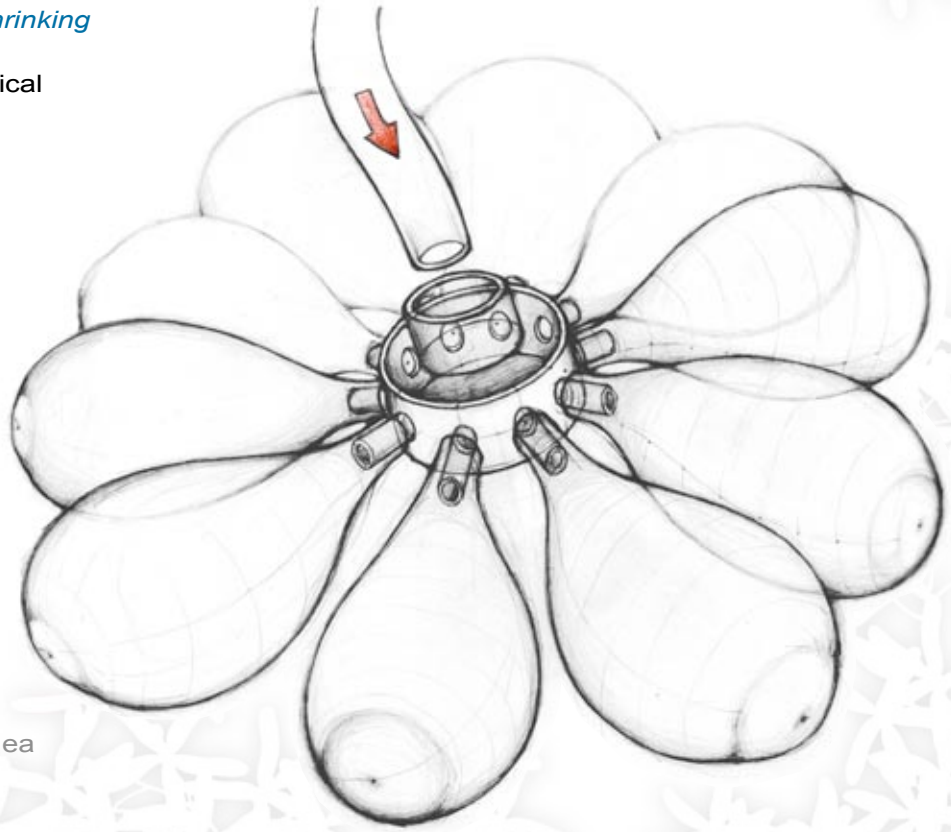
- the rubber tube round ends will be inserted into the openings of the cover plate
- by fixing the cover plate on the upper metal casing the edge of the rubber tube gets compressed between the two convex plates - so rubber tube and container close hermetically

- the rubber tubes are made from colored, very robust and stretchable material

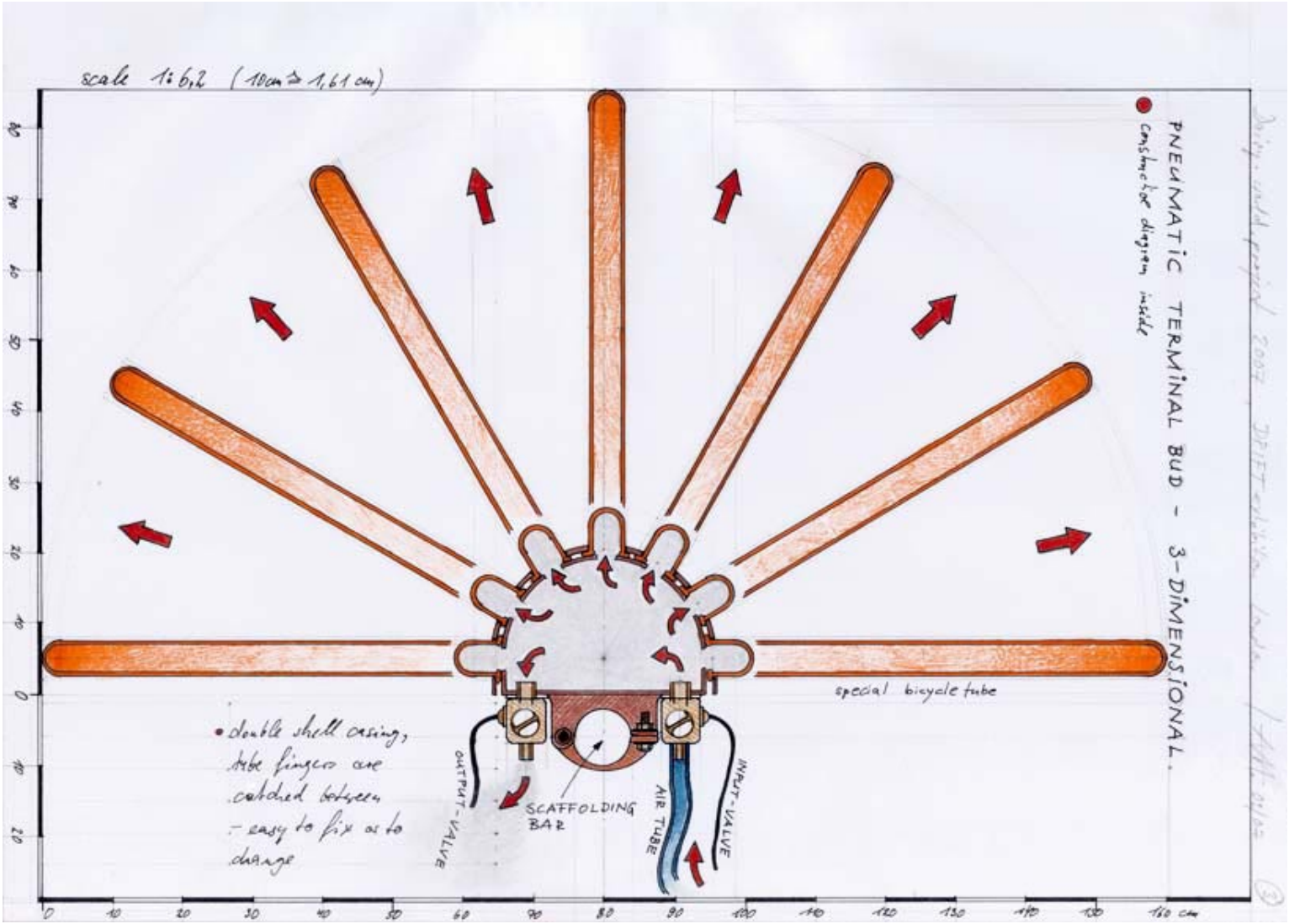
TECHNICAL REALIZATION

4. DATA NETWORK AND SENSORICS:

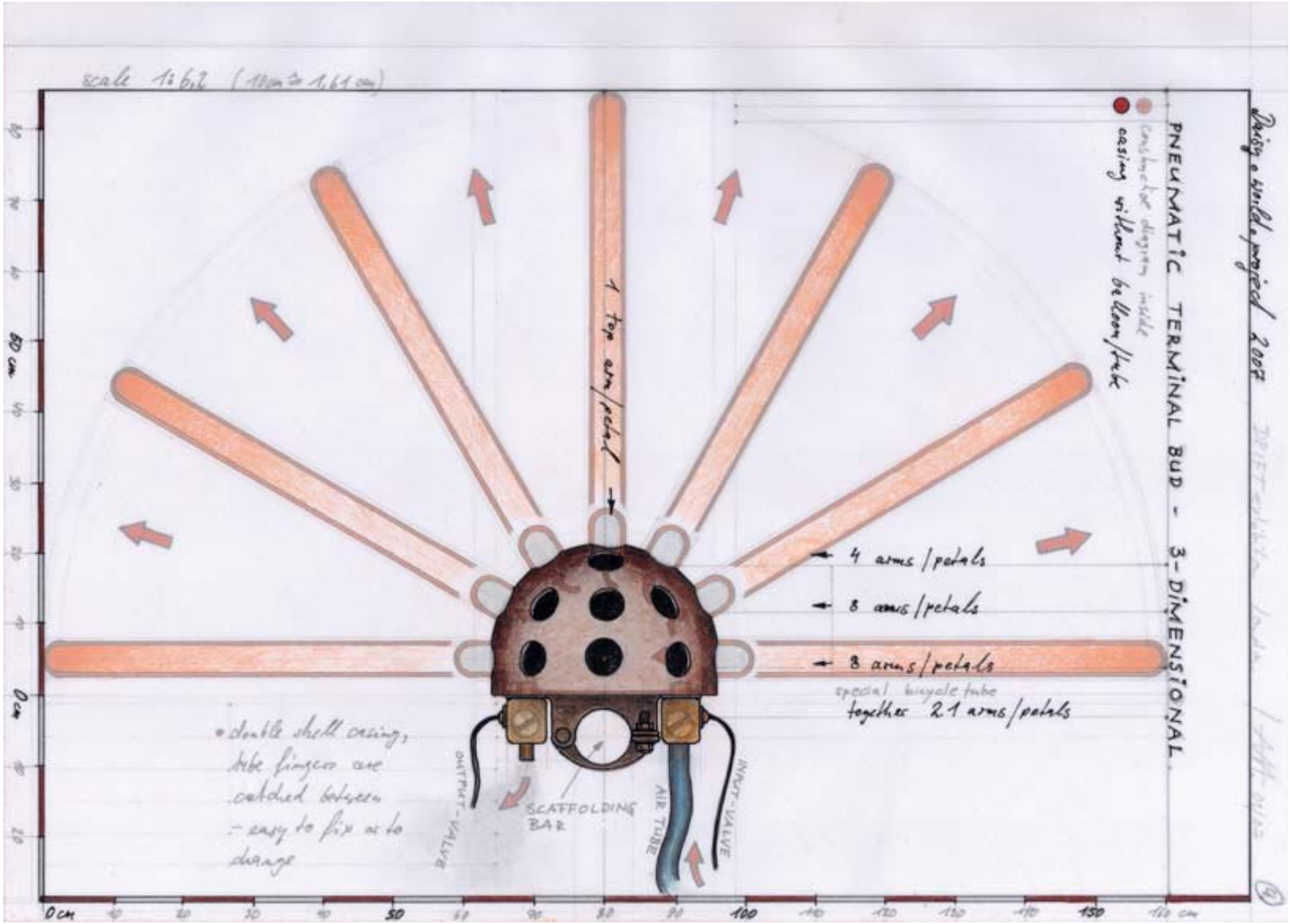
- computersimulation for calculation/processing the behavior of the actuators /flower heads
- data transfer between computer and actuators respectively sensors via DMX-data network for mediafacades
- events/incidents from the outer environment detected by sensors
- only two impulses determine the state of each actuator and are responsible for the controlling of the whole artificial flower landscape:
  1. opening of the air inlet valve / inflating / *blooming / growing / spreading*
  2. opening of the air outlet valve / contraction/relaxing / *withering / dying / shrinking*
- every actuator/flower head is a binary pixel and can switch/change by electrical impulse between the two states:
  1. ON / *growing*
  2. OFF / *dying*
- the controlling of the DAISY.WORLD mediafacade will be established like the historical Daisyworld Experiment James Lovelock‘s by an interactive real-time computer simulation



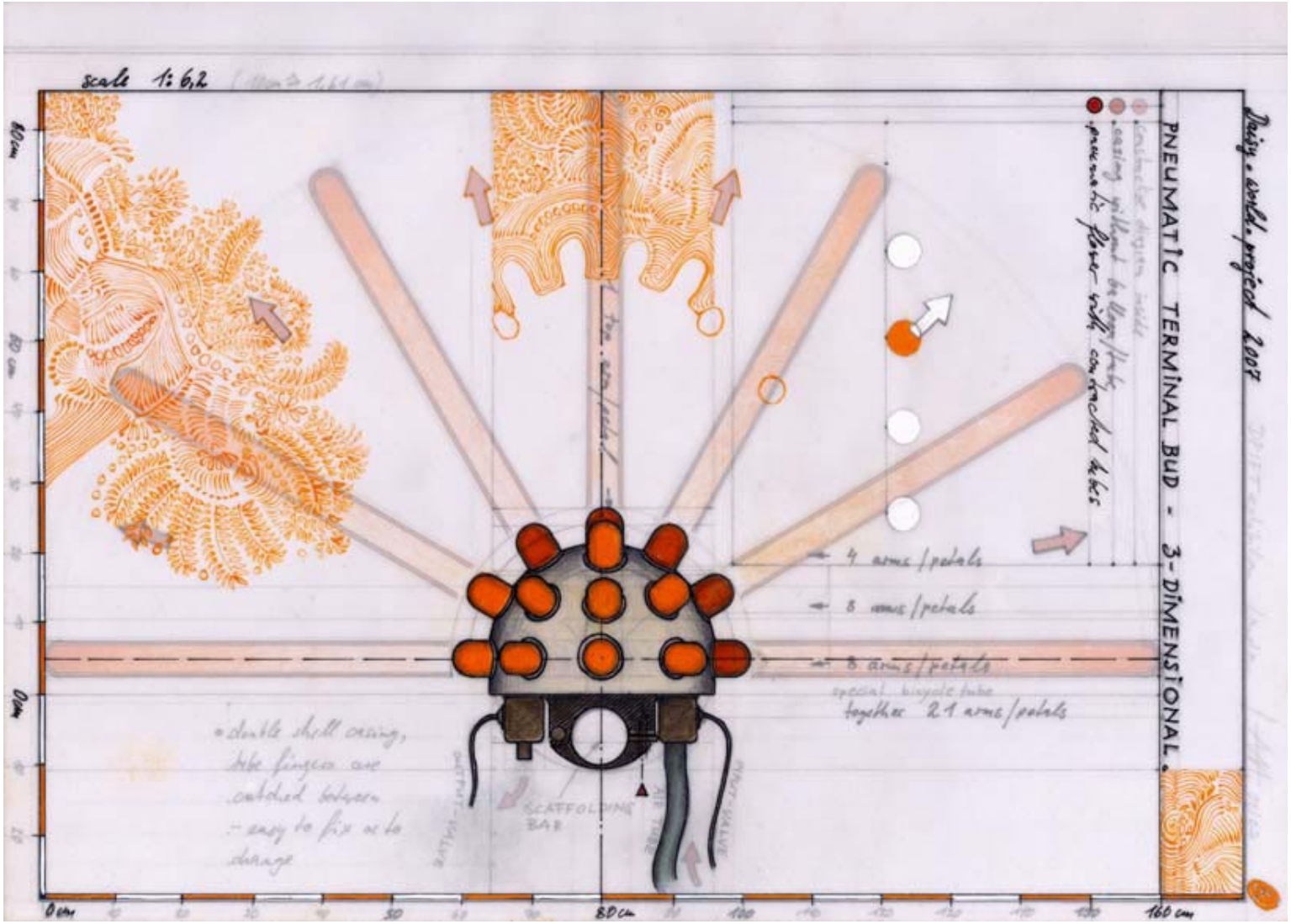
construktive basic idea



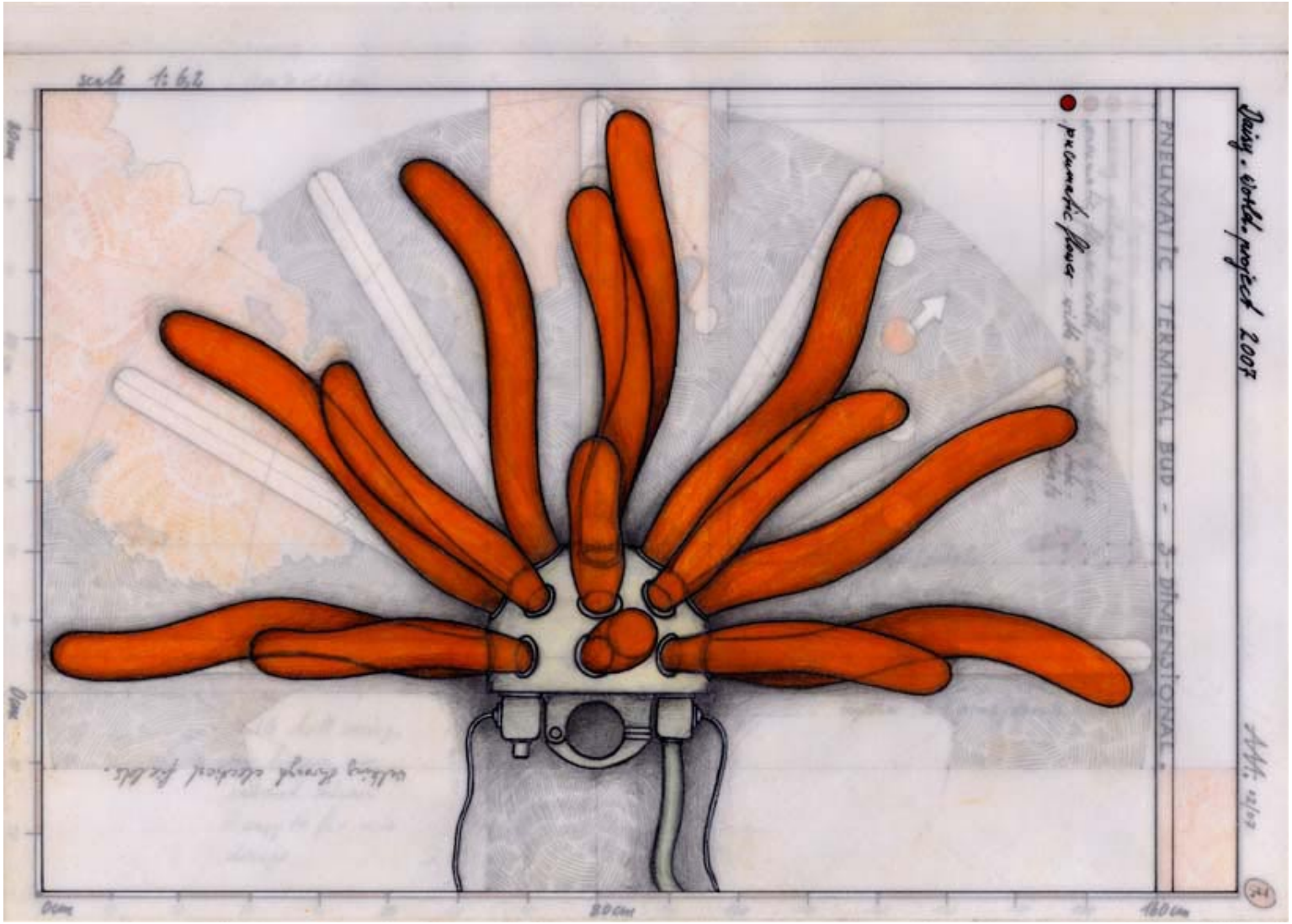
flower head constructive diagram (first draft)



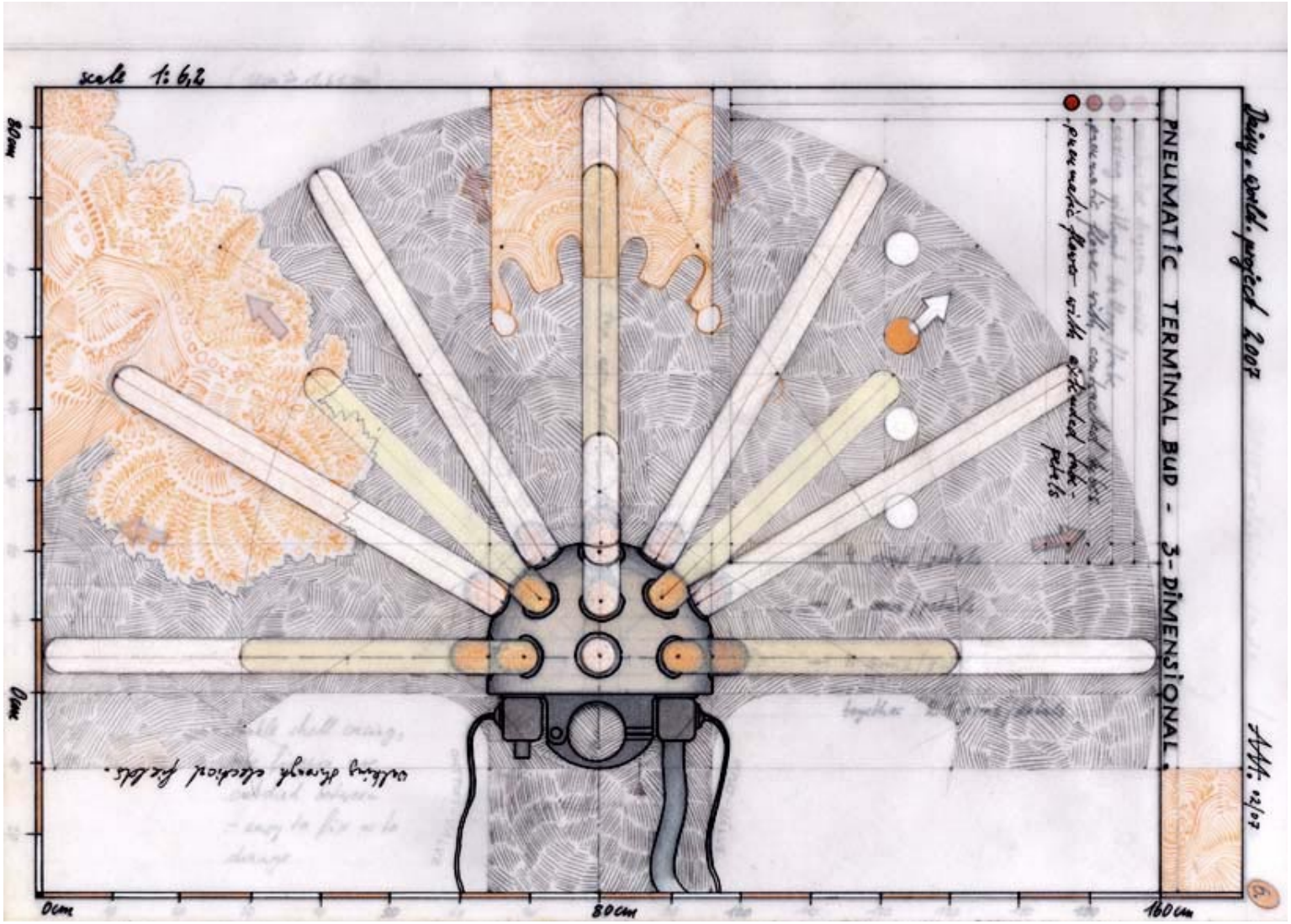
flower head casing without rubber tubes (first draft)



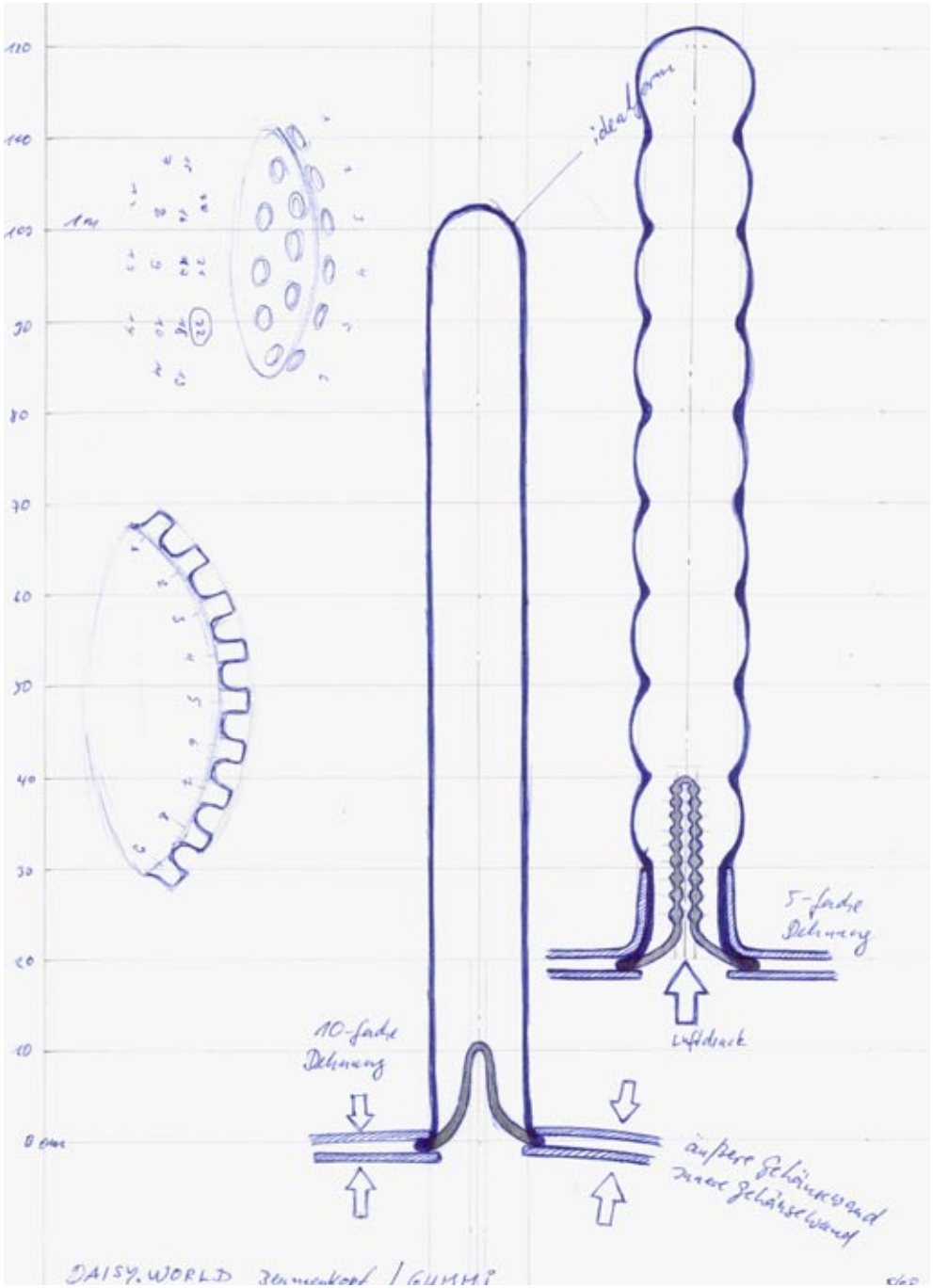
flower head with contracted rubber tubes (closed/died, first draft)



flower head with expanded/inflated petals/rubber tubes (blooming, first draft)

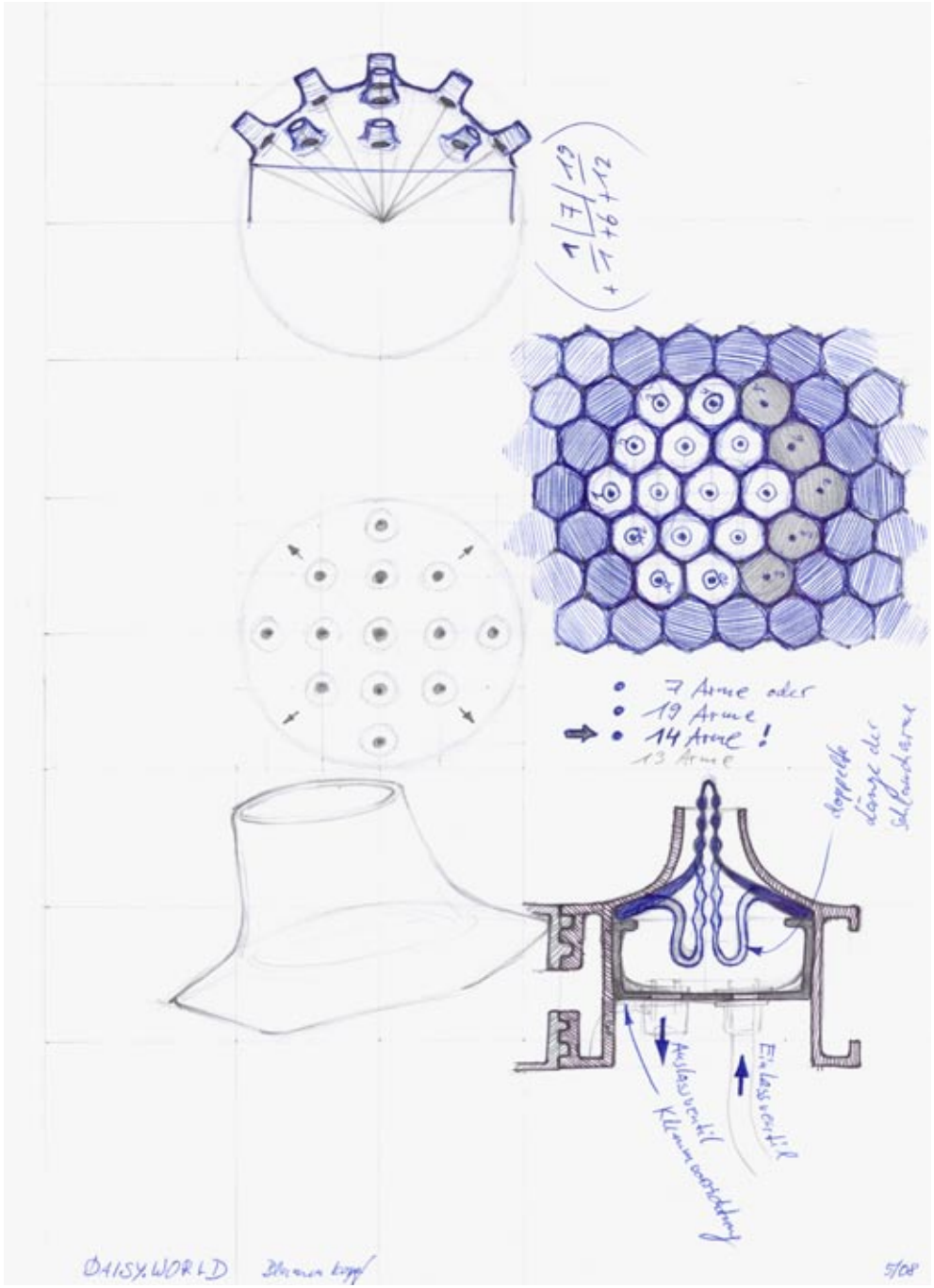


flower head open status (ideal exposure, first draft)



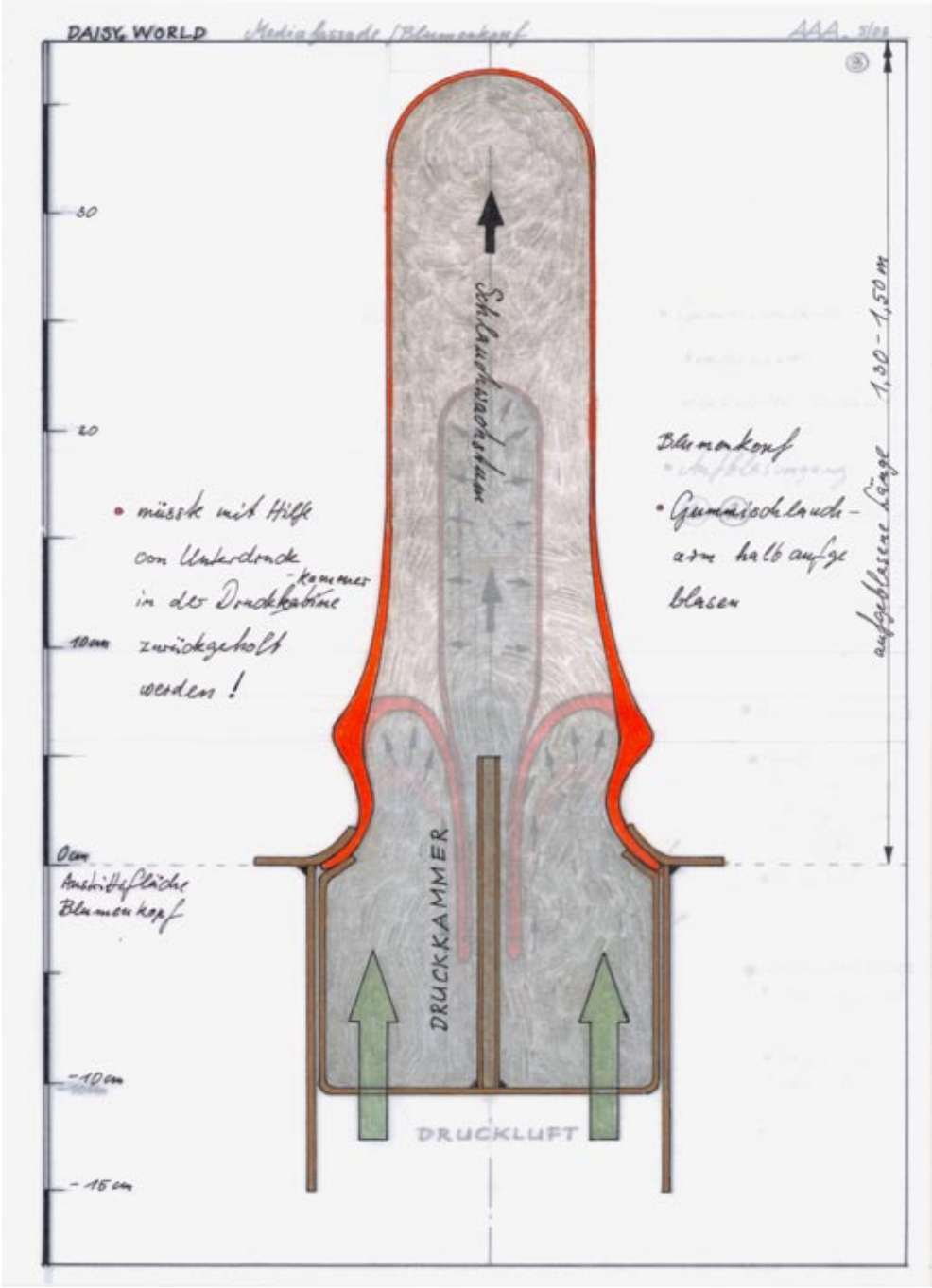
second draft studies

rubber expansion behaviour



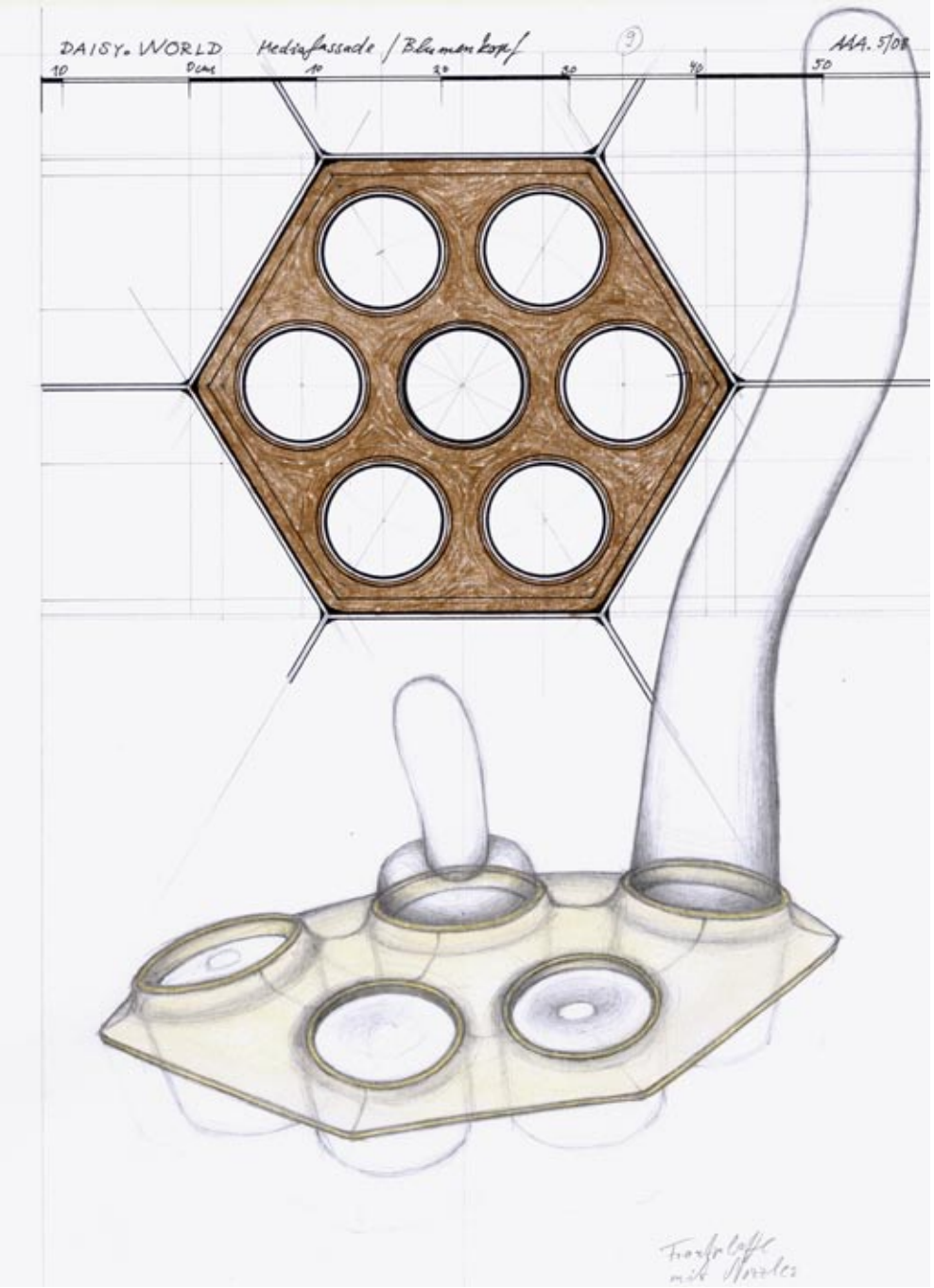
second draft studies

basic form flower head



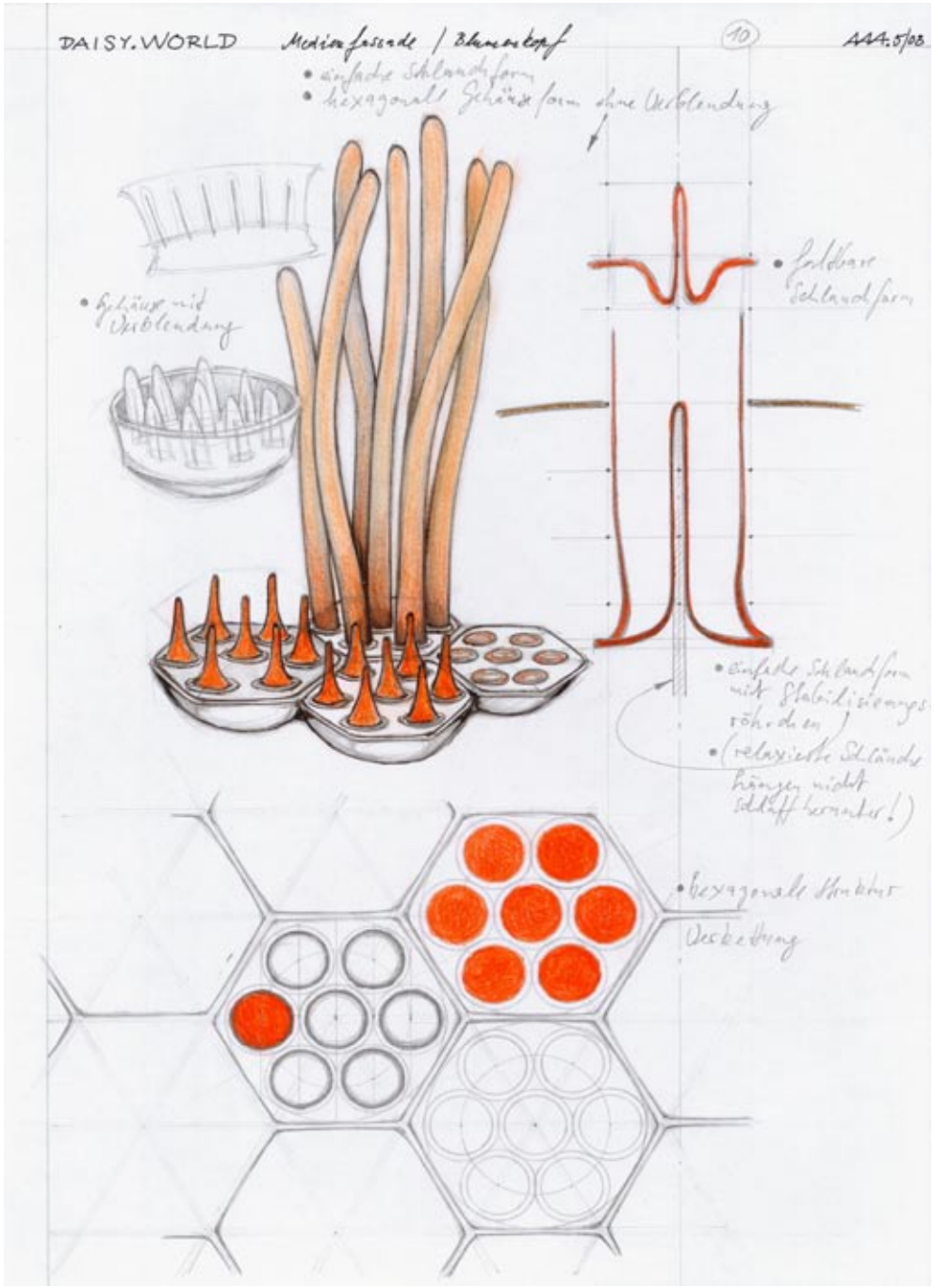
second draft studies

rubber expansion behaviour



second draft studies

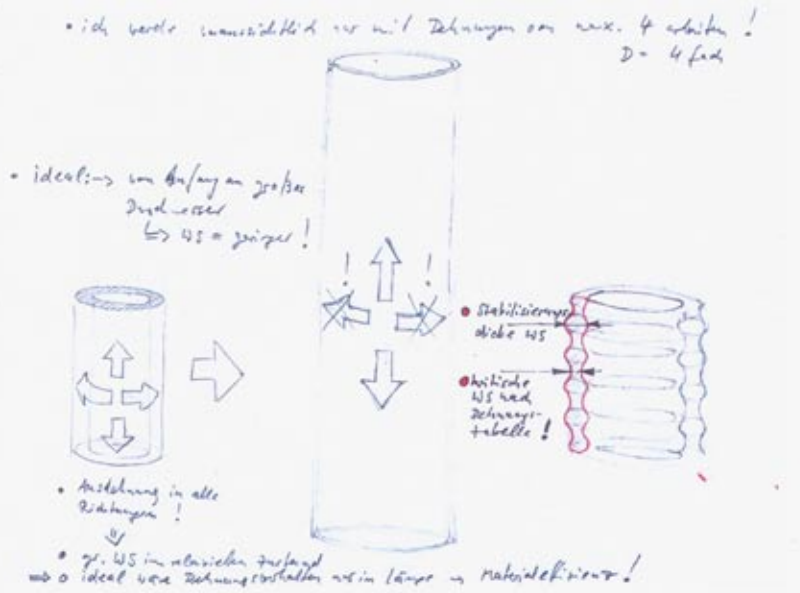
flower head cover plate


DAISY.WORLD
10
AAA.5/08
• einfache Schlaufform
• hexagonale Schäftform ohne Verblendung
• Schäfte mit Verblendung
• faltbare Schlaufform
• einfache Schlaufform mit Stabilisierungsröhrchen
• (relaxierte Schläufe hängen nicht schief herunter!)
• hexagonale Struktur
Verbindung

B.) Bedingungen und Beziehungen :

1. **Das Gesamtvolumen ist immer konstant !**
   Es findet keine Kompression statt, das Material verteilt sich in die jeweils neue Form.
2. Bei den Berechnungen wird die Schlauchform auf einen Hohlzylinder vereinfacht (Schlauchkuppe wird vernachlässigt)
3. **Dehnung in Längsrichtung D_L - nicht gleich - Dehnung im Umfang D_U !**
   - keine 2-dimensionale Dehnung in Längsrichtung und Umfangsrichtung
   - nur 1-dimensionale Dehnung in Längsrichtung
   - Dehnung in Umfangsrichtung wird durch Stabilisierungsringe verhindert
4. Vernachlässigung des Volumens der Stabilisierungsringe zur Berechnung der relaxierten Wansstärke
5. **Nachträgliche Addition der Stabilisierungsringe zur relaxierten Länge notwendig!**
   - bei 20 stabilisierten Segmenten je 50 mm auf gedehnte Schlauchlänge von 1000 mm
   = 21 Stabilisierungsringe ; d_{SR} = 4 mm
   Addition von 84 mm
   $L_{rel.\,SR} = L_{rel.} + SR\ d_{SR}$

6. $d_{rel.} = d_{ex.} = 100$ mm
7. $V_{ex.} = V_{rel.}$
8. $D = D_L = L_{ex.} / L_{rel.} \neq D_U$
9. $V = (L\ \pi\ /4)\ (d_a^2 - d_i^2)$
10. $d_a = d = 2\ r$
11. $ws = r - r_i = (d - d_i) / 2$



Berechnungsformeln:

1. Volumen $V = (\pi L_{ex.} / 4) (d_{ex.}^2 - [d_{ex.} - 2\,ws_{ex.}]^2)$
2. Dehnung $D = L_{ex.} / L_{rel.}$
3. Innendurchmesser relaxiert $d_{i\,rel.} = \sqrt{[\,10.000\ mm^2 - D\,(10.000\ mm^2 - [100\ mm - 2\,ws_{ex.}]^2)\,]}$
4. Wandstärke relaxiert $ws_{rel.} = (100\ mm - d_{i\,rel.}) / 2$

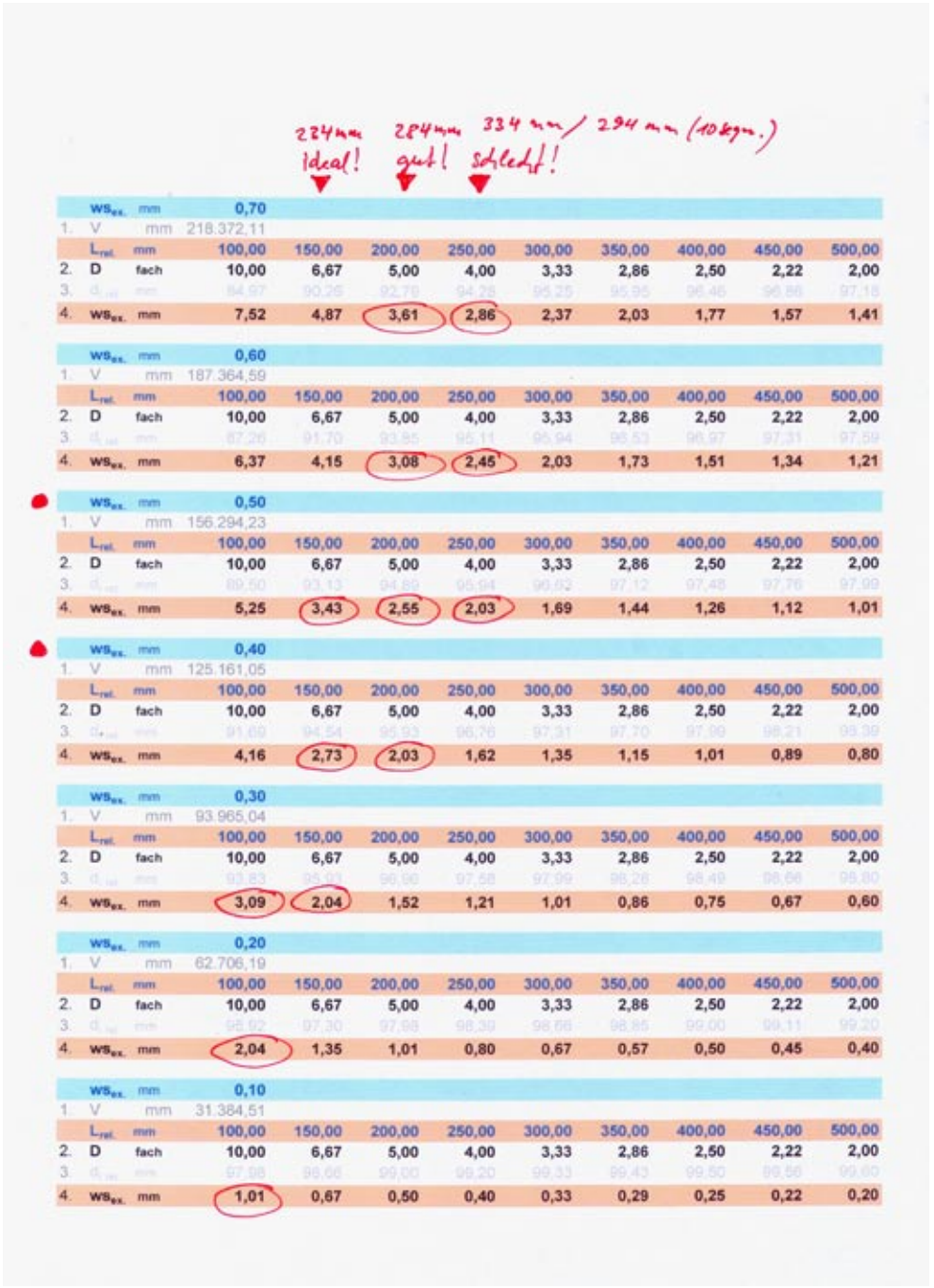
234 mm ideal! 289 mm gut!

	$ws_{ex.}$	mm	2,00								
1.	V	mm	615.752,16								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{i\,rel.}$	mm	46,48	69,09	77,97	82,85	85,95	88,09	89,67	90,87	91,83
4.	$ws_{ex.}$	mm	26,76	15,46	11,01	8,58	7,03	5,95	5,17	4,56	4,09
	$ws_{ex.}$	mm	1,50								
1.	V	mm	464.170,31								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{i\,rel.}$	mm	63,95	77,85	83,93	87,38	89,61	91,17	92,32	93,20	93,90
4.	$ws_{ex.}$	mm	18,02	11,08	8,03	6,31	5,19	4,42	3,84	3,40	3,05
	$ws_{ex.}$	mm	1,00								
1.	V	mm	311.017,67								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{i\,rel.}$	mm	77,72	85,79	88,56	91,74	93,17	94,17	94,92	95,50	95,96
4.	$ws_{ex.}$	mm	11,14	7,10	5,22	4,13	3,42	2,91	2,54	2,25	2,02
	$ws_{ex.}$	mm	0,90								
1.	V	mm	280.198,65								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{i\,rel.}$	mm	80,20	87,30	90,64	92,59	93,87	94,77	95,44	95,95	96,37
4.	$ws_{ex.}$	mm	9,90	6,35	4,68	3,70	3,07	2,62	2,28	2,02	1,82
	$ws_{ex.}$	mm	0,80								
1.	V	mm	249.316,79								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{i\,rel.}$	mm	82,62	88,79	91,72	93,44	94,58	95,36	95,95	96,41	96,77
4.	$ws_{ex.}$	mm	8,69	5,60	4,14	3,28	2,72	2,32	2,03	1,80	1,61

$L_{rel\,SR} = L_{rel} + 84$ mm

21 Stabilisierungsringe + 84 mm

11 Stabilisierungsringe + 44 mm (Abstand/Segment = 10 m)

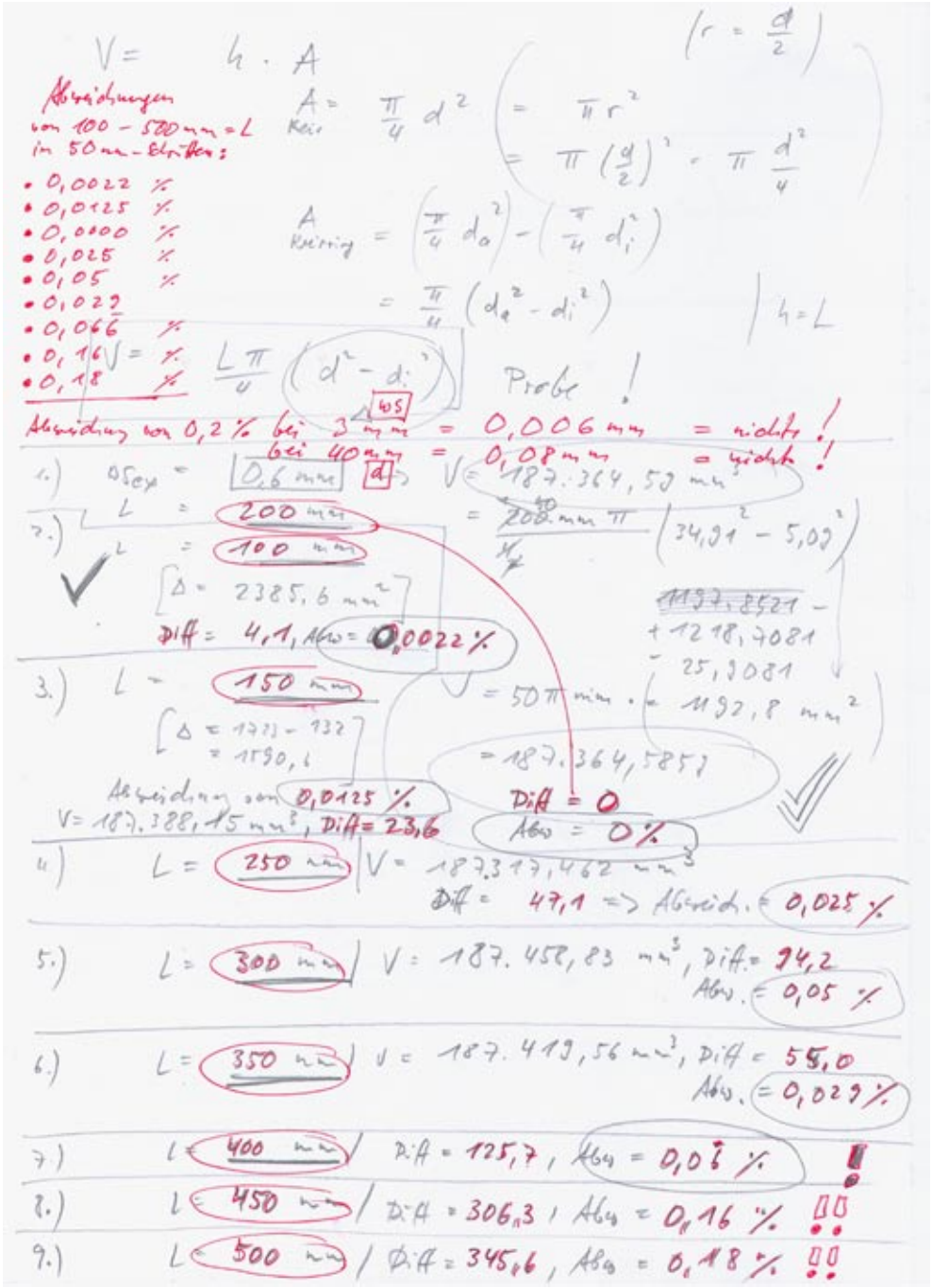


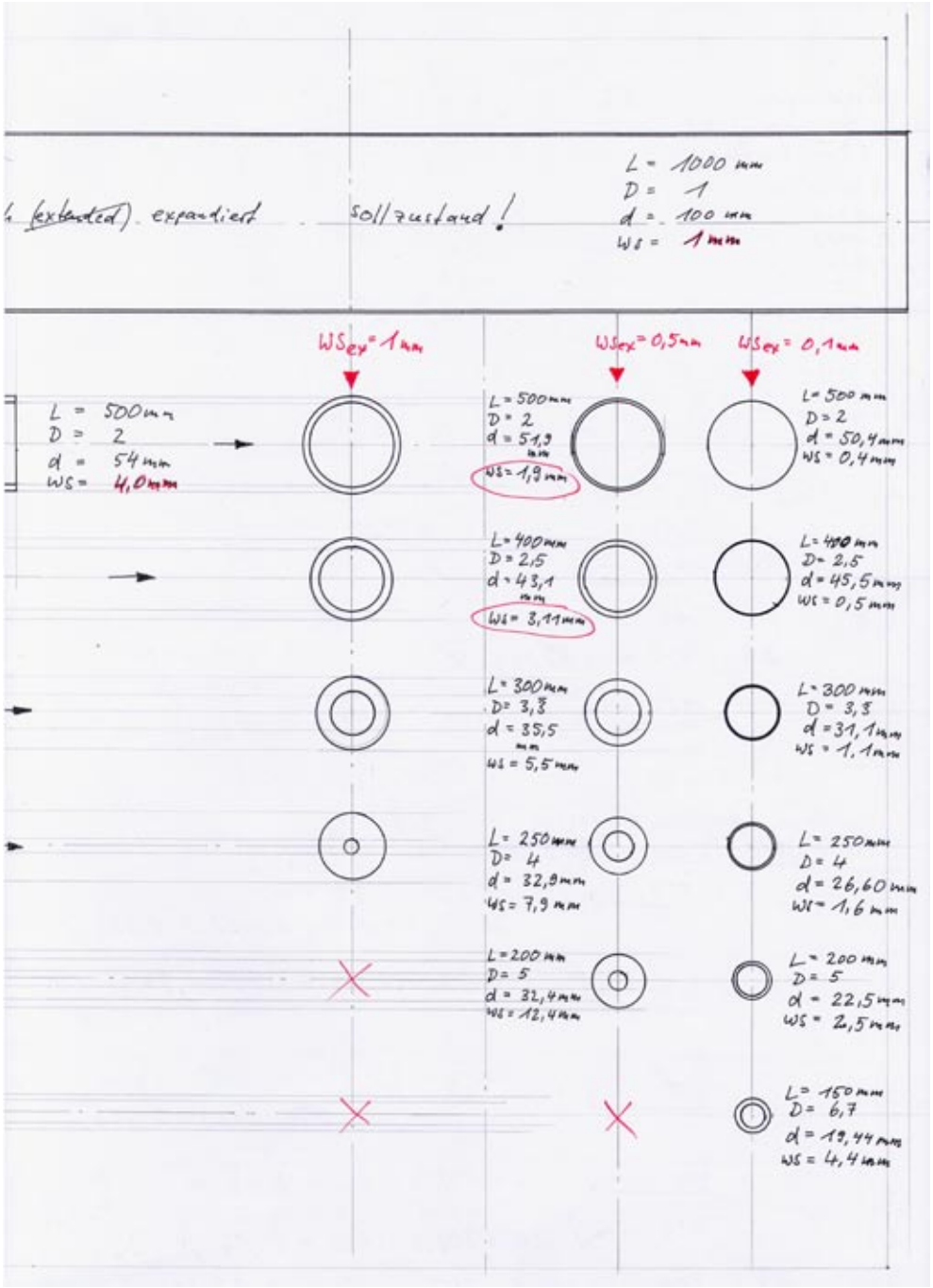
224 mm ideal! 284 mm gut! 334 mm / 294 mm (10 kgm.) schlecht!

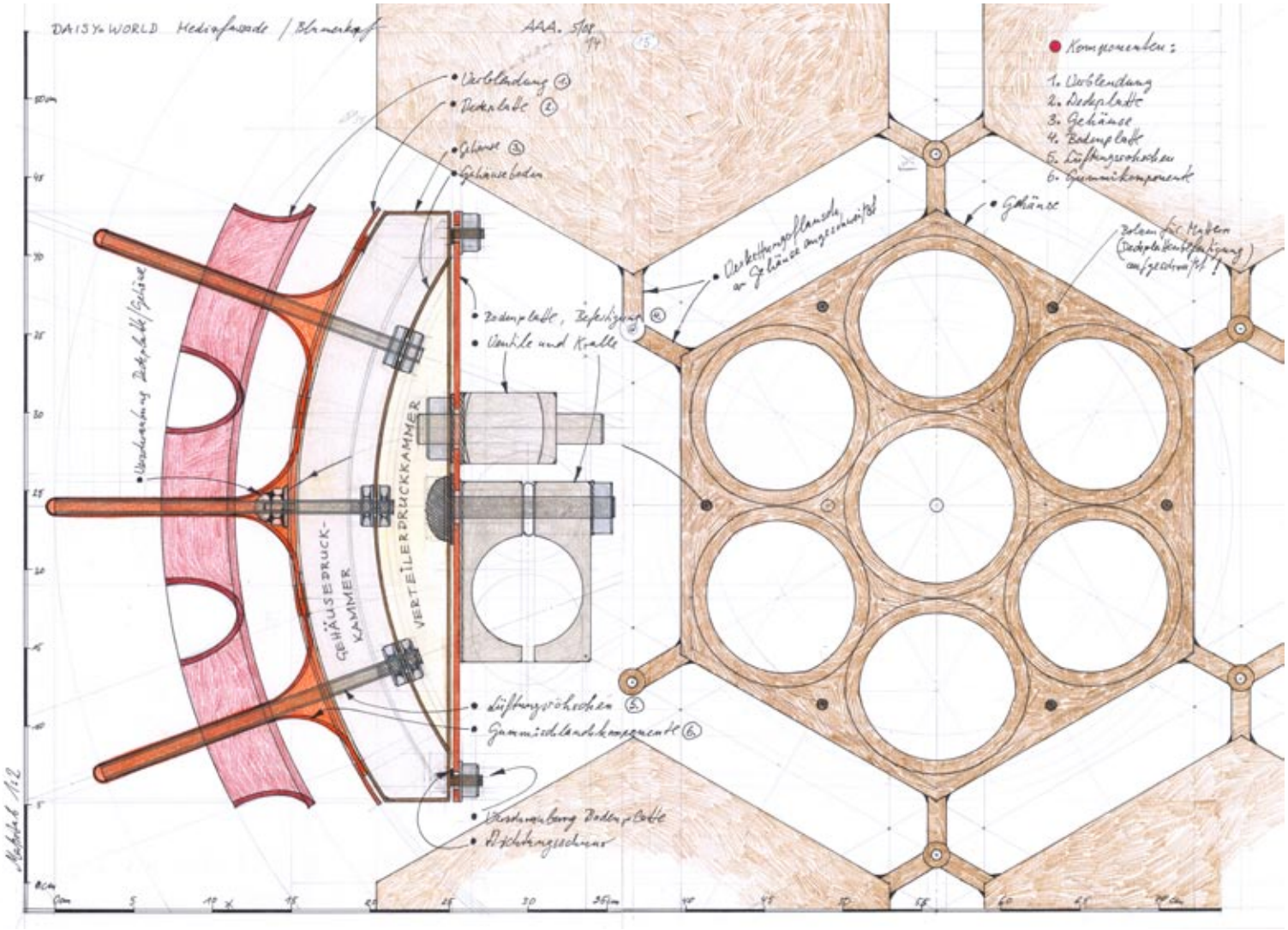
	$ws_{ex.}$	mm	0,70								
1.	V	mm	218.372,11								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{rel.}$	mm	84,97	90,26	92,79	94,28	95,25	95,95	96,46	96,86	97,18
4.	$ws_{ex.}$	mm	7,52	4,87	3,61	2,86	2,37	2,03	1,77	1,57	1,41
	$ws_{ex.}$	mm	0,60								
1.	V	mm	187.364,59								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{rel.}$	mm	87,26	91,70	93,85	95,11	95,94	96,53	96,97	97,31	97,59
4.	$ws_{ex.}$	mm	6,37	4,15	3,08	2,45	2,03	1,73	1,51	1,34	1,21
	$ws_{ex.}$	mm	0,50								
1.	V	mm	156.294,23								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{rel.}$	mm	89,50	93,13	94,89	95,94	96,62	97,12	97,48	97,76	97,99
4.	$ws_{ex.}$	mm	5,25	3,43	2,55	2,03	1,69	1,44	1,26	1,12	1,01
	$ws_{ex.}$	mm	0,40								
1.	V	mm	125.161,05								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{rel.}$	mm	91,69	94,54	96,03	96,76	97,31	97,70	97,99	98,21	98,39
4.	$ws_{ex.}$	mm	4,16	2,73	2,03	1,62	1,35	1,15	1,01	0,89	0,80
	$ws_{ex.}$	mm	0,30								
1.	V	mm	93.965,04								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{rel.}$	mm	93,83	95,93	96,96	97,58	97,99	98,28	98,49	98,66	98,80
4.	$ws_{ex.}$	mm	3,09	2,04	1,52	1,21	1,01	0,86	0,75	0,67	0,60
	$ws_{ex.}$	mm	0,20								
1.	V	mm	62.706,19								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{rel.}$	mm	96,92	97,30	97,68	98,39	98,66	98,85	99,00	99,11	99,20
4.	$ws_{ex.}$	mm	2,04	1,35	1,01	0,80	0,67	0,57	0,50	0,45	0,40
	$ws_{ex.}$	mm	0,10								
1.	V	mm	31.384,51								
	$L_{rel.}$	mm	100,00	150,00	200,00	250,00	300,00	350,00	400,00	450,00	500,00
2.	D	fach	10,00	6,67	5,00	4,00	3,33	2,86	2,50	2,22	2,00
3.	$d_{rel.}$	mm	97,98	98,66	99,00	99,20	99,33	99,43	99,50	99,56	99,60
4.	$ws_{ex.}$	mm	1,01	0,67	0,50	0,40	0,33	0,29	0,25	0,22	0,20

second draft calculations

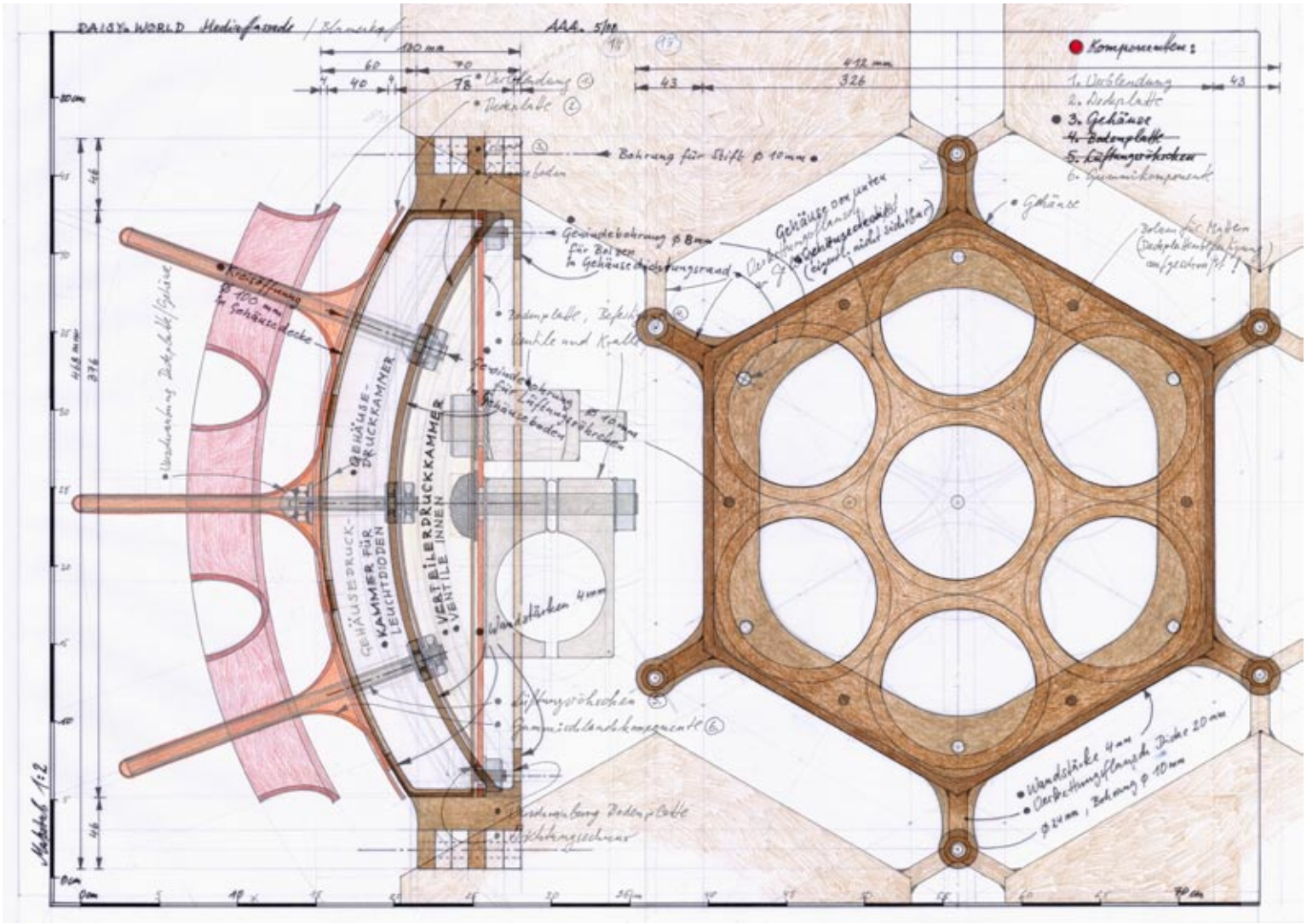
expansion parameters (example)


V = h · A
Abweichungen von 100 – 500 mm = L in 50 mm-Schritten:
• 0,0022 %
• 0,0125 %
• 0,0000 %
• 0,025 %
• 0,05 %
• 0,029
• 0,066 %
• 0,16 %
• 0,18 %
Probe !
Abweichung von 0,2 % bei 3 mm = 0,006 mm = nicht !
bei 40 mm = 0,08 mm = nicht !
1.) 0,6 mm d
2.) L = 200 mm
L = 100 mm
Δ = 2385,6 mm²
Diff = 4,1, Abw = 0,0022 %
3.) L = 150 mm
Δ = 1771 – 132 = 1590,6
Abweichung von 0,0125 %
V = 187.388,15 mm³, Diff = 23,6
Diff = 0
Abw = 0 %
4.) L = 250 mm
Diff = 47,1 => Abweich. = 0,025 %
5.) L = 300 mm
V = 187.458,83 mm³, Diff. = 94,2
Abw. = 0,05 %
6.) L = 350 mm
V = 187.419,56 mm³, Diff = 55,0
Abw. = 0,029 %
7.) L = 400 mm
Diff = 125,7, Abw = 0,06 %
8.) L = 450 mm
Diff = 306,3, Abw = 0,16 %
9.) L = 500 mm
Diff = 345,6, Abw = 0,18 %

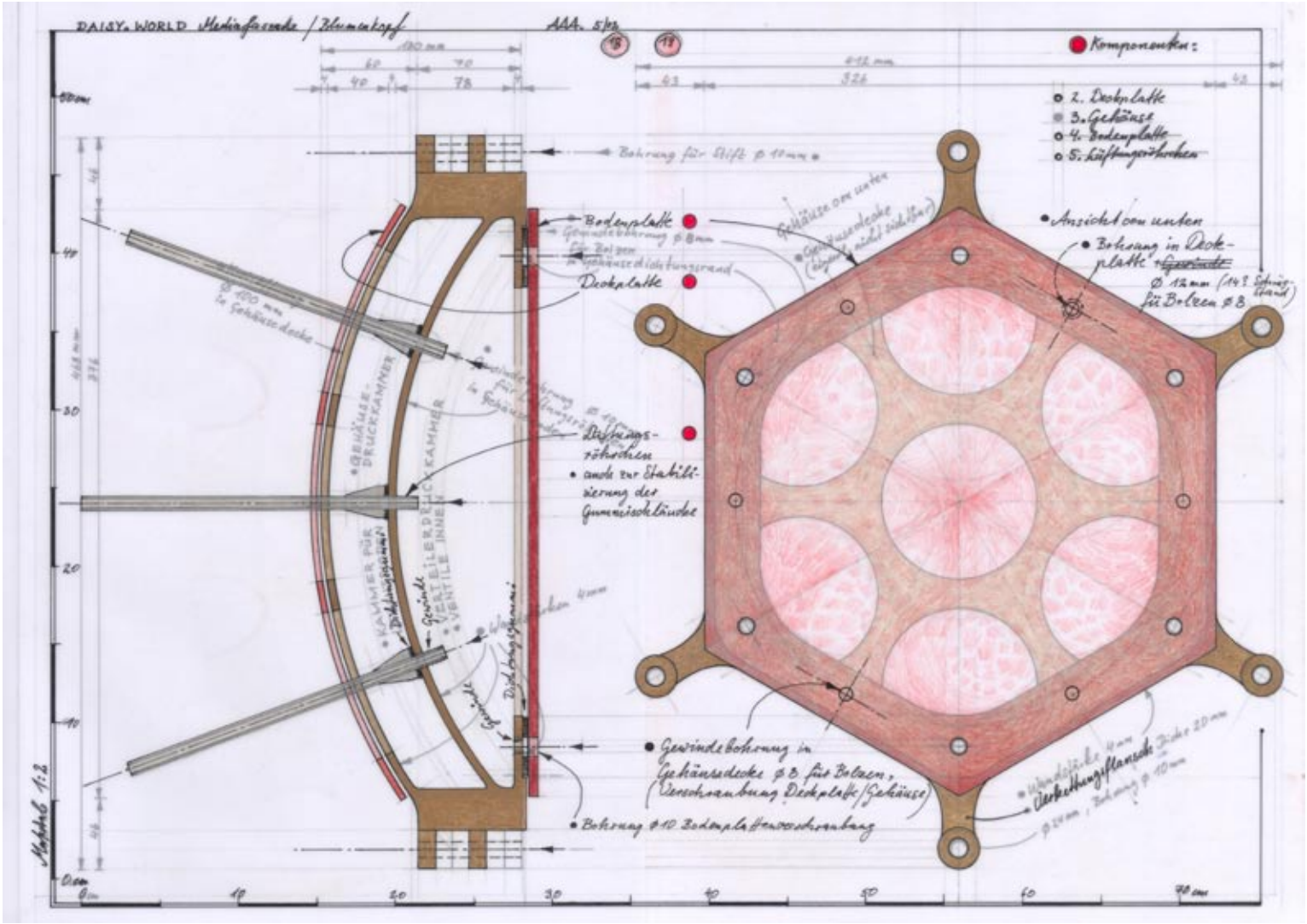

(extended) expandiert
Sollzustand!
L = 1000 mm
D = 1
d = 100 mm
WS = 1 mm
WSex = 1 mm
WSex = 0,5 mm
WSex = 0,1 mm
L = 500 mm
D = 2
d = 54 mm
WS = 4,0 mm
L = 500 mm
D = 2
d = 51,9 mm
WS = 1,9 mm
L = 500 mm
D = 2
d = 50,4 mm
WS = 0,4 mm
L = 400 mm
D = 2,5
d = 43,1 mm
WS = 3,11 mm
L = 400 mm
D = 2,5
d = 45,5 mm
WS = 0,5 mm
L = 300 mm
D = 3,3
d = 35,5 mm
WS = 5,5 mm
L = 300 mm
D = 3,3
d = 31,1 mm
WS = 1,1 mm
L = 250 mm
D = 4
d = 32,9 mm
WS = 7,9 mm
L = 250 mm
D = 4
d = 26,60 mm
WS = 1,6 mm
L = 200 mm
D = 5
d = 32,4 mm
WS = 12,4 mm
L = 200 mm
D = 5
d = 22,5 mm
WS = 2,5 mm
L = 150 mm
D = 6,7
d = 19,44 mm
WS = 4,4 mm



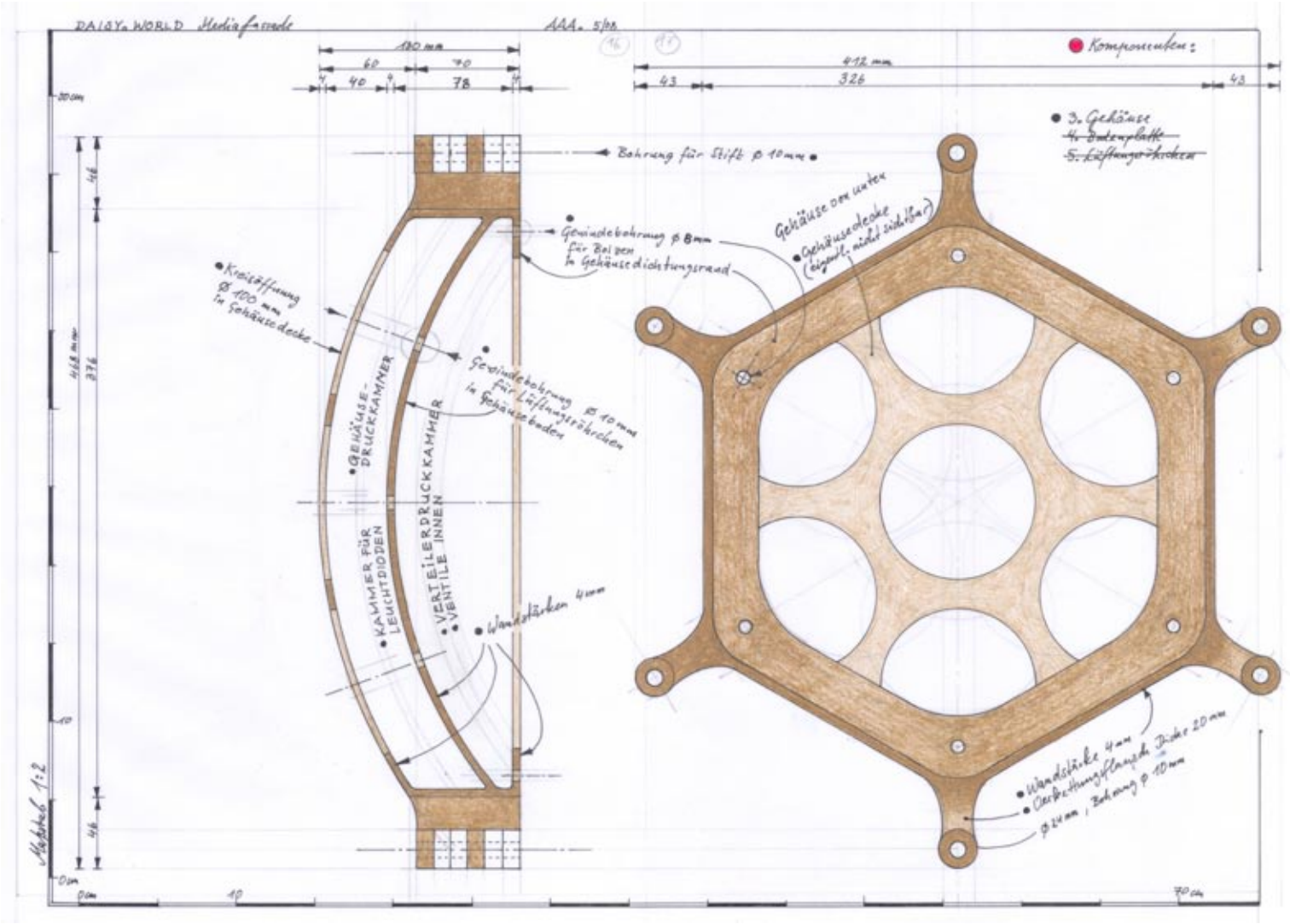
flower head construction plan (second draft)



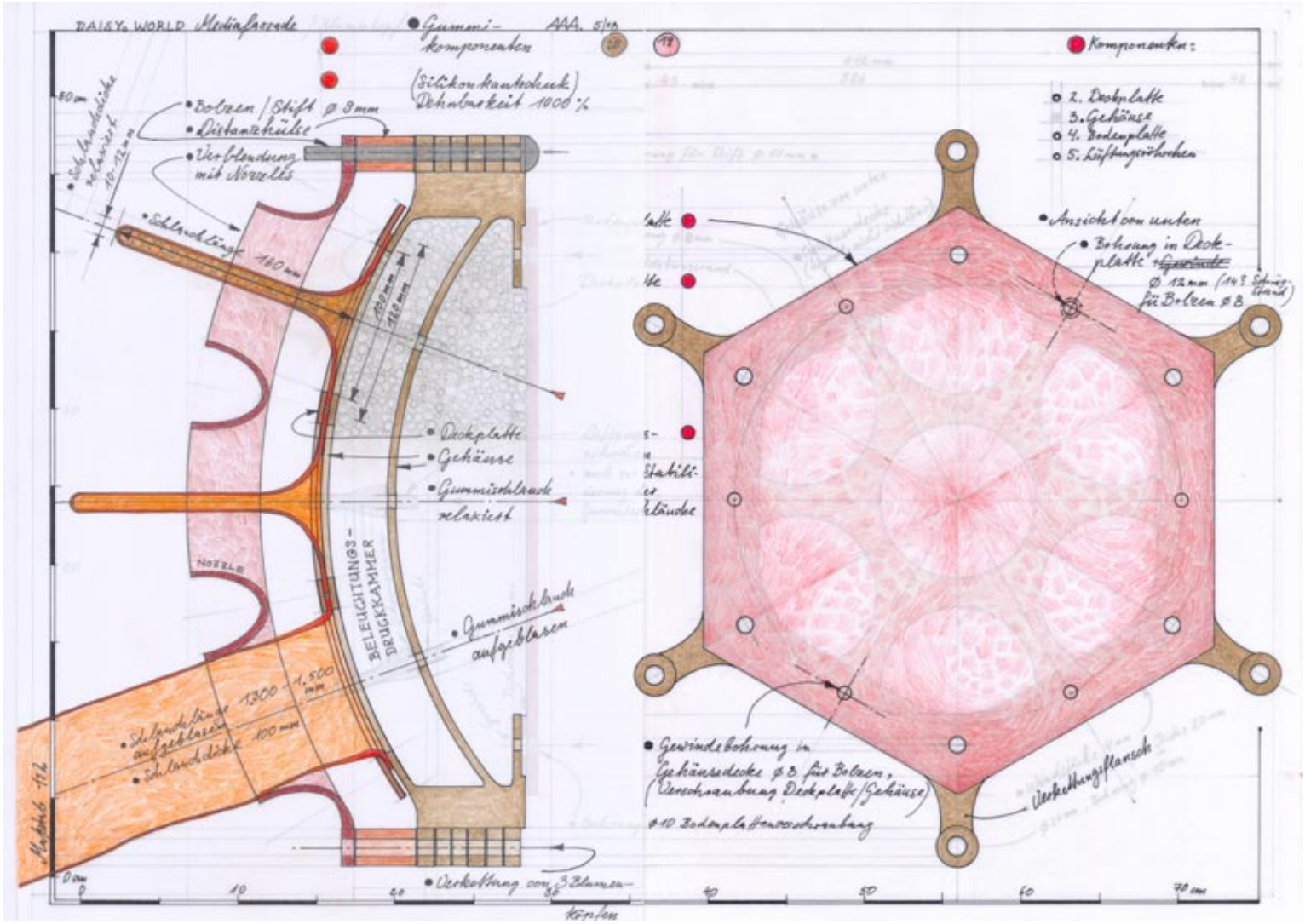
flower head construction plan (second draft)



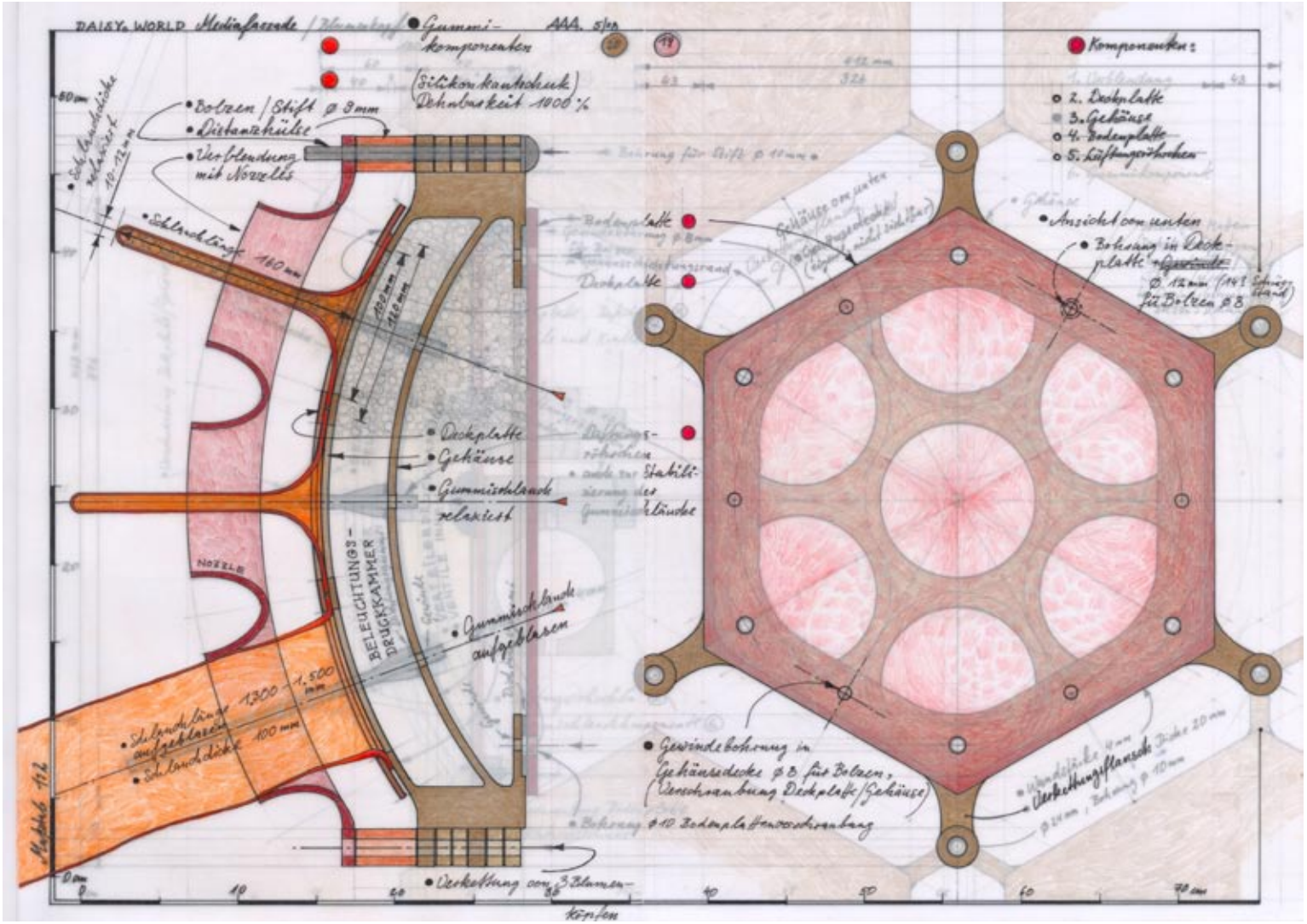
flower head construction plan (second draft)



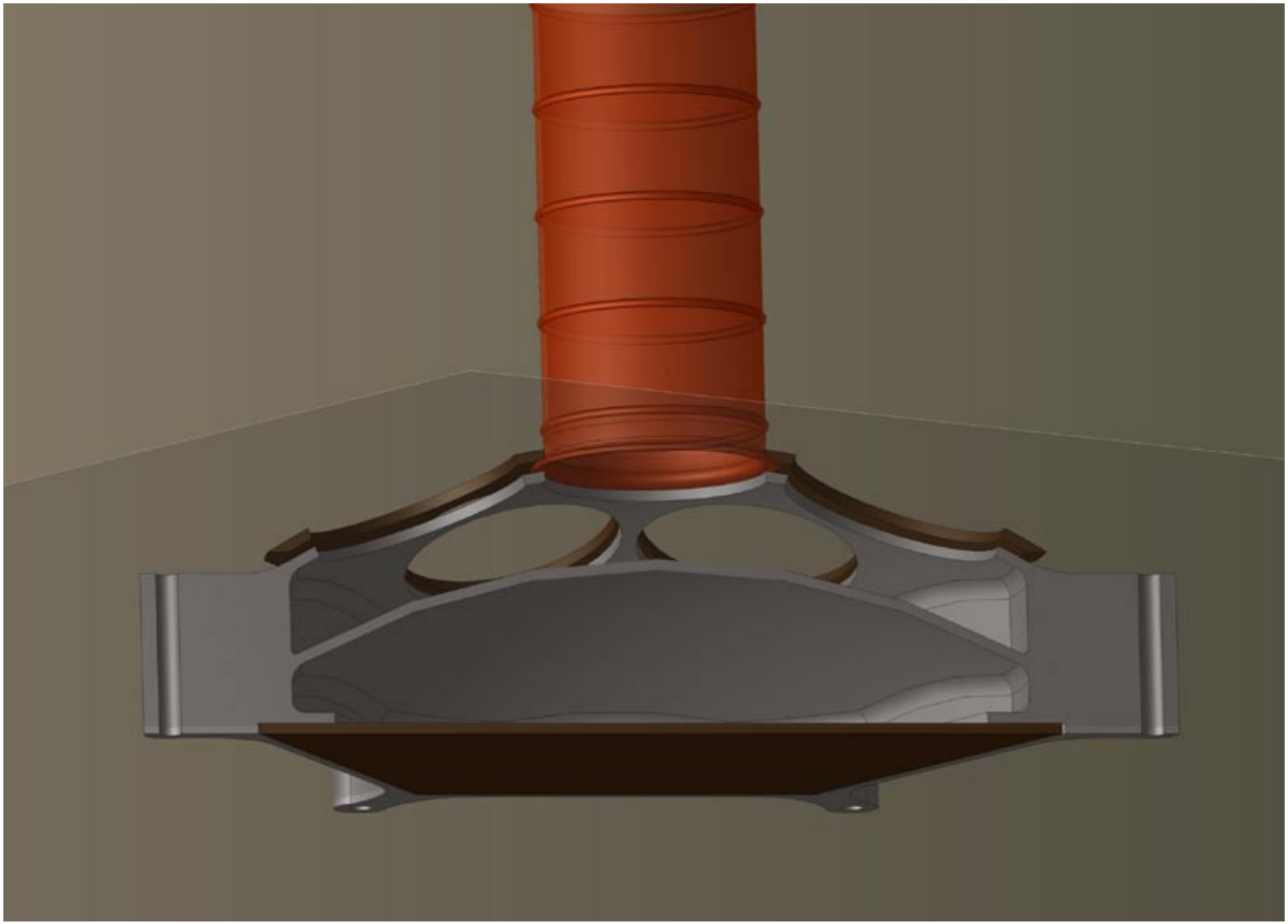
flower head construction plan (second draft)



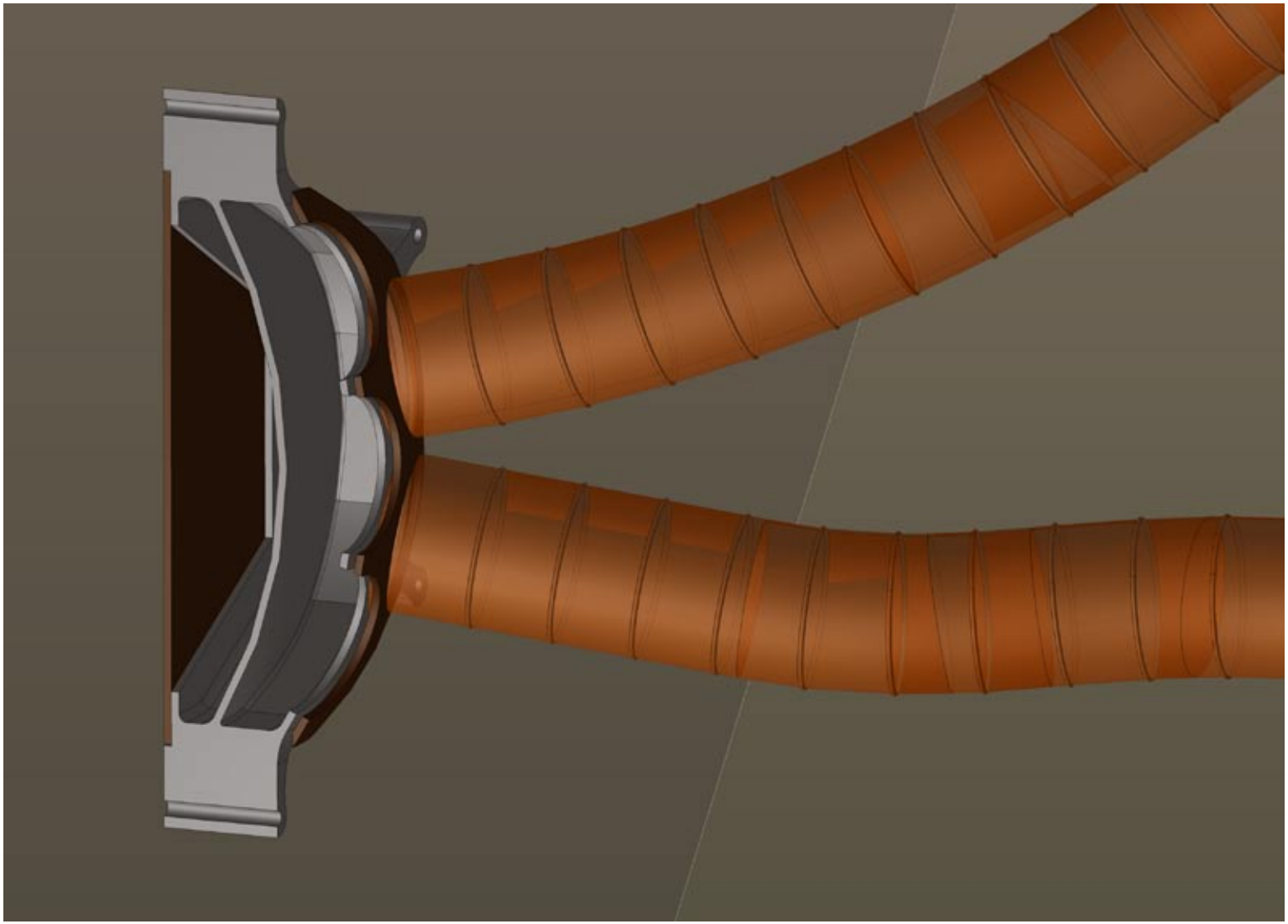
flower head construction plan (second draft)



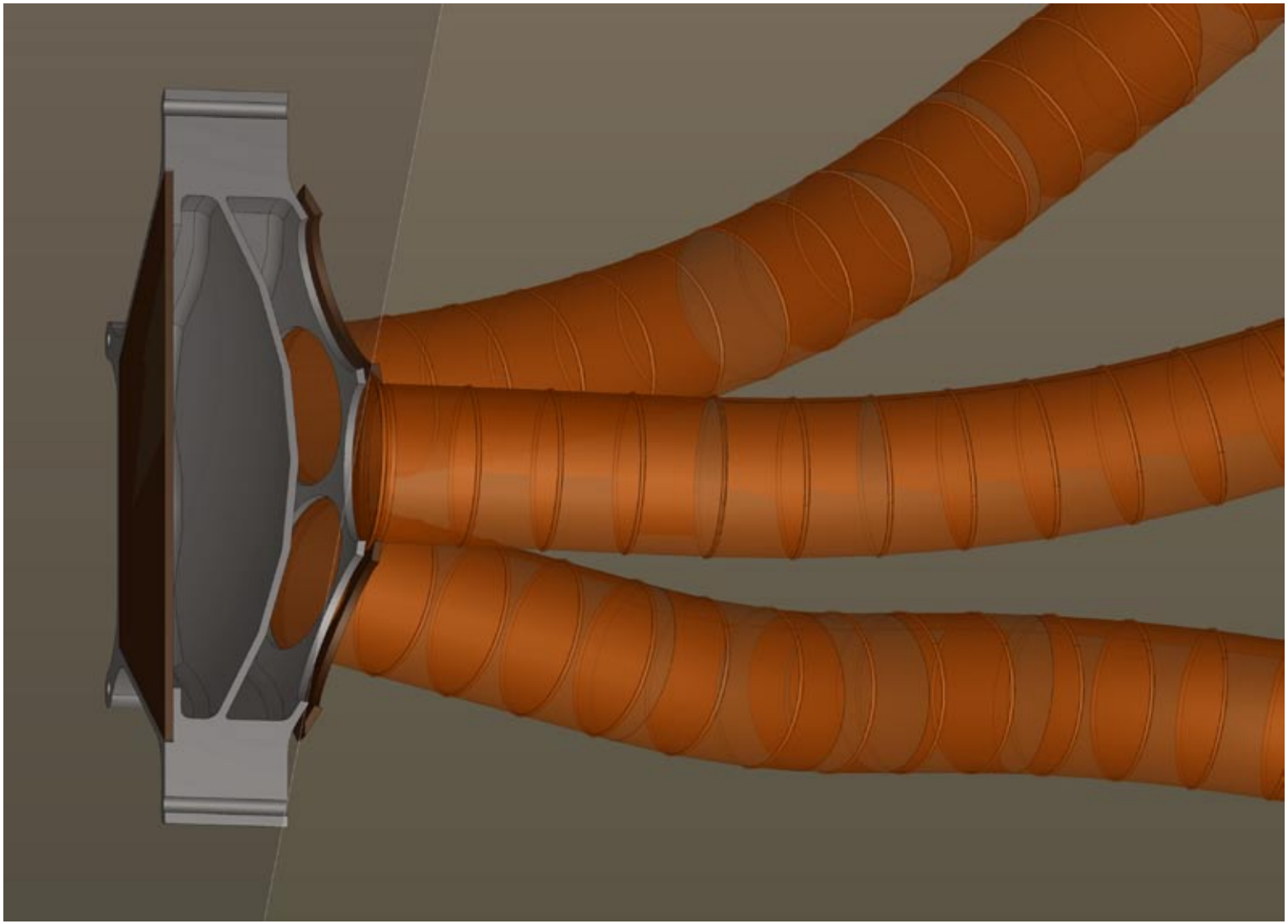
flower head construction plan (second draft)



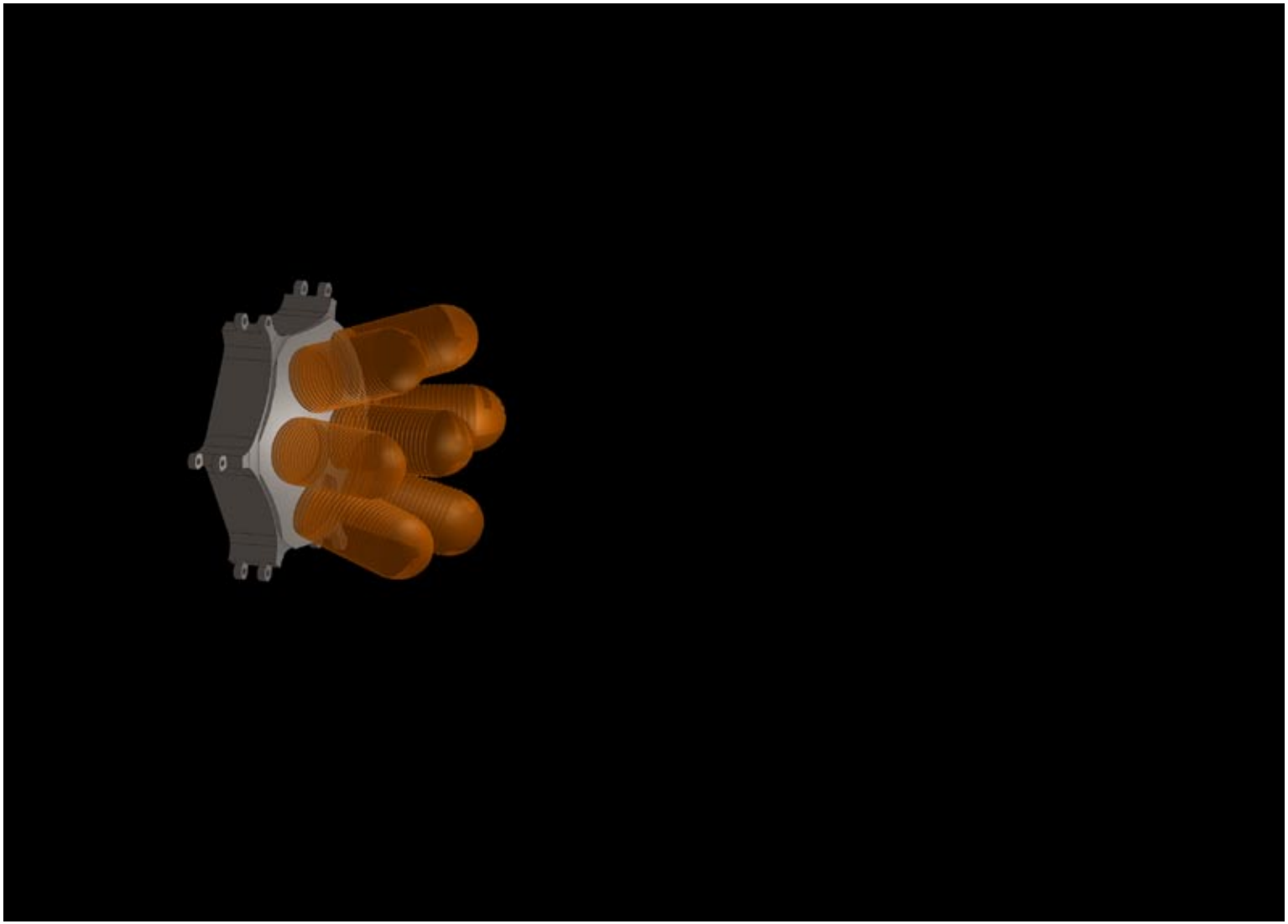
flower head structure, CAD visualization sectional view



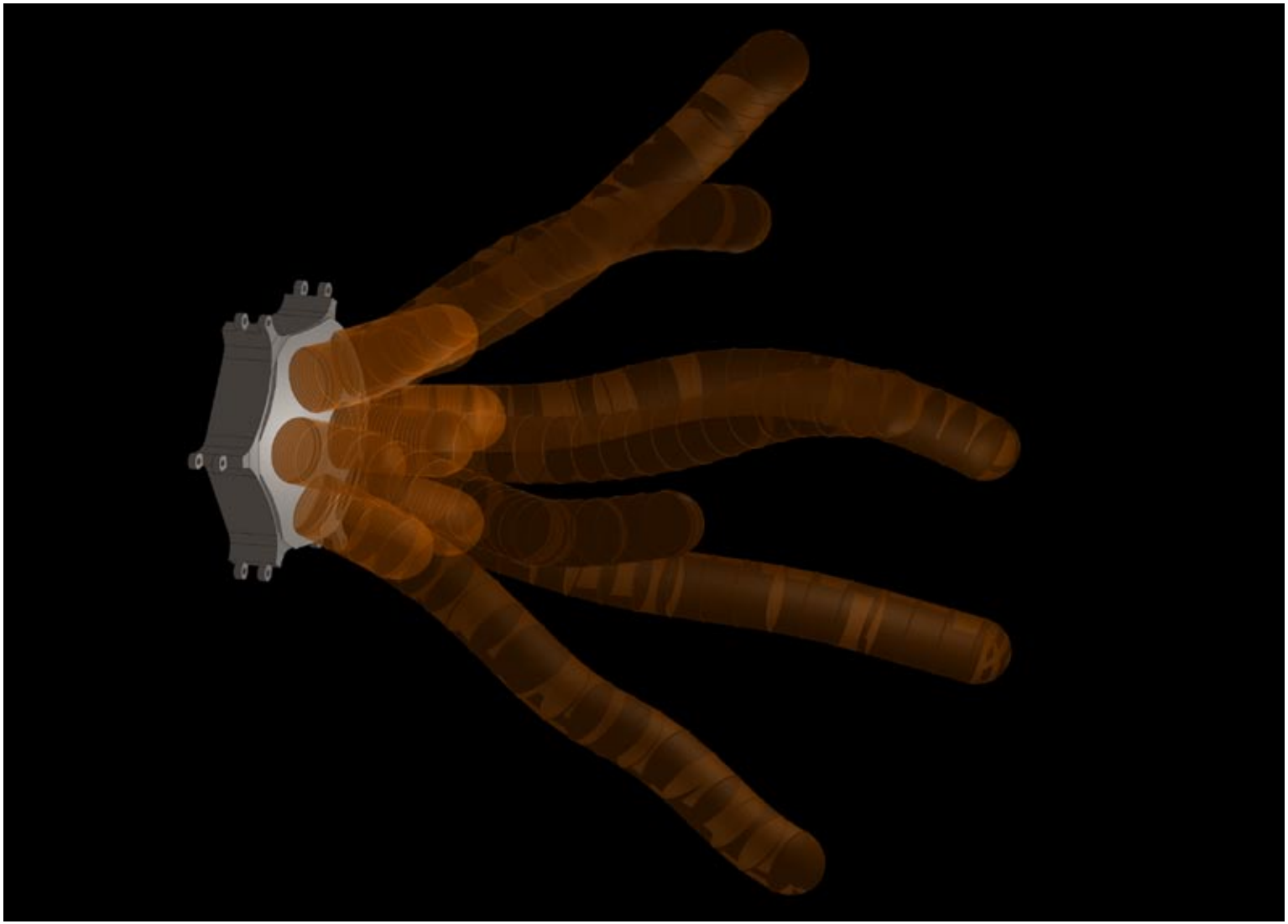
flower head structure, CAD visualization sectional view



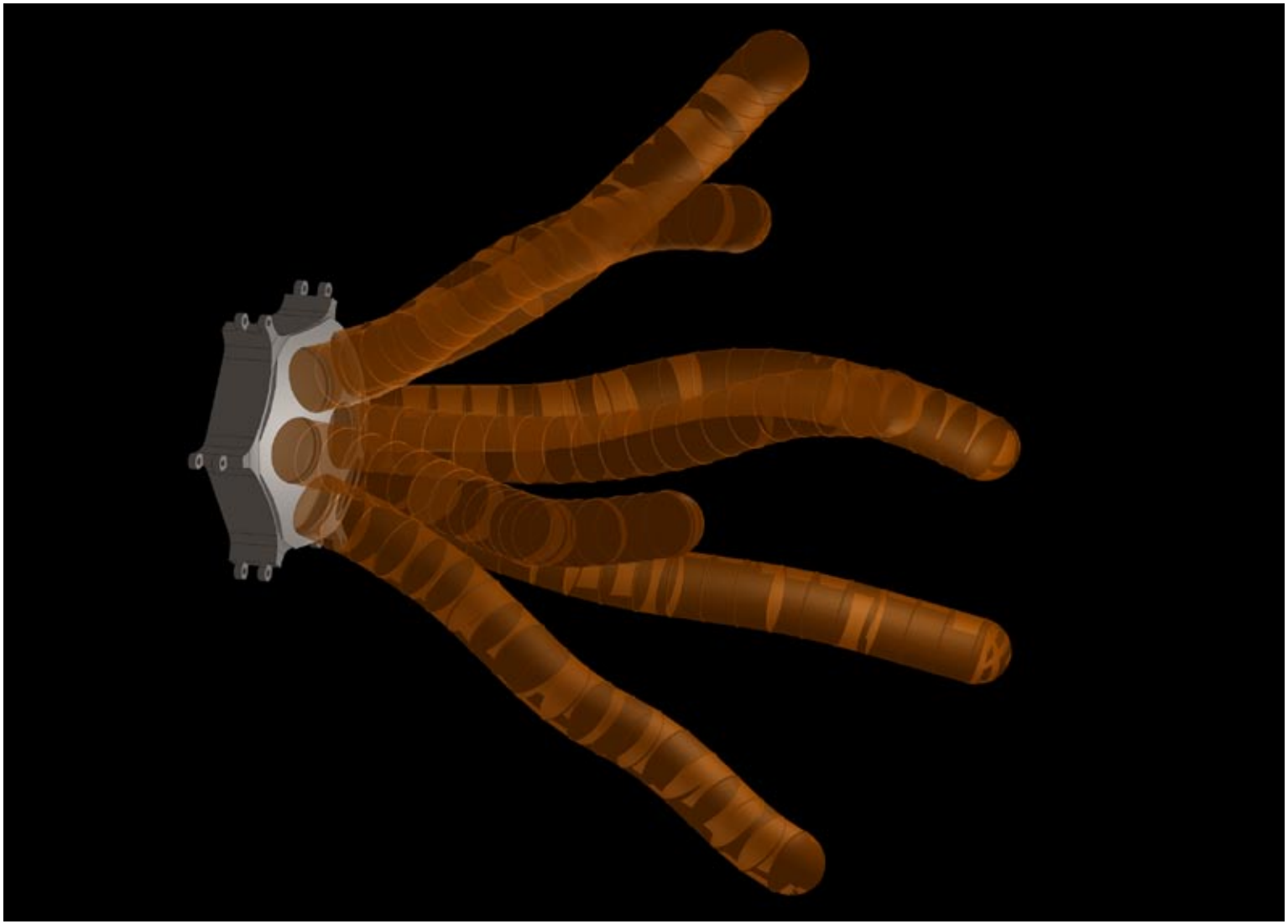
flower head structure, CAD visualization sectional view



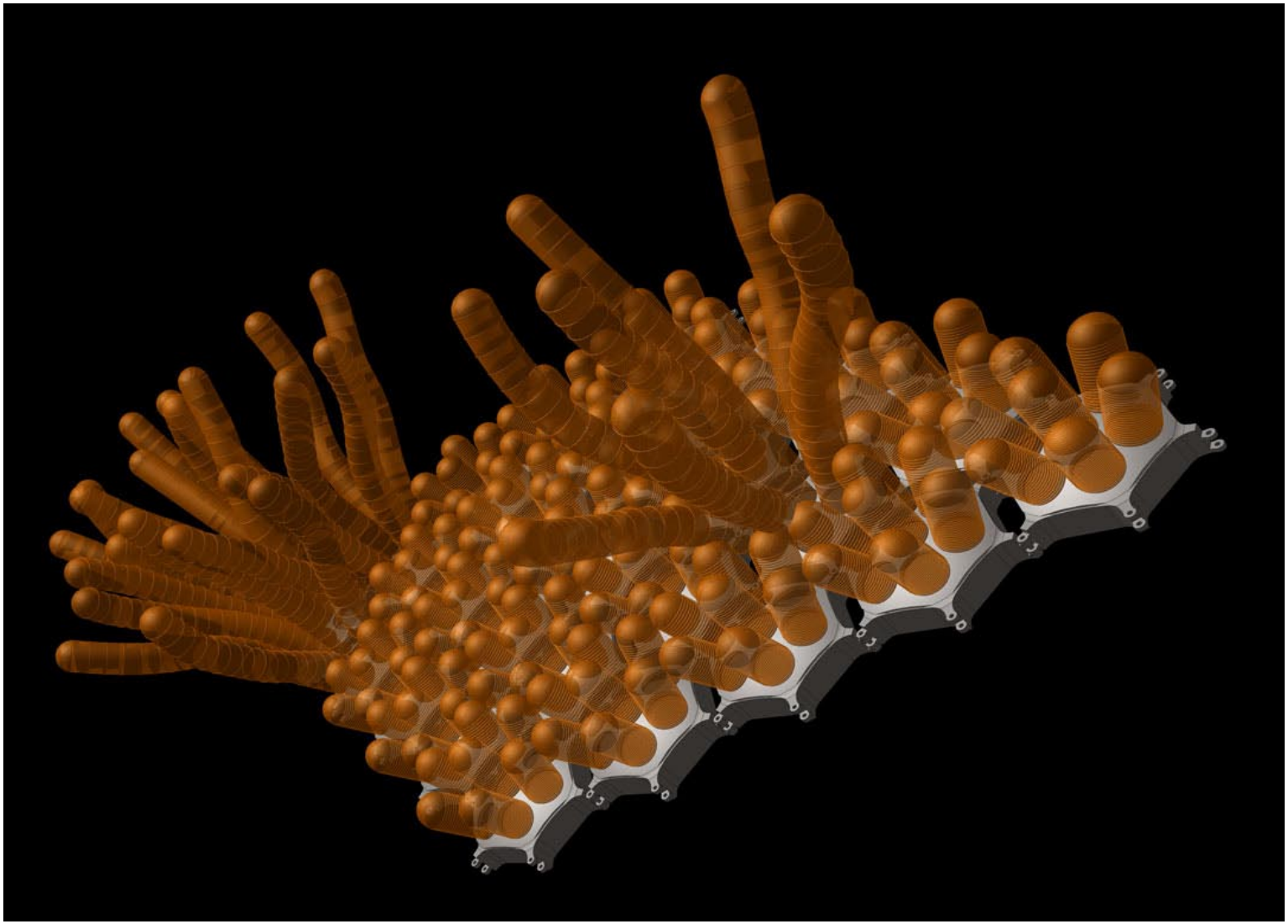
flower head with relaxed rubber tubes, CAD visualization



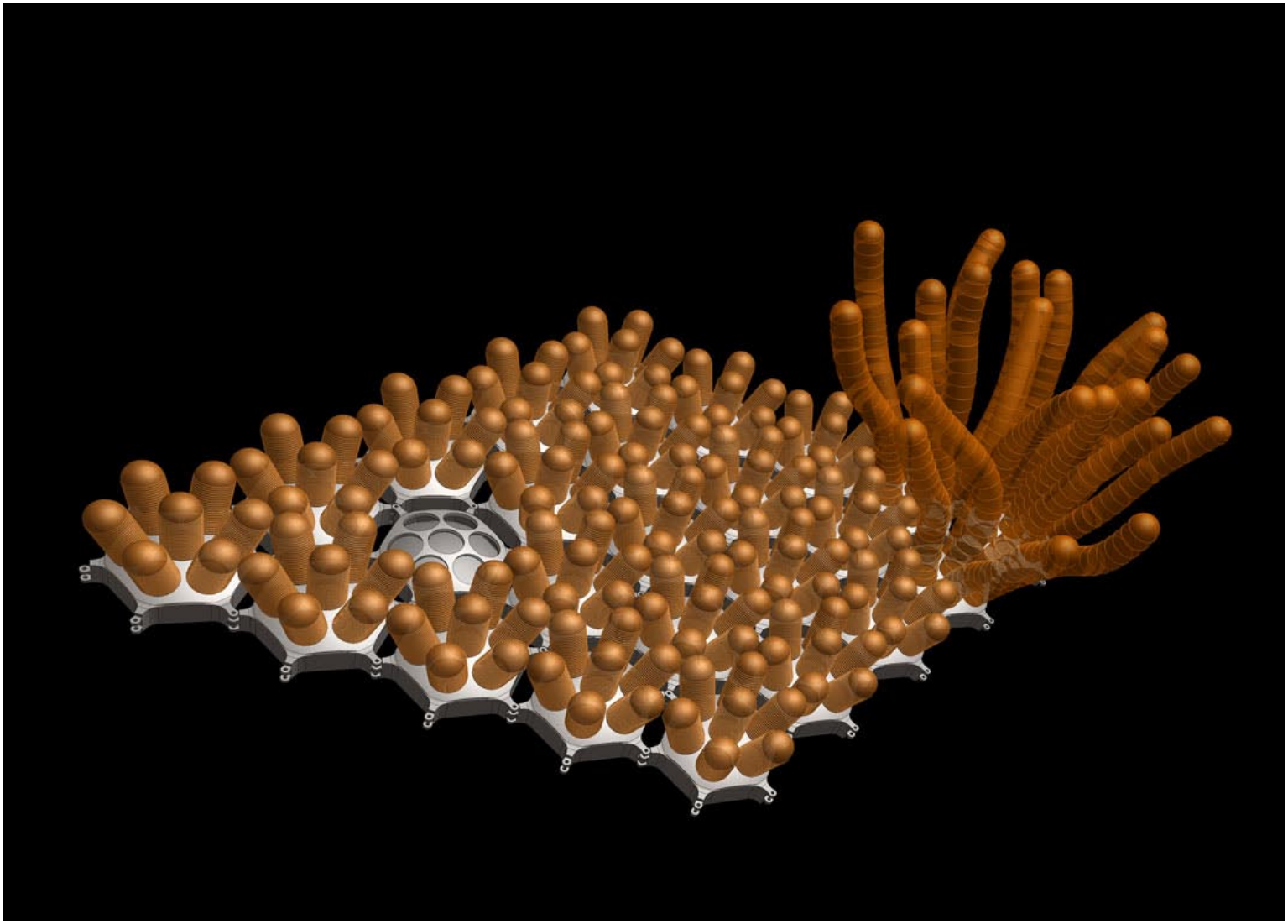
flower head with relaxed/extended rubber tubes, CAD visualization



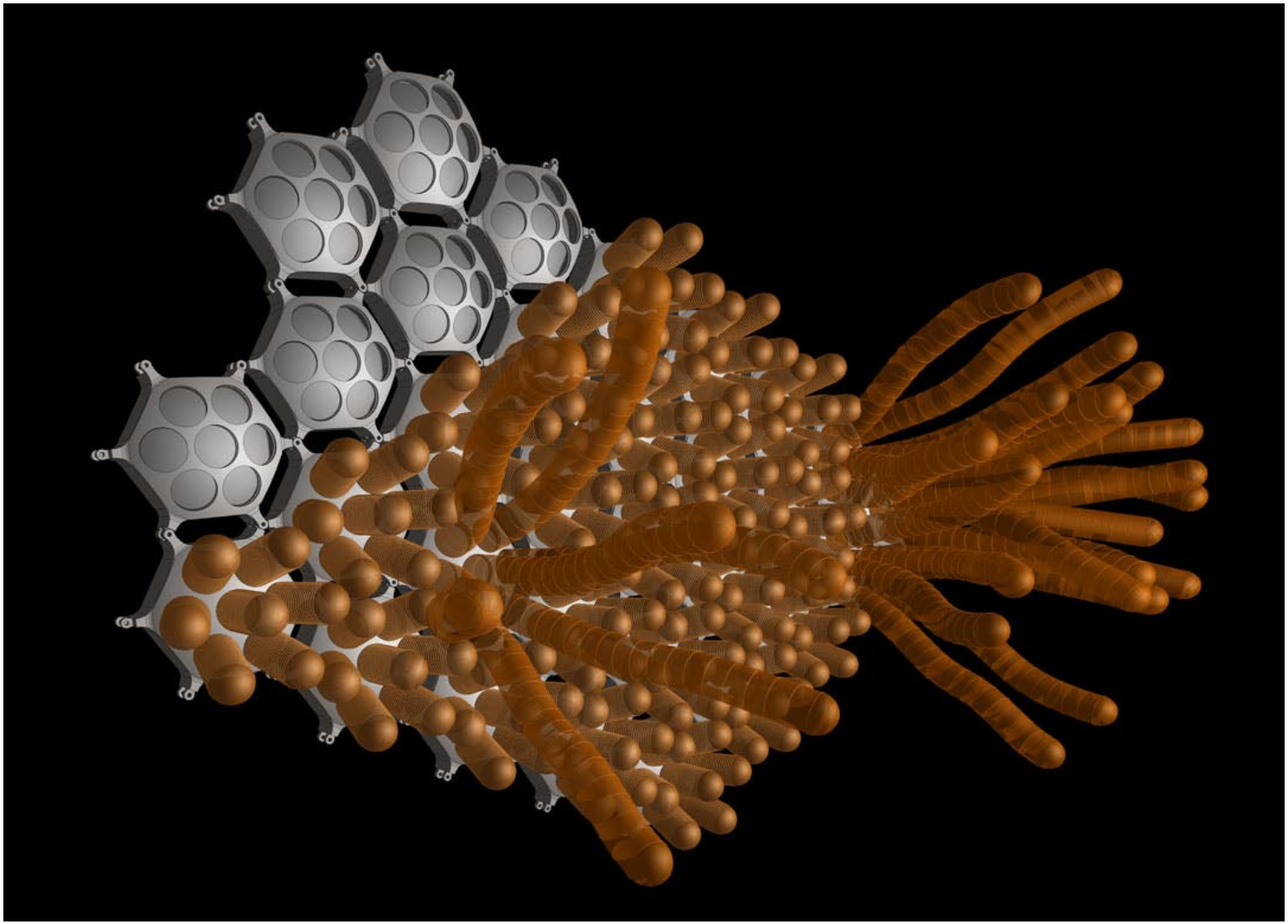
flower head with extended rubber tubes, CAD visualization



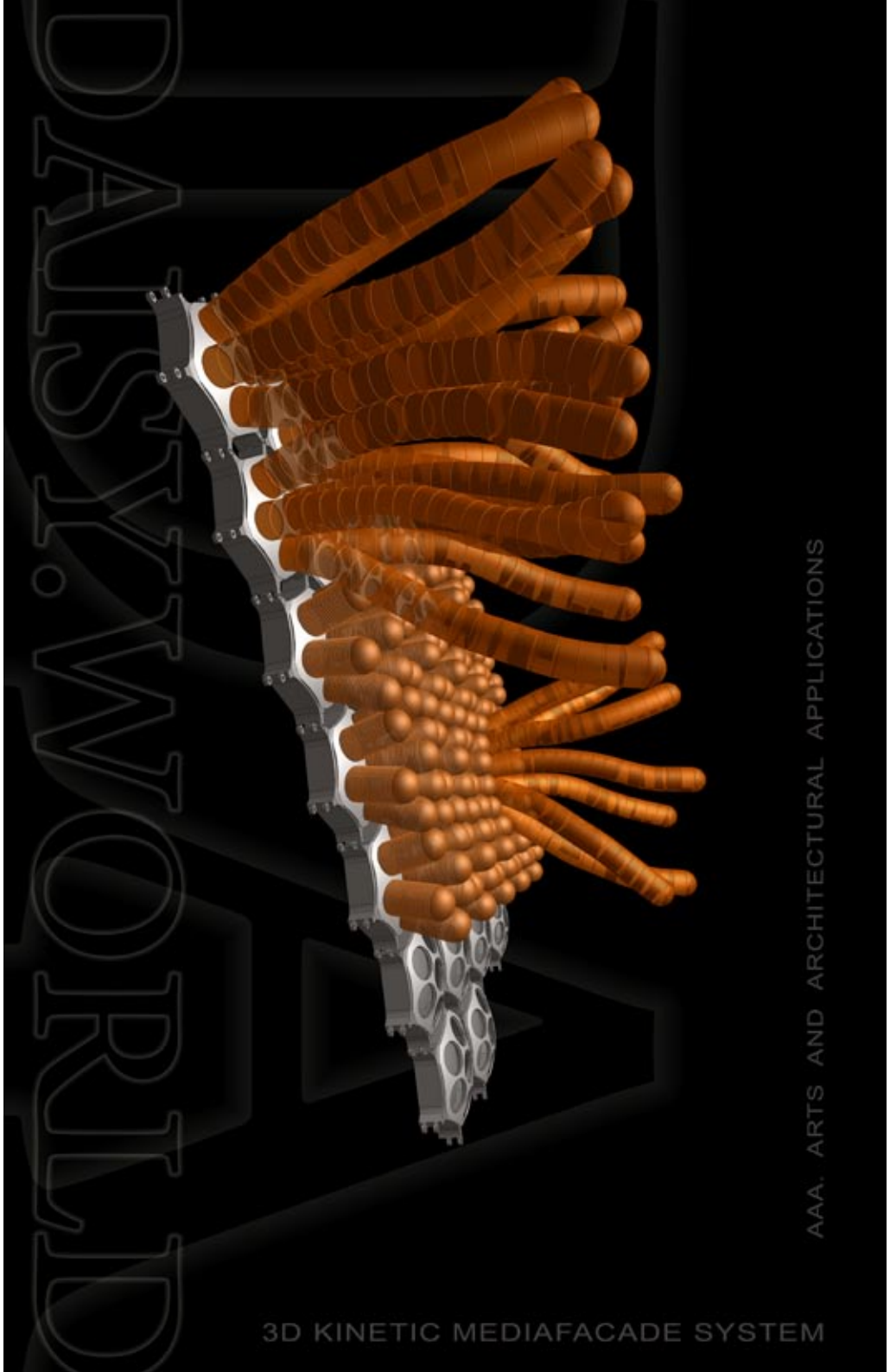
field of interlinked flower heads, CAD visualization



field of interlinked flower heads, CAD visualization

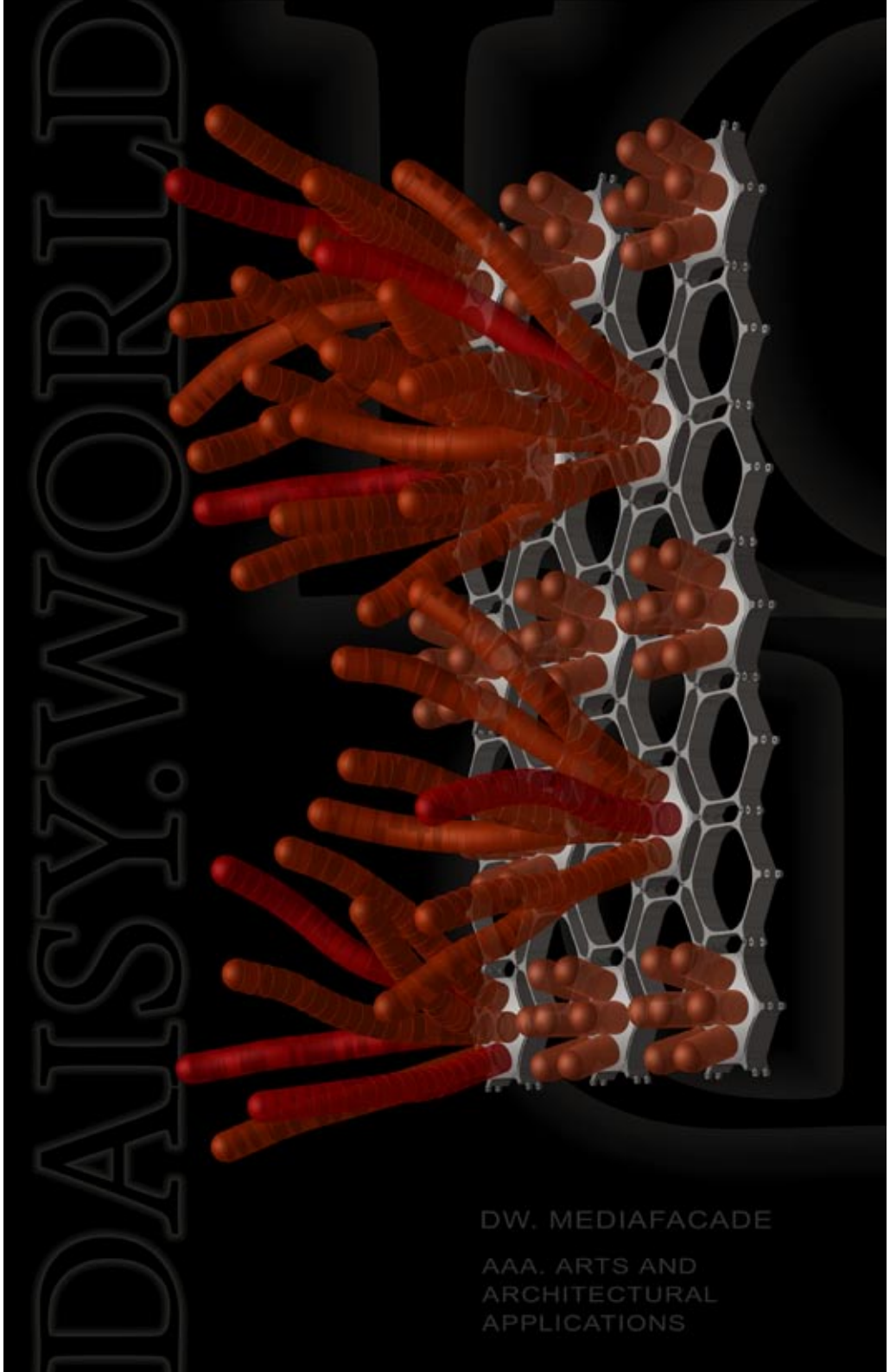


field of interlinked flower heads, CAD visualization

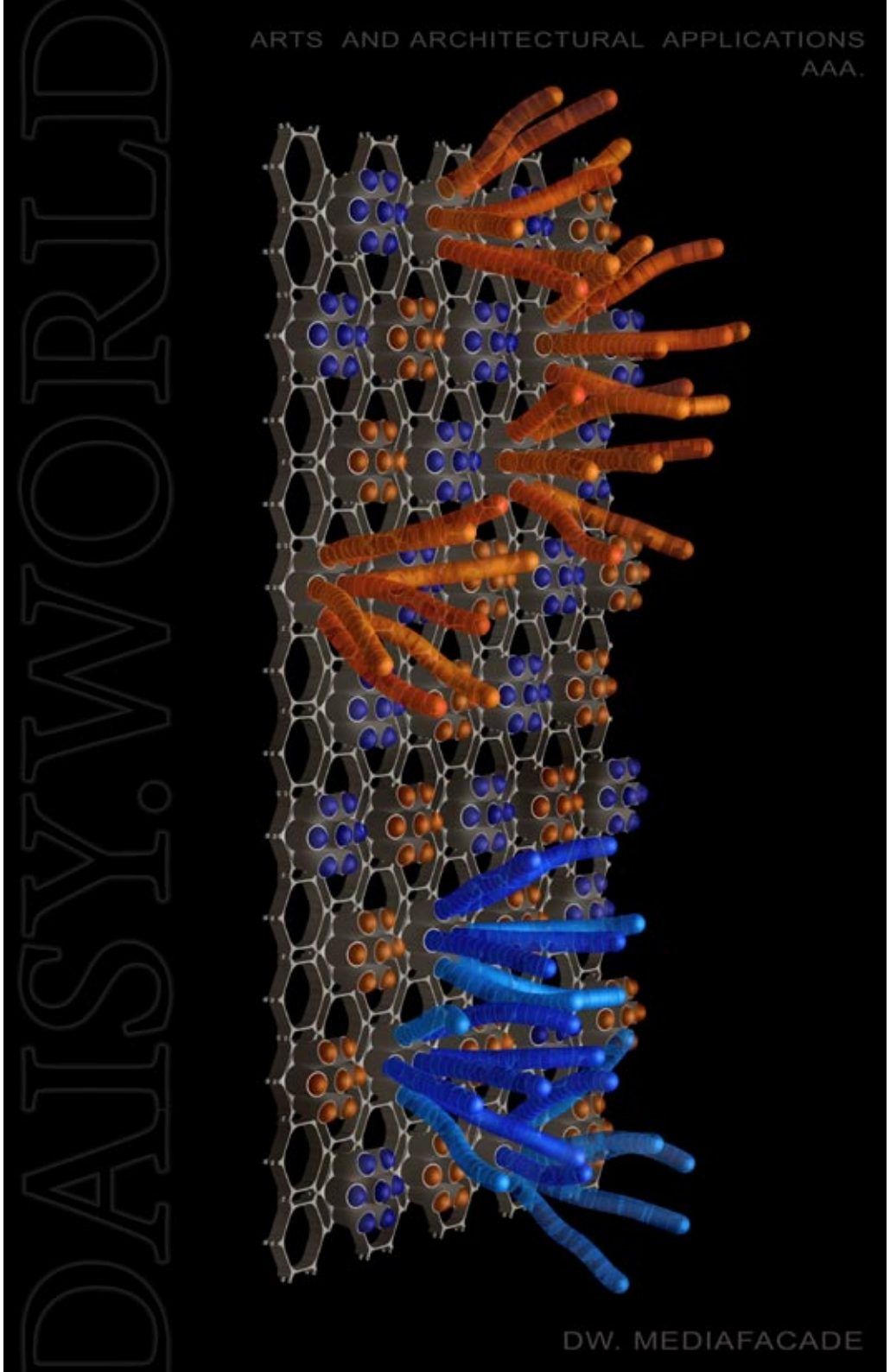


CAD visualization

field of interlinked flower heads

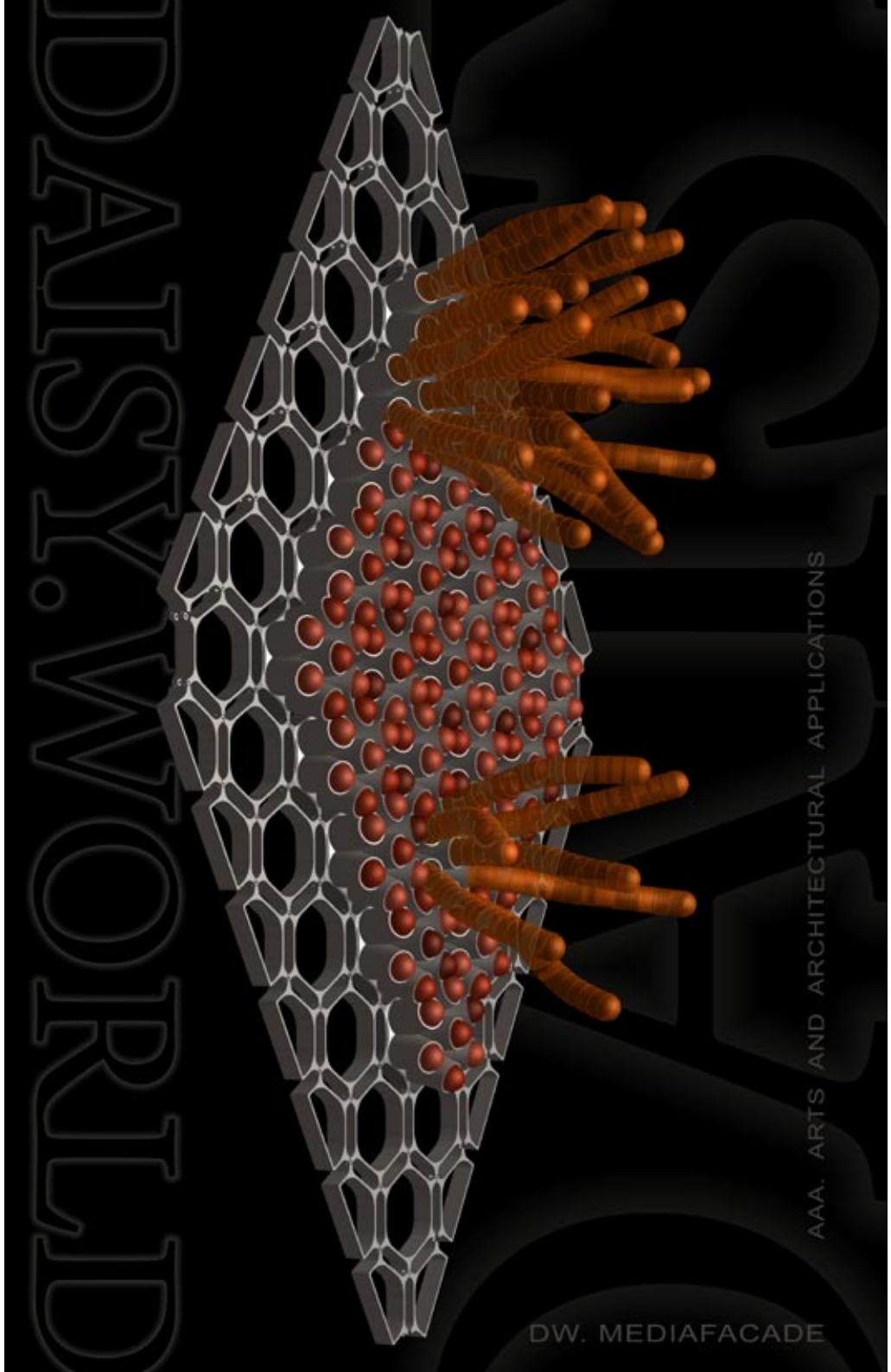


CAD visualization



CAD visualization

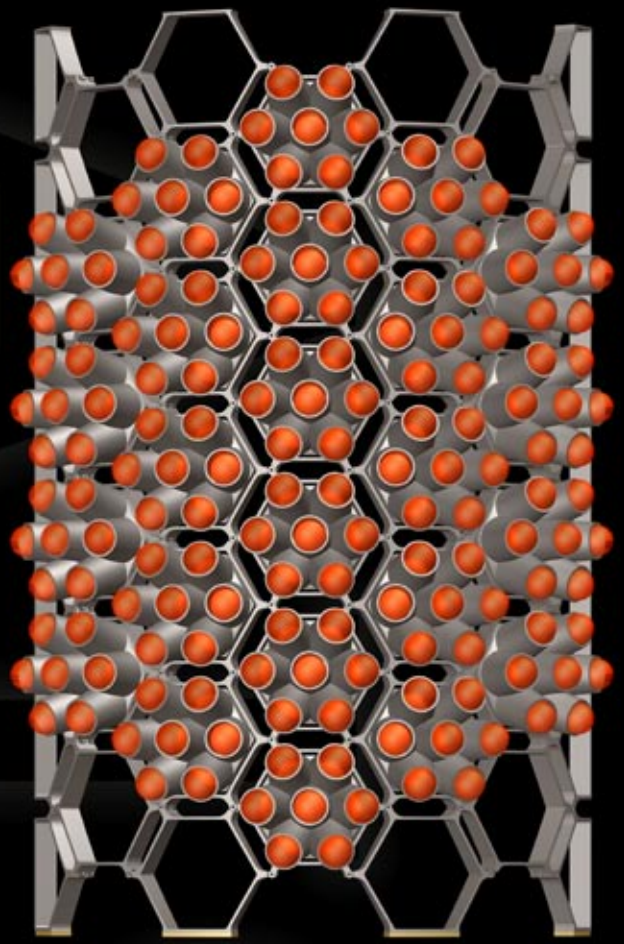
DW. mediafacade wall



CAD visualization

sculptural application

AAA. ARTS AND
ARCHITECTURAL APPLICATIONS



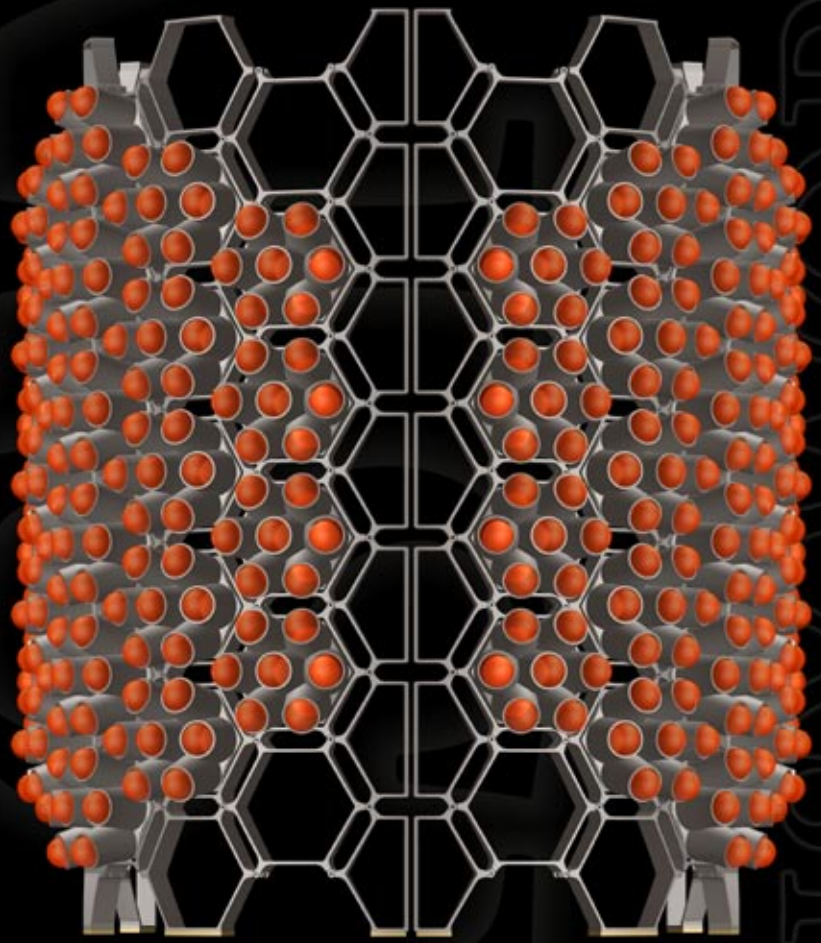
DW. MEDIAFACADE

DAISY.WORLD

CAD visualization

kinetic sculptural object

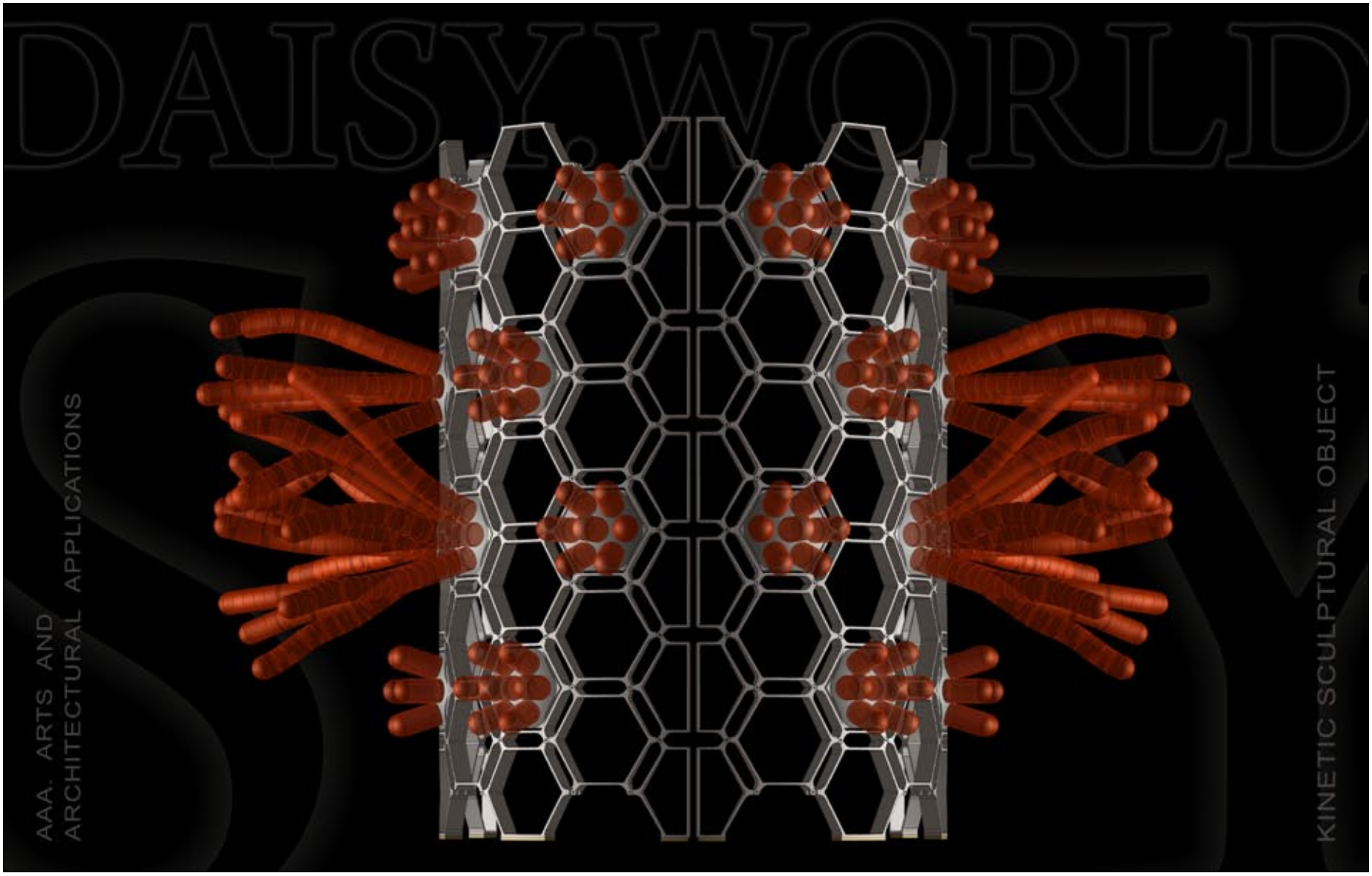
AAA. ARTS AND
ARCHITECTURAL APPLICATIONS



DW. MEDIAFACADE

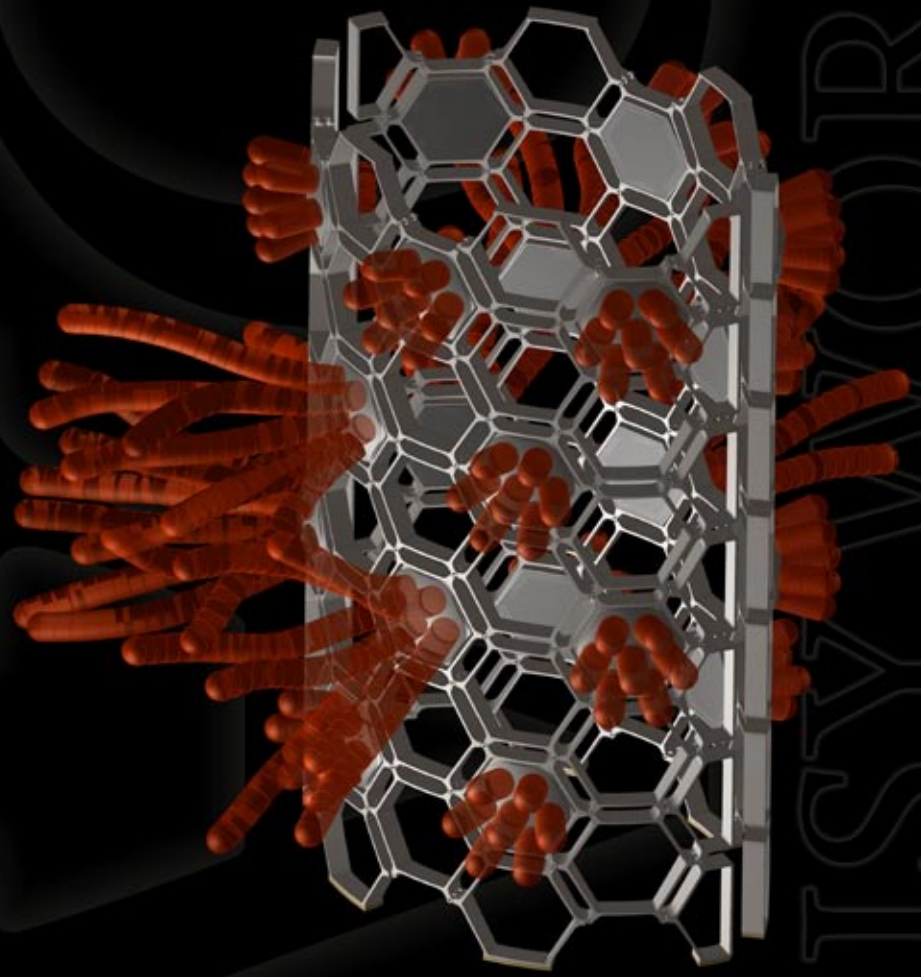
CAD visualization

kinetic sculptural object



kinetic sculptural object

AAA. ARTS AND
ARCHITECTURAL APPLICATIONS

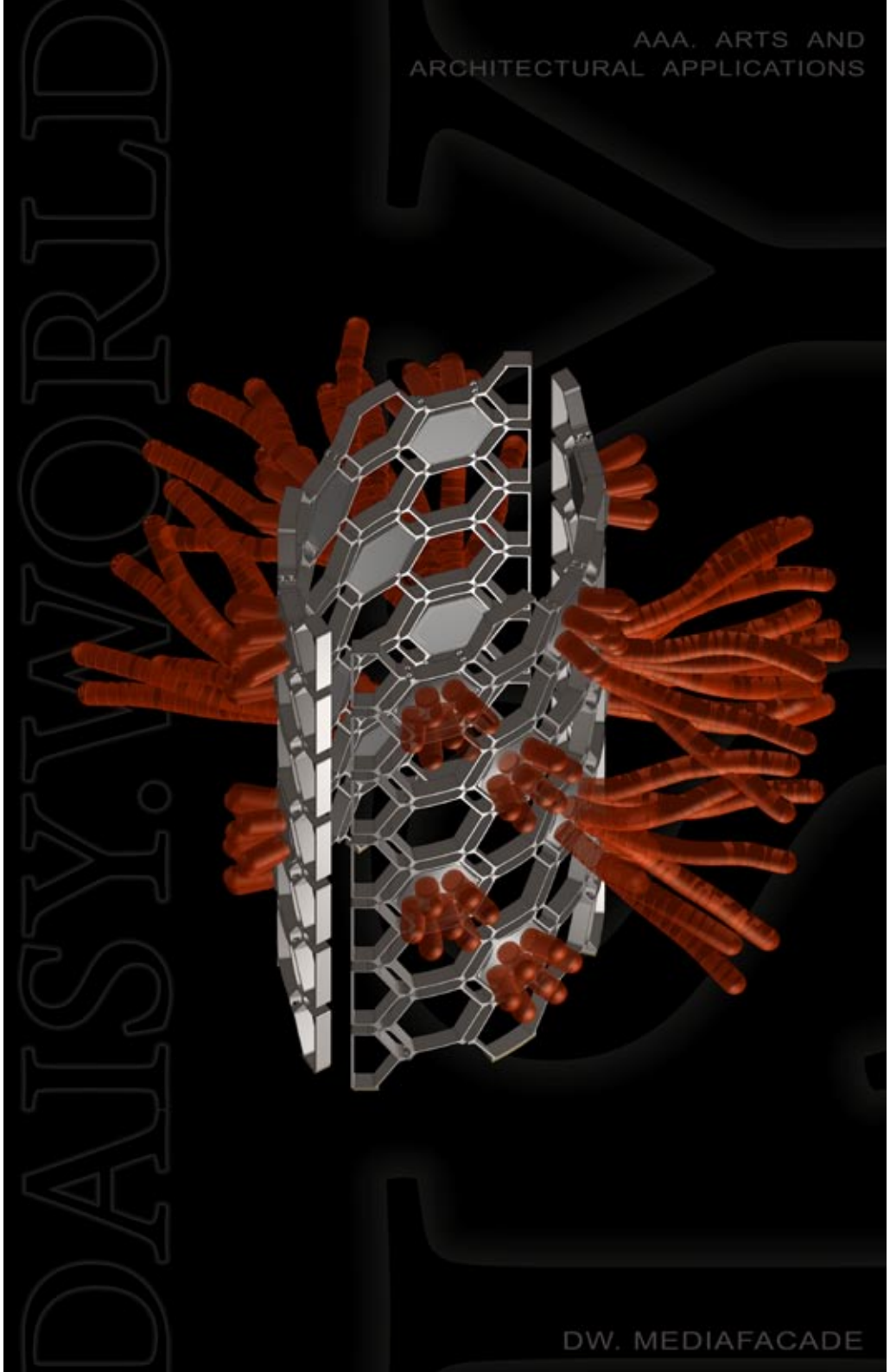


DAISY.WORLD

DW. MEDIAFACADE

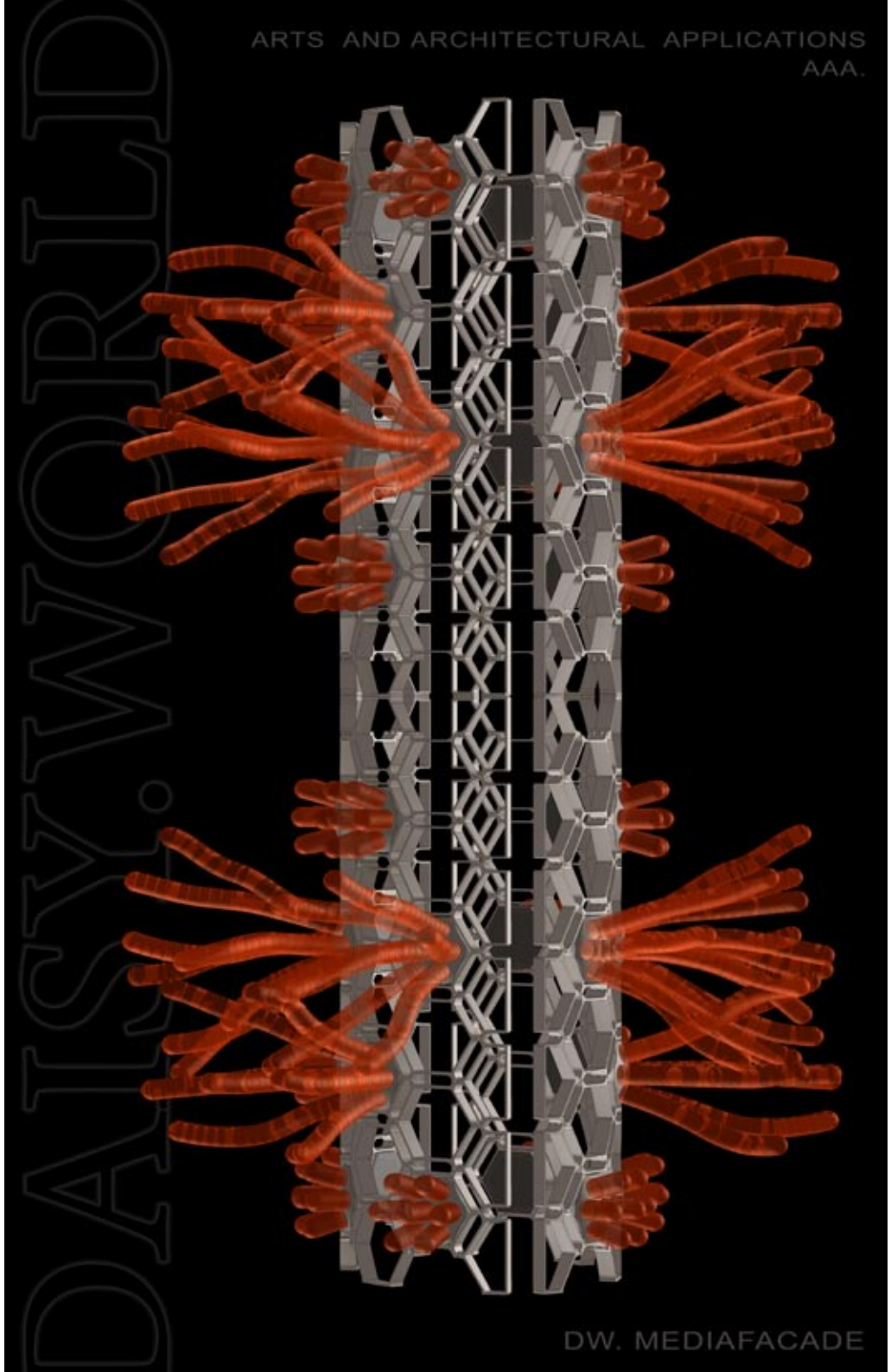
CAD visualization

kinetic sculptural object



CAD visualization

kinetic sculptural object



CAD visualization

kinetic sculptural object

DAISY.WORLD.PROJECT. 2008

Outline

DAISY.WORLD is the simulation of an artificial self-monitoring ecosystem placed on an urban structure.

Comparable to the rules in nature the computer simulation calculates the dynamic growth behavior of two artificial flower populations.
Both species and the outer conditions are interlinked in feedback loops to a complex network of interaction - a permanent DRIFT, a spreading and retreat, an incessant self-balancing to adapt to every outer change
- finally the idea of assertiveness and will power without supreme intervention.
LIFE.
.

DAISY.WORLD will be a colorful performance, a fancy dynamic movement of large flower landscapes growing over the surface of a city building.

In symbolic way nature conquers the habitat of men, and man becomes again a part of it.

DAISY.WORLD evokes a sensibility for the fragile balance and the coherence of all aspects of our living world.
.

The concept is related to a classic scientific experiment, a computer simulation by James Lovelock the father of the GAIA-theory.

internet presentation:

www.daisyworldproject.de

(broadband + screen 1280 x 1025 + sound, please!)

full English concept download:
go to DOWNLOAD.CENTER
(external link)

about my way and my work:
go to PERSONAL

project history until now:
go to CONCEPT/GENESIS

.

Weblinks:

*www.**illuminateproductions**.co.uk*
*www.**coca**now.org*
*www.**mediaarchitecture**.org/*

*www.en.wikipedia.org/wiki/**Gaia-Hypothese***
*www.en.wikipedia.org/wiki/**Daisyworld***
*www.en.wikipedia.org/wiki/**James_Lovelock***
*www.en.wikipedia.org/wiki/**Lynn_Margulis***

Exhibitions and projects introducing the DAISY.WORLD mediafacade to the public:

InterActive: New Technologies in Contemporary Architecture, Bernoudy Gallery of Architecture, Saint Louis, Missouri/USA, curated by Jasmin Aber, Dipl. Ing. R.A., Institute of Urban & Regional Development, UC Berkeley California.
12. September - 24. January 2009
.

MEDIA FACADES FESTIVAL BERLIN 2008,
German Centre for Architecture (DAZ) Berlin, curated by Media Architecture Group Vienna.
16. October - 12. December 2008
.

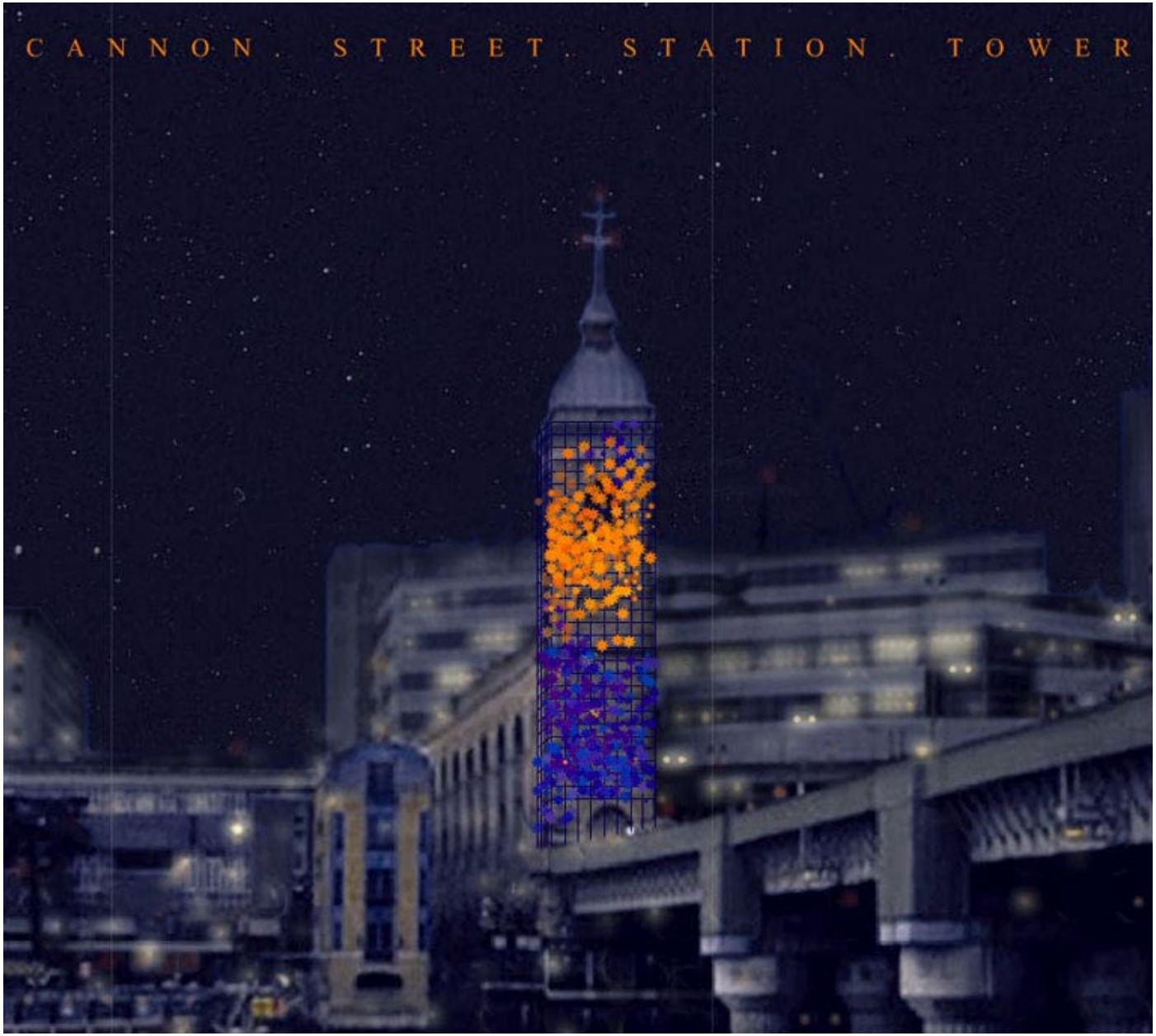
DAISY.WORLD London at the tower of the Cannon Street Station on the River Thames in Central Londonals - participation in DRIFT 09, curated by Illuminate Productions.
September - October 2009
.

DAISY.WORLD San Francisco at the famous Ferry Building on the San Francisco Bay, cooperation with COCA Center for Outdoor Contemporary Art, scheduled for 2010
.

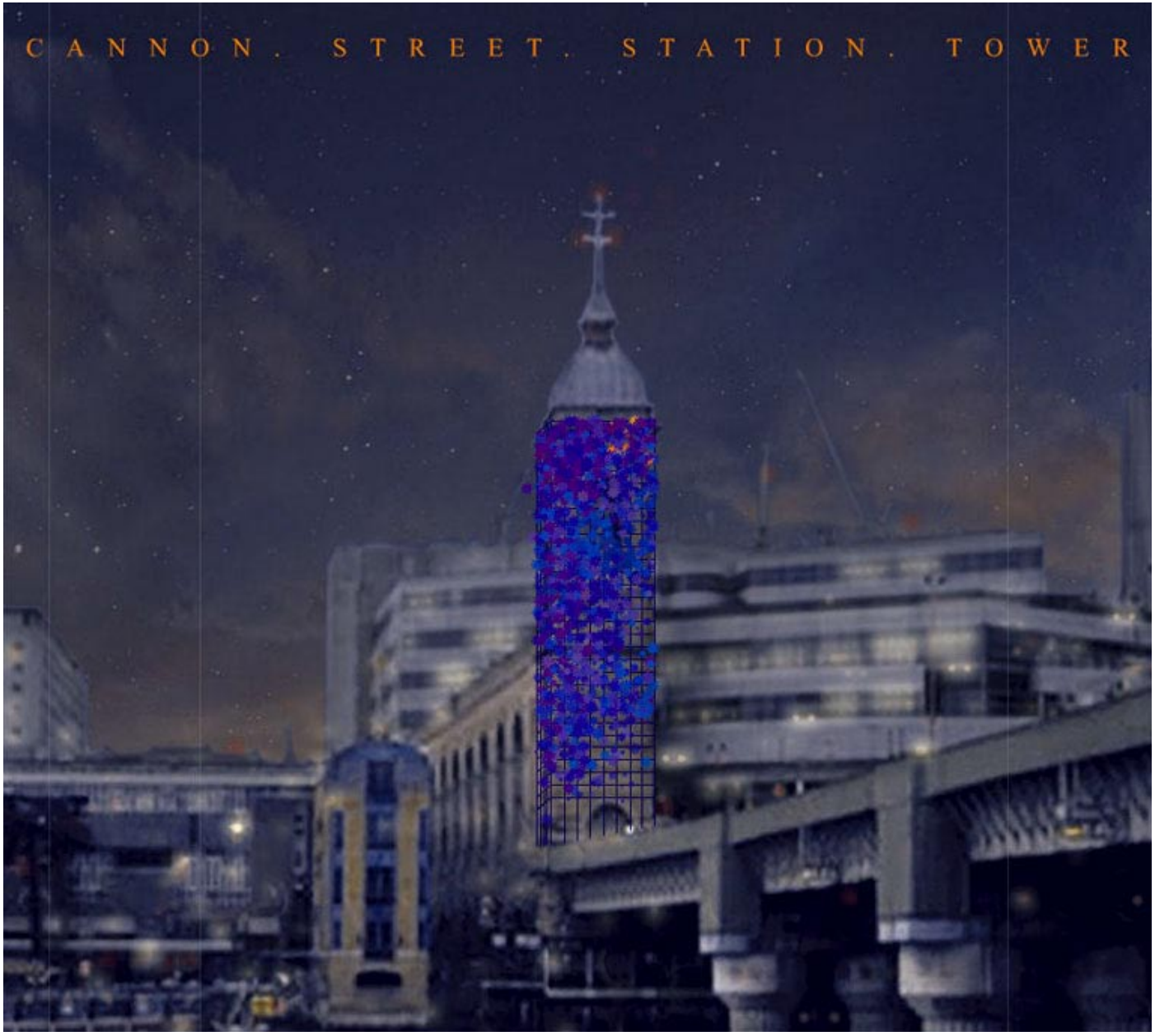
Furthermore we have inquiries from Dubai, Sydney und New York City.


CANNON. STREET. STATION. TOWER

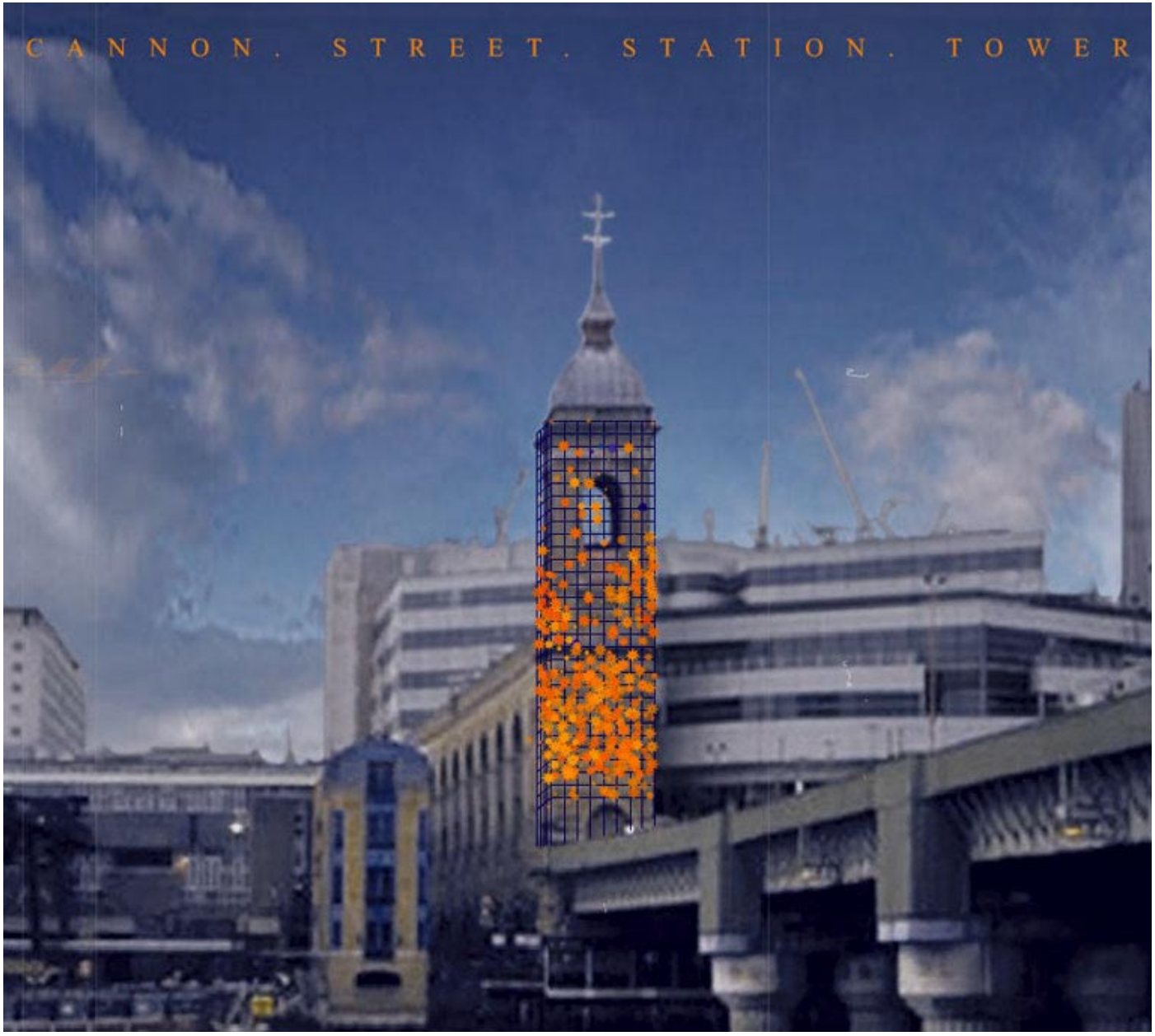

CANNON. STREET. STATION. TOWER



DAISY.WORLD London



DAISY.WORLD London



DAISY.WORLD London

VISION

- The classic principle ‚mediafacade' is currently depending on plane light-image medias.
  The continuative mediafacade concept of the AAA. is a technological thrust in a groundbreaking new direction.

- space-capturing kinetic media networks / spatial modulation of real objects + media texture on the surface

FORMCONTROLLING MEDIASYSTEMS (FCMS)

- Our vision will establish a robust (outdoor and height suitability) spatial (modulating the space) mediafacade concept in the near future.
  ‚Formcontrol' additionally to ‚Imagecontrol' via spatial controllable, flexible, pneumatic cells

- Our conceptional approach is up till now without analogy worldwide.

- If the AAA. ARTS AND ARCHITECTURAL APPLICATIONS can explore appropriate development resources in the next time - we will be able in a foreseeable timeframe to create digital controllable, kinetic 3-dimensional objects of free chooseable shape growing out of the architectural surface.
- The objects will be coated with an integrated light-image media skin.

- It is the next generation of mediafacades which will change again the face of our cities.

- It is the first consideration and research for a future vision of ‚free modeling of reality' out of virtuality.

- The flower installation DAISY.WORLD is an initial step.

ACKNOWLEDGMENT

My sincere thanks to my friends and patrons who have been with me for all these years with confidence and encouragement, helping me financially or practically when I needed it most!

Special thanks to my committed fellows working in the background for the progress of my project!

Their advocacy opens me doors to face the financial challenge.

Thanks to the specialists of the team AAA. ARTS AND ARCHITECTURAL APPLICATIONS who gratuitously work for the realization of our vision:

Sven Wachsmuth / programmer /
development computersimulation

Johannes Binder / media network specialist /
planning data network

Tom Rothmann / architect /
constructive and technological support

Micha Strobelt / volunteer /
modelbuilding + assistance

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  Illuminate Productions London
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- Bil Thompson / Fixturefilms NYC
- Tommo / tommophoto London
- Tina Müller and Alfredo Gutierrez / San Diego
- John Cottom / OMNI Logistics San Francisco
- Christian Geyer /
  Academy for Psychotherapy Erfurt
- Roland Teichert / Eischleben
- Dr. Frank Warzok / Gotha
- Fr. Walsmann / Minister of Justice of the
  Free State of Thuringia
- Dipl. Ing. Frank Sonnabend / gusmedia
- Dr. Gernot Tscherteu /
  Media Architecture Group Vienna
- Dipl. Ing. R.A. Jasmin Aber /
  Institute of Urban Design and Regional
  Development / UC Berkeley California

as well to many anonymous friends

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