



ALUMINIUM  
ASSOCIATION

# ARCHITECTURAL SOLUTIONS IN BRIDGE CONSTRUCTION

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*HEAD OF THE  
INFRASTRUCTURE  
DEPARTMENT*

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# EXPERIENCE IN DESIGN AND CONSTRUCTION OF PEDESTRIAN CROSSINGS WITH SUPERSTRUCTURES MADE OF ALUMINIUM ALLOYS IN RUSSIA



АЛЮМИНИЕВАЯ  
АССОЦИАЦИЯ

2017

Nizhni Novgorod  
Region



In total 8 footbridges have been built since 2017:

➤ Two bridges in the Nizhny Novgorod region

Customer: the government of the Nizhny Novgorod region  
Design documentation: developed based on Special Technical Regulations (STU) approved by the Ministry of Construction of the Russian Federation

Manufacturers: OOO GS-Reserve, AO OK RUSAL TD, AO AMR, AO Arconic SMZ, ZAO Cheboksary Company Sespel

➤ Three bridges in Krasnoyarsk

Customer: Municipal Public Institution Capital Construction Office of Krasnoyarsk

Design documentation: developed based on Special Technical Regulations (STU) approved by the Ministry of Construction of the Russian Federation

Manufacturers: OOO KraMZ and JAO OK RUSAL TD, AO Giprostroymost (Ulyanovsk)

➤ Two bridges in Moscow (in the suburban park Yauza)

➤ One bridge in Tula

Customer: the government of the Tula region. Design documentation was developed based on SP 443.1325800.2019 'Bridges with aluminium alloy elements. Design Rules.'

Designer: Morissot Design Institute

Manufacturers: OOO KraMZ, JAO OK RUSAL TD  
OOO GS-Reserv

2017  
Moscow



2018  
Krasnoyarsk



2020  
Tula

## Construction of an aboveground pedestrian crossing over the highway of Eastern Bypass Avenue in Tula



**Span length:** 41.22 m

**Span weight:** 30.0 tonnes

(KraMZ — extrusion of AD 35T1, AMR — rolled product of 1915T1)

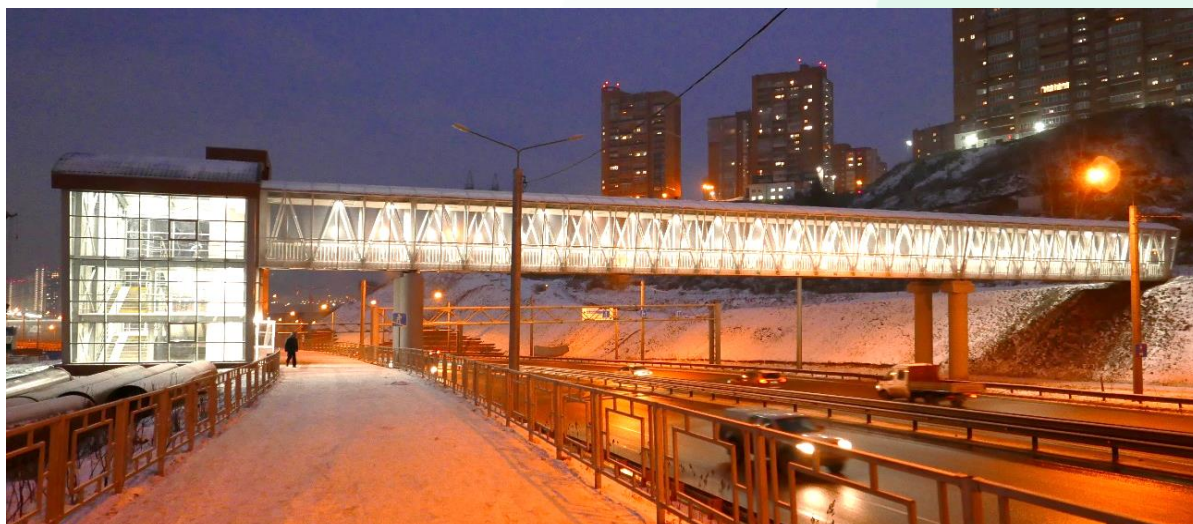
**Customer:** Government of the Tula Region  
GU TO Tulauprador

**Designer:** Morissot Design Institute

**Contractor for aluminium structures:** GS-Reserv

**Construction:** May–October 2020

## Construction of a pedestrian bridge across Volochaevskaya Street, Krasnoyarsk



**The full length of all the spans is 63 m (19.5 × 43.5 m)**

**The weight of all the bridge spans is 41.1 metres**  
(KRMZ – AD 351T1 extrusions)

**Customer:** Capital Construction Office, Krasnoyarsk

**Designer:** CJSC Giprotransmost

**Contractor:** JSC Giprostroymost

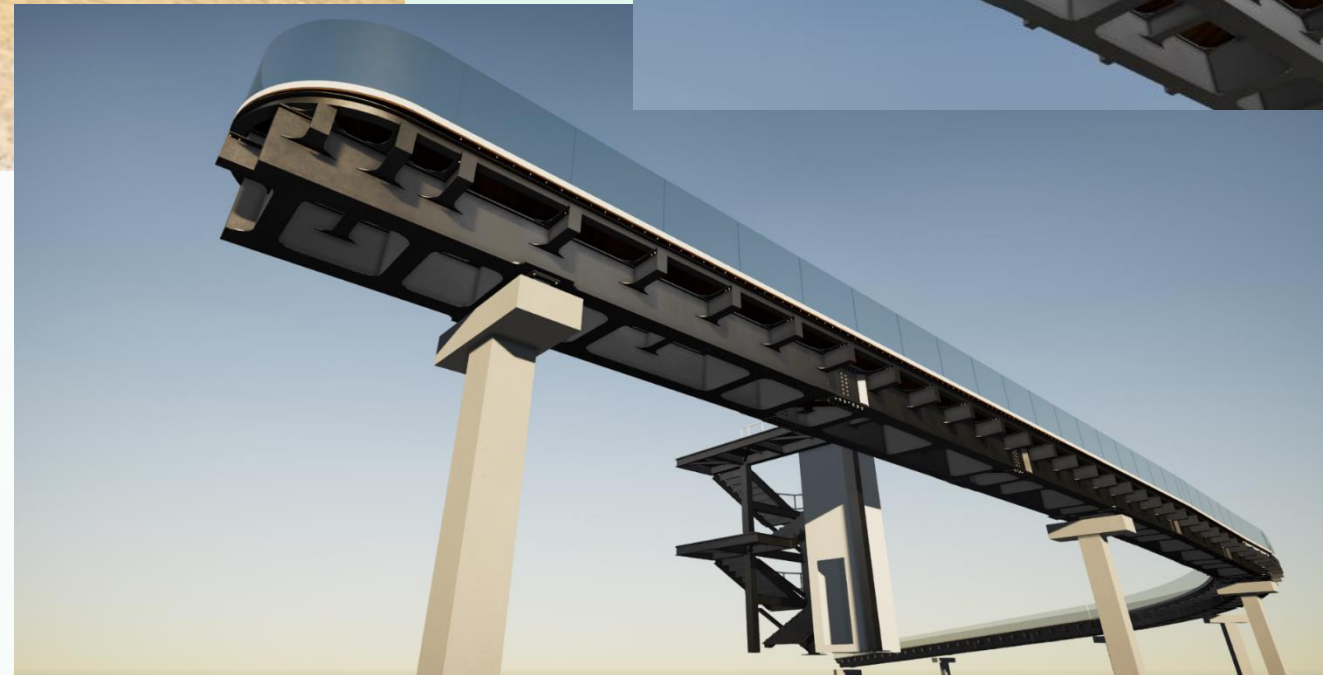
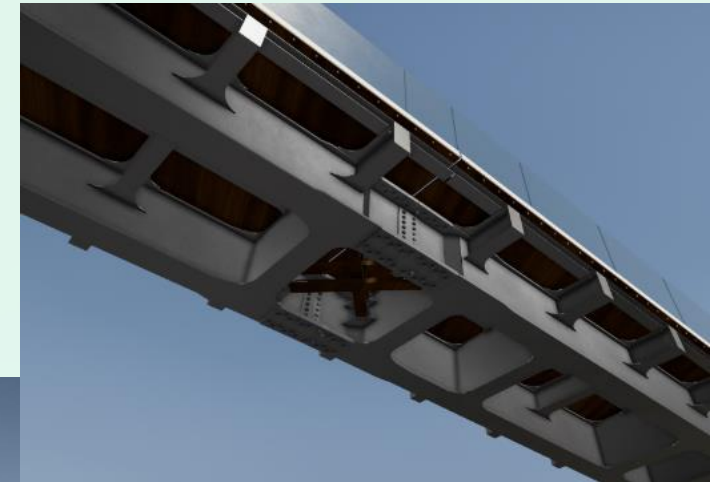
**Construction period:**

Q3 2019 – September 2020

# CONSTRUCTION OF A PEDESTRIAN BRIDGE IN BOR TOWN IN THE NIZHNY NOVGOROD REGION



АЛЮМИНИЕВАЯ  
АССОЦИАЦИЯ



**Total length of the bridge spans is 121 m**  
**The weight of the spans is 62 tonnes**  
(KRAMZ – AD 35T1 extrusions, Arconic – 1565  
CHM rolled slabs)

**Customer:** Municipal Public Institution  
Borstroyzakazchik

**Designer:** Volgaavtodorproekt Design Institute

**Construction period:** November 2020 – September  
2021

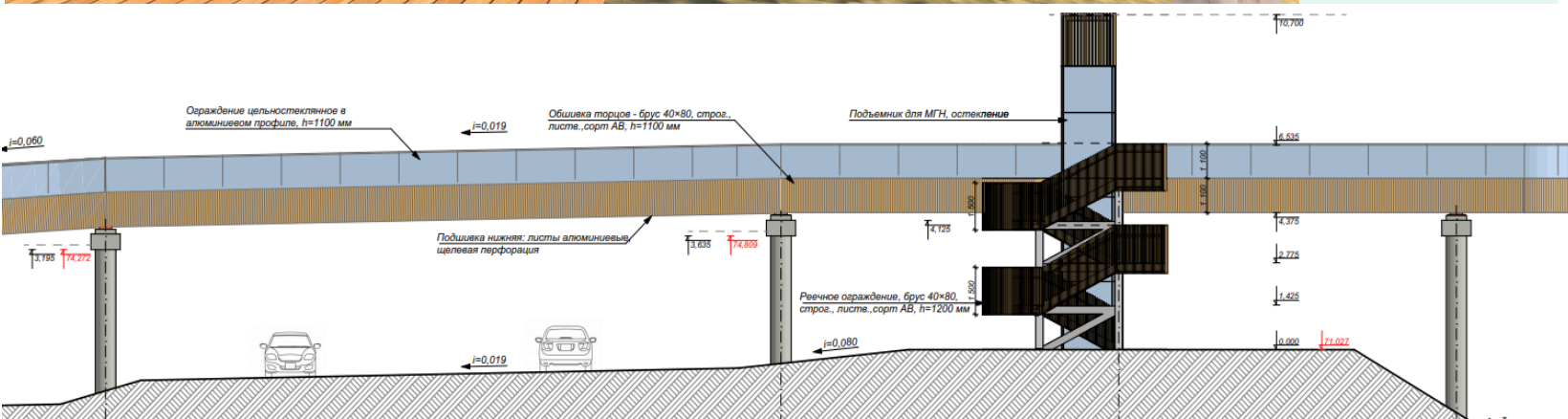
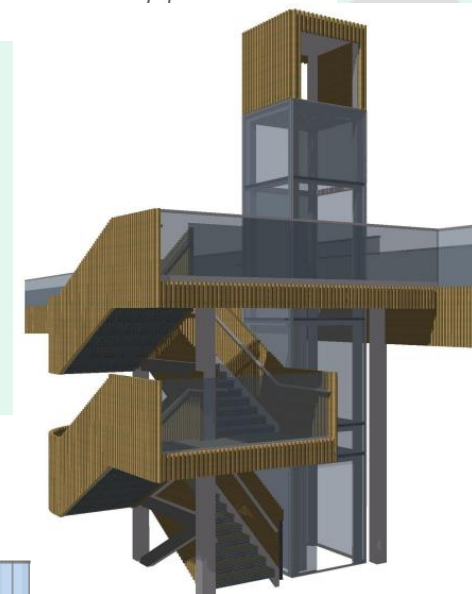
# CONSTRUCTION OF A PEDESTRIAN BRIDGE IN BOR TOWN IN THE NIZHNY NOVGOROD REGION



АЛЮМИНИЕВАЯ  
АССОЦИАЦИЯ



3D model of the pedestrian bridge



## Construction of a pedestrian crossing over Kalinin Street in the area of residential building No 177 in Krasnoyarsk



**Total length of the spans is 45.1 m (19.4x25.7)**  
**The weight of the bridge spans is 23.5 tonnes (10.11 + 13.32)**  
**Customer:** Municipal Public Institution of Krasnoyarsk, Capital Construction Office  
**Designer:** CJSC Giprottransmost Institute, Ulyanovsk  
**Construction period:** May 2021 – July 2022

## Construction of a pedestrian crossing over Karl Marx Street in the area of the Krasnoyarsk Regional Philharmonic in Krasnoyarsk



**The full length of all the spans: 53.0 m(5×33×15) Width: 6.0 m**  
**The weight of the spans: 45.0 tonnes (KRAMZ – AD 35T1 extrusions)**  
**Customer:** Municipal Public Institution of Krasnoyarsk, Capital Construction Office  
**Designer:** Horizon LLC  
**Contractor:** JSC Giprostroymost  
**First stage construction period:** December 2020 – October 2021.



АЛЮМИНИЕВАЯ  
АССОЦИАЦИЯ

## ARCHITECTURAL FENCING OF THE PEDESTRIAN BRIDGE OF THE MOSCOW ZOO



**Design period:** August – October 2020

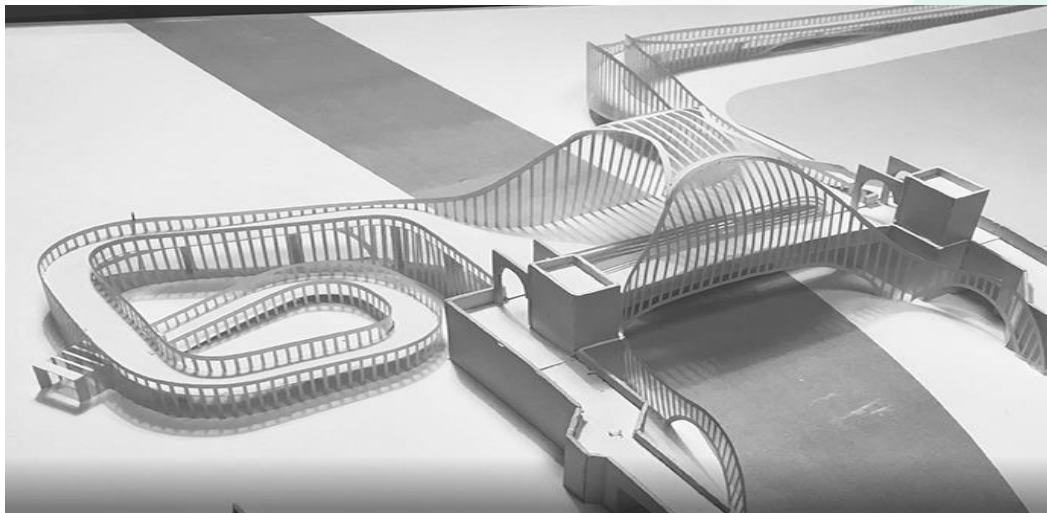
**Construction period:** Q3 2020 – May 2021

**Customer:** Public Production Facility Civil Construction Office of Moscow

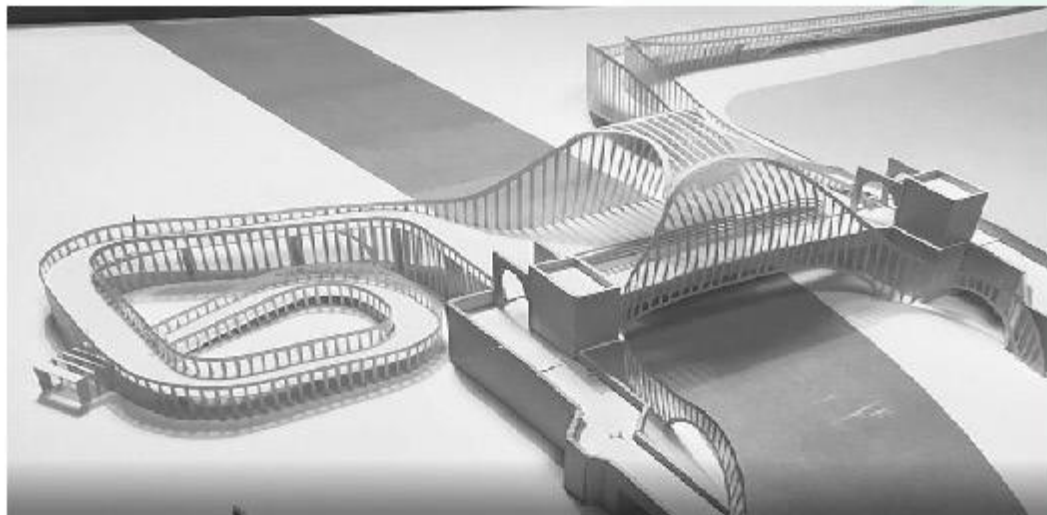
**Designer and General Contractor:** GP-MFS LLC

**Metal consumption:** 52 tonnes (architectural fencing)

(KRAMZ – AD 35 T1 extrusions)



## Architectural fencing of the pedestrian bridge of the Moscow Zoo

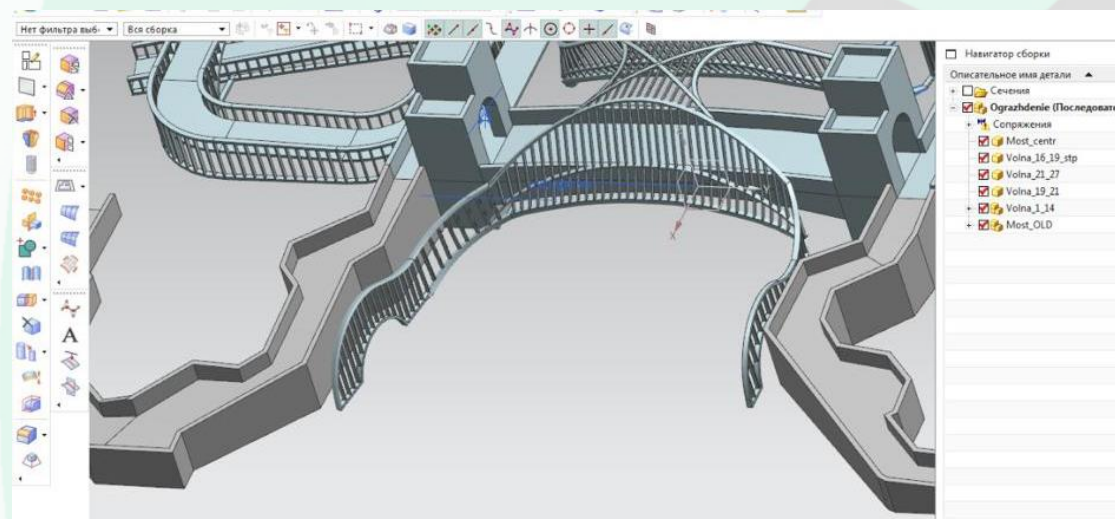
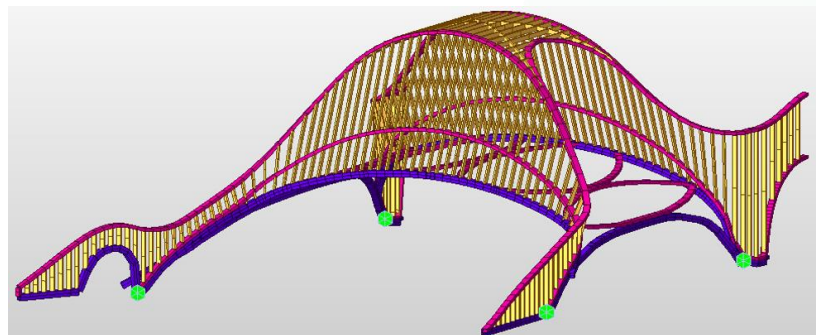
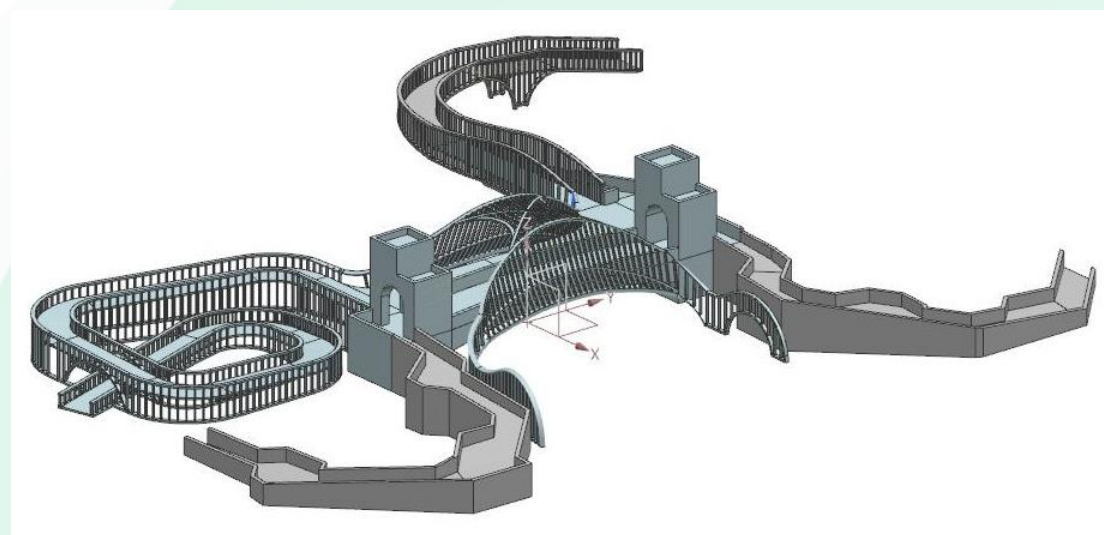
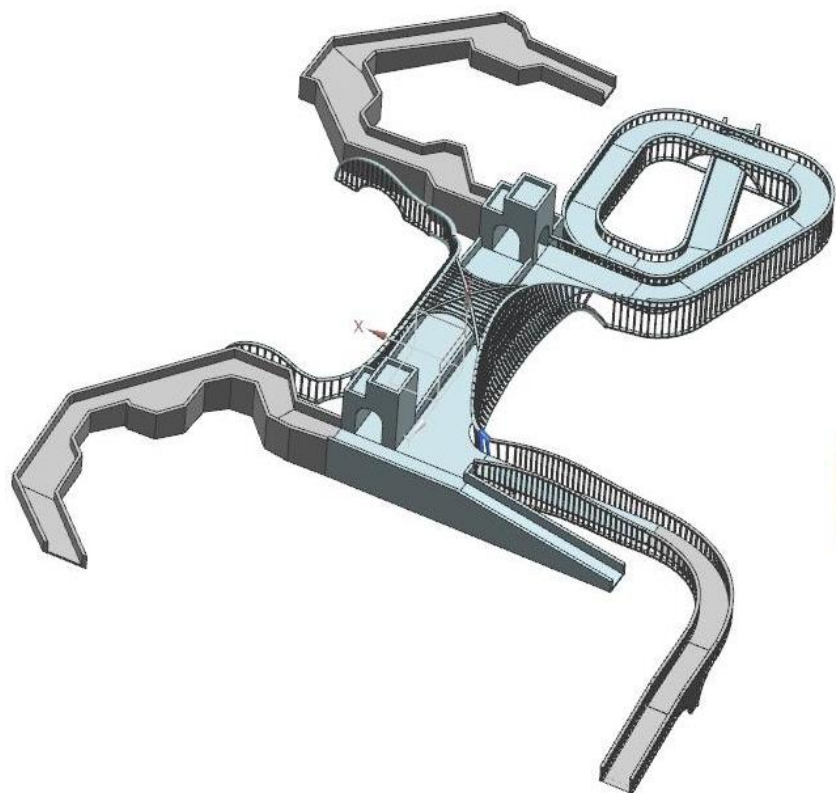


**Design period:** August – October 2020  
**Construction period:** Q3 2020 – May 2021  
**Customer:** Public Production Facility Civil Construction Office of Moscow  
**Designer and General Contractor:** GP-MFS LLC  
**Metal consumption:** 52 tonnes (architectural fencing)  
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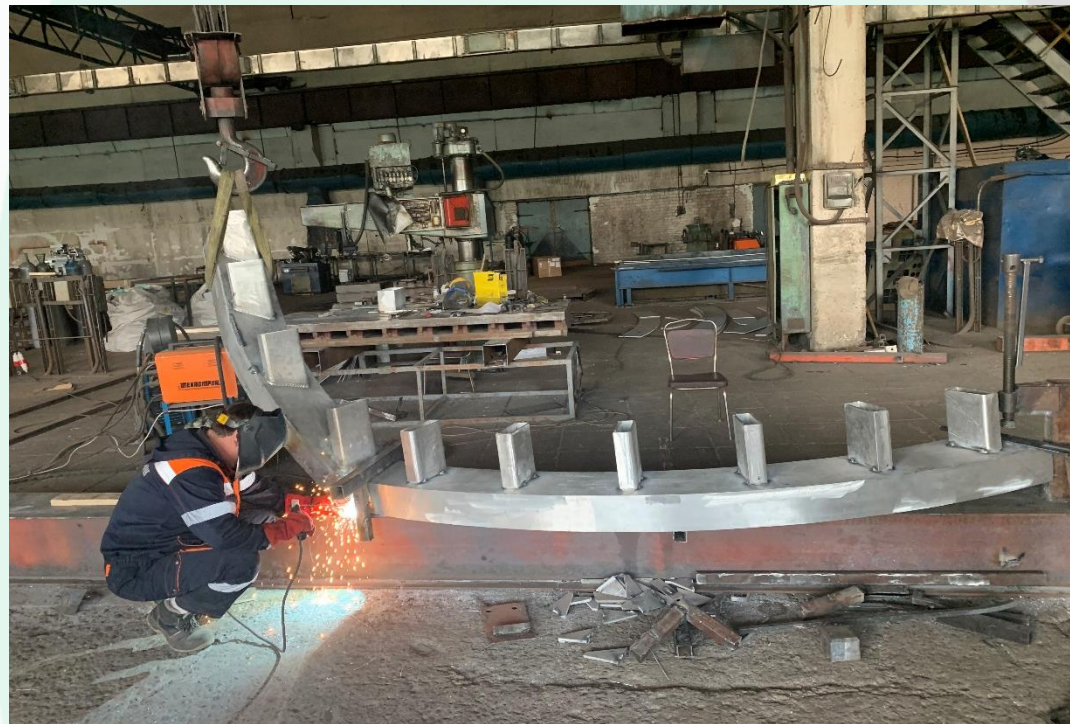
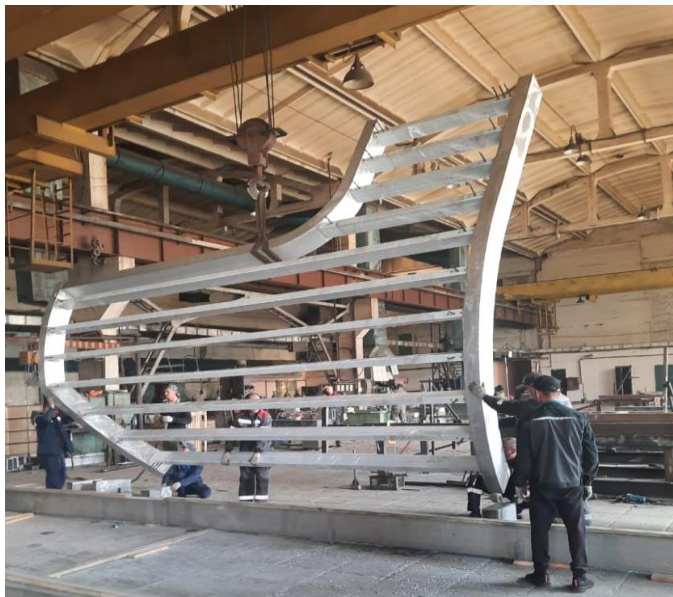




## 3D modeling of the construction



## Construction manufacturing



# ARCHITECTURAL FENCING OF THE PEDESTRIAN BRIDGE OF THE MOSCOW ZOO



АЛЮМИНИЕВАЯ  
АССОЦИАЦИЯ

## Construction



The Aluminium Association is open to discussion on various forms of cooperation and projects aimed at increasing the usage of aluminium

**We invite you to cooperate with us!**

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