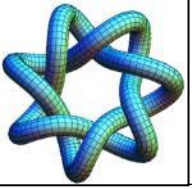


Herzlich willkommen
zur Präsentation
der Teilnehmer und Sieger des

Young Austrian Engineers Contest

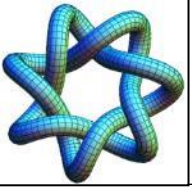
YAEC2023



Intro & Moderation

Ing. DI(FH) Wolfgang Steiner

Mechatronik-Cluster

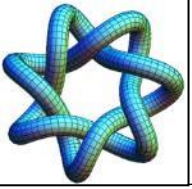


Eröffnung

SektChefin Doris Wagner, MEd, BEd

Leitung Sektion I

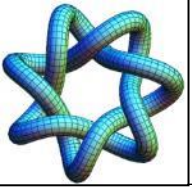
Bildungsministerium BMBWF



Eröffnung

Mag. Gabriele Tischler

WKO Salzburg
Leiterin der Stabstelle Bildung



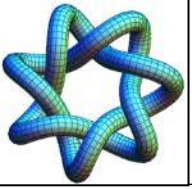
Young Austrian Engineers Contest - YAEC2023

- Veranstalter & Sponsoren



 Bundesministerium
Bildung, Wissenschaft
und Forschung



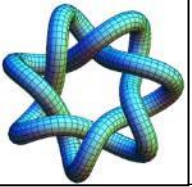


Young Austrian Engineers Contest - YAEC2023

33 HTL **89+12 Projekte** **169+42 Teilnehmer:innen**

The image displays a map of Austria with various HTL logos placed around it, representing participating institutions across different regions. The logos include:

- LINZER TECHNIKUM**
- WELS**
- HTL Waidhofen a.d. Ybbs**
- HTL josephinum.at**
- HTL Hollabrunn**
- HTL HALLEIN**
- VÖCKLABRUCK HTL** (education on a higher level)
- ANDORF TECHNOLOGY SCHOOL**
- HTL Neufelden**
- HTL ST. PÖLTEN**
- tgm Die Schule der Technik**
- SPENGERGASSE** (ausbildung mit zukunft)
- HTL WIEN WEST**
- HTL Braunau**
- HTBLVA Salzburg**
- HTL RIED**
- Ödling**
- HTL Fulpmes**
- HTL3 rennweg**
- HTL wiener neustadt**
- htlbregenz** (SCHULE DER TECHNIK)
- HTL WOLFSBERG**
- Haus der Technik HTL1 Lastenstraße** (Klagenfurt)
- BULME**
- HTL KAPFENBERG**
- HTL ZELTWEG**
- HTLinn**
- EUREGIO HTBLVA FERLACH**
- HTL WEIZ**
- HTBLA KAINDORF**



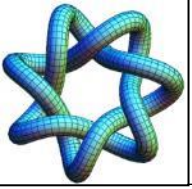
Herzlichen Dank an die



Prof. DI Aberger & Team für die

Erstellung und Betreuung des

YAEC-Einreichtools



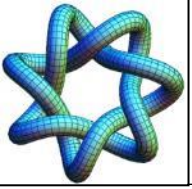
Preisträger

Kategorie Young Experts

Laudatio

DI Roland Sommer, MBA

GF, Plattform Industrie 4.0



Young Austrian Engineers Contest - YAEC2023

3. Platz

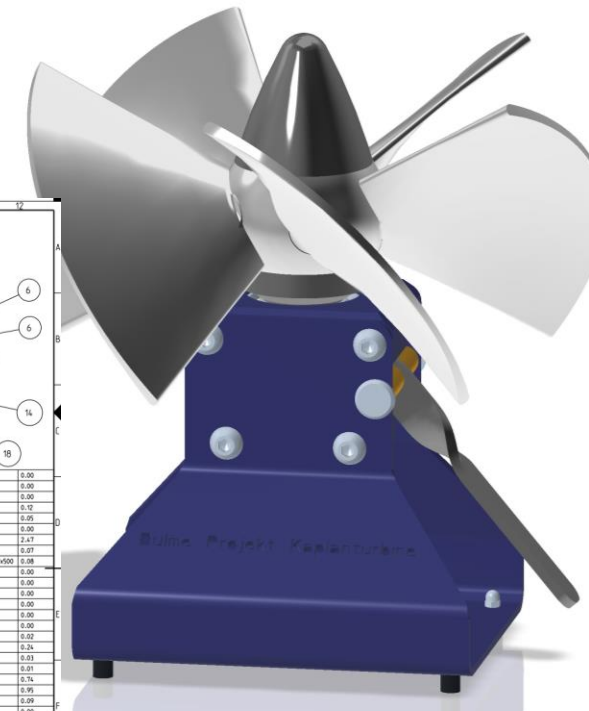
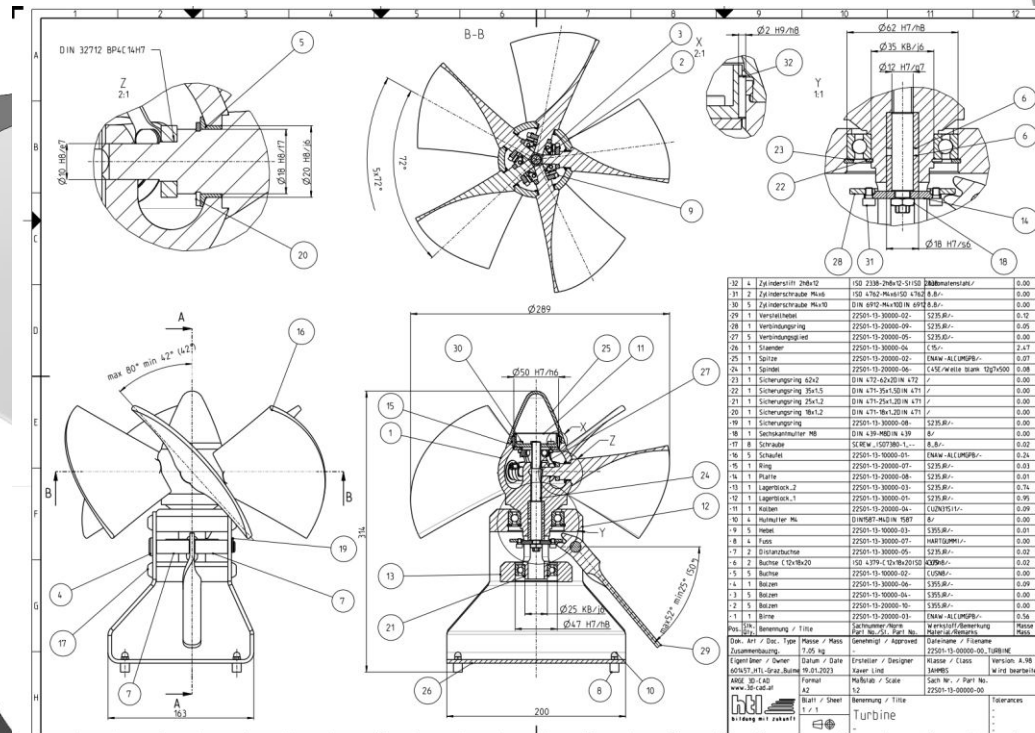
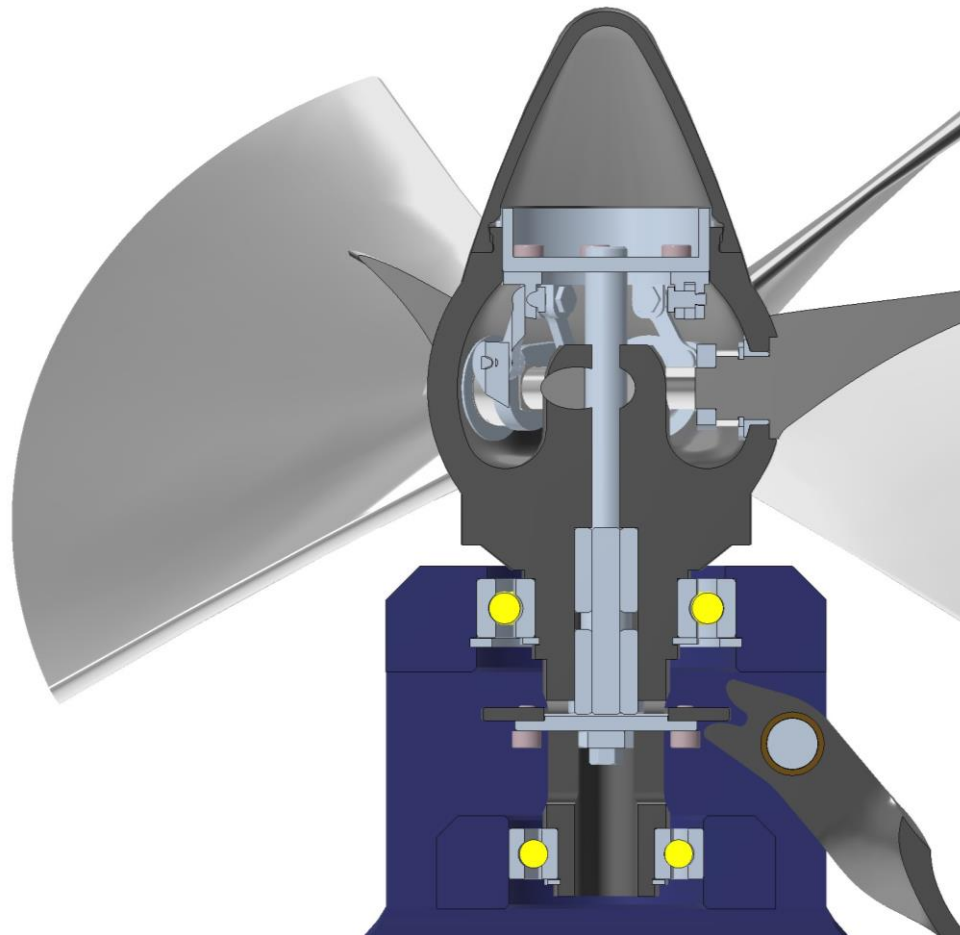
Kategorie **Young Experts**

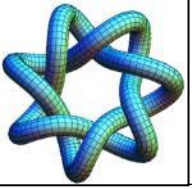
Einreicher:
Stephan Schimpel

HTL Graz-Gösting

Kaplanturbine

Betreuer:
DI Andreas Hoffelner





Young Austrian Engineers Contest - YAEC2023

2. Platz

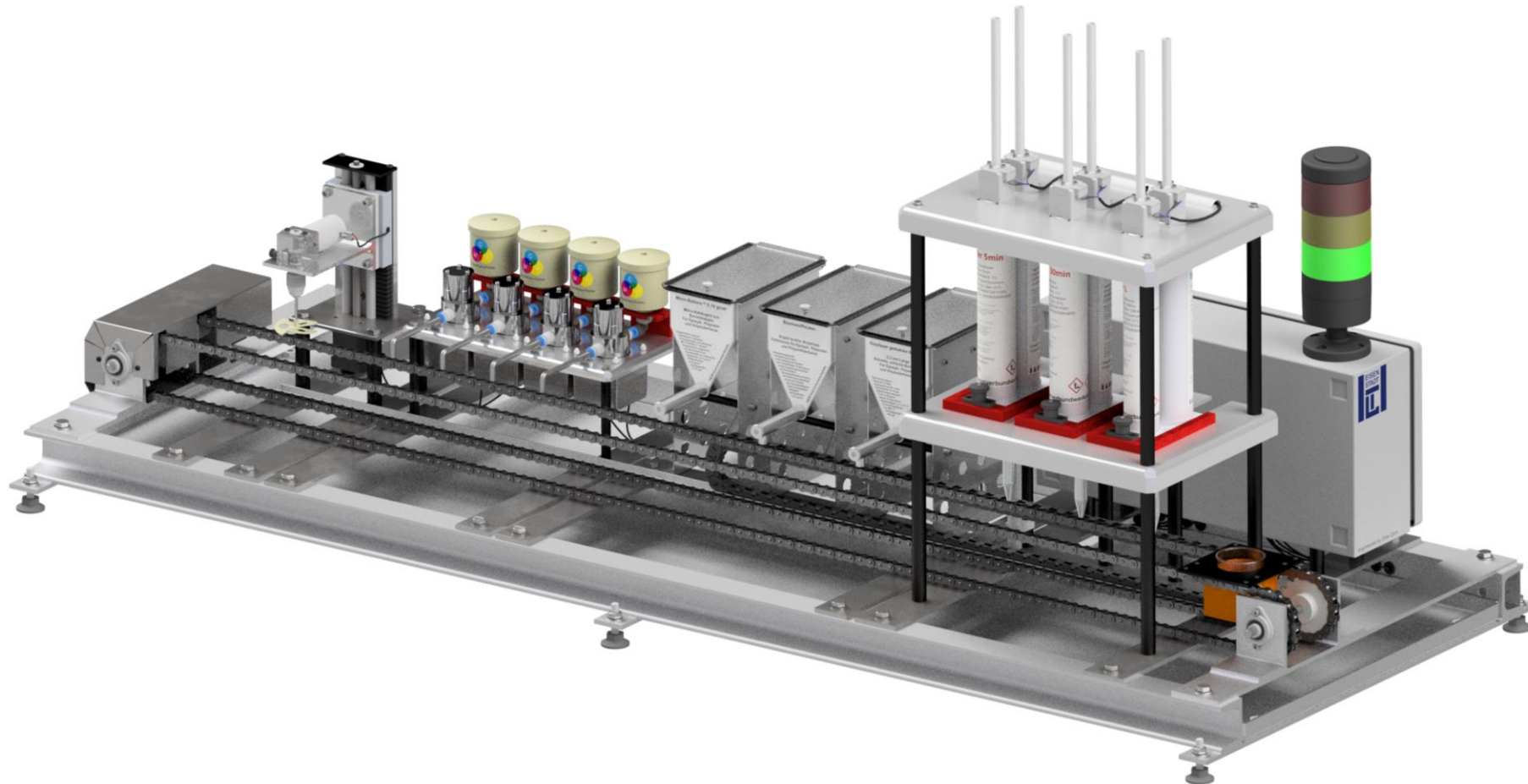
Kategorie Young Experts

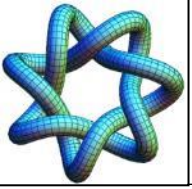
Einreicher:
Elias Zorn

HTL Eisenstadt

Epoxidharzmischanlage

Betreuer:
Daniel Wutzlhofer, MSc



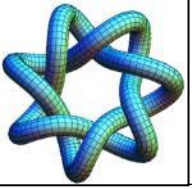


Preisträger
Kategorie Advanced

Laudatio

DI Wilhelm Heintze

Head of Global Engineering, Palfinger AG



Young Austrian Engineers Contest - YAEC2023

3. Platz

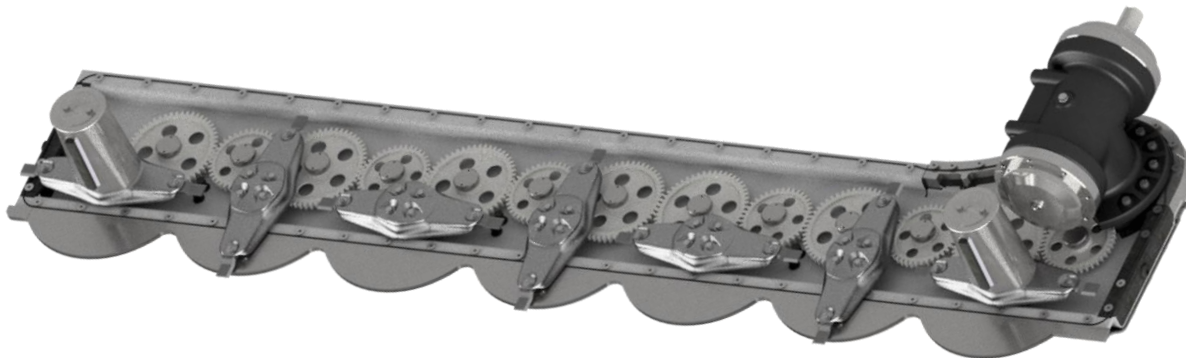
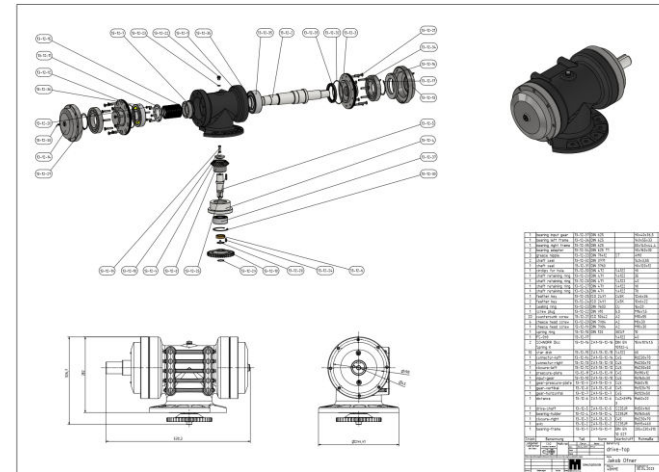
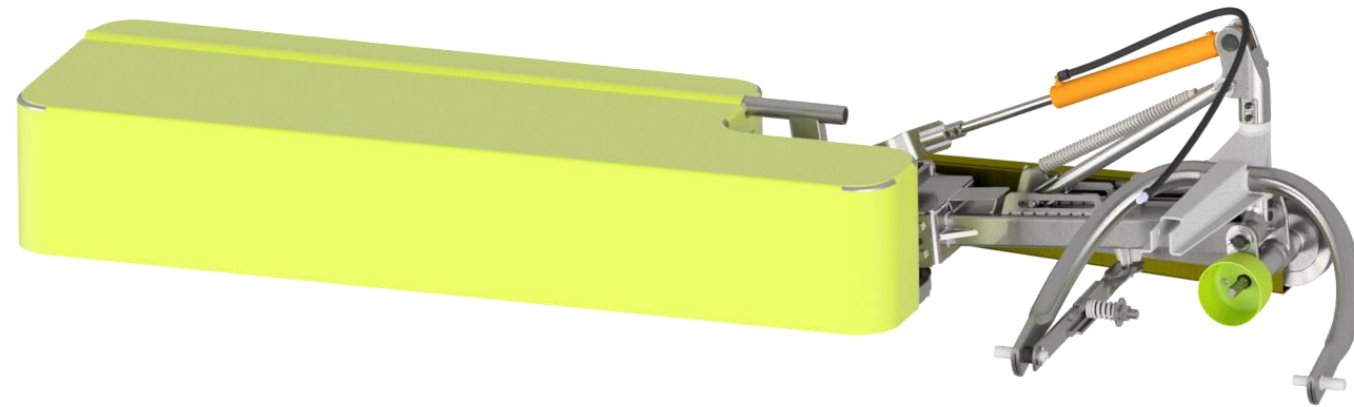
Kategorie **Advanced**

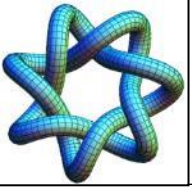
Einreicher:
Jakob Ofner

HTL Mödling

Scheibenmähwerk

Betreuer:
DI Thomas Pickl





Young Austrian Engineers Contest - YAEC2023

2. Platz

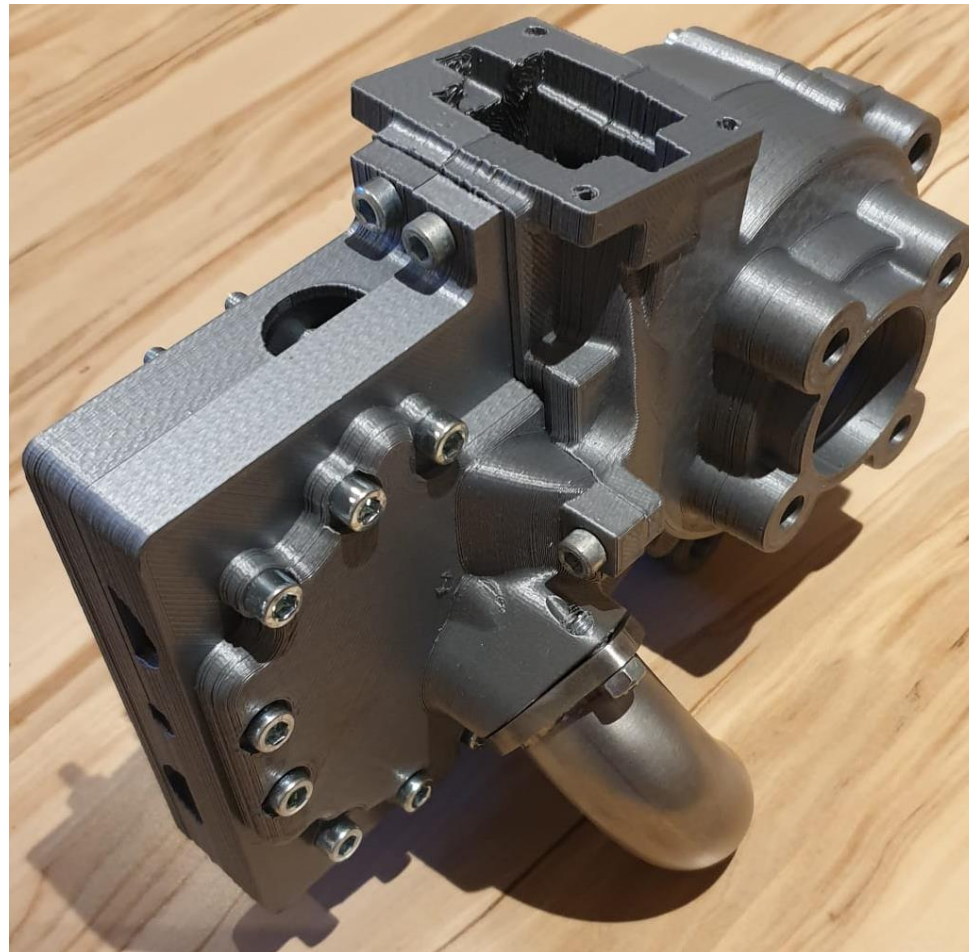
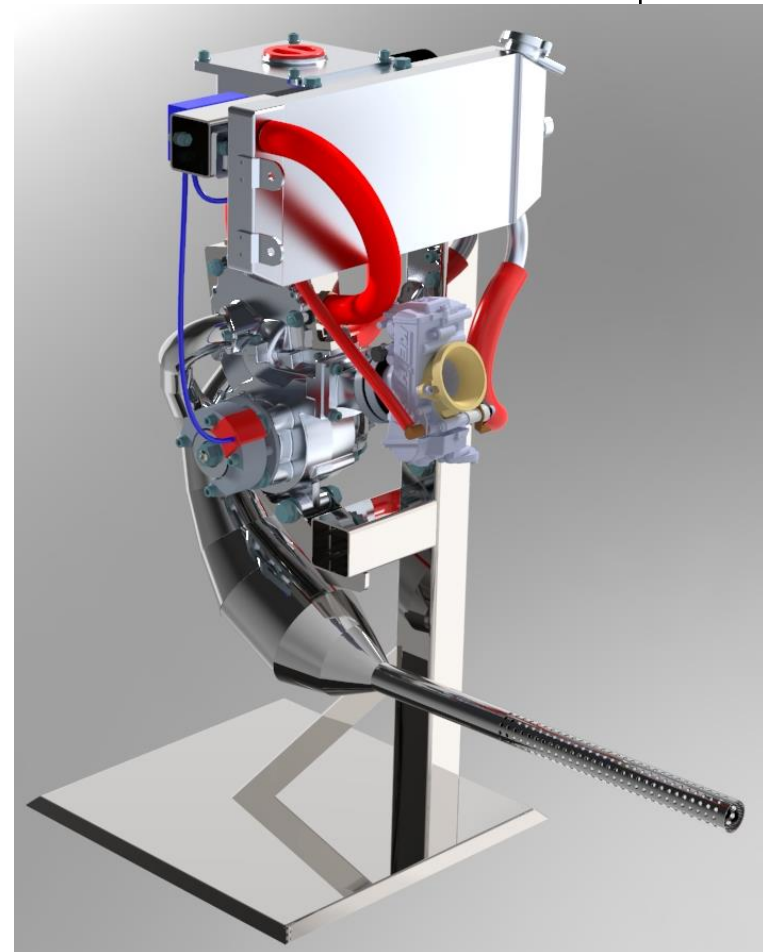
Kategorie **Advanced**

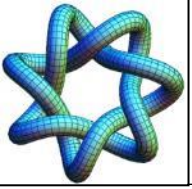
Einreicher:
Alexander Brüggl

HTL Salzburg

Zweitakt Motor

Betreuer:
DI Richard Grutschnig





Young Austrian Engineers Contest - YAEC2023

1. Platz

Kategorie **Advanced**

Einreicher:
Samuel Vollnhofer

HTL Eisenstadt

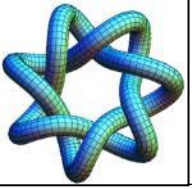
Massenkräftefreier Hubkolbenmotor

Betreuer:
DI Raimund Trummer



2	Sicherungsring für Bohrungen 35x1.5	10	DIN 472	C75		
2	Zylinderstift 4x12 gehärtet	9	ISO 8734	Stahl		
2	Lagerschale	8	01_02_04	Al-Leg		
1	Lagerbuchse	7	01_02_03	Bronze-Leg		
2	Pleuelschraube	6	01_02_02	Stahl		
1	Pleuelstange	5	01_02_01	42CrMo4		
1	Ölabstreifring	4	01_01_04	Stahl		
2	Kompressionsring	3	01_01_03	Stahl		
1	Kolbenbolzen	2	01_01_02	16MnCr5		
1	Kolben	1	01_01_01	AlSi12CuNiVg		

Stück	Benennung	Teil	Norm-Nr./Zeichng.-Nr.	Werkstoff	Rohmaße	Bemerkung
Alle Maße in mm: Masse: 2.29 kg Werkstoff: -						
Oberfläche / Behandlung		ISO 2768 mK	Maßstab: 1:1	Zeichnungsnummer: 01	Revision: 00	
HTBLA Eisenstadt Bad Küssingen Platz 3 7000 Eisenstadt 02682/64606			A3		Benennung: Kolben Baugruppe	
Datum: 12/04/23		Name: Vollnhofer		Blatt: 1/1		
Status: Freigegeben		Gez.:		Projekt: C.I.E.		

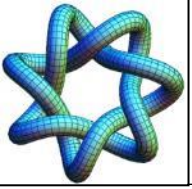


Preisträger
Kategorie **Professional**

Laudatio

DI Dr. Helfried Sorger

CTO PIERER Mobility, GF Fa. KTM AG



Young Austrian Engineers Contest - YAEC2023

3. Platz

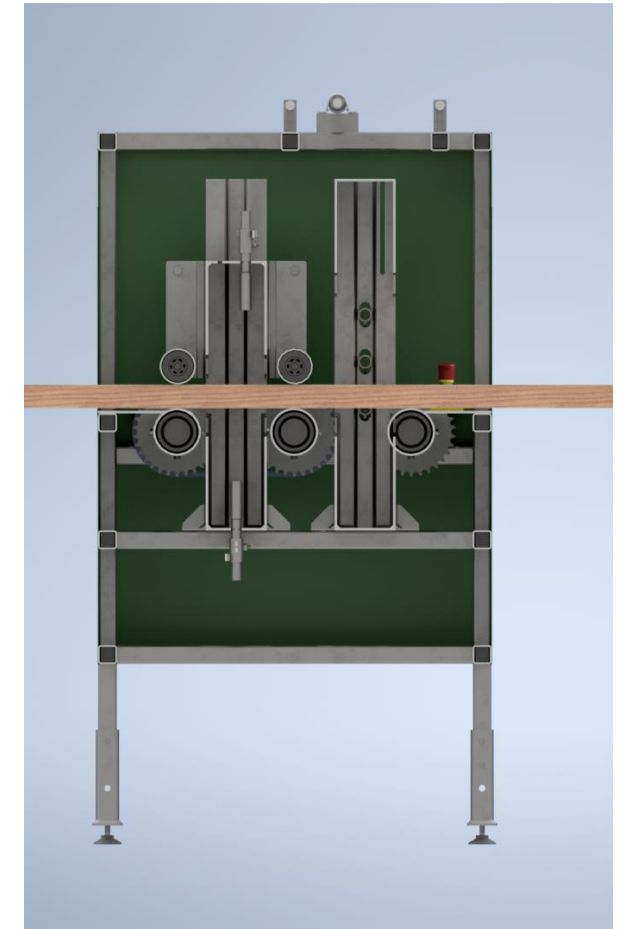
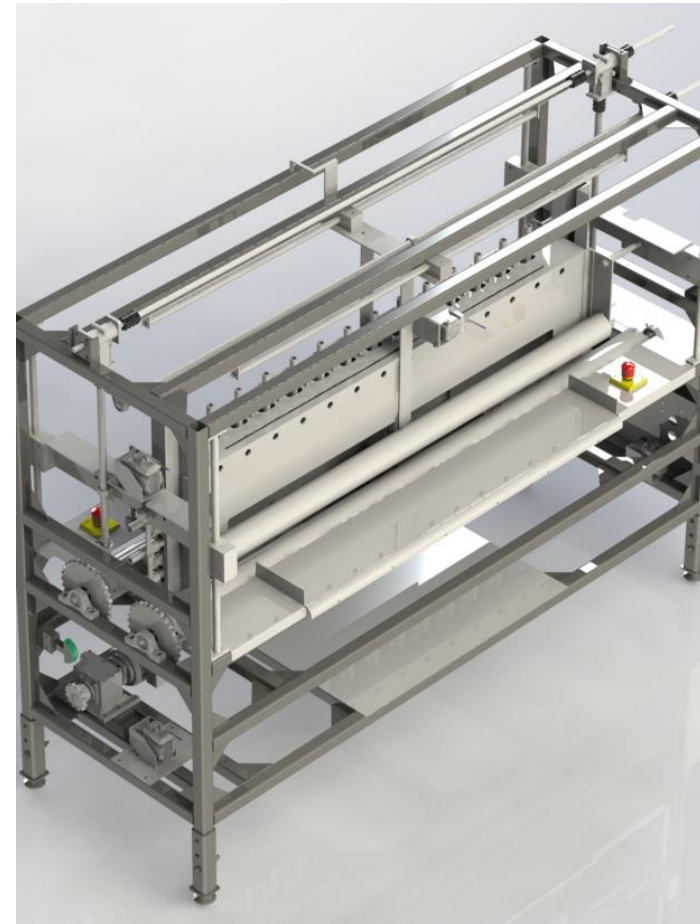
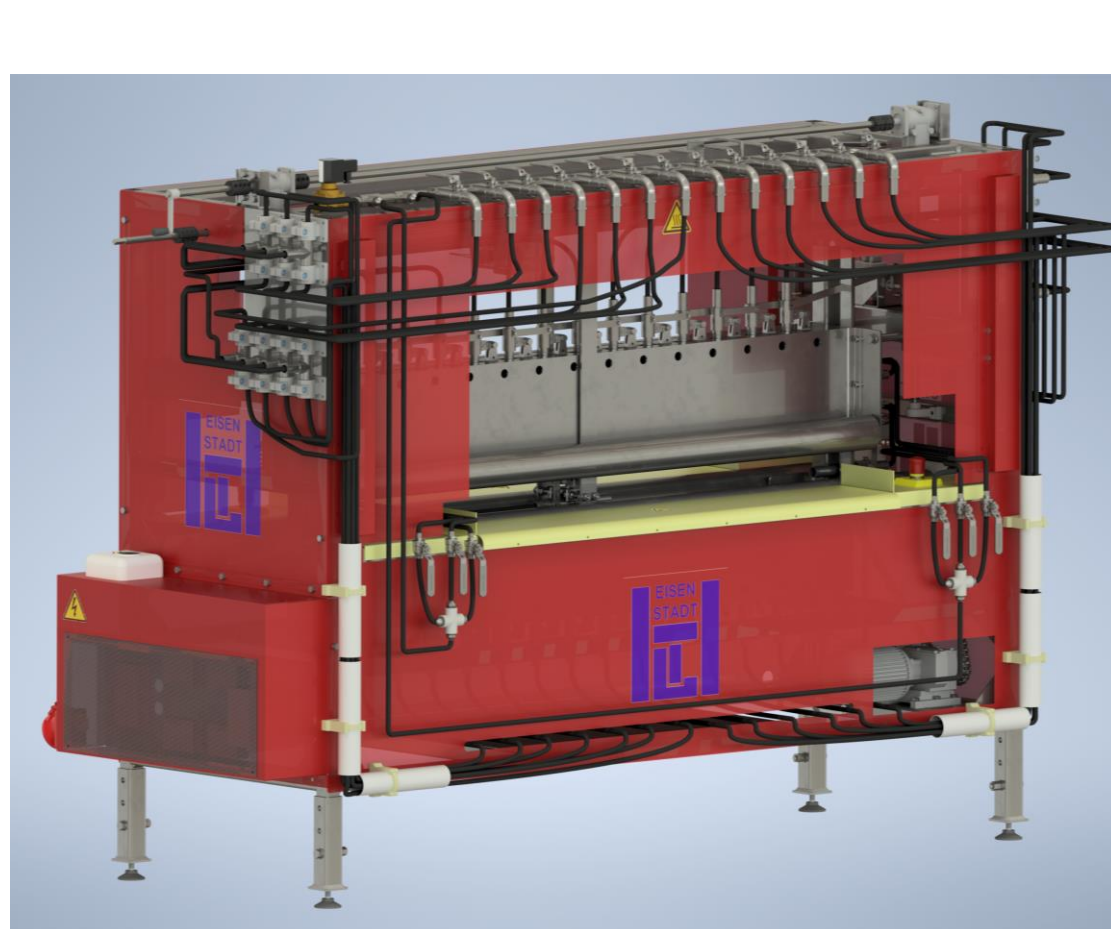
Kategorie Professional

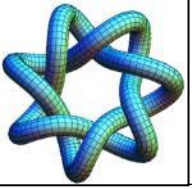
Einreicher:
James Whitehead

HTL Eisenstadt

Flämm-Maschine

Betreuer:
DI Raimund Trummer





Young Austrian Engineers Contest - YAEC2023

2. Platz

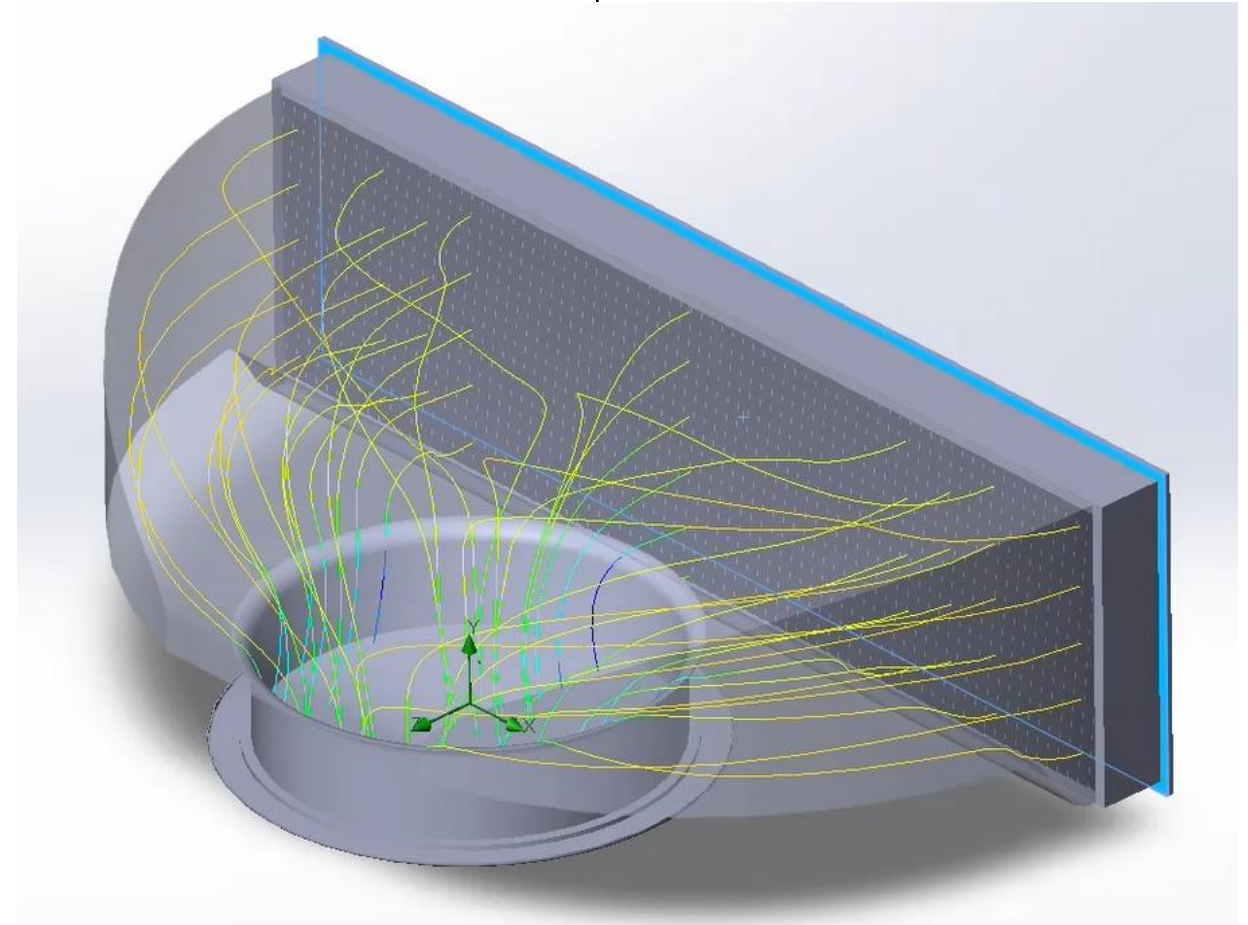
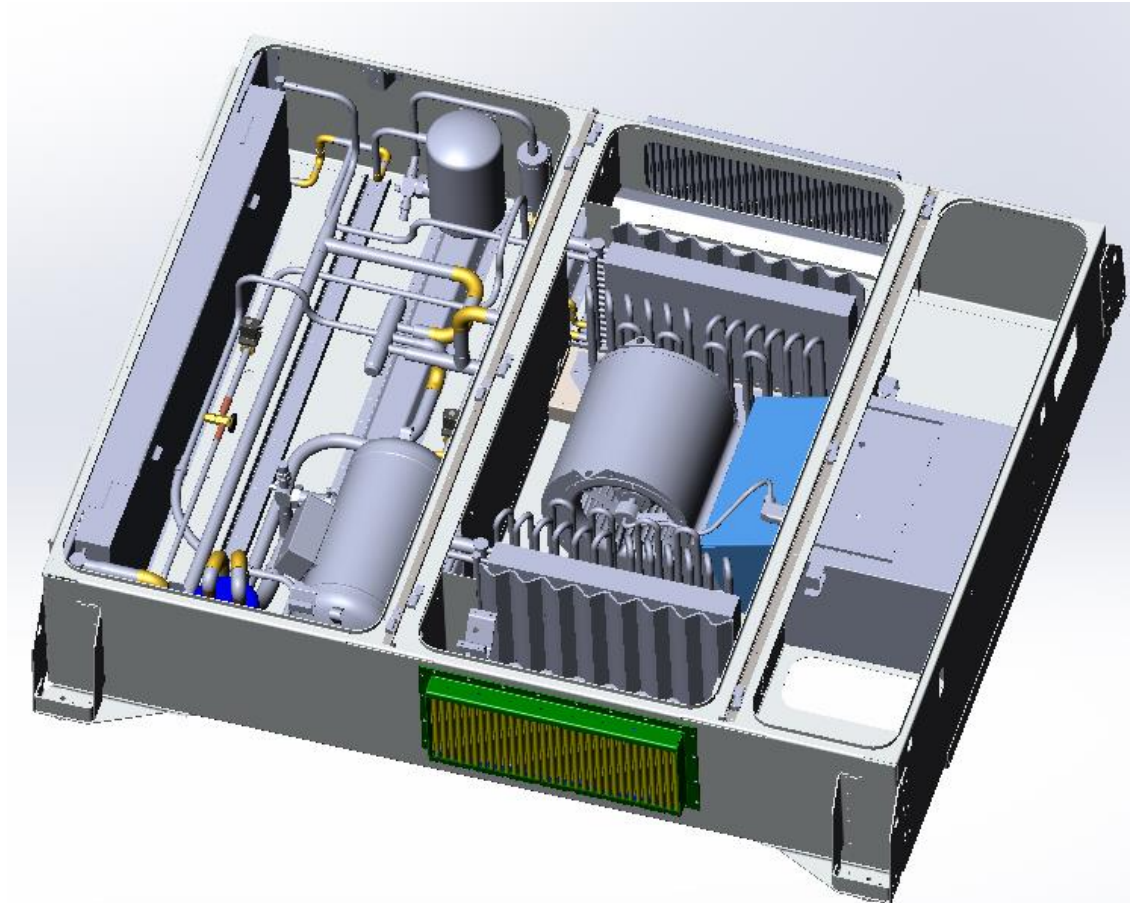
Kategorie Professional

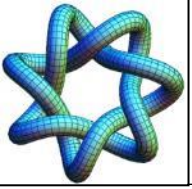
Einreicherin:
Hanna Vogler

HTL Hollabrunn

Konstruktion eines Klimagerätes für
Schienenfahrzeuge

Betreuer:
DI Martin Striok, MSc





Young Austrian Engineers Contest - YAEC2023

1. Platz

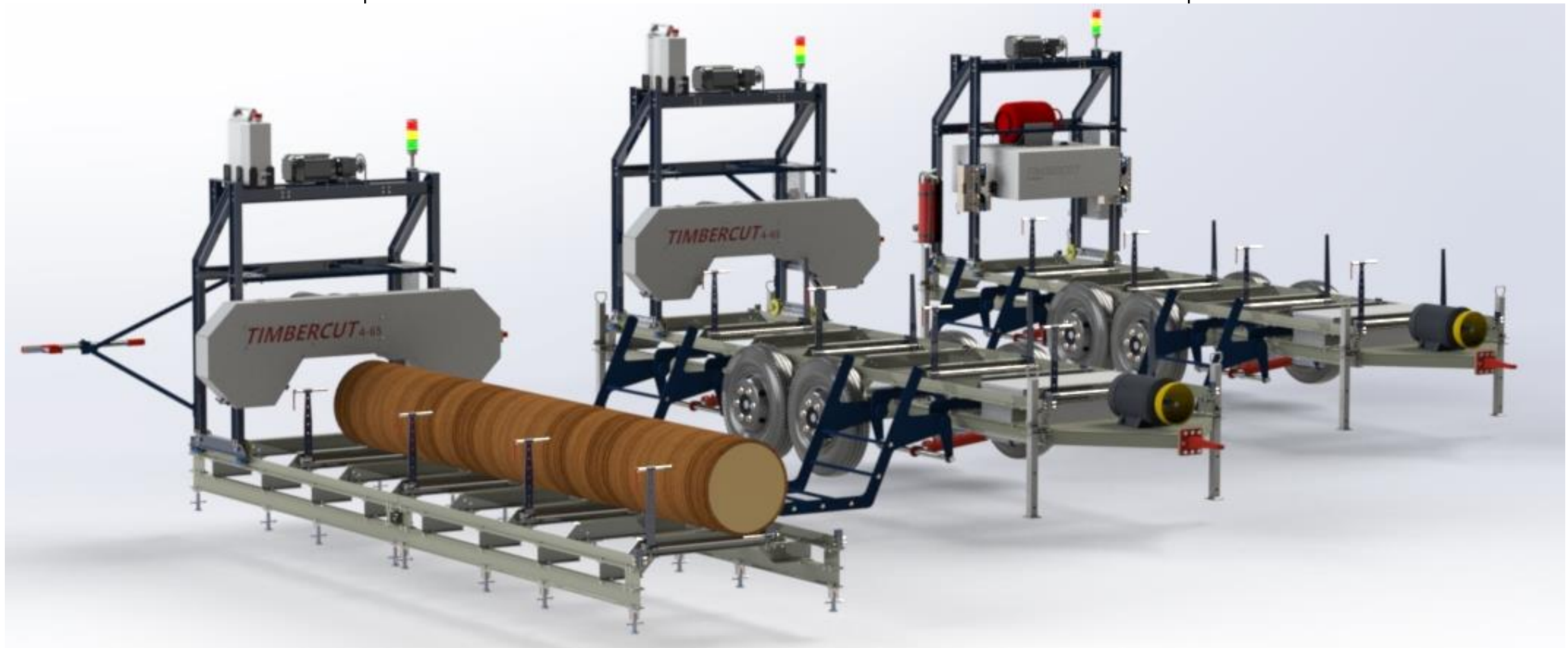
Kategorie Professional

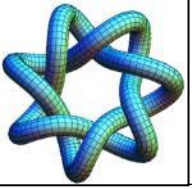
Einreicher:
Jakob Bauer

HTL Eisenstadt

Timbercut

Betreuer:
DI Raimund Trummer





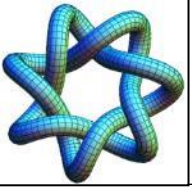
Preisträger

Kategorie **Sonderpreise**

Laudatio

KommRⁱⁿ Mag. Marianne Kusejko

GF, Sigmatek GmbH & Co KG, WKS-VP



Young Austrian Engineers Contest - YAEC2023

Sonderpreis

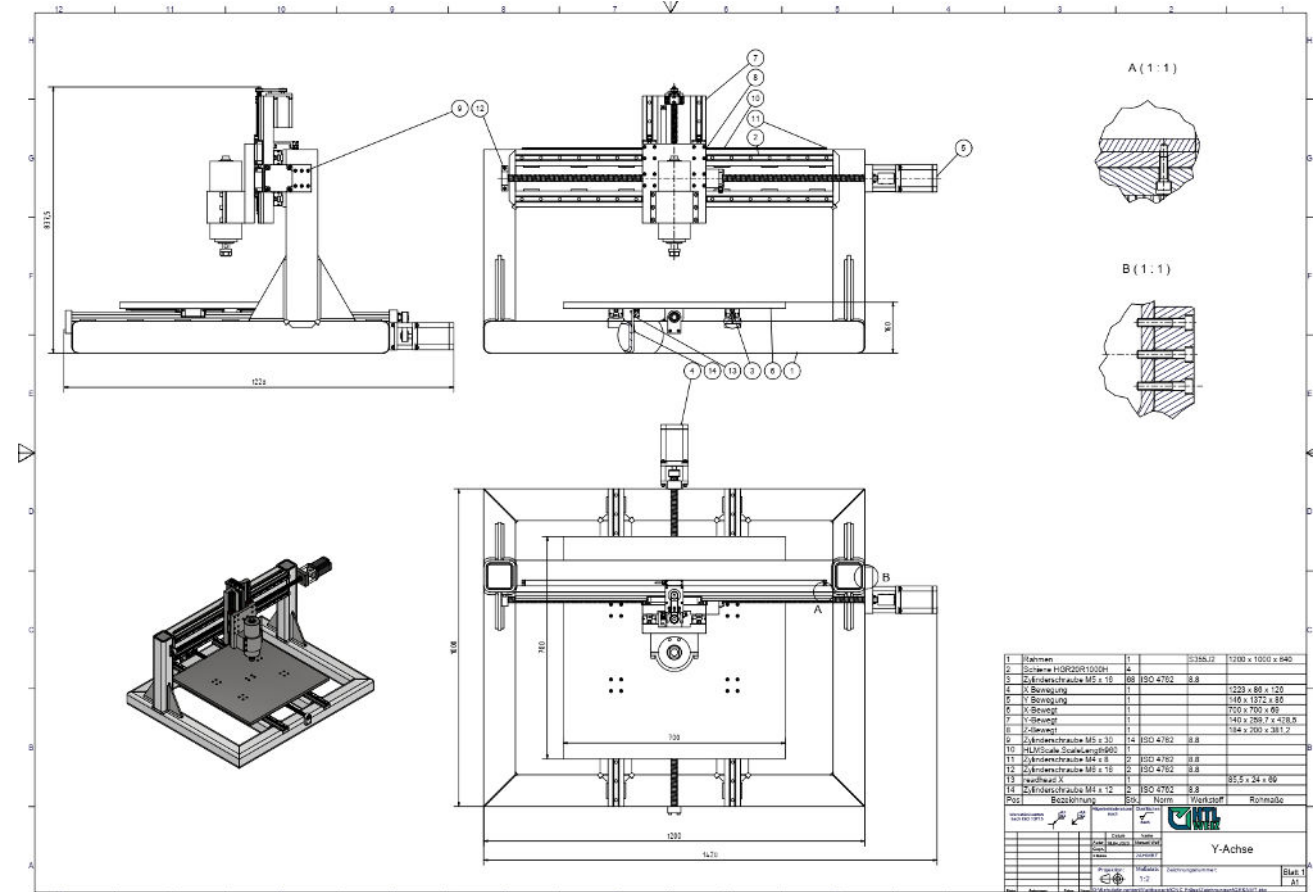
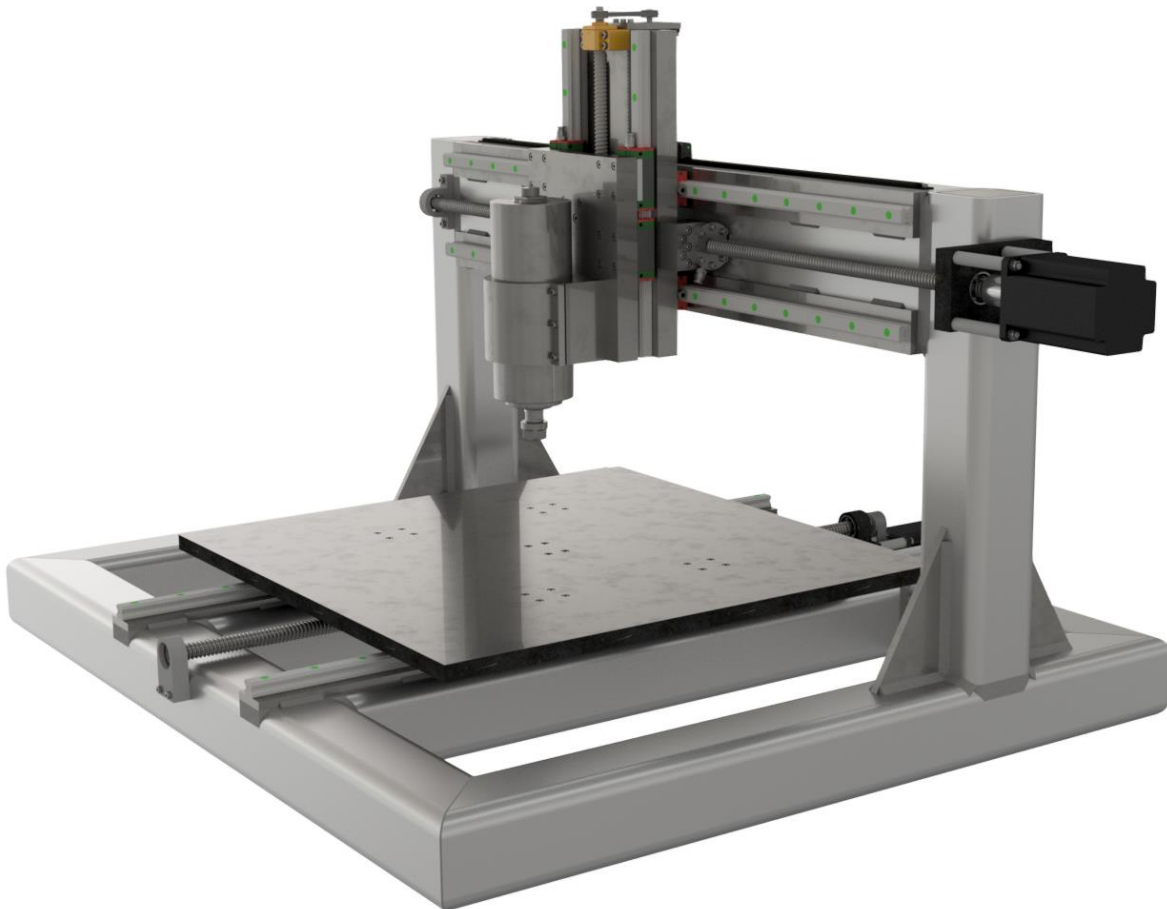
Early Beginners – 2.Klassen

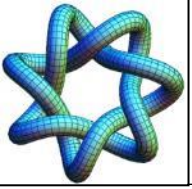
Einreicher:
Manuel Wolf

HTL Weiz

CNC Fräse

Betreuer:
DI Wolfgang Ableitner





Young Austrian Engineers Contest - YAEC2023

Sonderpreis

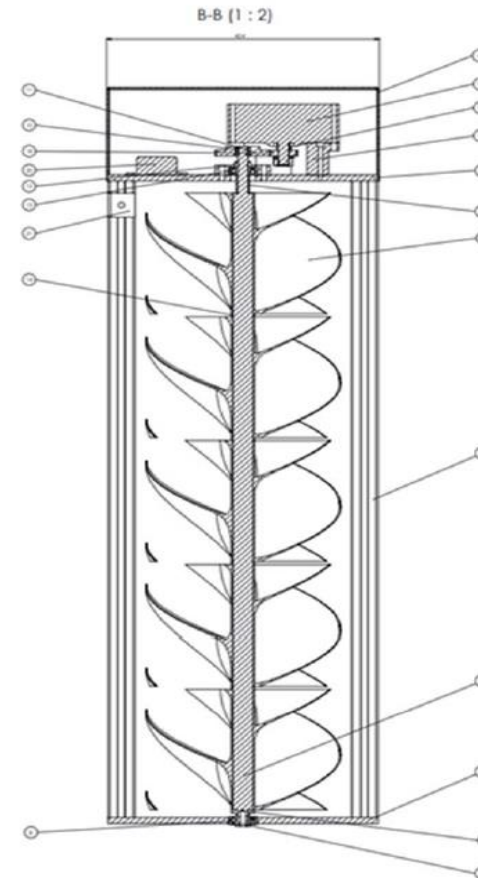
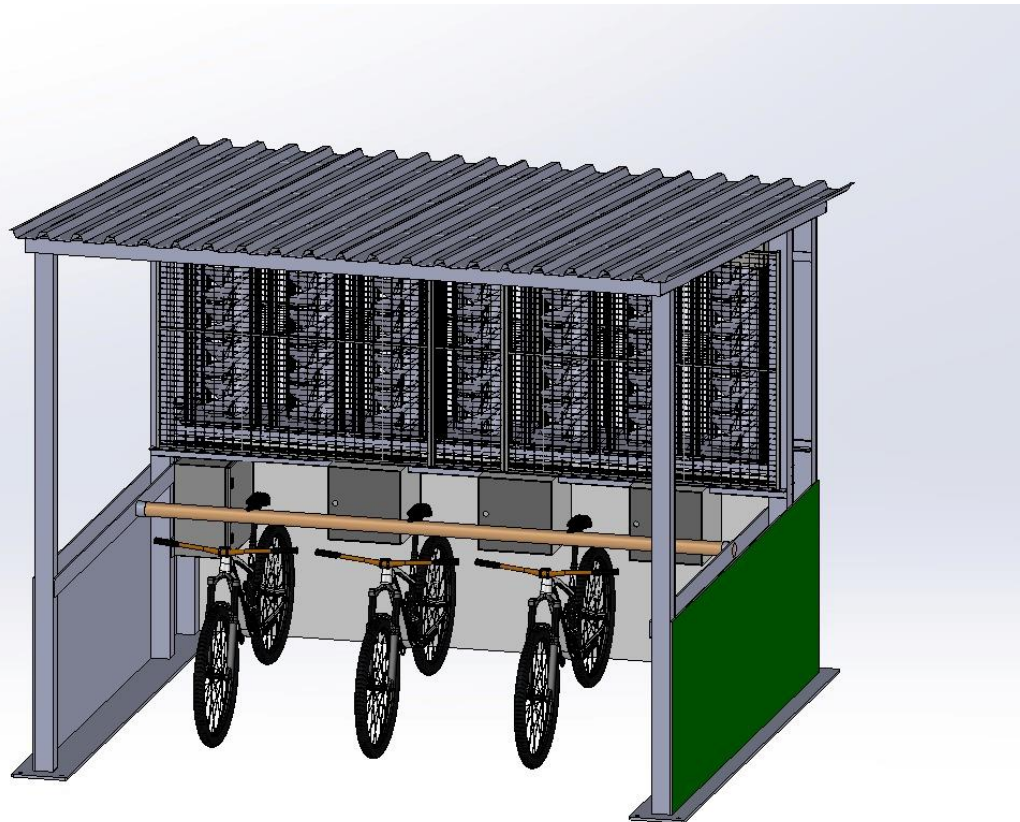
MAGNA Zero Emission Challenge

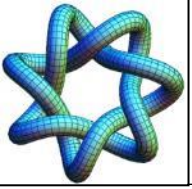
Einreicher:
Thomas Krammer

HTL Wolfsberg

Ride the wind of change

Betreuer:
DI Markus Liebhard





Young Austrian Engineers Contest - YAEC2023

Sonderpreis

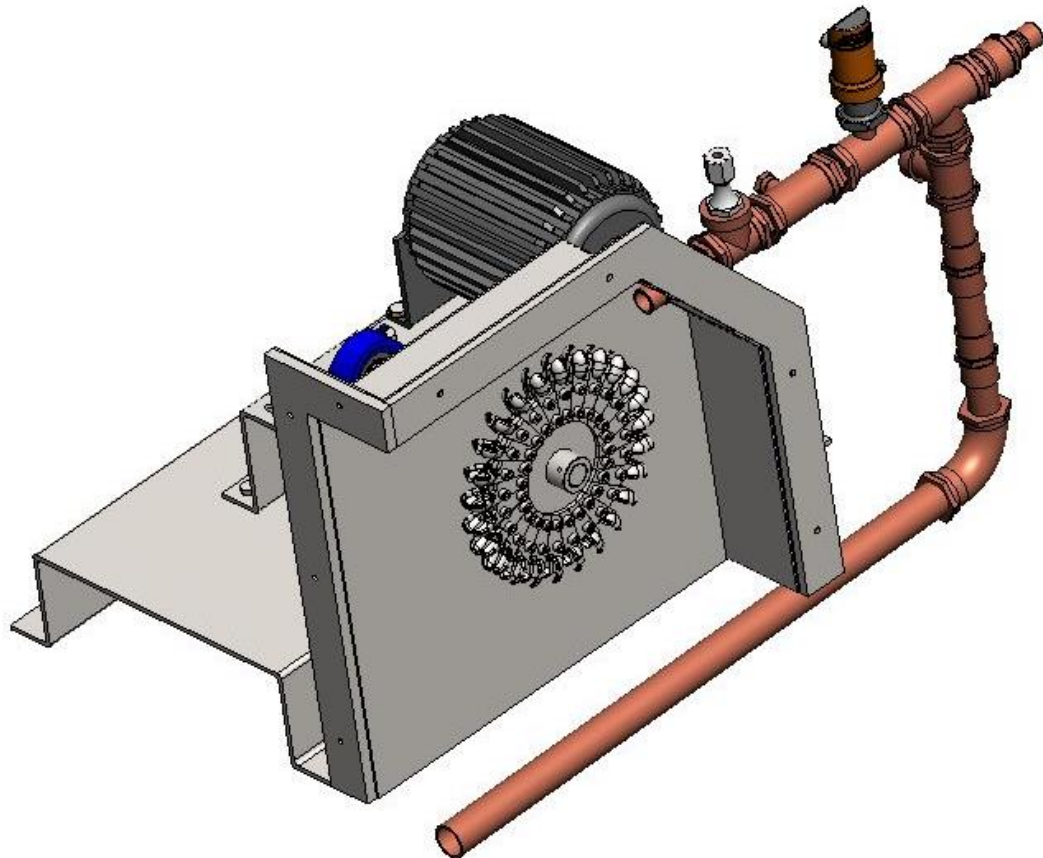
Green Transition

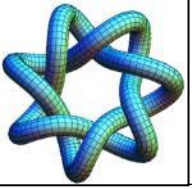
Einreicher:
Dominic Unterkirchner

HTL Hallein

Kleinstwasserkraftwerk mit Pelton-turbine

Betreuer:
DI Paul Fleischmann





Young Austrian Engineers Contest - YAEC2023

Sonderpreis

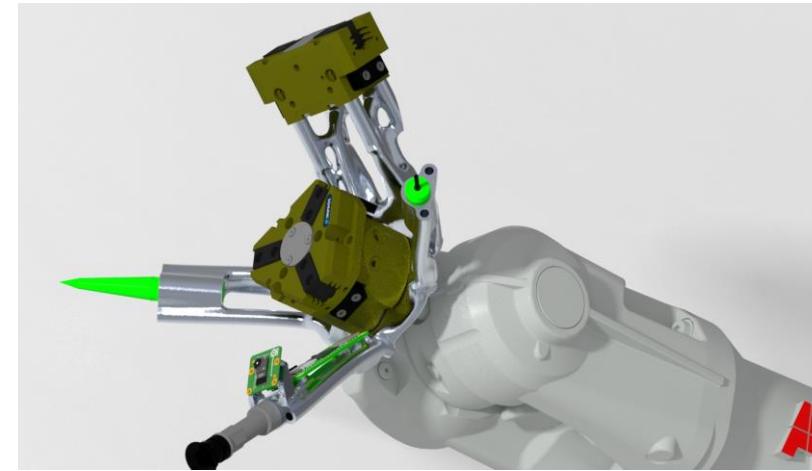
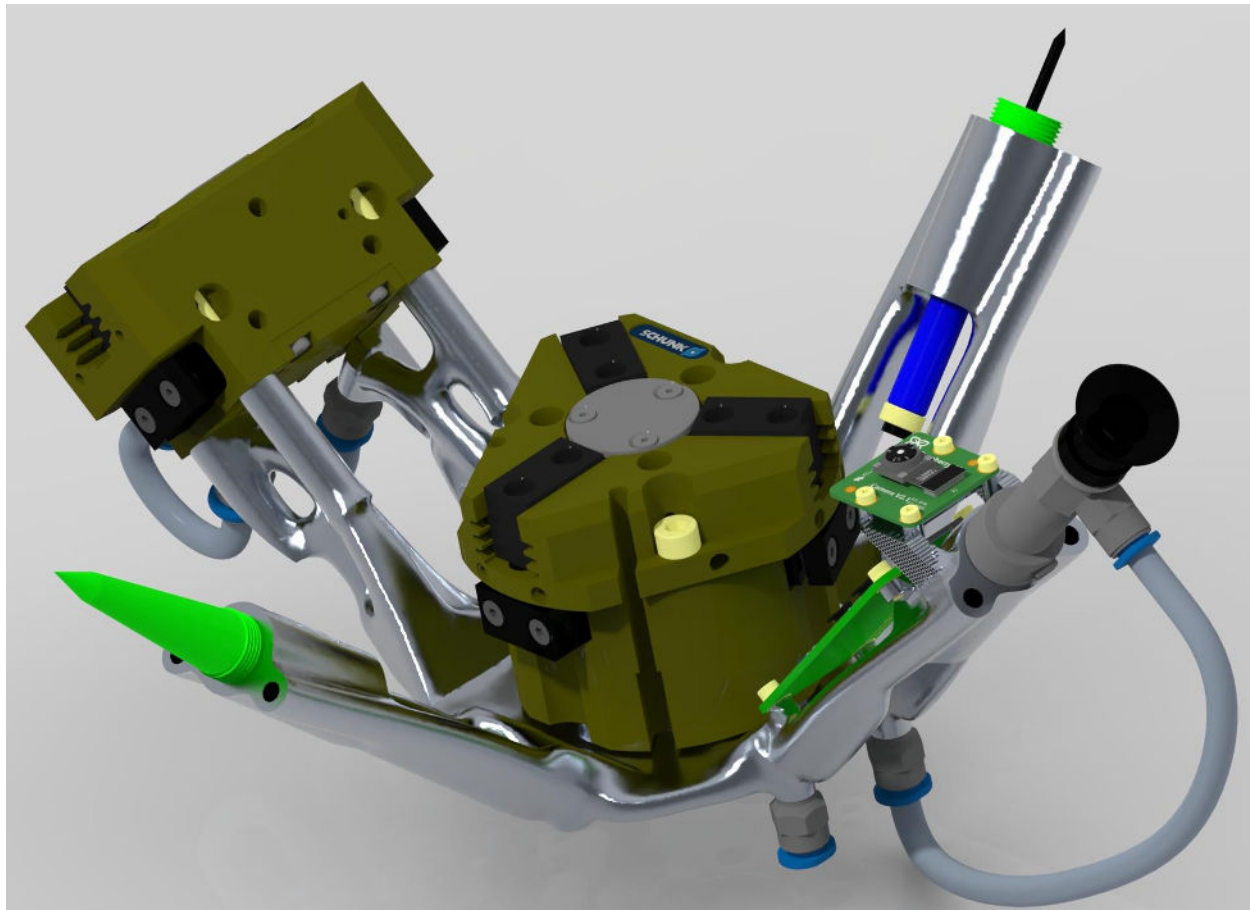
New Technologies

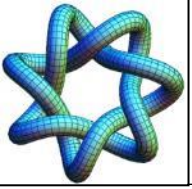
Einreicher:
Fabian Hois

HTL Wels

Topologieoptimierter Mehrfach-Werkzeughalter

Betreuer:
DI Jürgen Achleitner





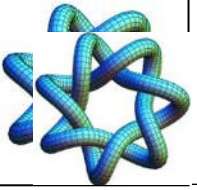
Preisträger

MAGNA Zero Emission Challenge

Laudatio

Josef Lackner, BSc

Senior-Mgr., MAGNA INTERATIONAL
EUROPA GmbH



Young Austrian Engineers Contest - YAEC2023

3. Platz

MAGNA Zero Emission Challenge

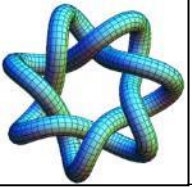
Einreicher:
Simon Fuchsbauer

HTL St. Pölten

Konstruktion und Fertigung eines motorisierten
Einrads

Betreuer:
Dr. Martin Tiefenbacher





Young Austrian Engineers Contest - YAEC2023

3. Platz

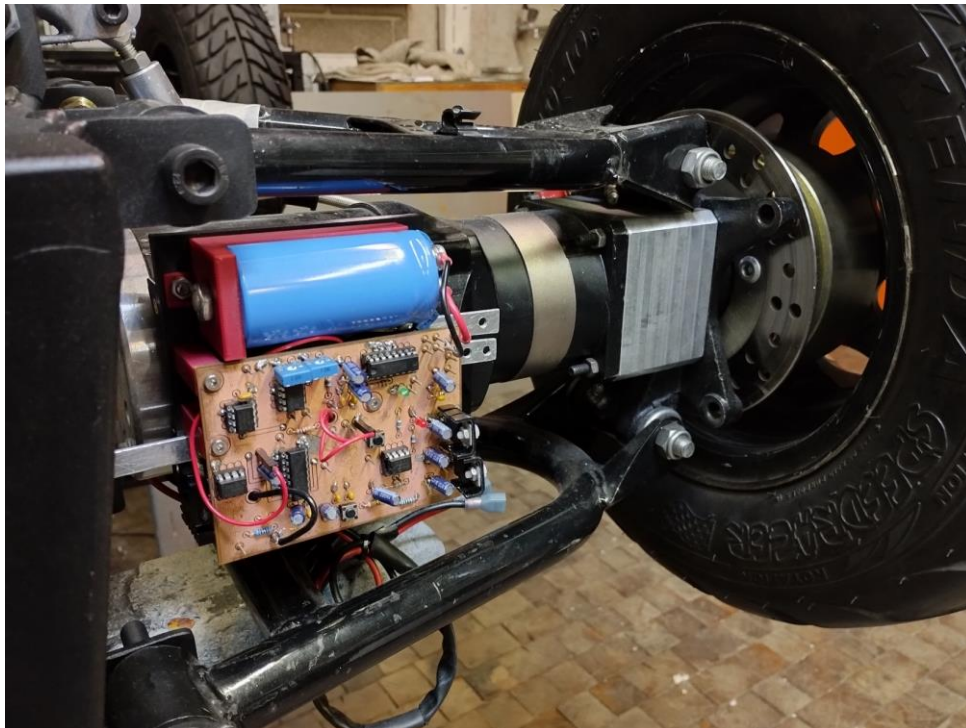
MAGNA Zero Emission Challenge

Einreicher:
Manuel Thonhauser

HTL Wolfsberg

Antriebselektronik und Monitoring für ein E-Gokart

Betreuer:
DI Dr. Tino Colle
DI Martin Mitterer



HTL Wolfsberg E-Gokart

Status: verbunden mit 34:86:5D:FD:47:EA HTL_E-Gokart

Bluetoothgerät wählen



Verbindung
trennen

App
schließen

Geschwindigkeit: 9.8 km/h

Drehzahl: 120.0 U/min

Spannung OB: 12.1 V

Spannung UB: 2.3 V

Strom OB: 8.0 A

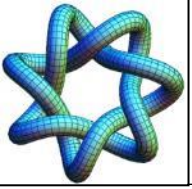
Strom UB: 8.6 A

Temperatur links: 22.3 °C

Temperatur rechts: 12.8 °C

Ladezustand: 14.4 V

Lenkwinkel: 70.4 °



Young Austrian Engineers Contest - YAEC2023

2. Platz

MAGNA Zero Emission Challenge

Einreicher:
Lukas Reisenbauer

HTL Weiz

Optimierung des Fahrwerks E²MILY - 01

Betreuer:
DI Michael Fasching

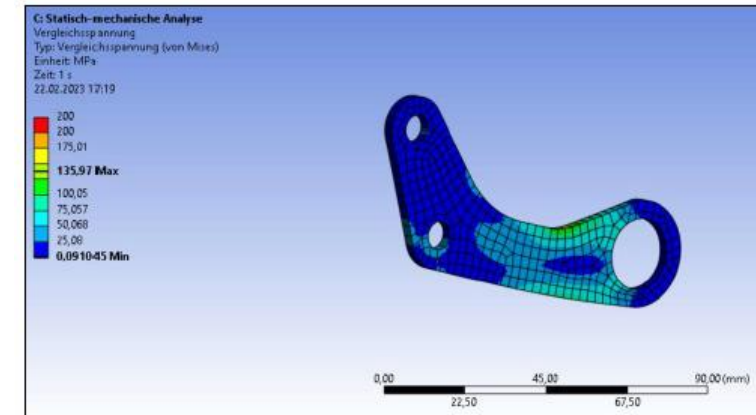
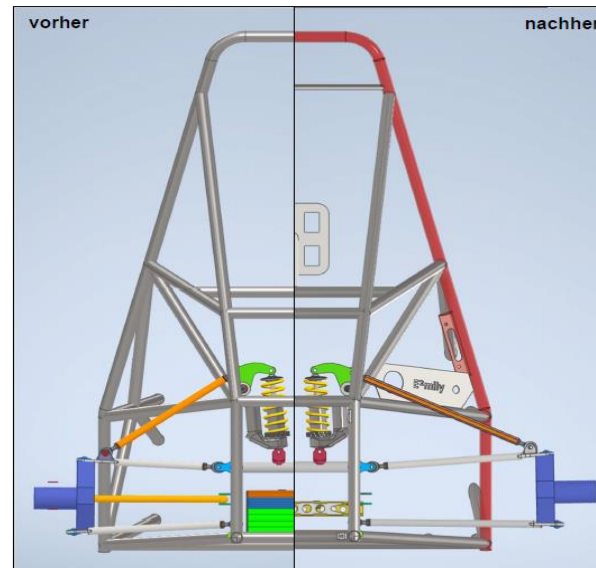
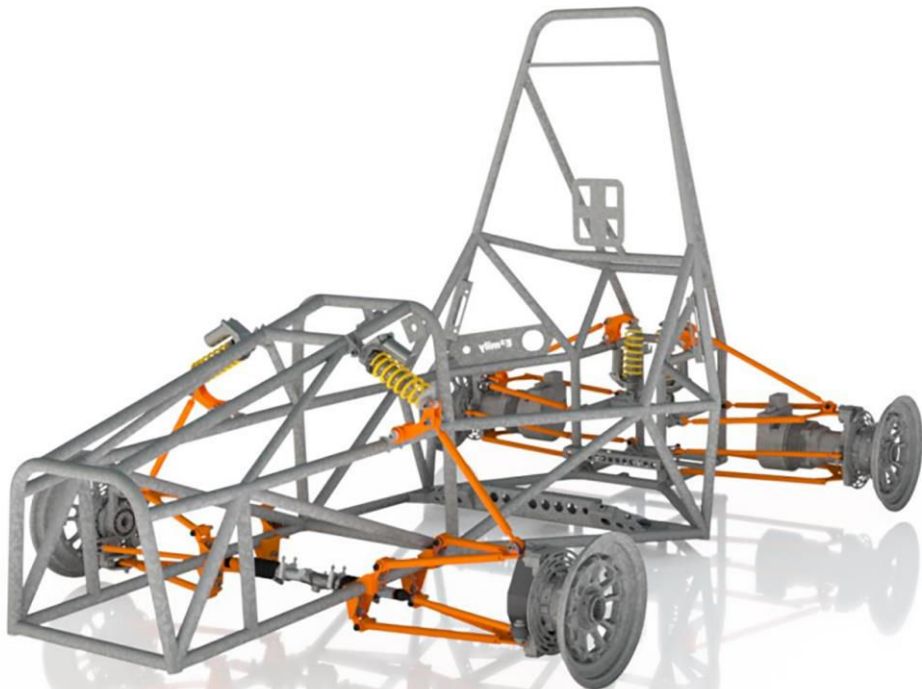


Abbildung 64: Vergleichsspannung Umlenkhebel VA

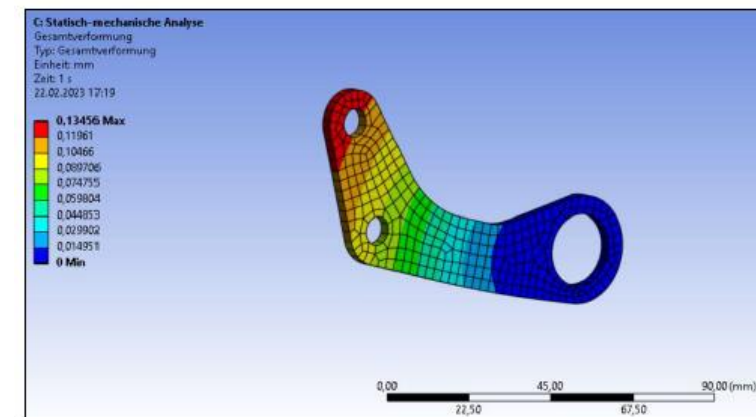
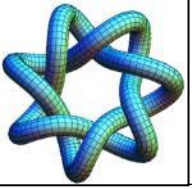


Abbildung 65: Gesamtverformung Umlenkhebel VA



Young Austrian Engineers Contest - YAEC2023

1. Platz

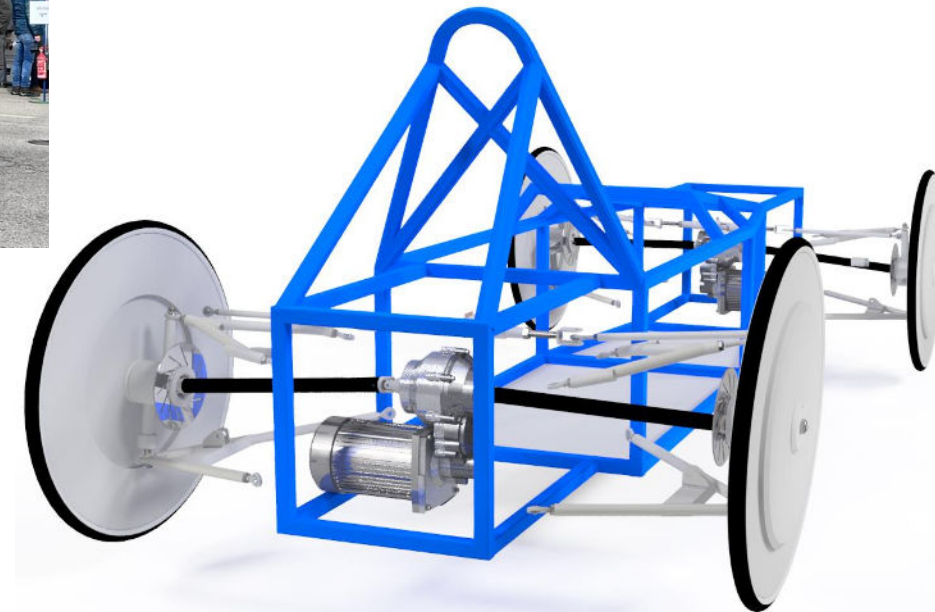
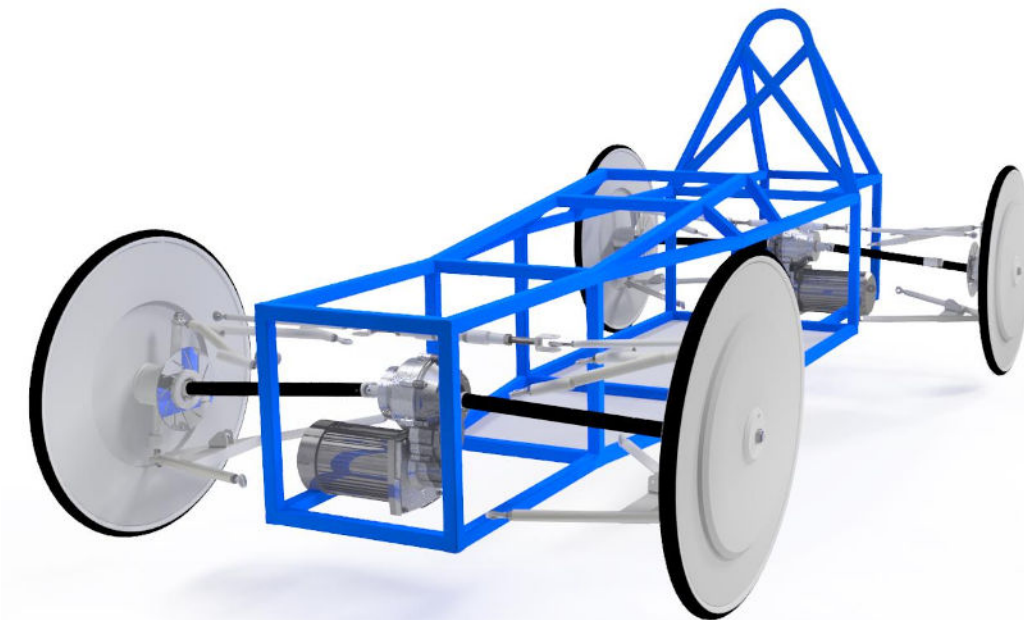
MAGNA Zero Emission Challenge

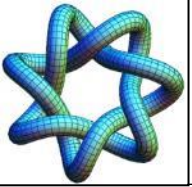
Einreicher:
Hubert van der Pavert

TGM

E-Kart mit Allradantrieb und Allradlenkung

Betreuer:
DI Peter Herzog
DI Robert Hauß

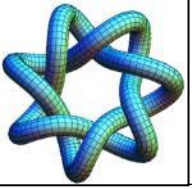




Dank und Anerkennung



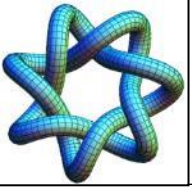
StR Dipl.-Päd. FOL Peter Mörtlitz



Schlussworte

MinR Mag. Wolfgang Pachatz

Bildungsministerium BMBWF



Young Austrian Engineers Contest - YAEC2023

- Danke an***
- alle teilnehmenden Schülerinnen und Schüler
 - alle Betreuer:innen
 - alle Jury-Mitglieder
 - allen Preis-Überreichern:innen
 - dem Moderator
 - das BMBWF
 - alle Sponsoren