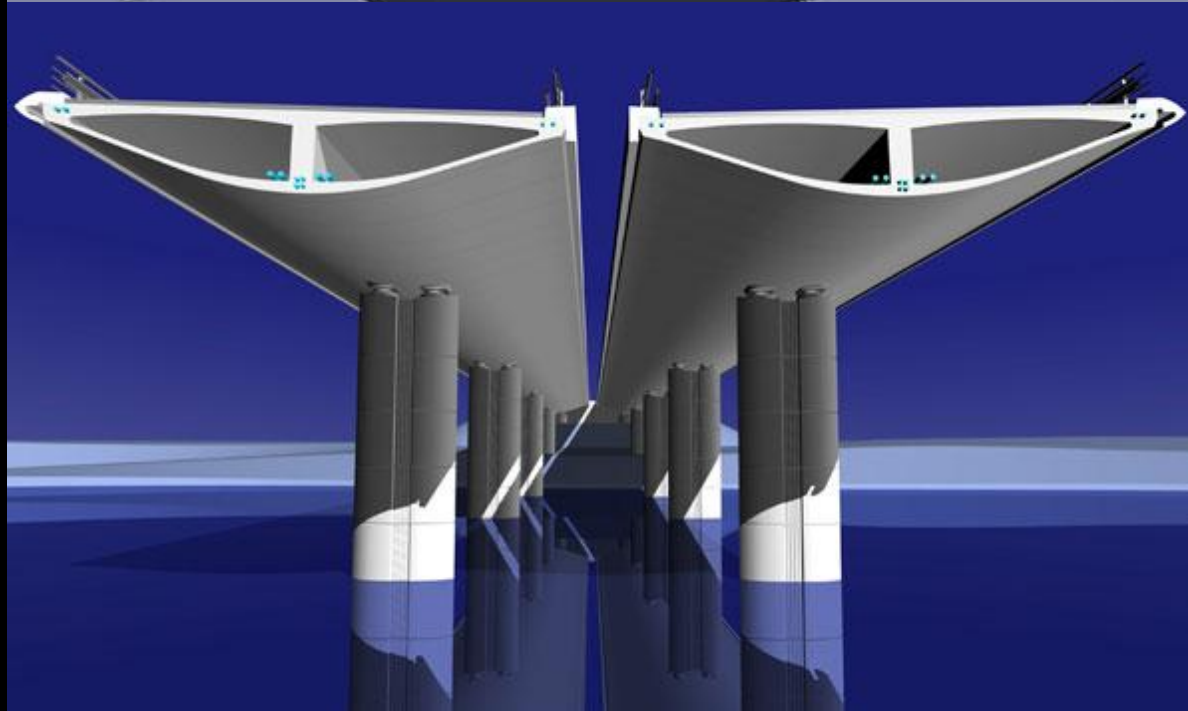
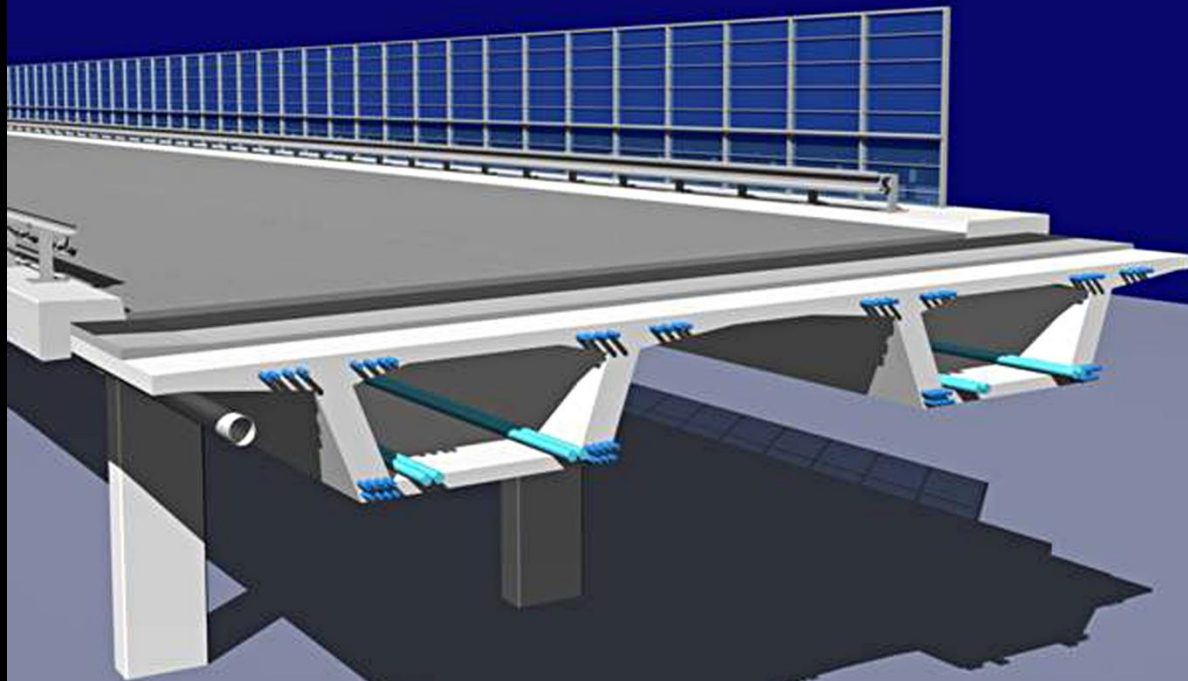


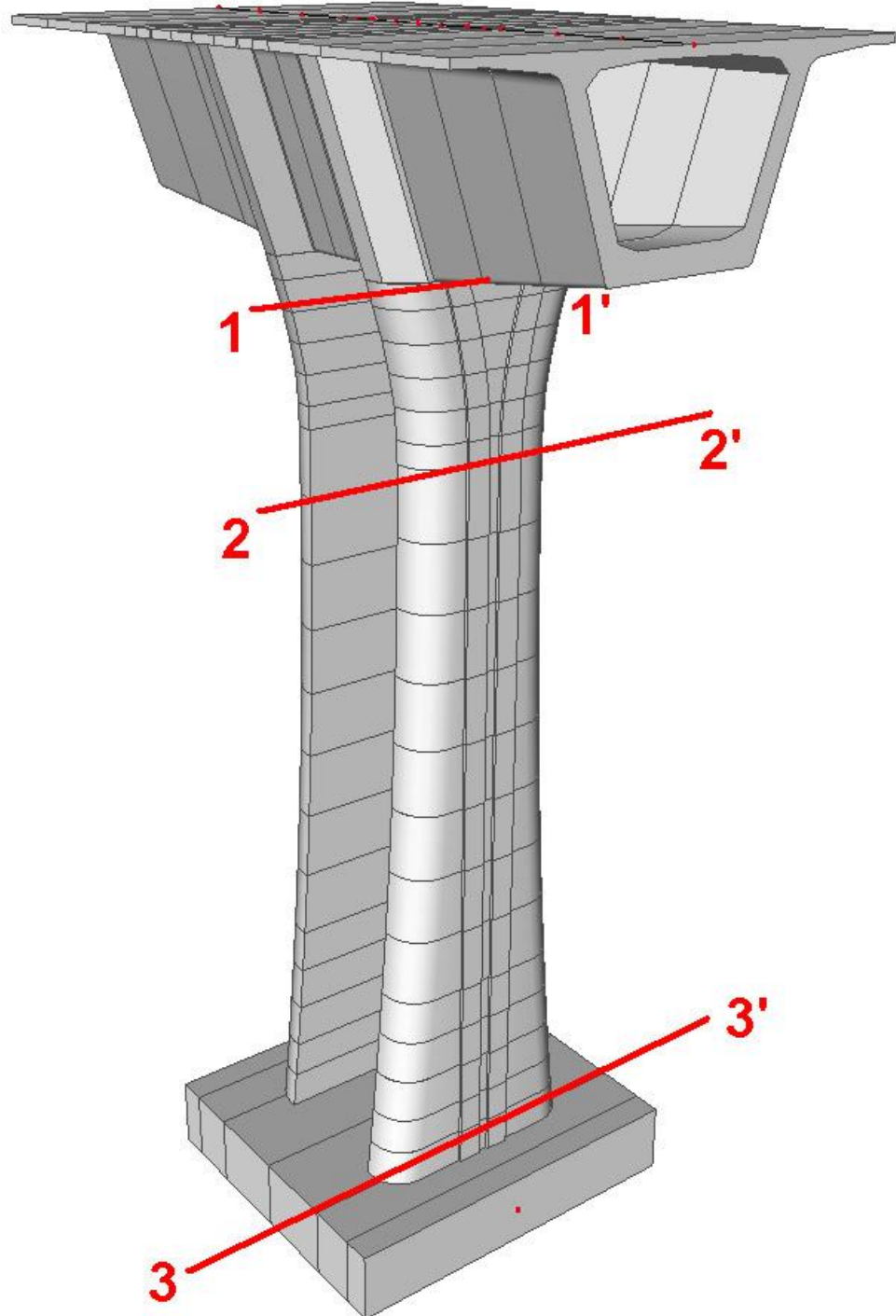
FALKIRK WHEEL

SKOTSKO

VODNÍ MOSTY

TECHNOLOGIE VÝSTAVBY MOSTNÍCH KONSTRUKCÍ





1

1'

2

2'

3

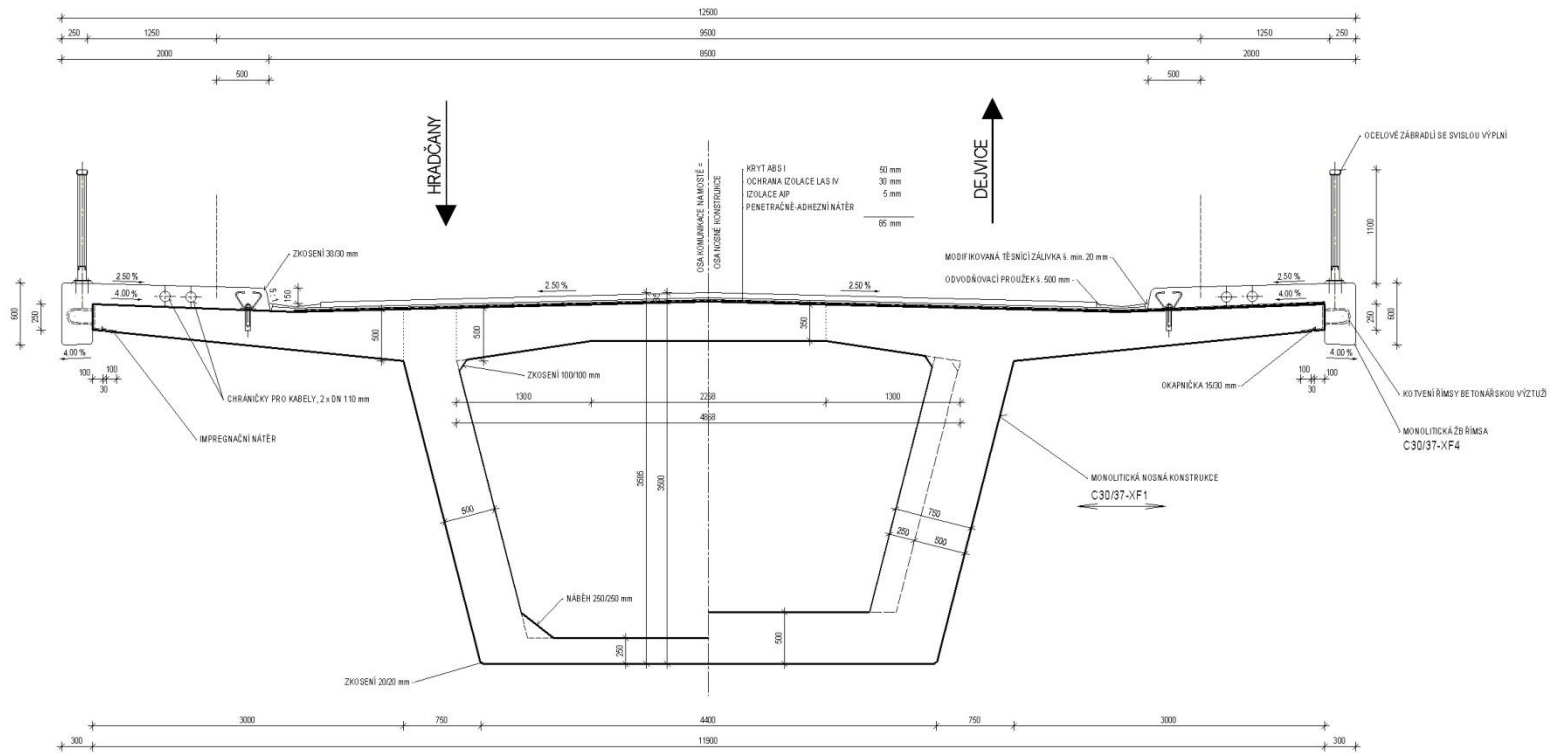
3'

VZOROVÝ PŘÍČNÝ ŘEZ

- OBJEKT S CHODNÍKY A BEZ SVOVIDEL
- ROZPĚTÍ STŘEDNÍHO POLE 70,0 m
- MĚŘÍTKO V ORIGINÁLE 1 : 25

V POLI

NAD PILÍŘEM

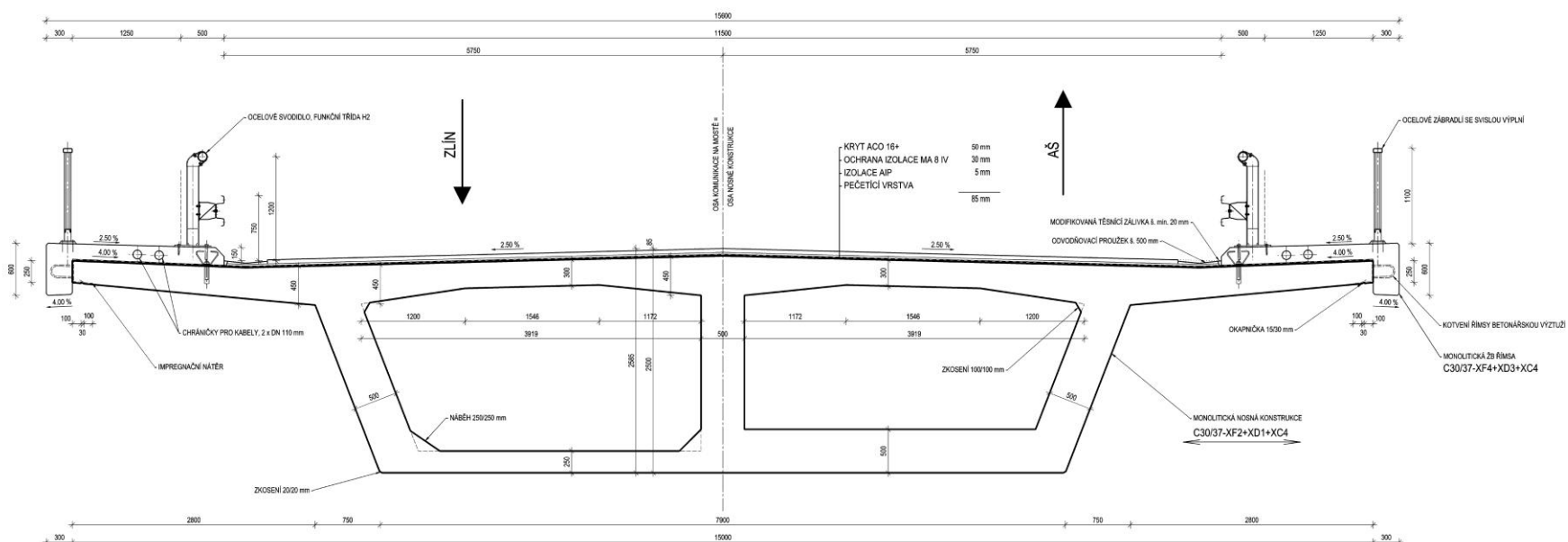


VZOROVÝ PŘÍČNÝ ŘEZ

- OBJEKT S CHODNÍKY A SE SVODIDLY
- ROZPĚTÍ STŘEDNÍHO POLE 50,0 m
- MĚŘÍTKO V ORIGINÁLE 1 : 25

V POLI

NAD PILÍŘEM



Main

- Project
- Template dialogue
- Structure
- Load
- Load cases, Combinations
- Construction stages
- Calculation, Mesh
- Concrete
- Document
- Picture gallery
- Paperspace gallery
- Library
- Tools

Properties

Member (1)

Name	B2
Type	general (G)
CrossSection	divoutram_1-Gener...
Alpha	0
Member system line at	centre
ex [mm]	1004.585
LCS	standard
FEM type	standard
Buckling and relative le...	Default
Layer	divoutram

Geometry

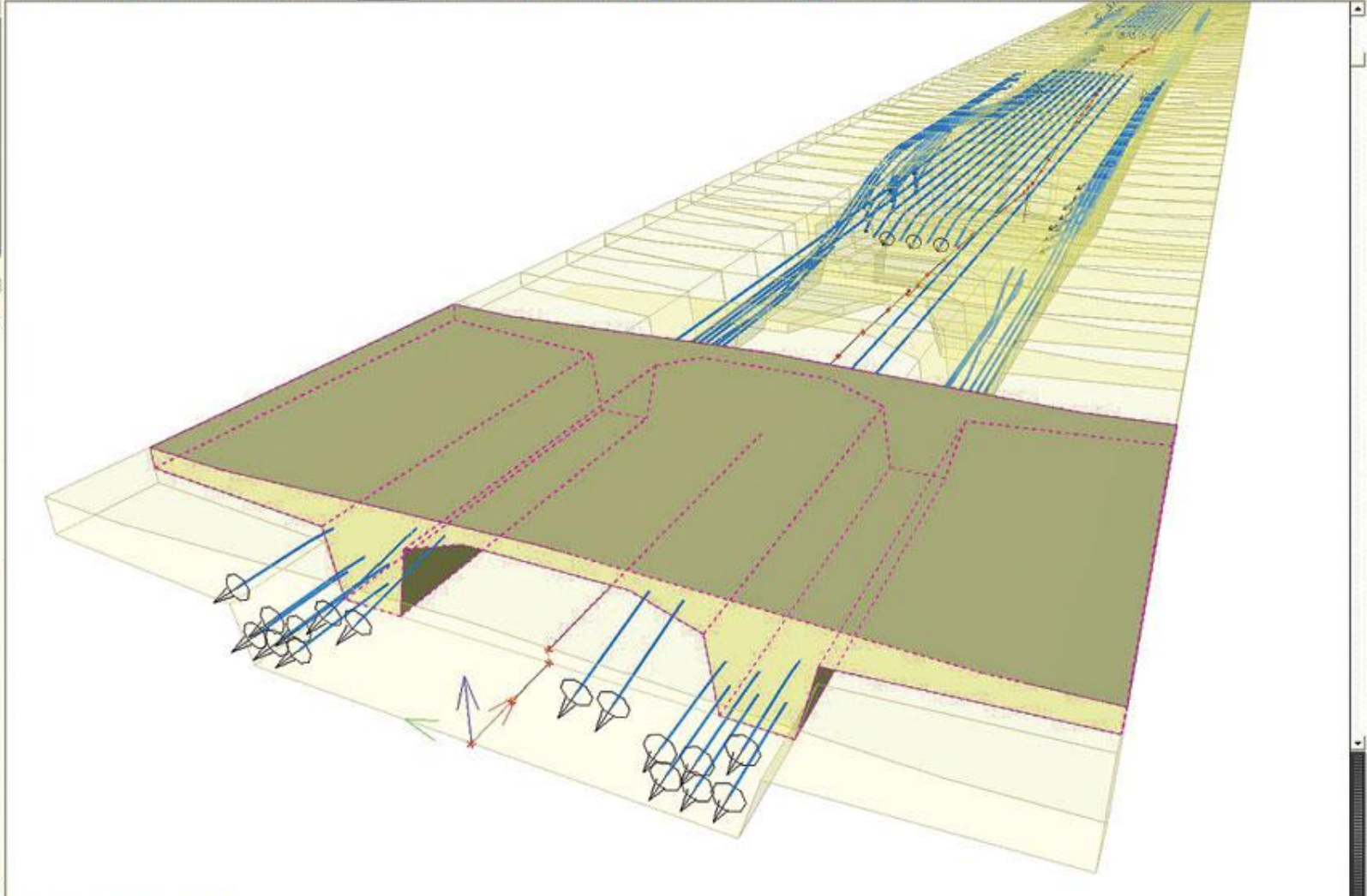
Length [m]	7.600
Shape	Line
Seg. node	N3
End node	N4

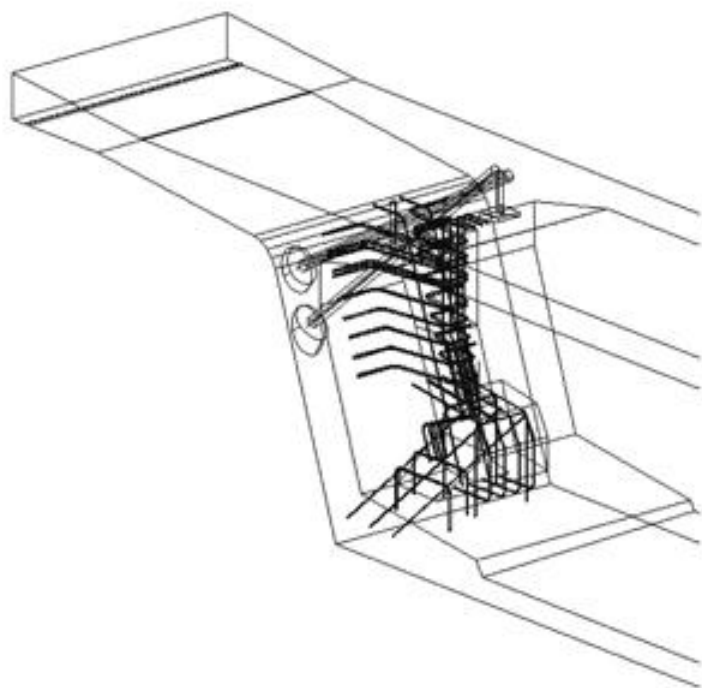
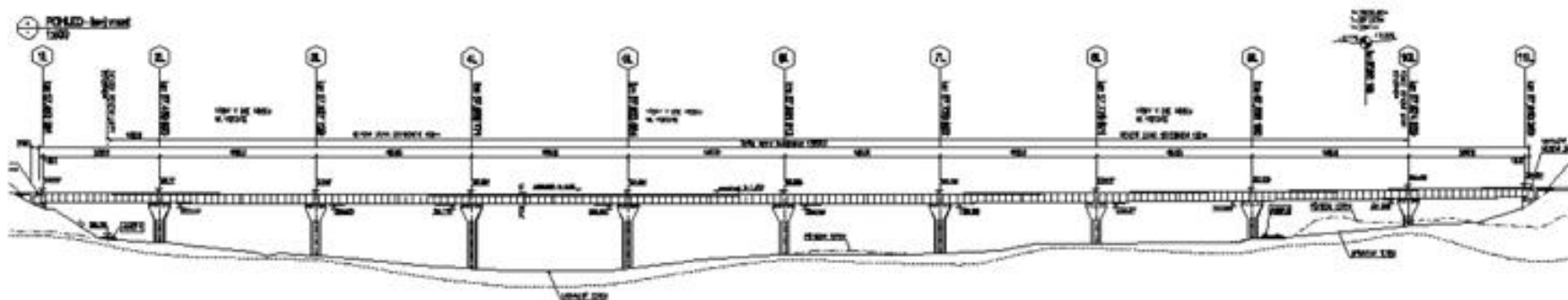
Nodes

N3	align
N4	align

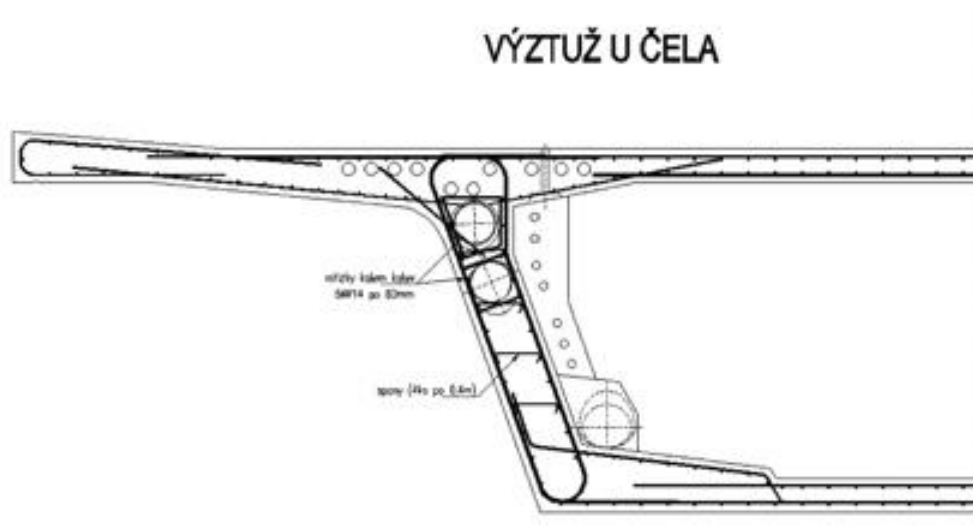
Data

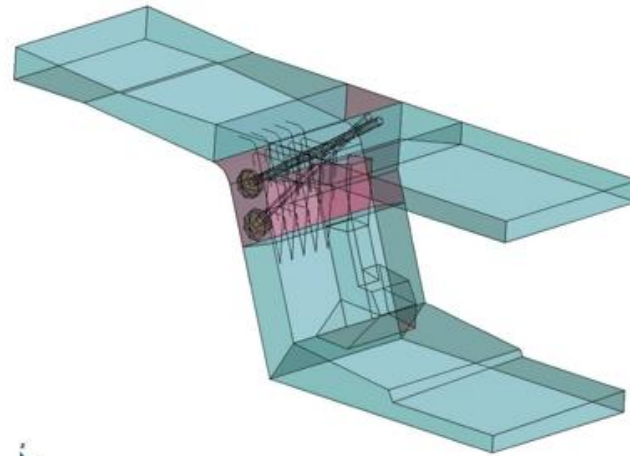
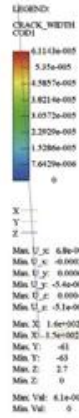
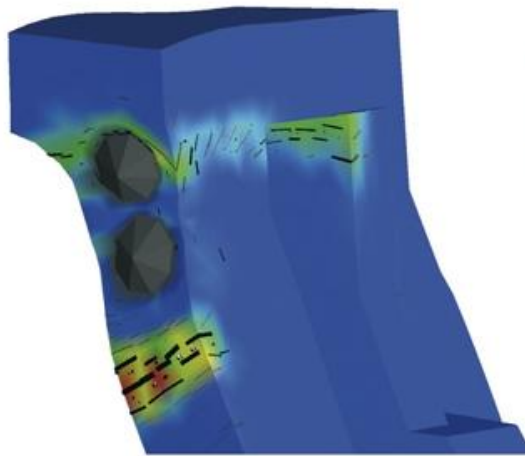
Line force on beam	LF2
Post tensioned tendon	
Post tensioned tendon	
Post tensioned tendon	
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Post tensioned tendon	
Post tensioned tendon	





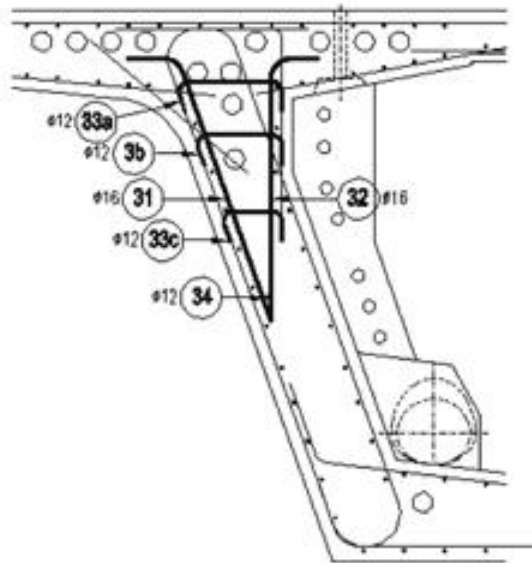
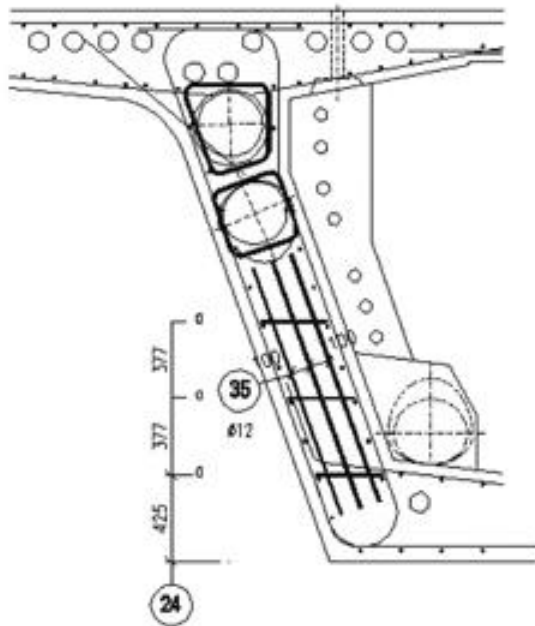
VÝZTUŽ U ČELA



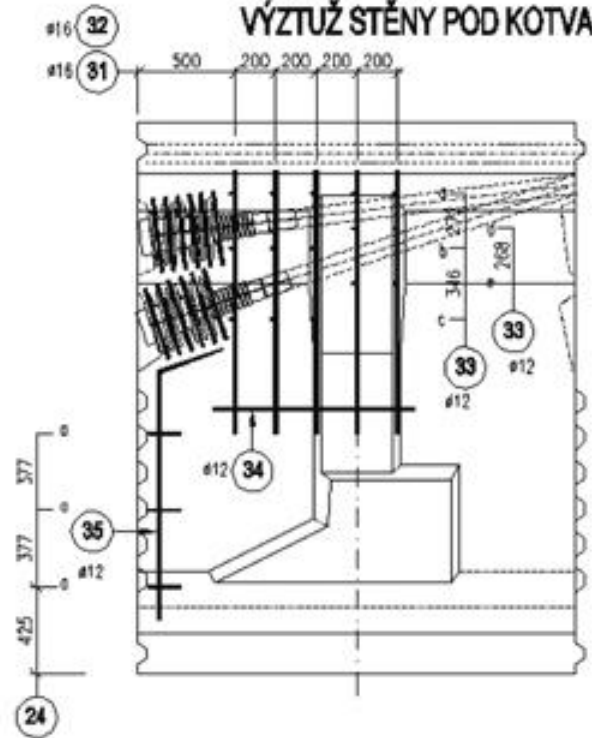


VÝZTUŽ ČELA STĚNY

VÝZTUŽ ZA KOTVAMI



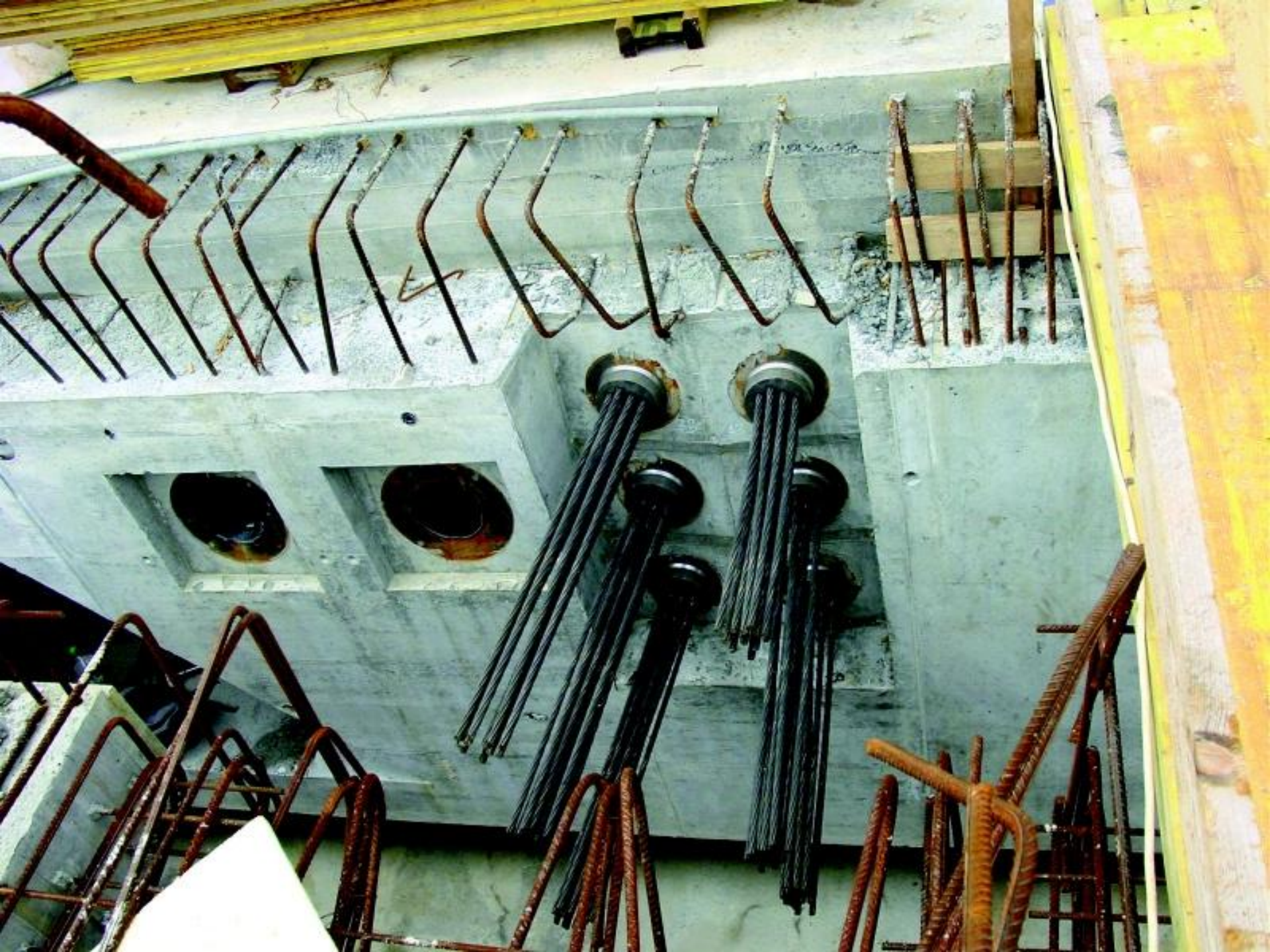
ŘEZ E-E 1:25
 VÝZTUŽ STĚNY POD KOTVAMI

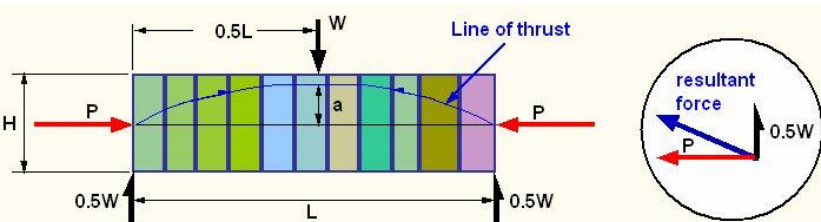
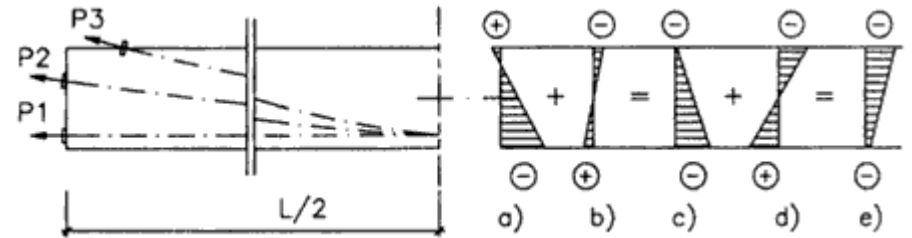
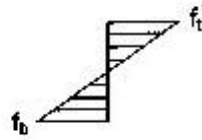
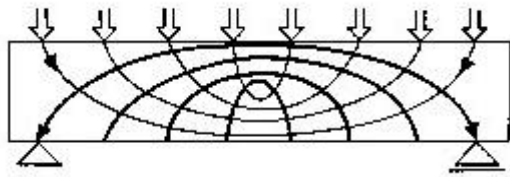






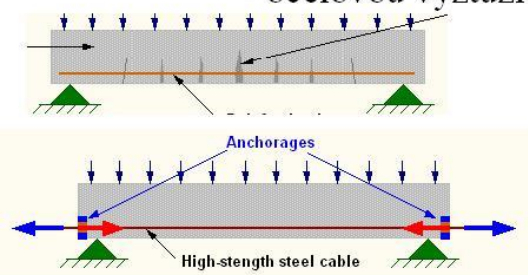
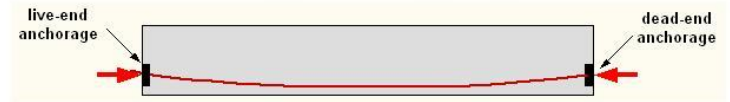




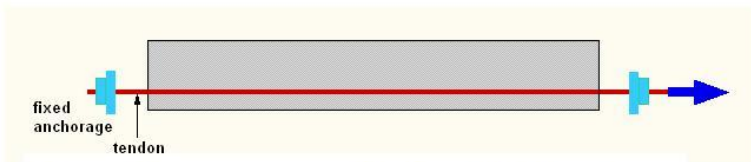


Malou pevnost betonu v tahu lze kompenzovat
- ocelovou výztuží v tažené oblasti - **železobeton**

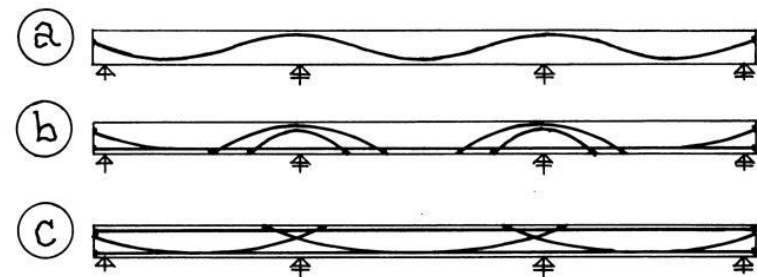
Dodatečně předpjatý beton



Různé způsoby vedení výztuže

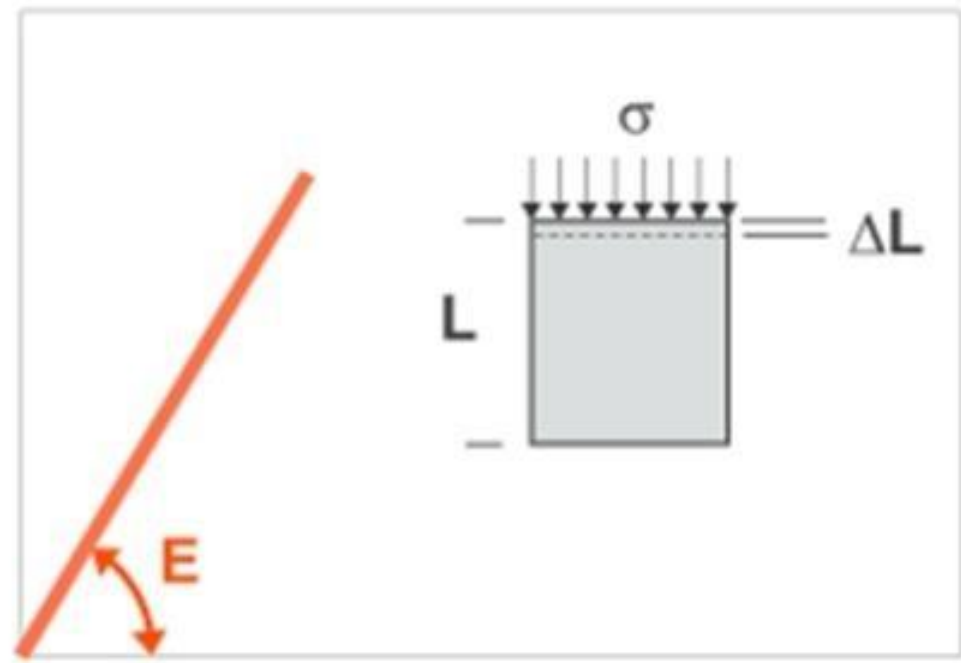


Předem předpjatý beton



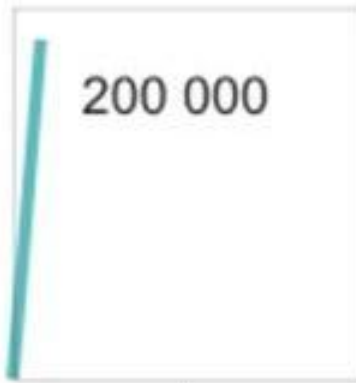
σ
(N/mm²)

napětí
↑



$$E = \frac{\sigma}{\varepsilon} \text{ (N/mm}^2\text{)}$$

→ deformace $\varepsilon \left(= \frac{\Delta L}{L} \right)$



200 000

ocel



> 35 000

beton C 40/50



25-30 000

beton C 20/25



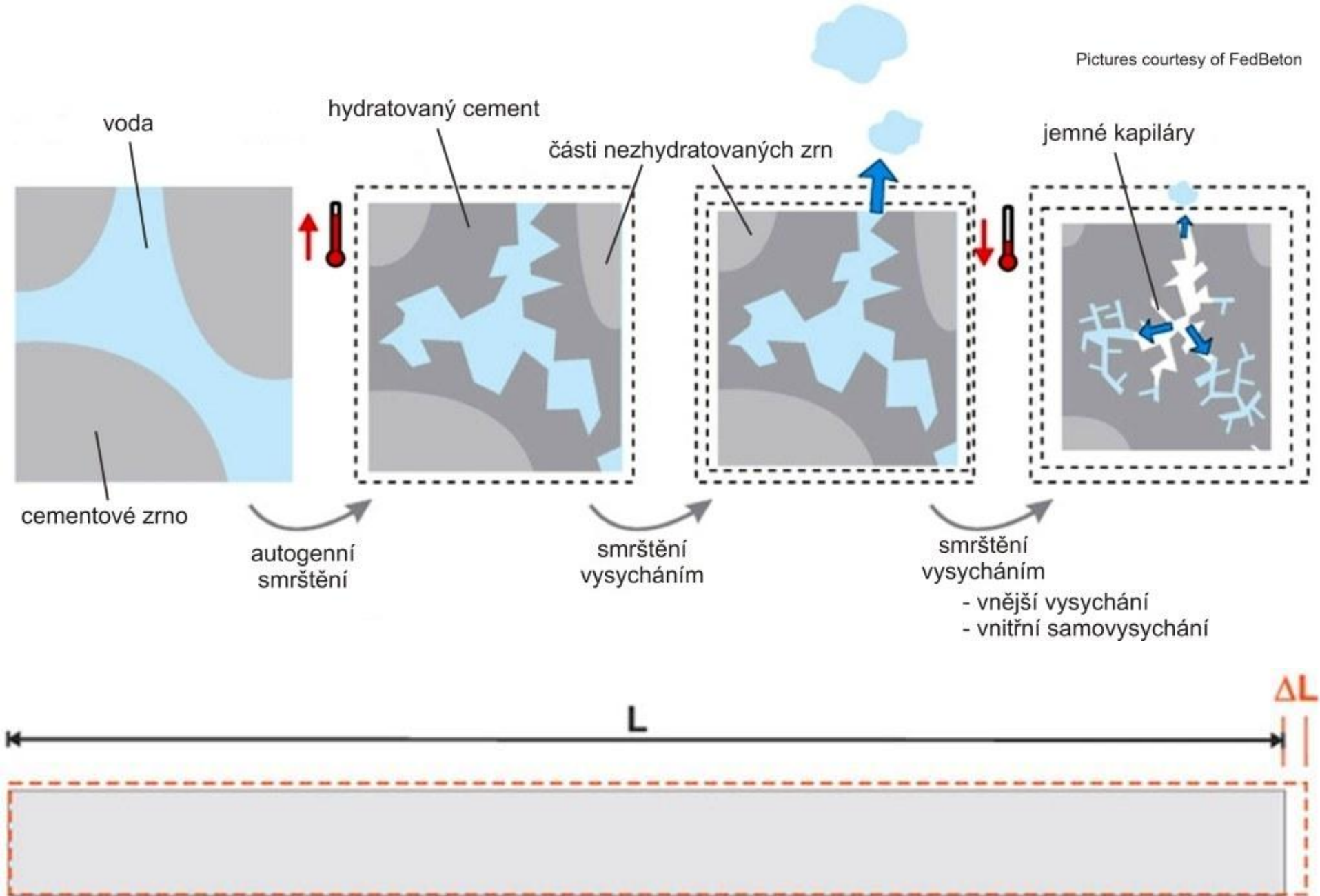
10-15 000

dubové dřevo



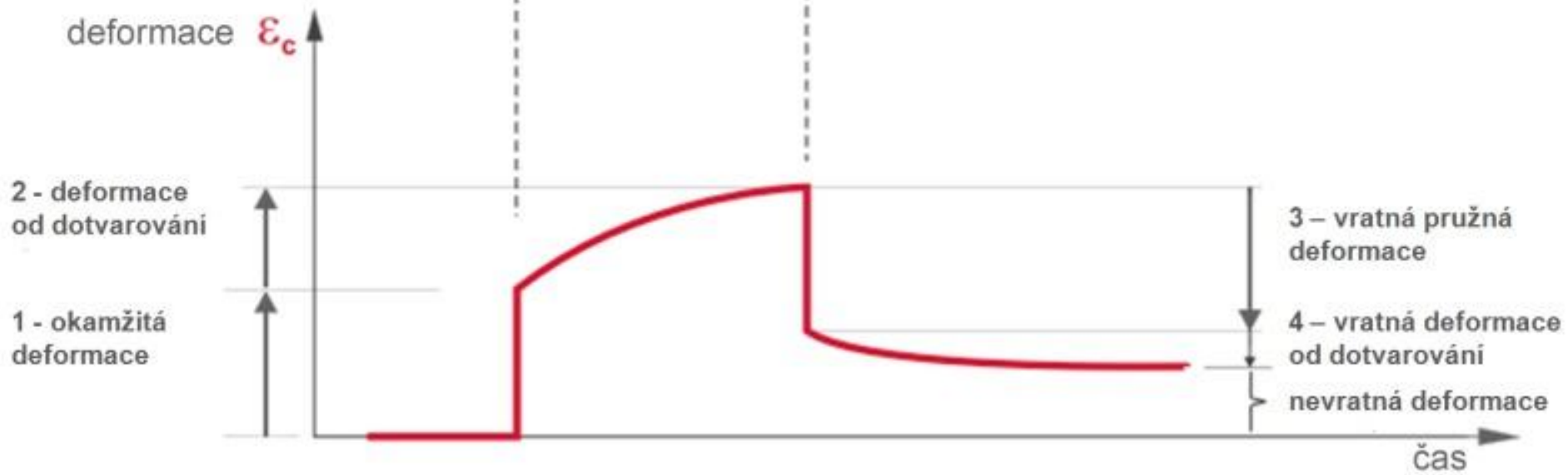
< 1

kaučuk



$$\Delta L = 1 \text{ mm} / 10 \text{ m} / 10 \text{ }^\circ\text{C}$$

picture courtesy of FedBeton



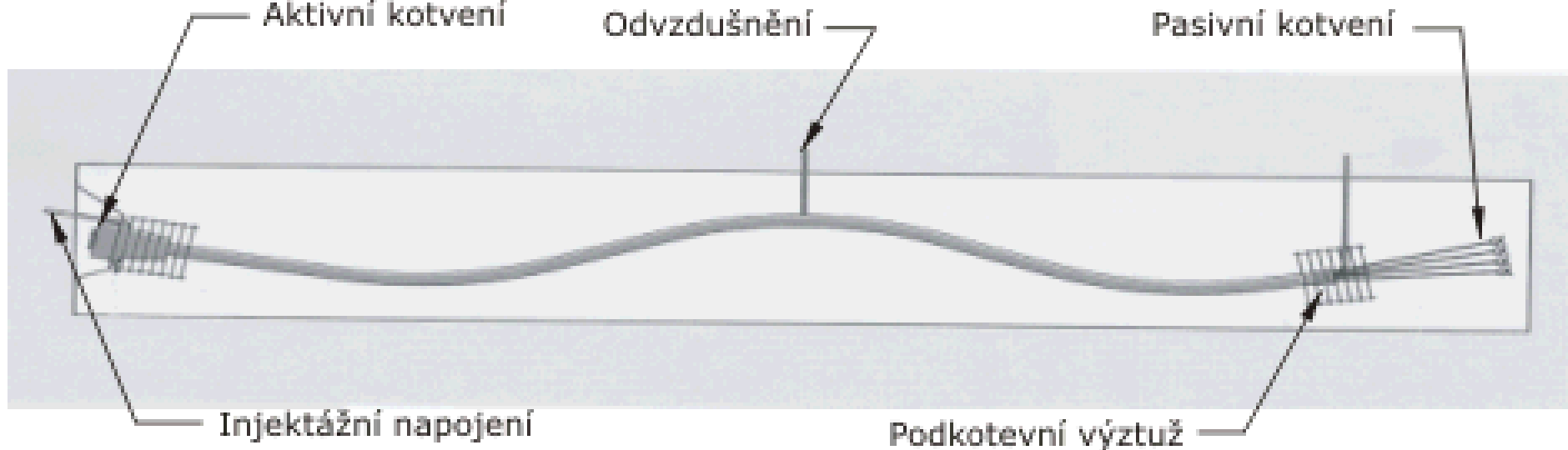


Schéma vícelanového předpínacího systému

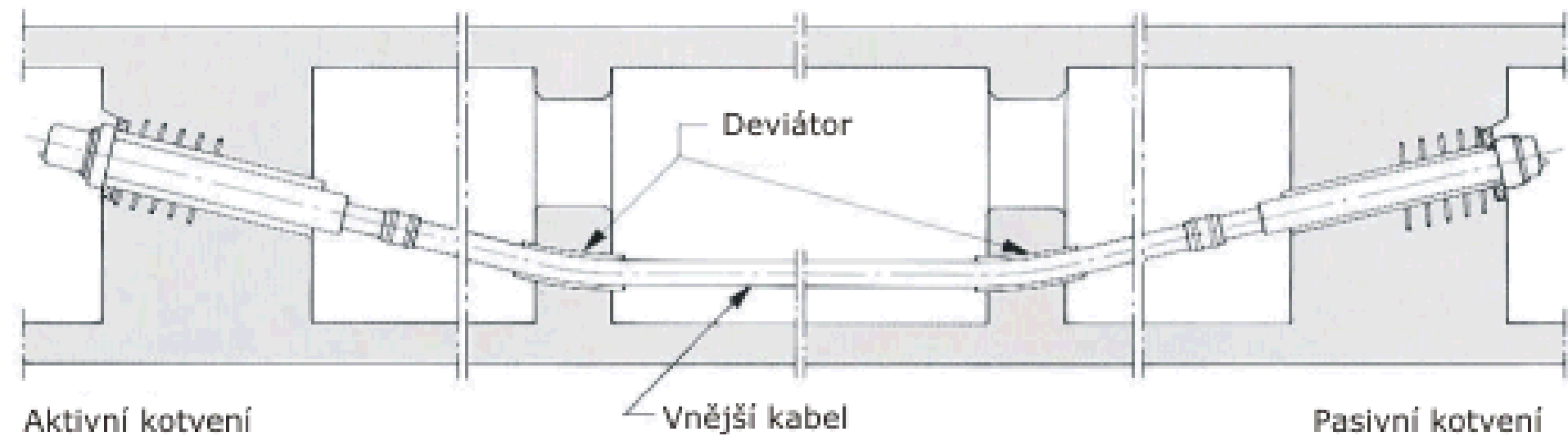


Schéma vnějšího předpínacího systému

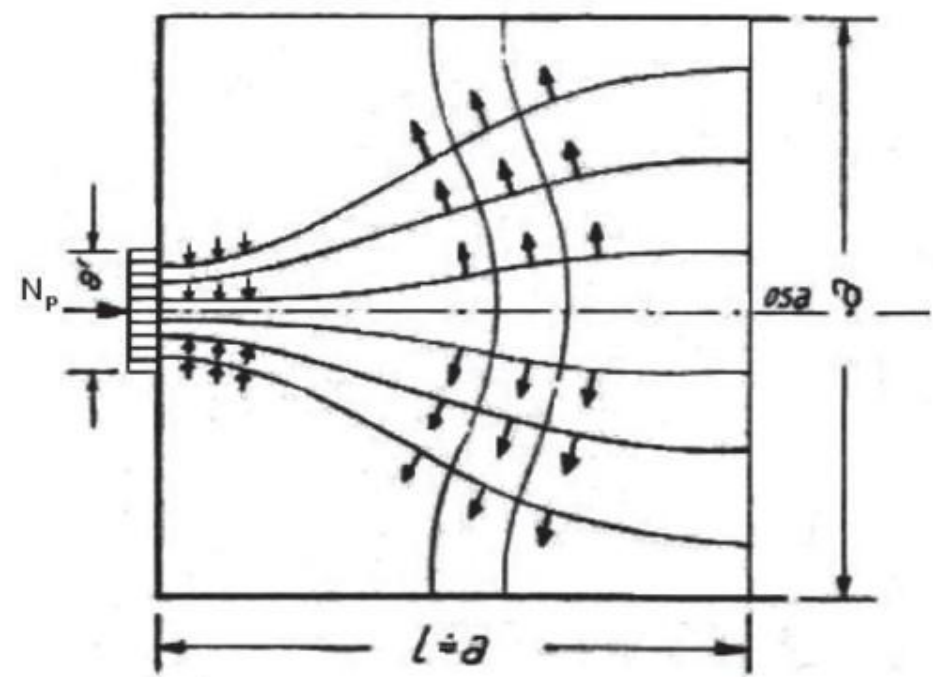
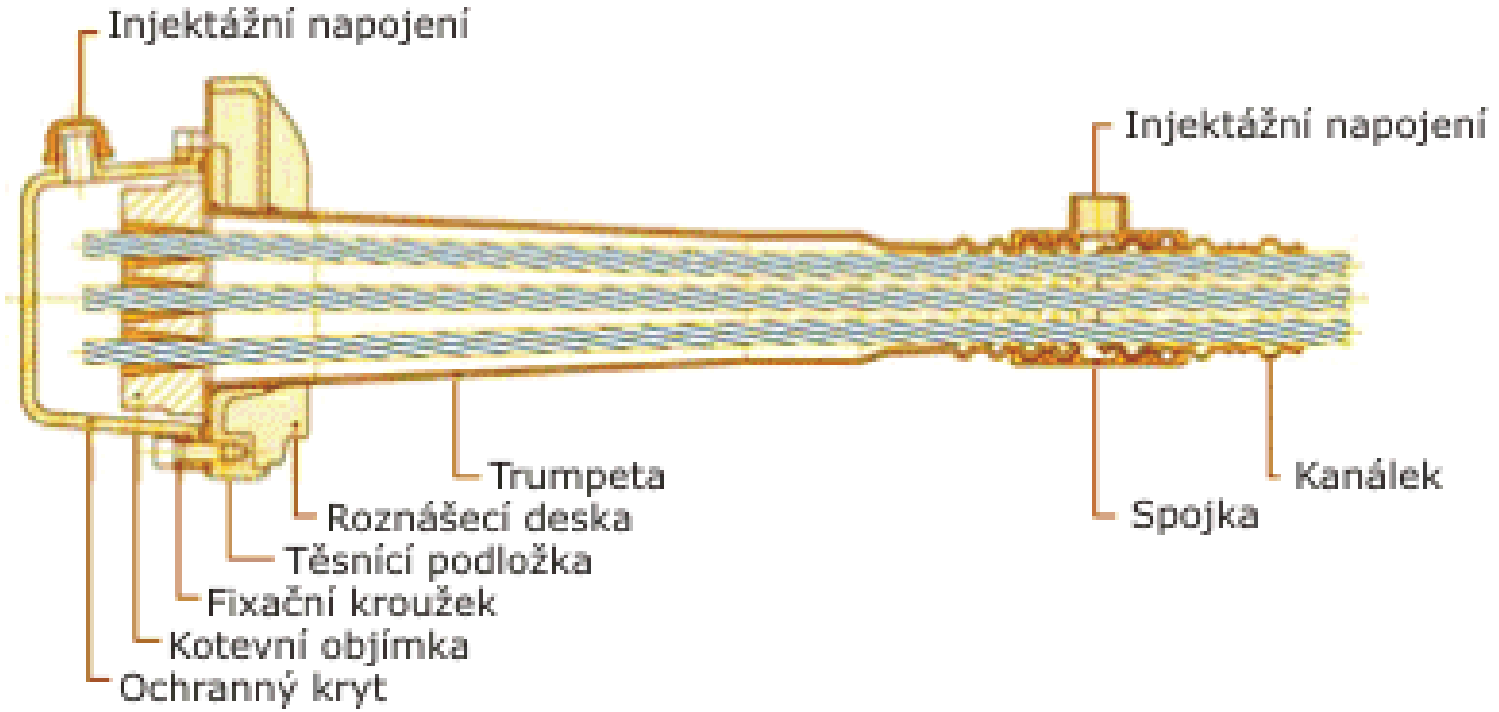




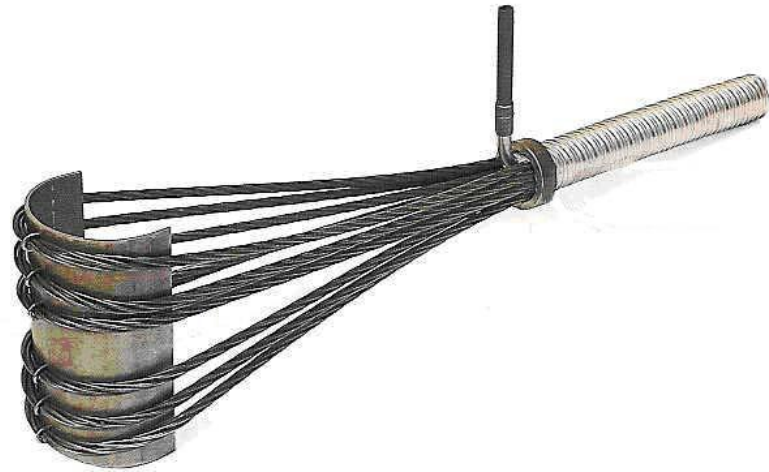
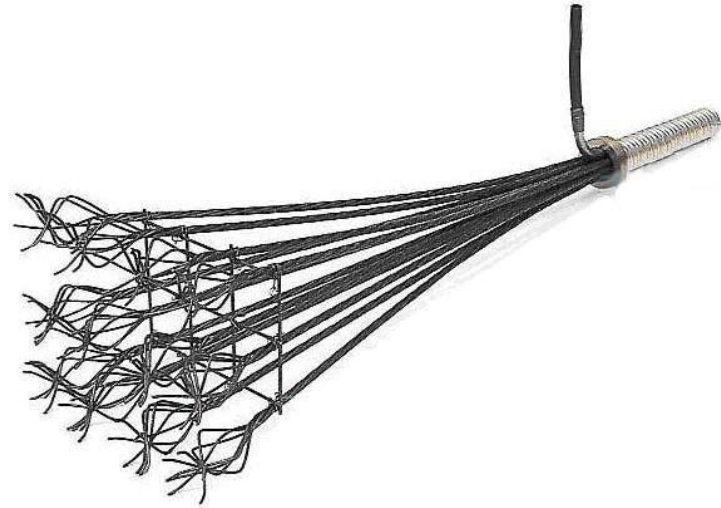


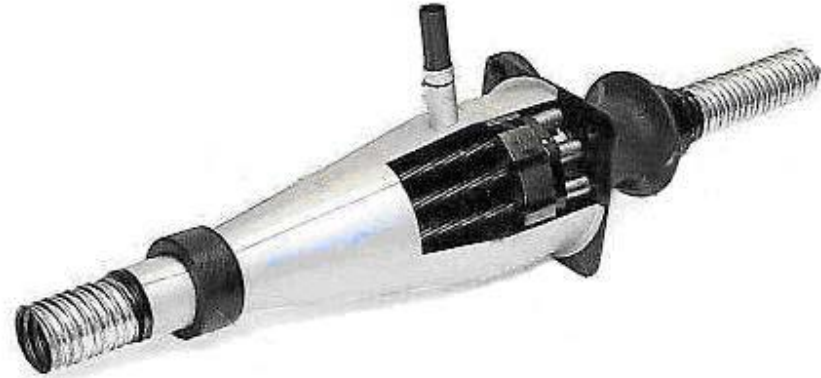


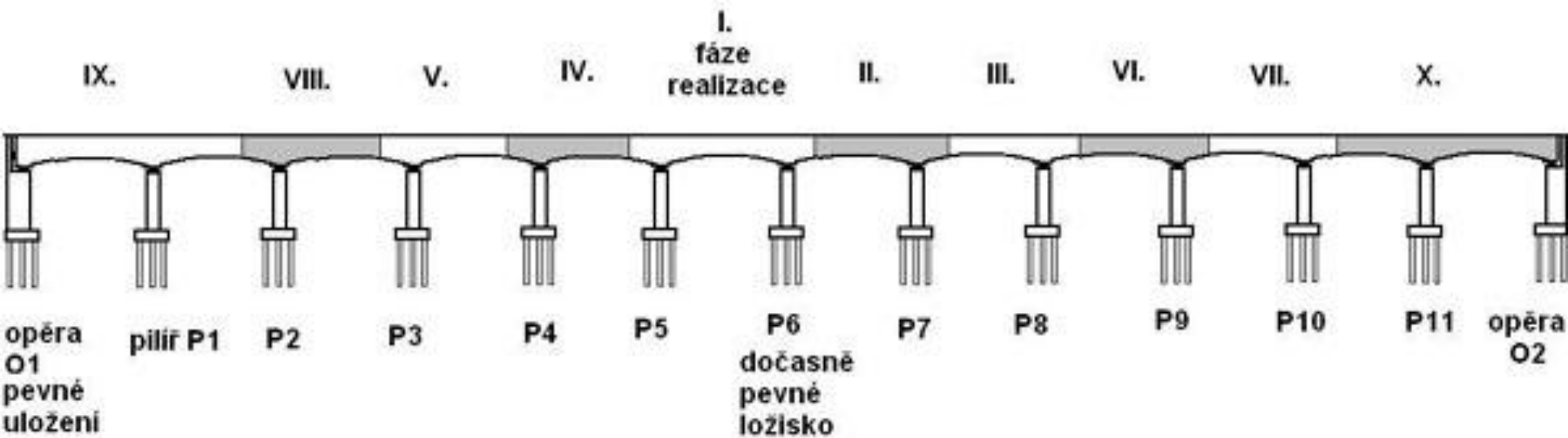




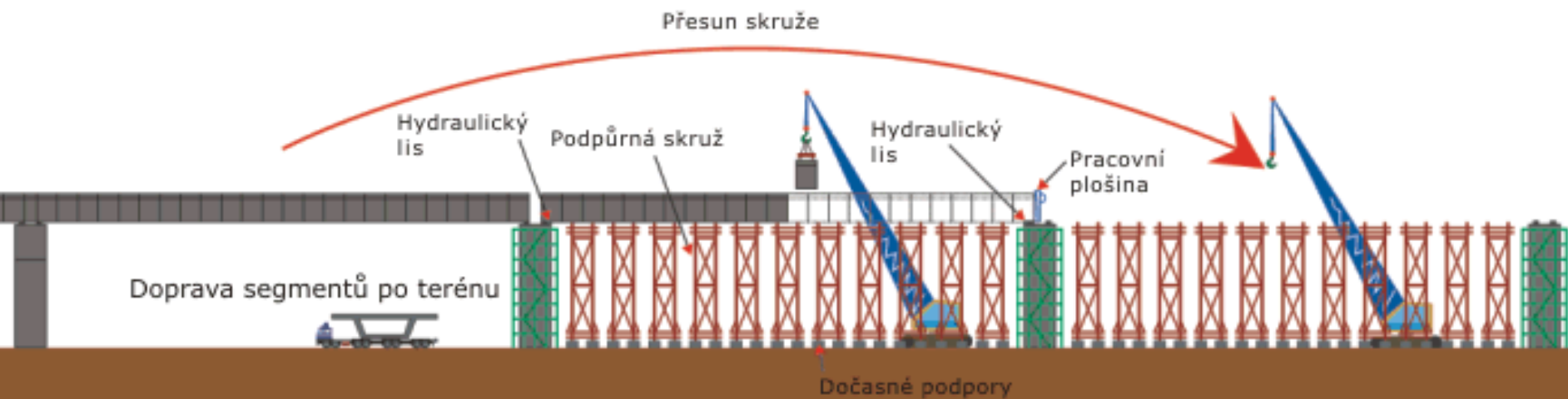








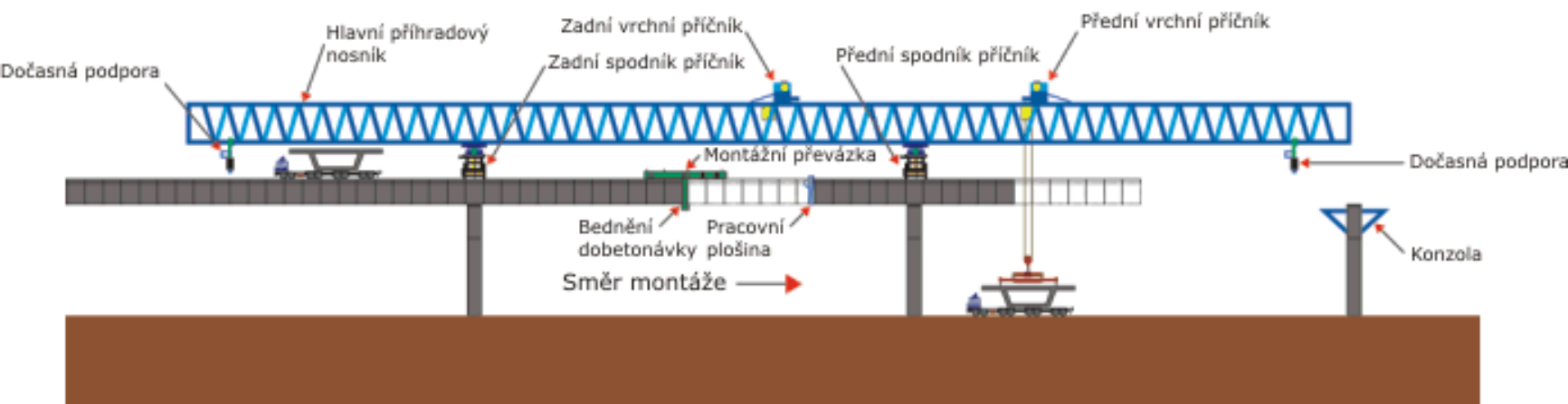
BETONÁŽ NA PEVNÉ SKRUŽI



MONTÁŽ NA PEVNÉ SKRUŽI







MONTÁŽ A BETONÁŽ NA VÝSUVNÉ SKRUŽI









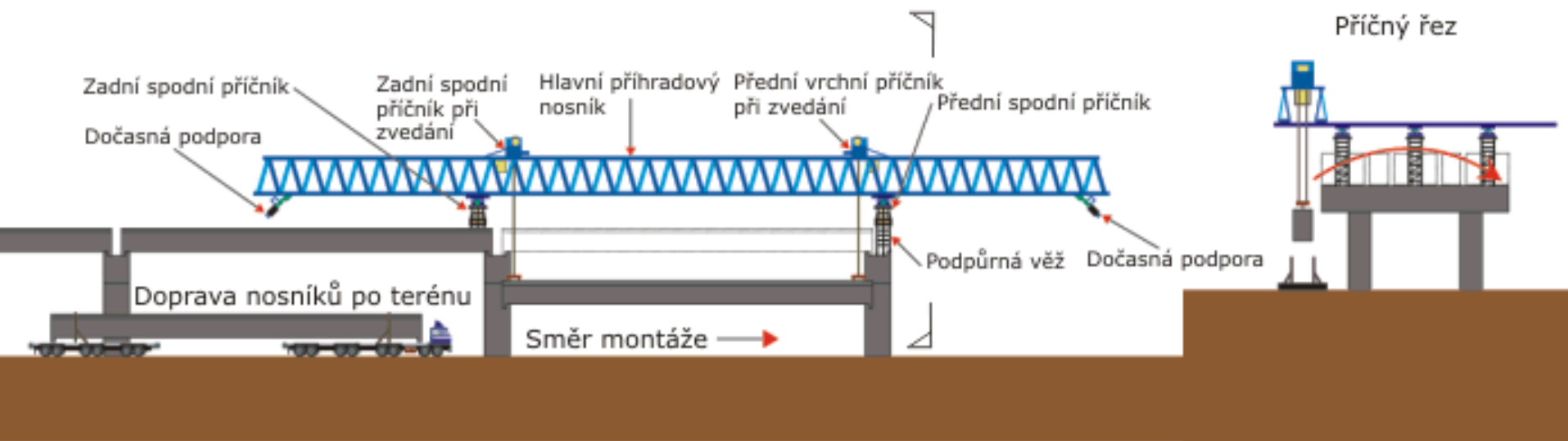




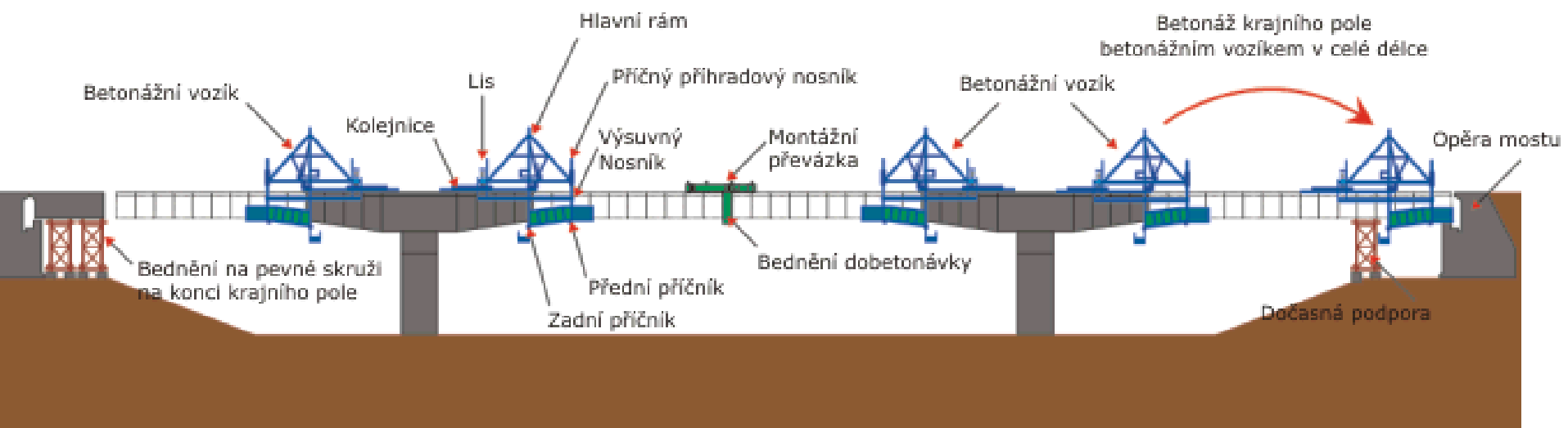








MONTÁŽ PREFABRIKOVANÝCH NOSNÍKŮ



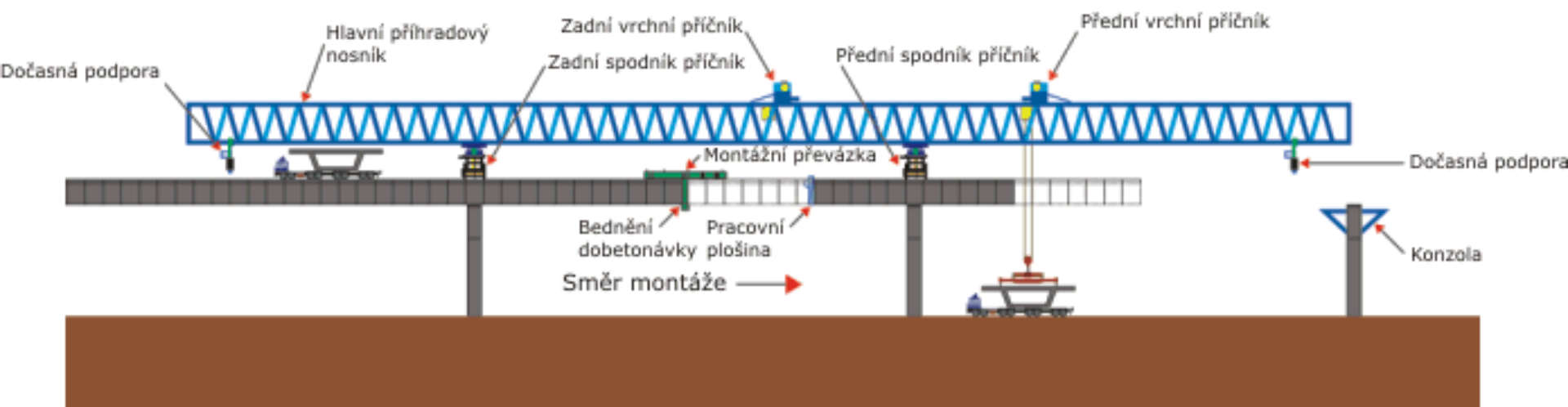
LÉTMÁ BETONÁŽ







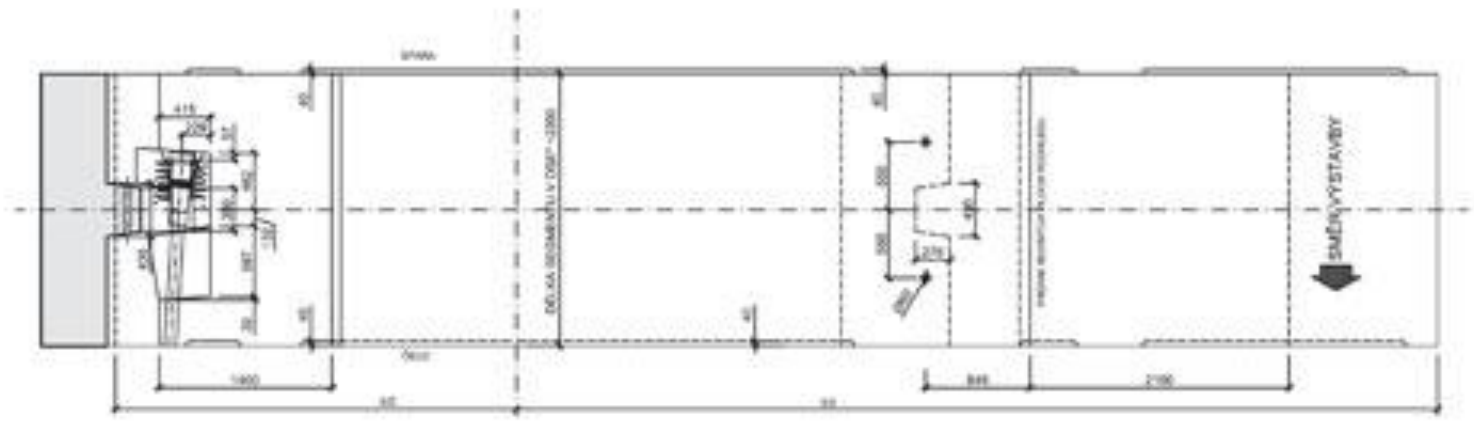
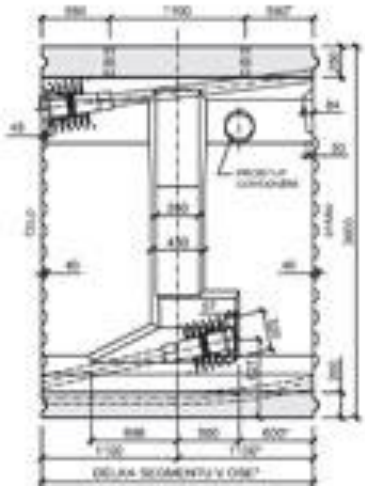
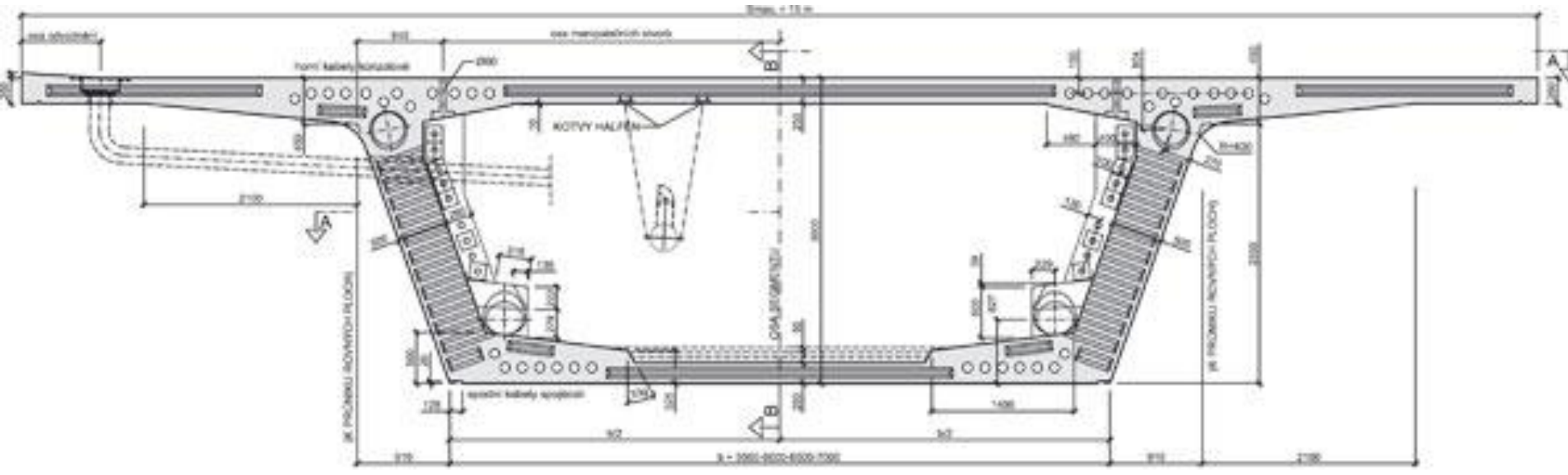


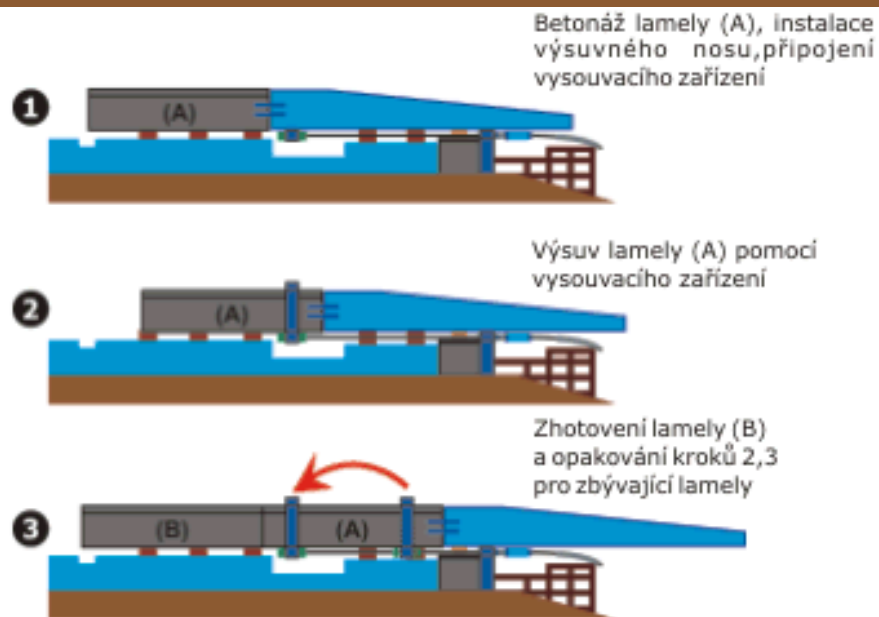
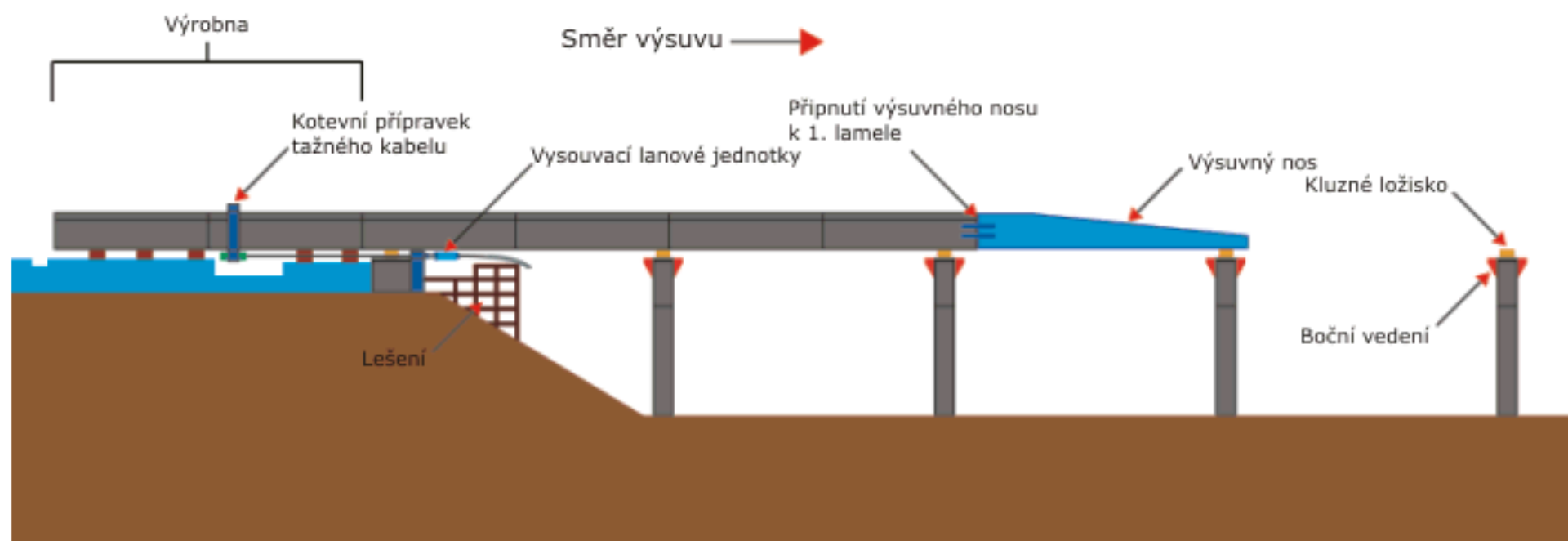


LETMÁ MONTÁŽ VÝSUVNÝM ZAVÁŽECÍM MOSTEM







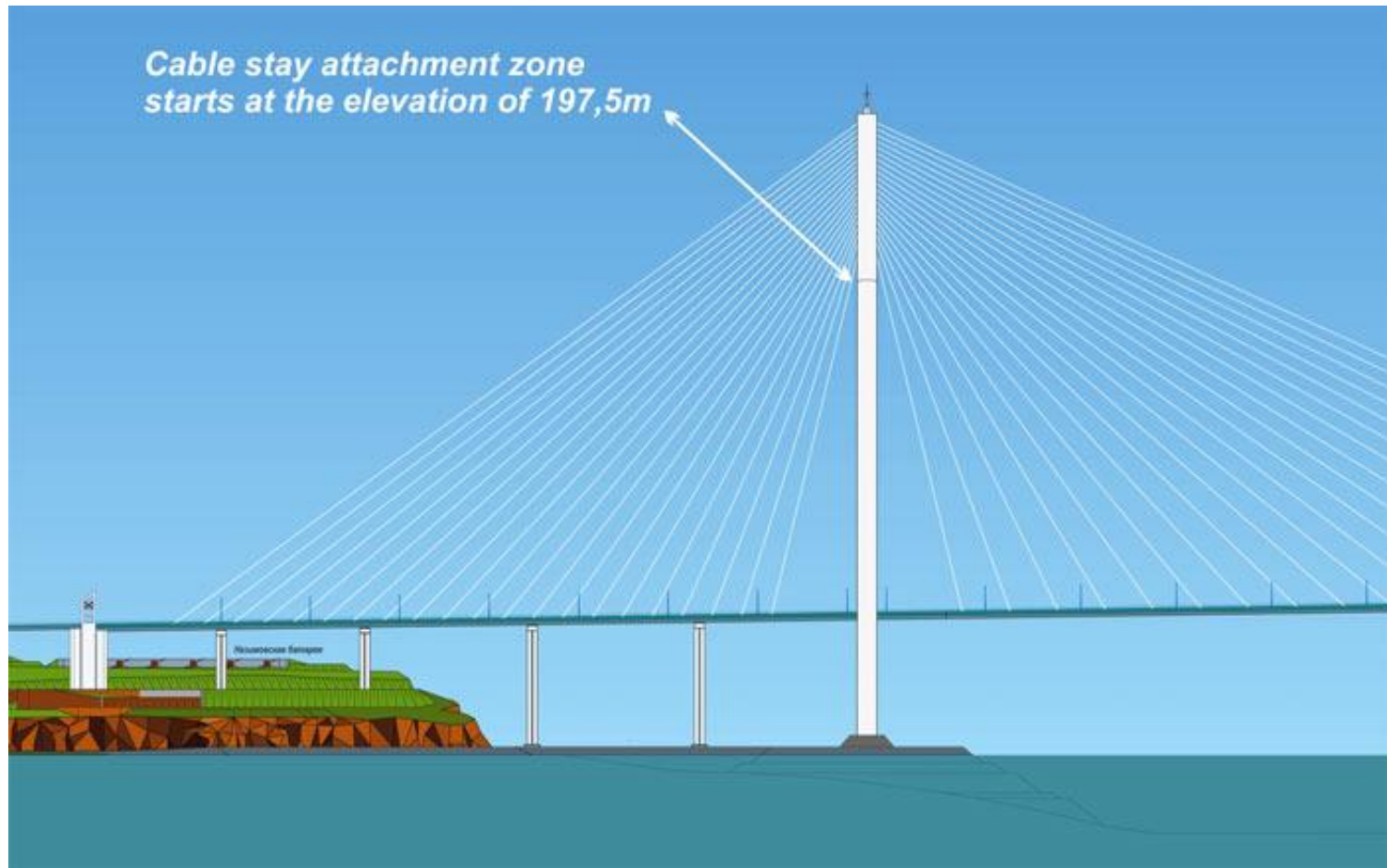
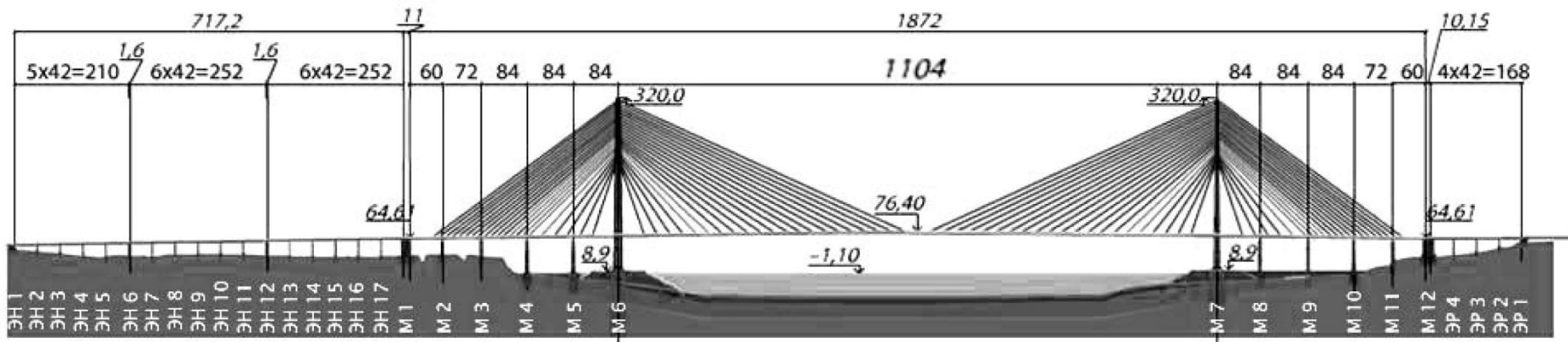


VÝSTAVBA POSTUPNÝM VÝSUDEM

















MILLAU VIADUCT

FOSTER AND PARTNERS

DĚKUJEME ZA POZORNOST