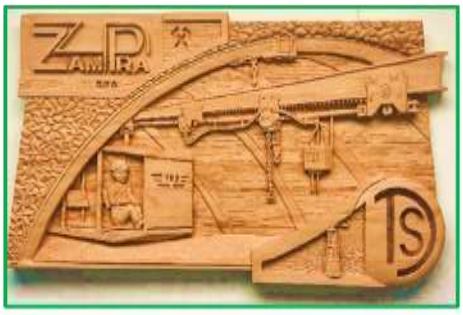
# PRODUCT CATALOGUE



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

**07/2025**

# CONTENT

**Catalogue sheet name** **Page number**


Introduction ..... 1
Hydraulic handling system HMZ TDS 8, 10, 16, 20 - DUO ..... 2
HMZ TDS 8, 10, 16, 20 - DUO ..... 2
HMZ TDS 8 tons DUO; HMZ TDS 8 tons TRIO – with traverses ..... 3
HMZ TDS 8 tons QUADRO - with traverses+ HMZ TDS 10 tons DUO; HMZ TDS 16 tons DUO ..... 4
HMZ TDS 20 tons DUO; Connecting traverse HMZ TDS; Longitudinal traverse HMZ ..... 5
Hydraulic transport trolley HPV TDS with a locking mechanism ..... 6
Hydraulic transportation manipulator HPM TDS 6 / 10 DUO - Snake ..... 8
HPM TDS TRIO; QUADRO - Snake with longitudinal traverses ..... 10
Connecting traverse HPM TDS Snake - 15 tons; Longitudinal traverse - 11 tons, 15 tons ..... 10
Hydraulic transportation manipulator HPM TDS 1.5m - 6/10 - Snake ..... 11
HPM TDS 1.5m TRIO; QUADRO – with traverses ..... 13
Hydralic transportation system HPZ TDS Hawk 10 tons, 13 tons, 16tons, 20 tons ..... 14
Hydraulic assembly chamber HMK TDS ..... 17
Hydraulic aggregate for the assembly chamber HMK TDS ..... 18
Hydraulic transportation carriage HMK TDS with a locking mechanism ..... 19
Hydraulic hoist HK TDS 5/10 ..... 20
Hydraulic traction system HTZ 5/10 ..... 21
Cabin for transport of 8 people TDS 160kN - 21 ..... 22
Cabin for transport of 12 people TDS 160kN - 21 ..... 23
Convertible medical cab for transport of 8 people or injured personnel, type TDS 160 - 21 .. 24
Convertible medical cab for transport of 12 people or injured personnel, type TDS 160 - 21 25
Cabin for transport of 8 people with HPVU TDS 160kN - 21 ..... 26
Cabin for transport of 12 people with HPVU TDS 160kN - 21 ..... 27
Medical cab TDS for transport of injured personnel TDS 120 ..... 28
Pallet for transport of small tools TDS 120kN 1.2m / 2.0m ..... 29
Pallet for transport of small tools TDS 160kN 1.2m / 2.0m ..... 30
Transport container ..... 31
Container for transport of explosives and storage of electrical materials ..... 32
Transport carriages TDS ..... 33
Chain carriers (type TDS 4000, type HPV TDS); Chain grip HPV TDS ..... 34
Frame carrier of heavy loads type RNTB 5000; Transition piece 80 kN – 120 kN ..... 35
Transition joint BV1; Manual handling stopper TDS D/130 ..... 36
Pull rod 80 kN – fixed; Pull rod 140 kN ..... 37



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

**Catalogue sheet name** **Page number**


**Pull rod 120 kN** ..... **38**
**Pull rod - articulated 120 kN** ..... **39**
**Pull rod 160kN – 2.5m ; 3.0m** ..... **40**
**Pull rod - cranked** ..... **40**
**Pull rod - telescopic** ..... **41**
**Pull rod - locomotive** ..... **41**
**Switch TDS ZD 24 D/130 – reinforced** ..... **42**
**Switch ZD 24 A, B, C – pneumatic** ..... **46**
**Switch ZD 24 A, B, C – raised** ..... **48**
**Switch ZD 24 A, B, C – cable-operated** ..... **49**
**Intersection TDS** ..... **50**
**Curved track section with frame ZD 24 D130 – version 0° / 45°** ..... **51**
**Suspension track type ZD 24 HMZ TDS** ..... **52**
**Stop section with toothed rack - with an anchor / fork** ..... **55**
**Base plate stopper TDS; Base plate stopper – pneumatic TDS** ..... **56**
**Anchorage – lateral + short** ..... **57**
**Anchorage - longitudinal + short** ..... **58**
**Anchorage type „V“** ..... **59**
**Anchorage TDS type D/130** ..... **60**
**Anchorage – bolt-type longitudinal** ..... **61**
**Anchorage hanger** ..... **61**
**Suspension block** ..... **62**
**Light suspension block** ..... **62**
**Double-rope suspension 18x64** ..... **63**
**Double-rope suspension - universal** ..... **63**
**Adjustable suspension** ..... **64**
**Suspension bolts** ..... **64**
**Anchorage tensioner** ..... **65**
**Inclined pipe hanger** ..... **65**



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

**Dear Business Partners and Customers,**

We are pleased to present the latest product catalogue of **TDS ZAMPRA, spol. s r.o.**, a company that has been operating in the field of engineering for the mining industry for over 30 years. During this time, we have built a strong reputation as a reliable supplier of specialized technologies designed to meet the demanding conditions of underground mining.

**Our main product portfolio includes:**

- hydraulic transport trolleys
- hydraulic handling systems
- hydraulic assembly chambers
- switches for the ZD 24 suspended monorail
- cabins for underground workplaces
- custom-made components

Each product is developed with a clear focus on **quality, safety, and long-term value for our customers**. With our in-house design capabilities, experienced team, and close cooperation with mining operations, we deliver solutions that truly meet real-world needs. Our products are designed for the most challenging deep-mining environments, ensuring **maximum reliability, safety, and efficiency**.

This catalogue offers an overview of our standard product range. However, we are always ready to respond to **individual requirements and technical challenges**.

**Thank you for your continued trust. We look forward to further cooperation.**

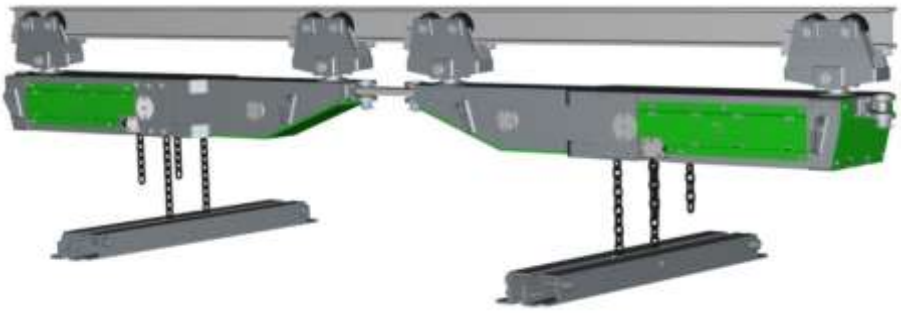
Sincerely,

**Ing. Kateřina Tomášová**
Managing Director

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

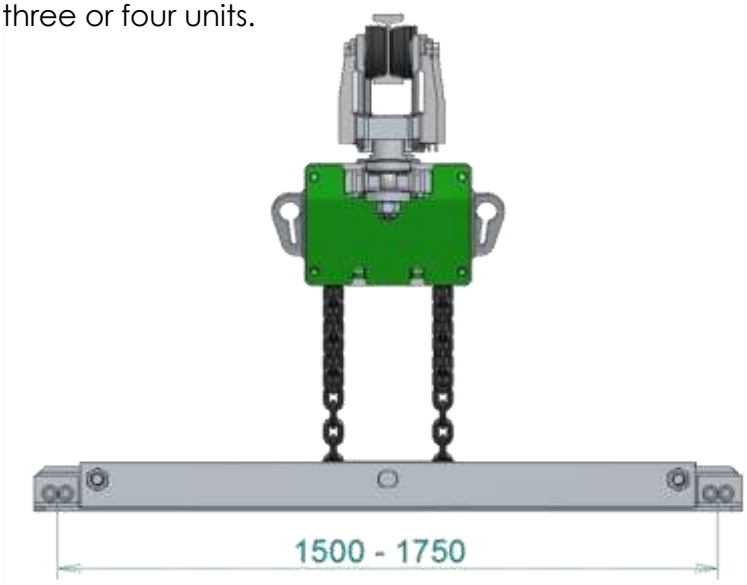
# Hydraulic handling system
# HMZ TDS 8, 10, 16, 20 - DUO



The hydraulic handling system HMZ TDS – DUO is designed for lifting, handling, and transporting loads along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other suitable track types at inclines up to ± 30°. It is recommended to use a suspended locomotive as both the towing vehicle and the source of hydraulic pressure oil. The system is suitable for use in explosive atmospheres classified as SNM 2.

The hydraulic handling system HMZ TDS – DUO consists of two hydraulic handling units connected by pull rods and suspended on carrier carriages. Propulsion is provided by a hydraulic cylinder with a simple chain-and-pulley mechanism. A pair of pulling chains is attached to the load either directly or using supporting balance beams.

It is possible to connect the HMZ TDS system into TRIO or QUADRO configurations, consisting of three or four units.



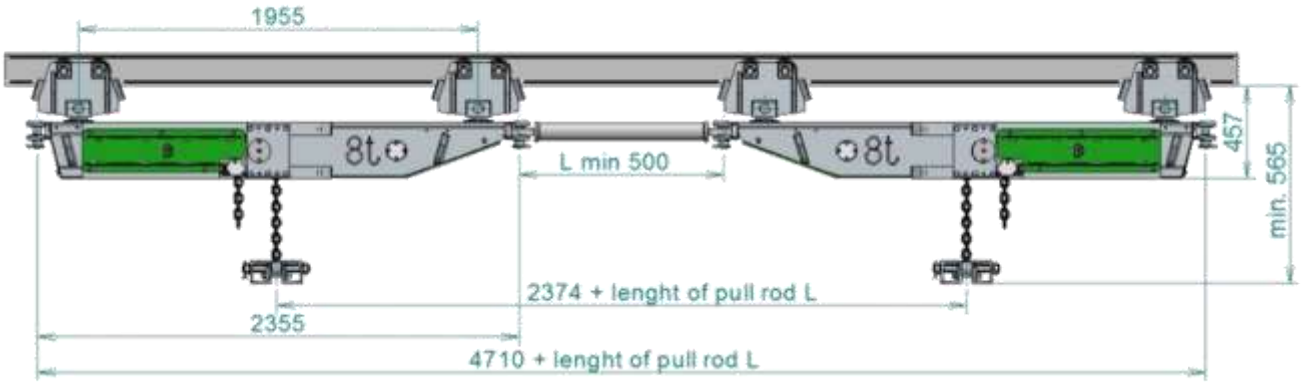

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

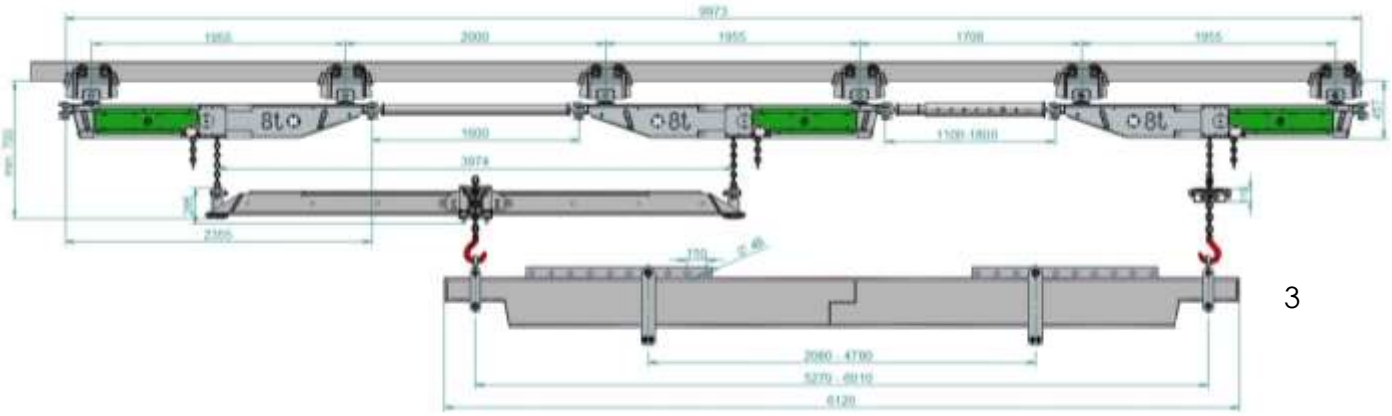
# Technical parameters

| HMZ TDS | 8 tons<br>ZP-910008-120-DUO | 10 tons<br>ZP-450003-120-DUO | 16 tons<br>ZP-530005-120-DUO | 20 tons<br>ZP-730007-120-DUO |
|---|---|---|---|---|
| **Max. load capacity** | 2 x 8 000 kg | 2 x 10 0000 kg | 2 x 16 000 kg | 2 x 20 000 kg |
| **Pull chain** | 13x39 DIN 5687 | 13x39 DIN 5687 | 16x48 DIN 5687 | 16x48 DIN 5687 |
| **Operating stroke – adjustable** | 1 m | 1.5 m | 1.64 m | 1.64 m |
| **Stroke time for 1 metre lift at 30 dm³/min flow rate** | 30 s | 40 s | 50 s | 60 s |
| **Max. pressure** | 16 + 10 % MPa | | | |
| **Medium** | hydraulic oil | | | |
| **Min. oil supply** | 10 dm³/min | | | |
| **Supporting profile** | I 155 (I 140E, I 140 V) | | | |
| **Min. radius of horizontal turns** | 4 m | | | |
| **Min. radius of vertical turns** | 8 m | | | |
| **Max. speed of the assembly** | 2 m/s | | | |
| **Max. incline of the track** | ± 30° | | | |
| **Max. tractive force of traction vehicle** | 80-120 kN | | | |

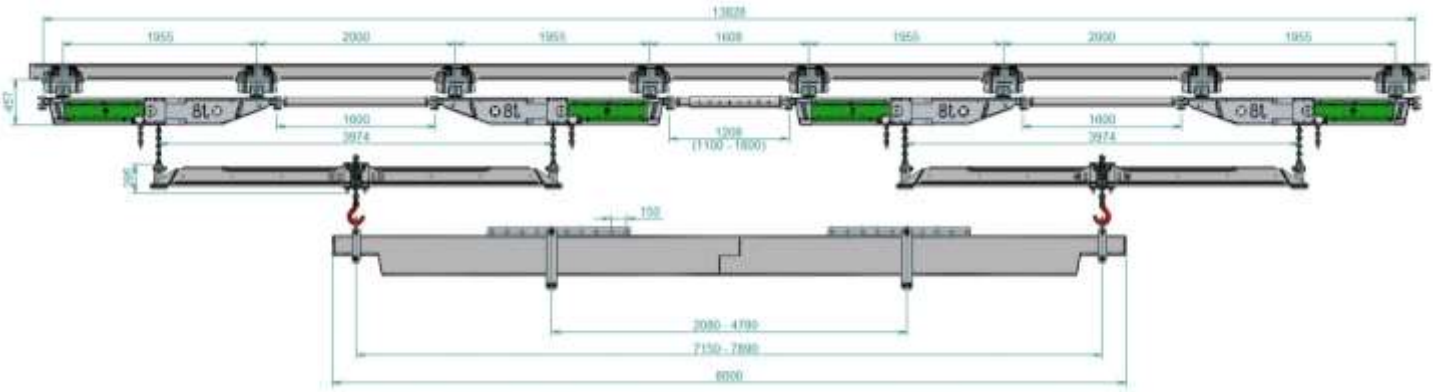
## HMZ TDS 8 tons DUO – ZP-910008-120-DUO



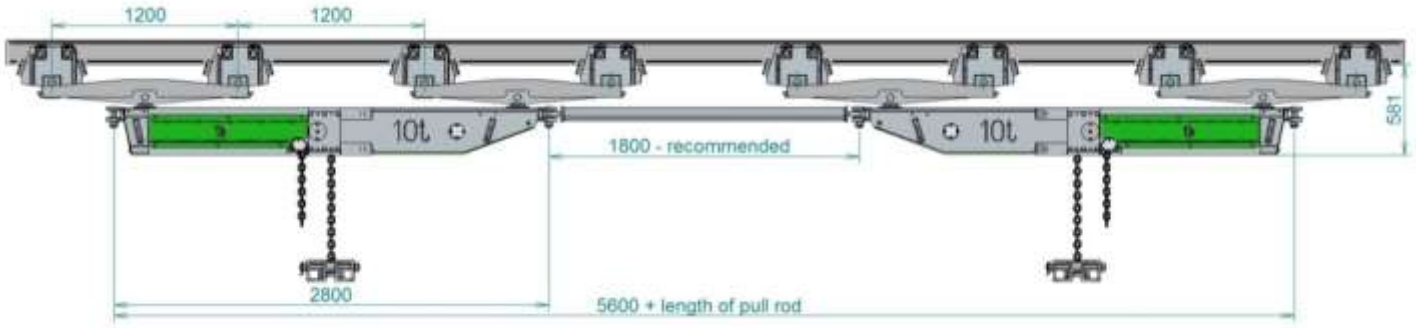

## HMZ TDS 8 tons TRIO - with traverses - ZP-910008-120-TRIO



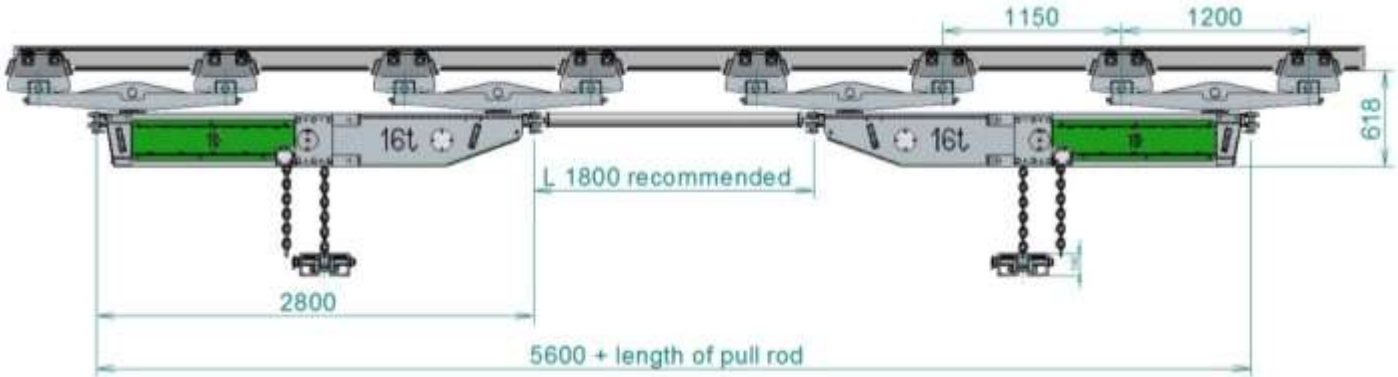
## HMZ TDS 8 tons QUADRO – with traverses – ZP-910008-120-QUADRO




## HMZ TDS 10 tons DUO – ZP-450003-120-DUO



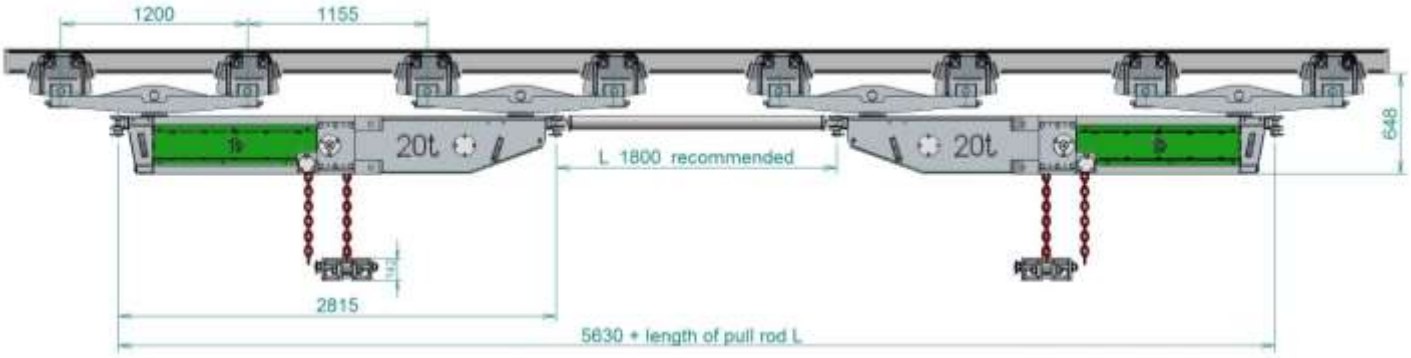

## HMZ TDS 16 tons DUO – ZP-530005-120-DUO



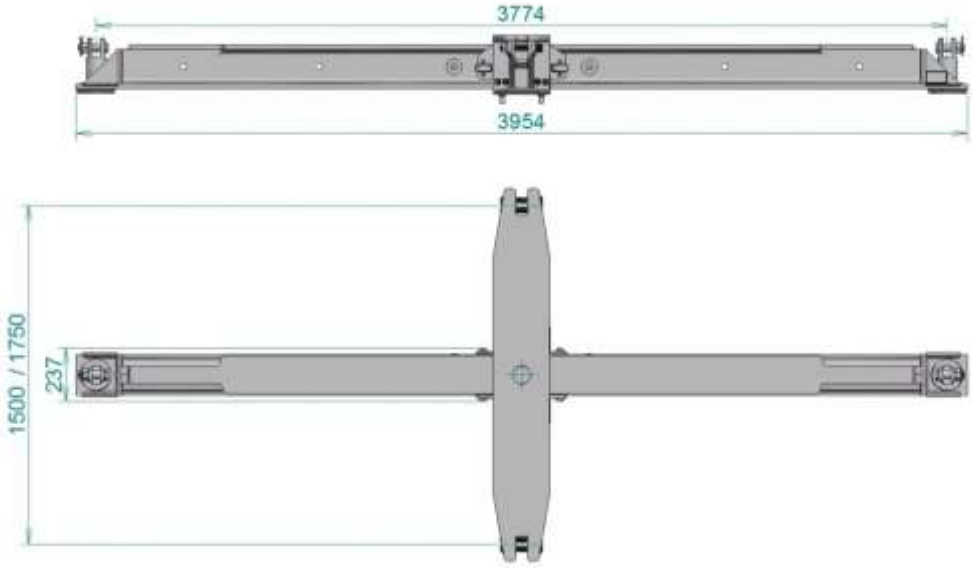

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

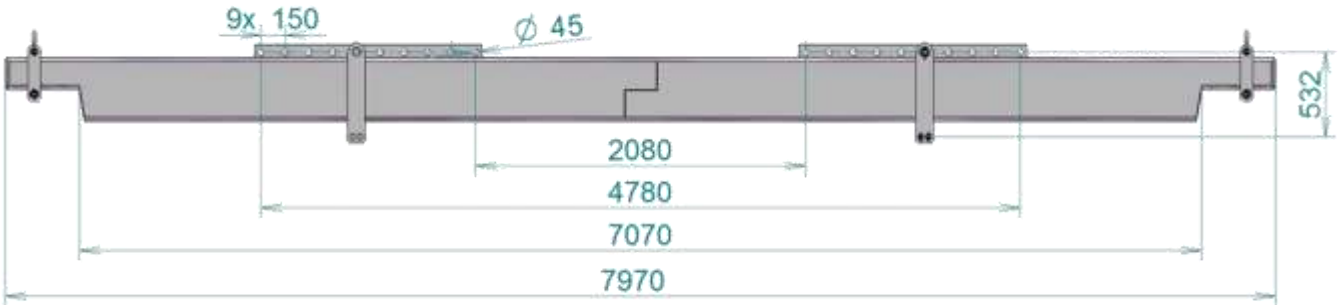
## HMZ TDS 20 tons DUO – ZP-730007-120-DUO




## Connecting traverse HMZ TDS with carriage




## Longitudinal traverse HMZ

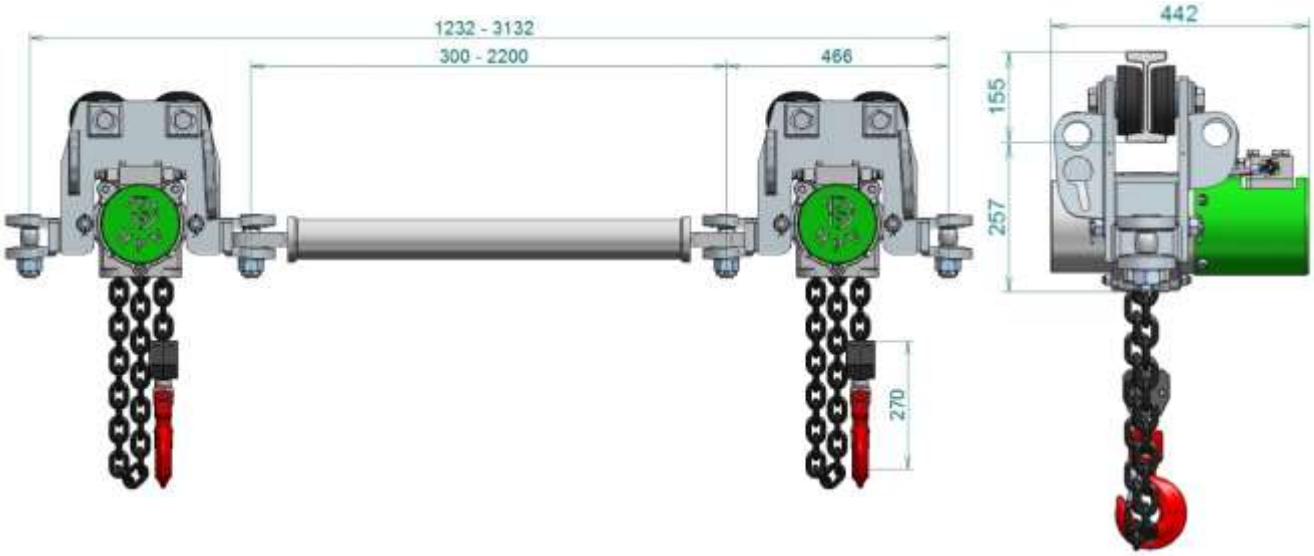



Traverses can only be configured in the HMZ TDS 8t version

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

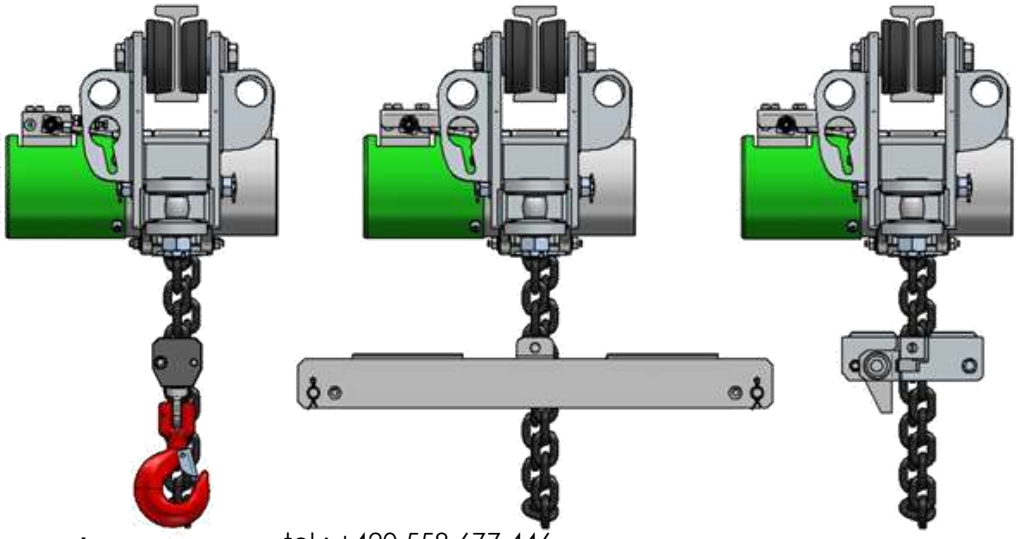
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Hydraulic transport trolley
# HPV TDS with a locking mechanism




The hydraulic transport trolley HPV TDS with a locking mechanism is designed for handling suspended loads along suspension tracks with I 155 support profiles or compatible profiles.

It is not designed for the transport of people. The system is powered by hydraulic pressure oil supplied from a compatible source (a suspension locomotive or an independent hydraulic aggregate). The hydraulic transport trolley can be pulled or pushed by a traction vehicle with independent propulsion (e.g. locomotive) or pulled by a rope wound on a drum winch.

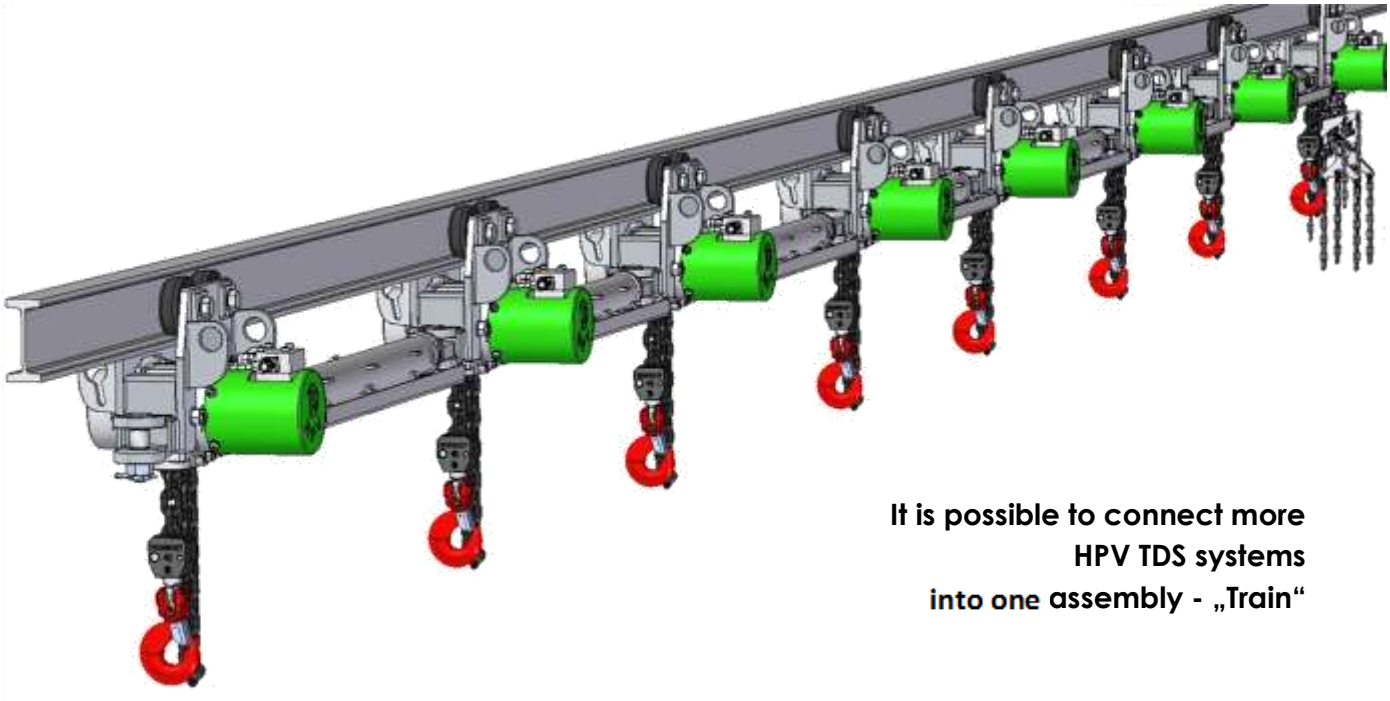


**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Technical parameters

| | |
|---|---|
| Max. load capacity | 2 x 4 000 kg |
| Pull chain | 13 x 36 T 8 |
| Operating stroke – adjustable | 3-6 m |
| Stroke time for 1 metre lift at 30 dm³/min flow rate | 15 s |
| Max. pressure | 15–16 MPa |
| Medium | hydraulic oil |
| Min. oil supply | 25 dm³/min |
| Supporting profile | I 155 (I 140E, I 140V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30° / ± 35° |
| Max. tractive force of traction vehicle | 80 kN / 120kN / 160kN |
| Product number - version 80kN | **ZP-110009-80-B** |
| - version 120kN | **ZP-110009-120-B** |
| - version 160kN | **ZP-272022-B** |



**It is possible to connect more HPV TDS systems into one assembly - „Train“**

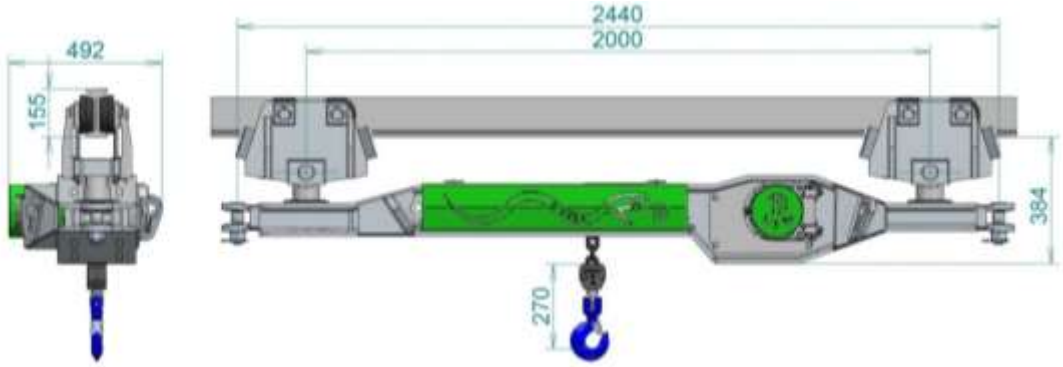
**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

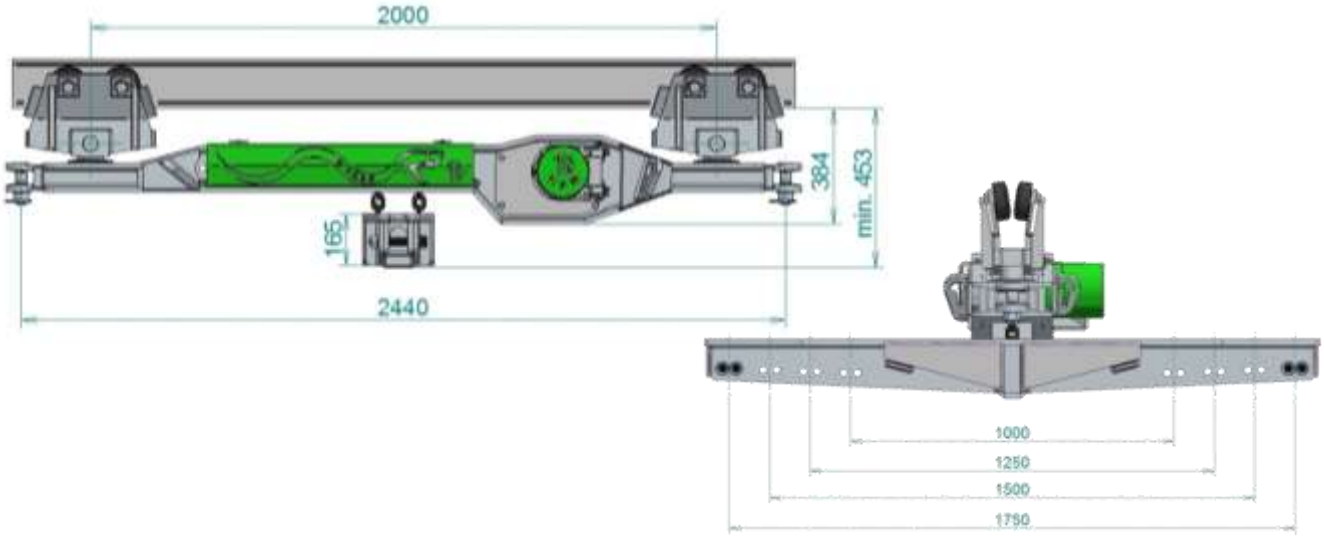
# Hydraulic transportation manipulator
# HPM TDS 6 / 10 DUO – Snake

The hydraulic transportation manipulator HPM TDS 6 / 10 DUO – Snake is designed for lifting, handling, and transporting loads along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other suitable track types at inclines up to ± 30° or ± 35°.
It is recommended to use a suspended locomotive as both the towing vehicle and the source of hydraulic pressure oil.
The system is suitable for use in explosive atmospheres classified as SNM 2.

**HPM TDS 6 – version with hook (6000 kg)**




**HPM TDS 10 – version with balance beam (10 000 kg)**



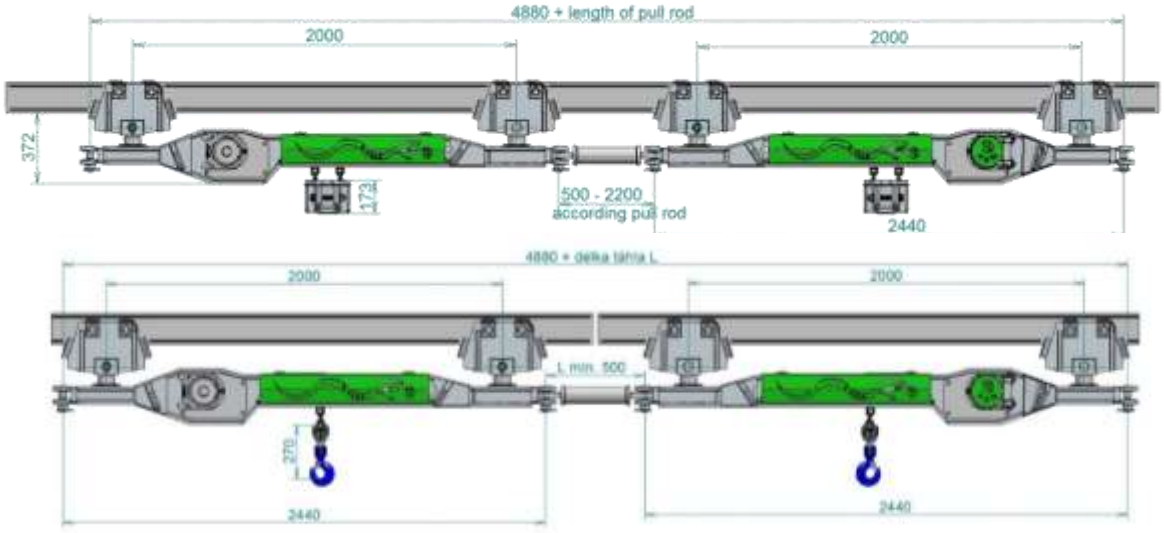

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Technical parameters

| | |
|---|---|
| Max. load capacity | 2 x 6 000 kg / 2x 10 000 kg |
| Max. tractive force of traction vehicle | 120 kN / 160kN |
| Pull chain | 13 x 36 T 10 |
| Operating stroke – adjustable | 3-6 m |
| Stroke time for 1 metre lift at 30 dm³/min flow rate | 30 s / 60 s |
| Pressure of hydraulic fluid in the range | 15–16 MPa |
| Medium | hydraulic oil |
| Min. oil supply | 30 dm³/min |
| Supporting profile | I 155 (I 140E, I 140V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30°/ ± 35° |
| Type of operating fluid | hydraulic oil with a viscosity of 2.6-60 mm²/s or difficult toignite hydraulic fluid |
| Optimal viscosity of operating fluid | 46 mm2/s |
| Filtration | 10 µm |
| Optimal operating temperature | 40°-55 °C |
| Permissible operating temperature | 10°-70 °C |

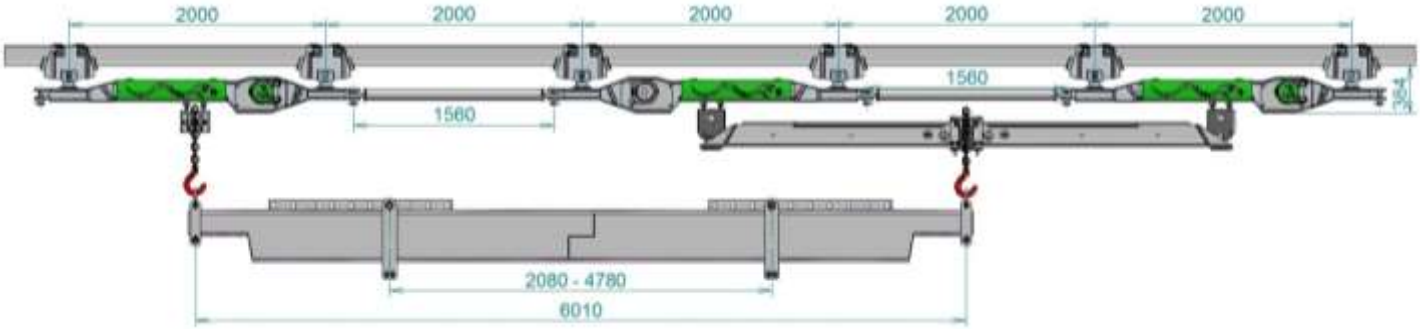
| | |
|---|---|
| Product number - version 6 (6000kg) | **ZP-166014-100** |
| - version 10 (10 000kg) | **ZP-166014-XXX** |
| - version 6 (6000kg)-22 – incline ± 35° | **ZP-271022-100** |
| - version 10 (10 000kg)-22 – incline ± 35° | **ZP-271022-XXX** |



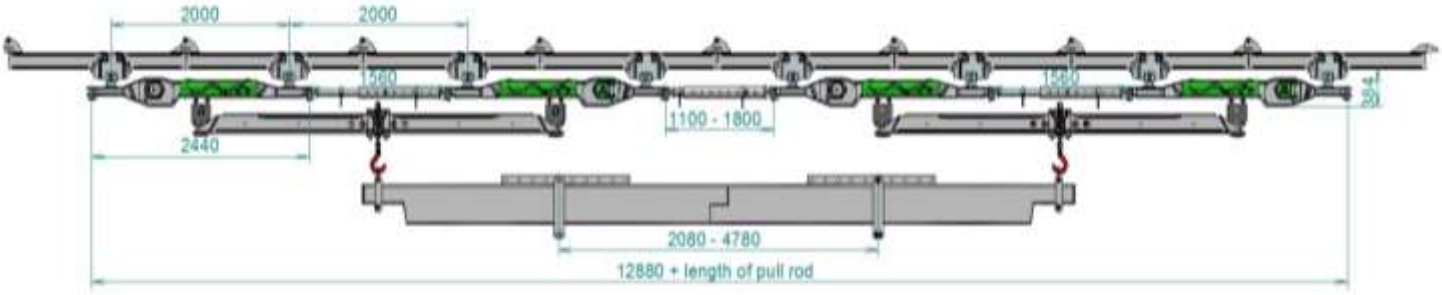

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

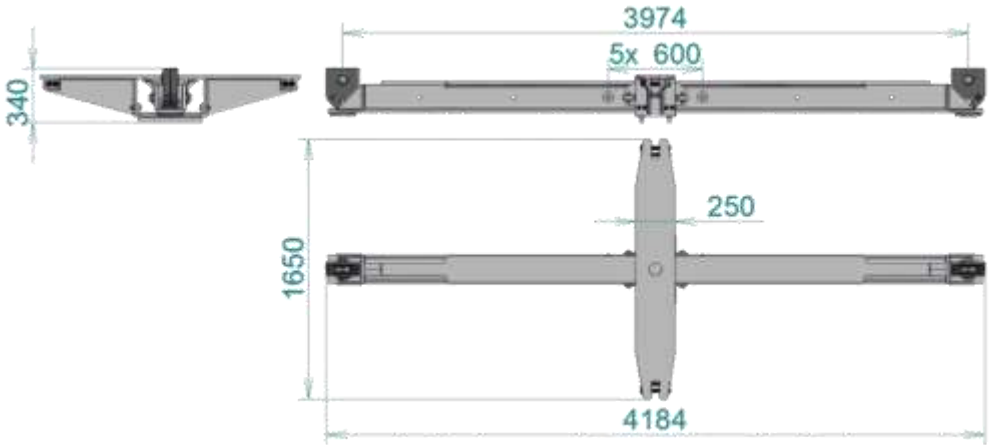
# HPM TDS TRIO-Snake with longitudinal traverses



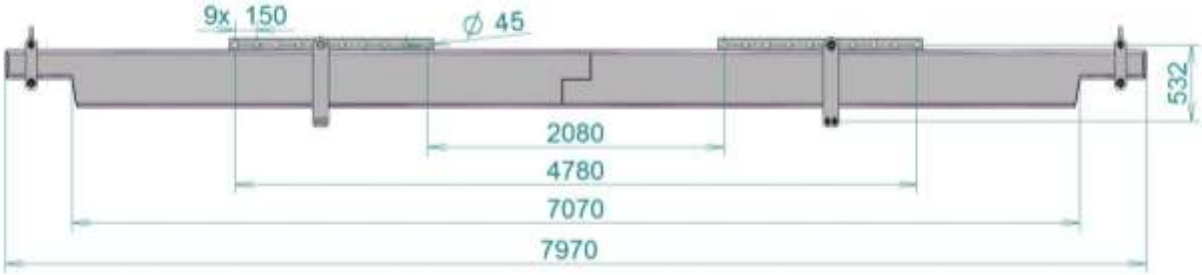

# HPM TDS QUADRO-Snake with longitudinal traverses




# Connecting traverse HPM TDS Snake with carriage - 15 tons




# Longitudinal traverse - 11 tons, 15 tons



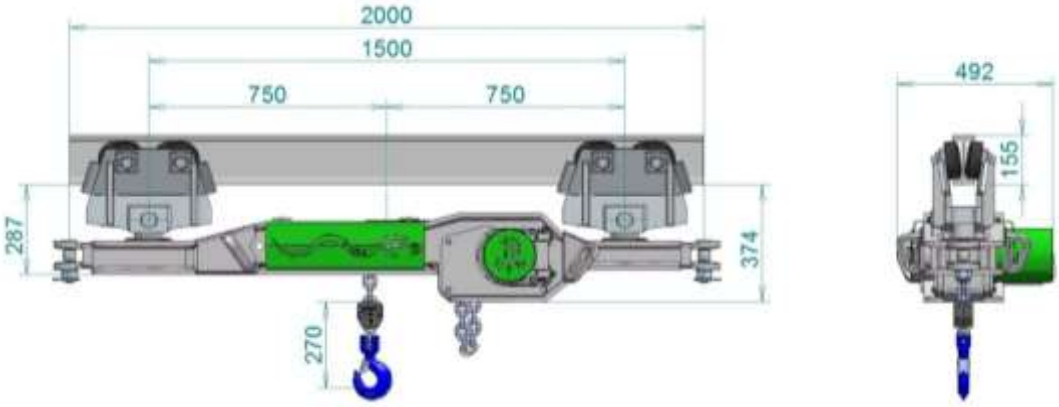

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

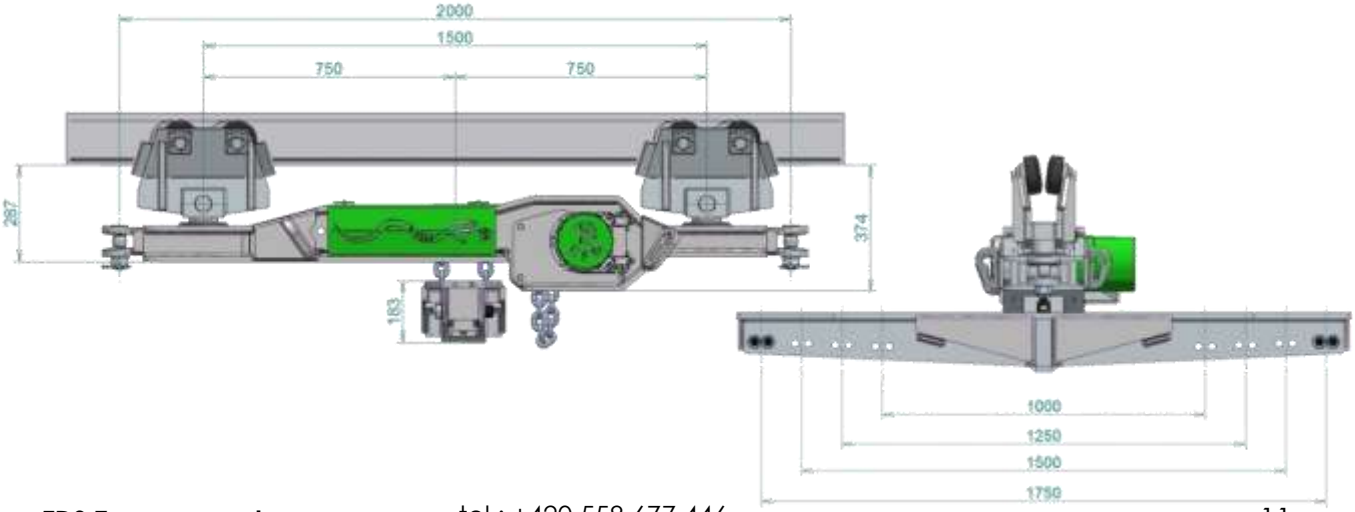
# Hydraulic transportation manipulator
# HPM TDS 1.5m - 6/10 - Snake

The hydraulic transportation manipulator HPM TDS 1.5m - 6/10 DUO – Snake is designed for lifting, handling, and transporting loads along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other suitable track types at inclines up to ± 35°.
It is recommended to use a suspended locomotive as both the towing vehicle and the source of hydraulic pressure oil. The system is suitable for use in explosive atmospheres classified as SNM 2.

**HPM TDS 1.5m - 6 – version with hook (6000 kg)**




**HPM TDS 1.5m -10 – version with balance beam (10 000 kg)**

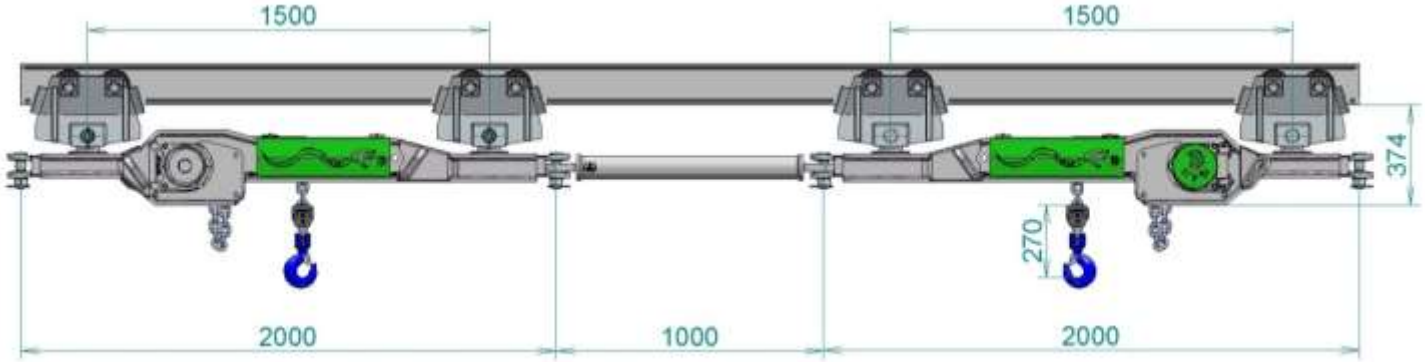


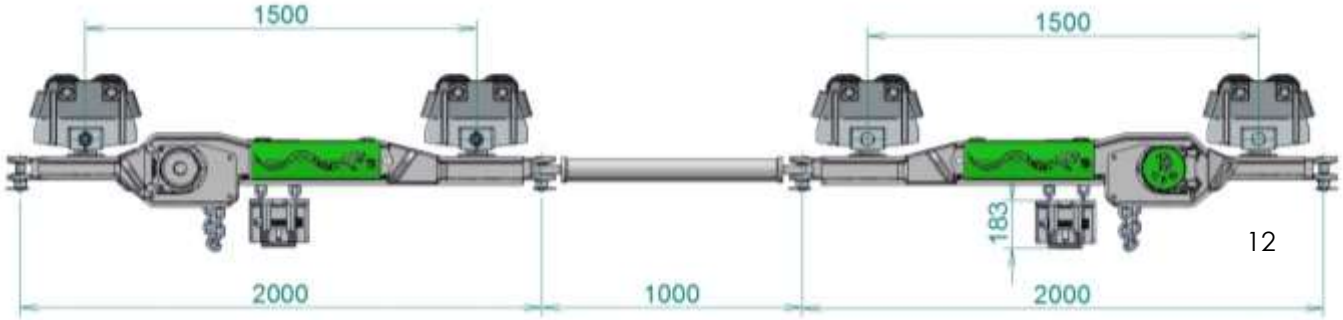

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

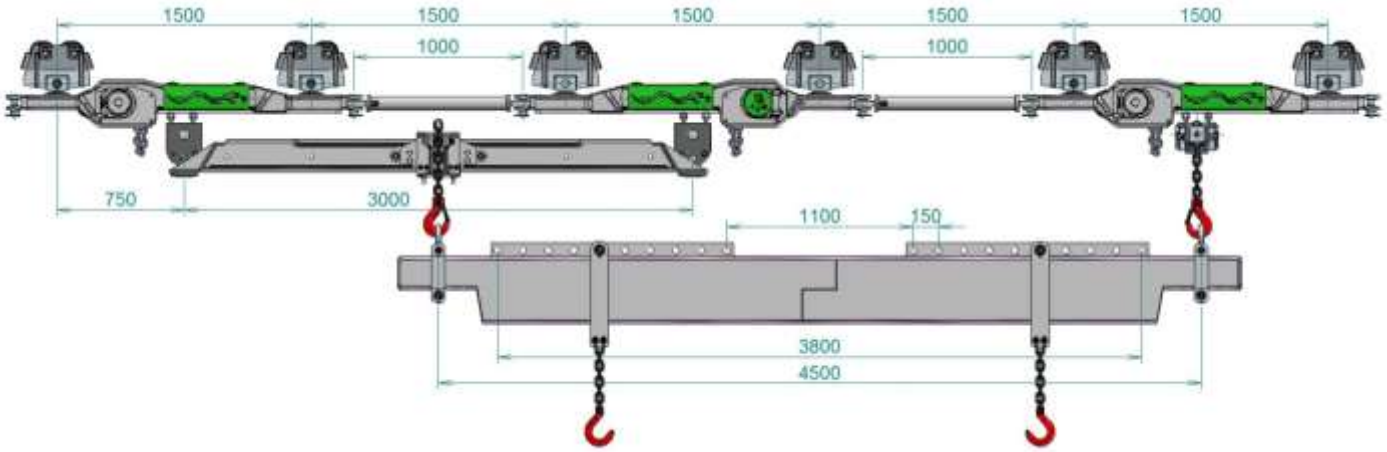
# Technical parameters

| | |
|---|---|
| Max. tractive force of traction vehicle | 120 kN / 160kN |
| Pull chain | 13 x 36 T 10 |
| Operating stroke – adjustable | 3-6 m |
| Stroke time for 1 metre lift at 30 dm³/min flow rate | 30 s / 60 s |
| Pressure of hydraulic fluid in the range | 15–16 MPa |
| Medium | hydraulic oil |
| Min. oil supply | 30 dm³/min |
| Supporting profile | I 155 (I 140E, I 140V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 35° |
| Max. load capacity | 2 x 6 000 kg / 2 x 10 000 kg |
| Type of operating fluid | hydraulic oil with a viscosity of 2.6-160 mm²/s or difficult to ignite hydraulic fluid |
| Optimal viscosity of operating fluid | 46 mm2/s |
| Filtration | 10 µm |
| Optimal operating temperature | 40°-55 °C |
| Permissible operating temperature | 10°-70 °C |
| Product number - 6 tons | **ZP–231019-100** |
| - 10 tons | **ZP-231019-XXX** |

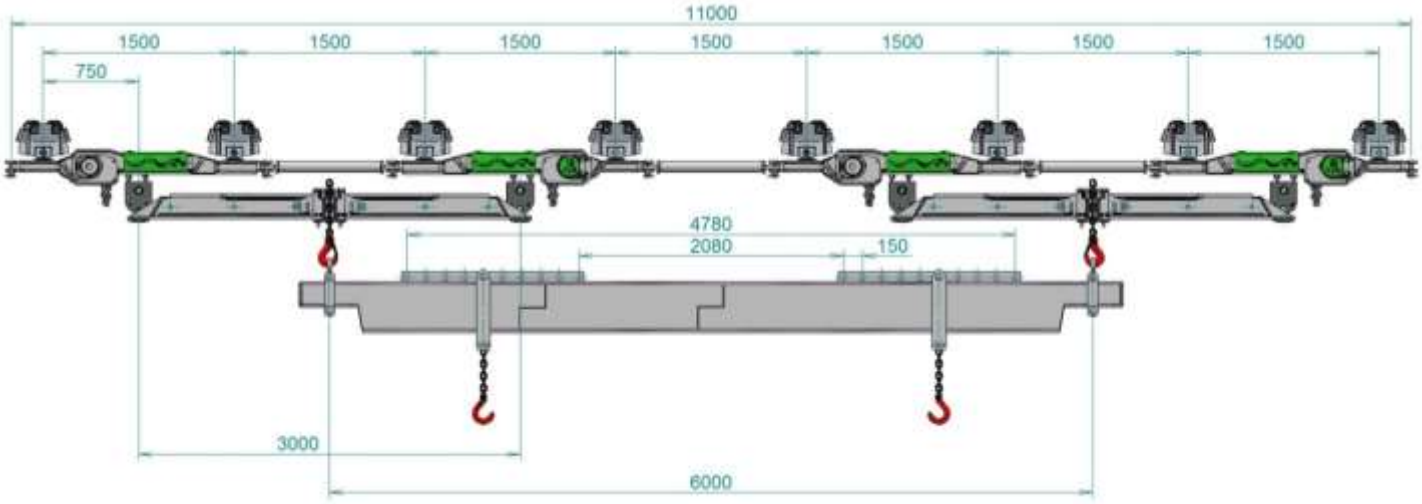


# HPM TDS 1.5m TRIO – with traverses




# HPM TDS 1.5m QUADRO – with traverses




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Hydraulic transportation system HPZ TDS Hawk

## 10 tons
## 13 tons
## 16 tons
## 20 tons

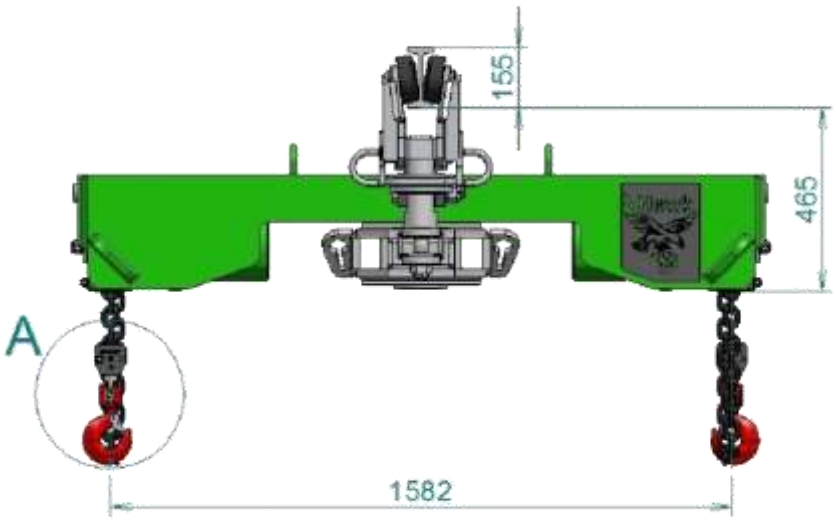
The hydraulic transportation system (hereinafter HPZ) Hawk is designed for lifting, handling, and transporting heavy loads along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other suitable track types at inclines up to ±30°.

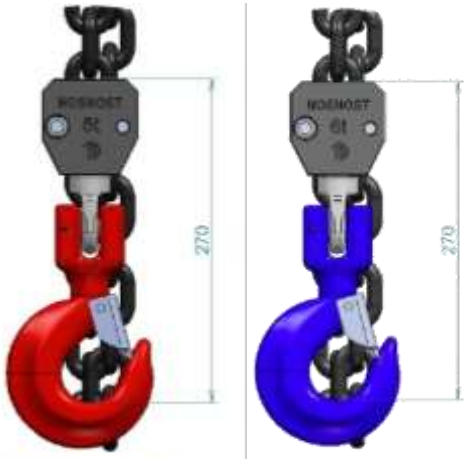
The system is suitable for use in explosive atmospheres classified as SNM 2. It is recommended to use a suspended locomotive as both the towing vehicle and the source of hydraulic pressure oil.

The HPZ Hawk is equipped with four independent motors for improved load handling, especially at great heights. Thanks to its low dead height, handling is very straightforward and efficient.

The load can also be lifted from the side. This allows the system to reposition the load during lifting, even if it is situated in an unfavorable side position.

**10 tons / 13 tons**




Detail A
10 tons

13 tons

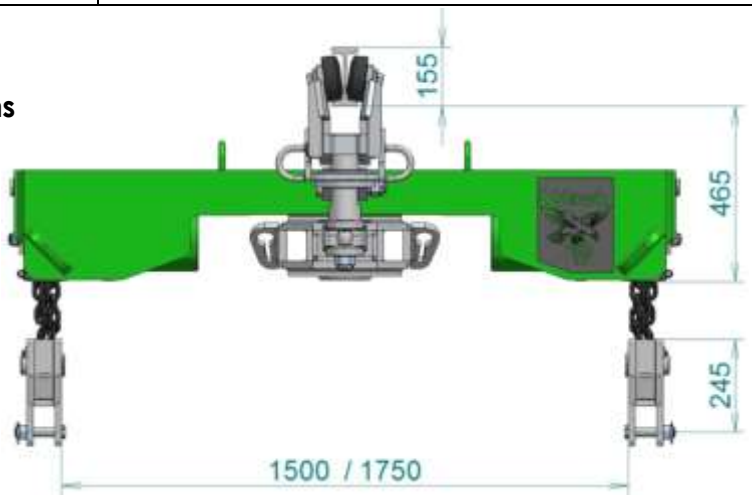
**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Technical parameters

| HPZ TDS Hawk | 10 tons | 13 tons | 16 tons | 20 tons |
|---|---|---|---|---|
| Max. load capacity | 2 x 10 000 kg | 2 x 13 000 kg | 2 x 16 000 kg | 2 x 20 000 kg |
| Stroke time for 1 metre lift at 30 dm³/min flow rate | 15 s | 30 s | 60 s | 60 s |
| Product number range 1500 | ZP-201016-DUO | ZP-202016-DUO | ZP-171014-DUO | ZP-176014-DUO |
| Product number range 1750 | - | - | ZP-174014-DUO | ZP-144012-DUO |
| Max. tractive force of traction vehicle | 120 kN | | | |
| Pull chain | 13 x 36 T 8 | 13 x 36 T 8 | 13 x 36 T10 | 13 x 36 T10 |
| Operating stroke – adjustable | 3-6 m | | | |
| Pressure of hydraulic fluid in the range | 15–16 MPa | | | |
| Medium | hydraulic oil | | | |
| Min. oil supply | 30 dm³/min | | | |
| Supporting profile | I 155 (I 140E, I 140 V) | | | |
| Min. radius of horizontal turns | 4 m | | | |
| Min. radius of vertical turns | 8 m | | | |
| Max. speed of the assembly | 2.5 m/s | | | |
| Max. incline of the track | ± 30° | | | |
| Type of operating fluid | hydraulic oil with a viscosity of 2.6-160 mm²/s or difficult to ignite hydraulic fluid | | | |
| Optimal viscosity of operating fluid | 46 mm²/s | | | |
| Filtration | 10 µm | | | |
| Optimal operating temperature | 40°-55 °C | | | |

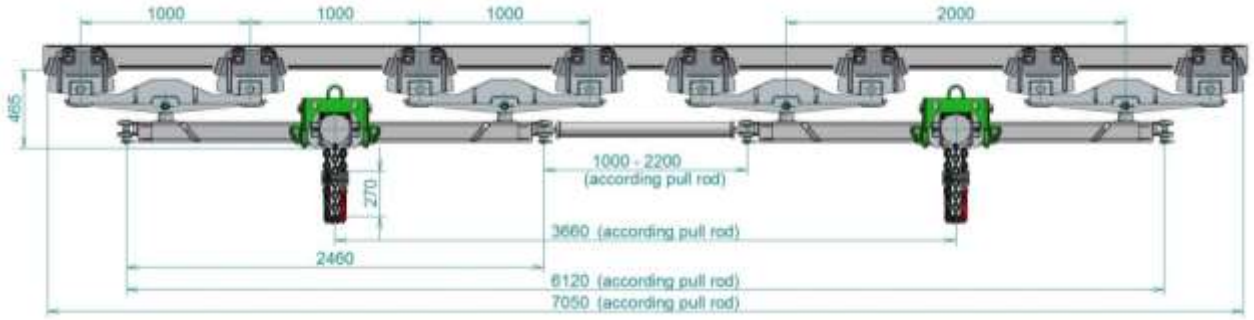
**16 tons / 20 tons**



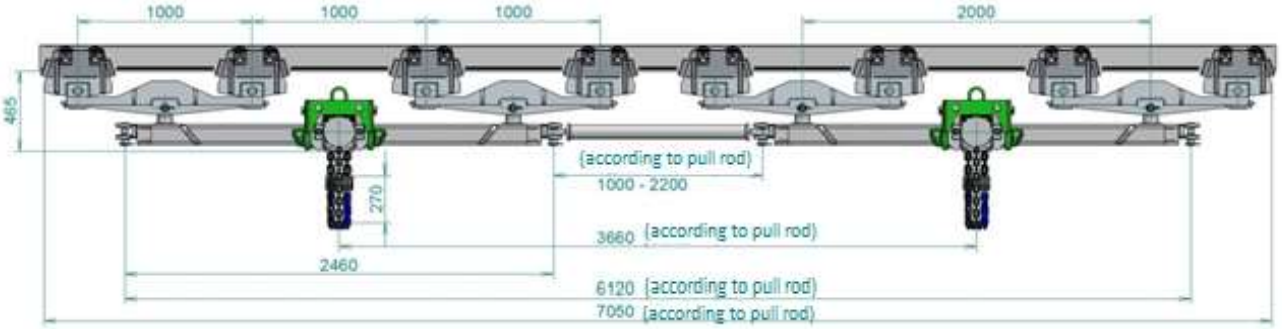

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

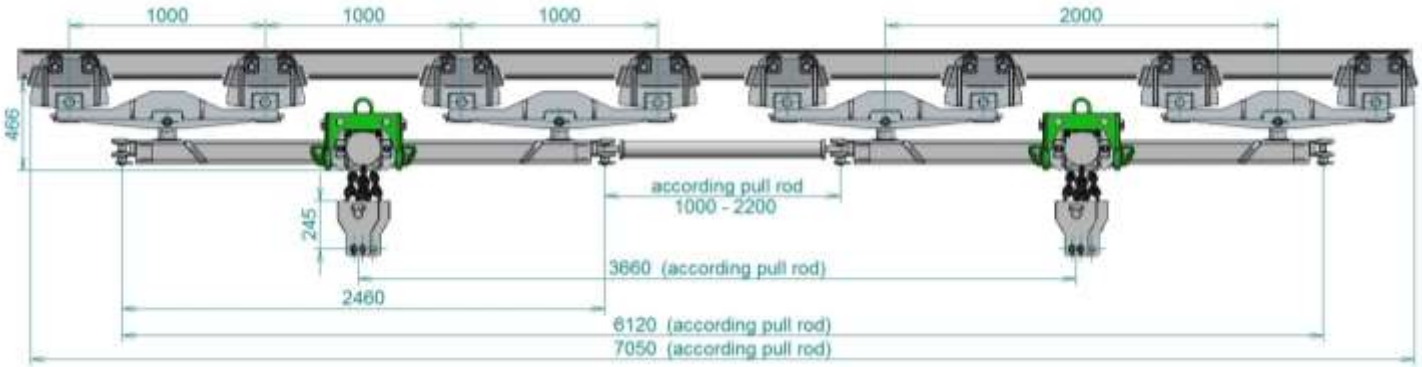
**10 tons**



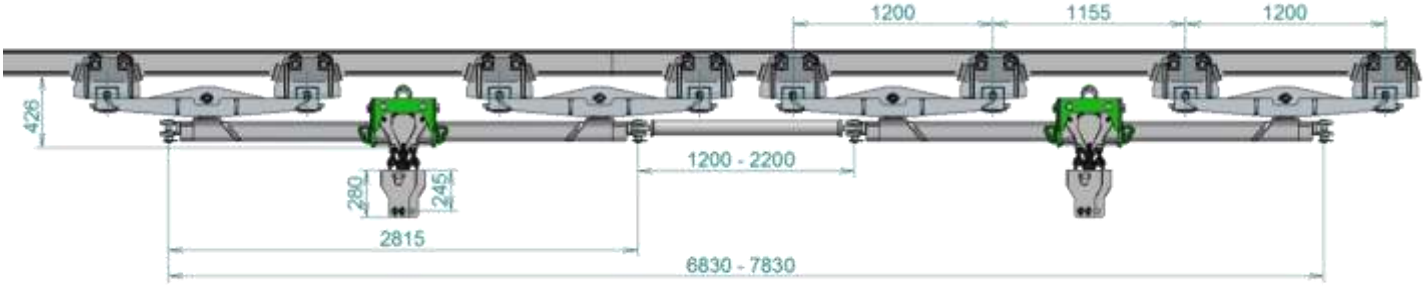

**13 tons**




**16 tons**



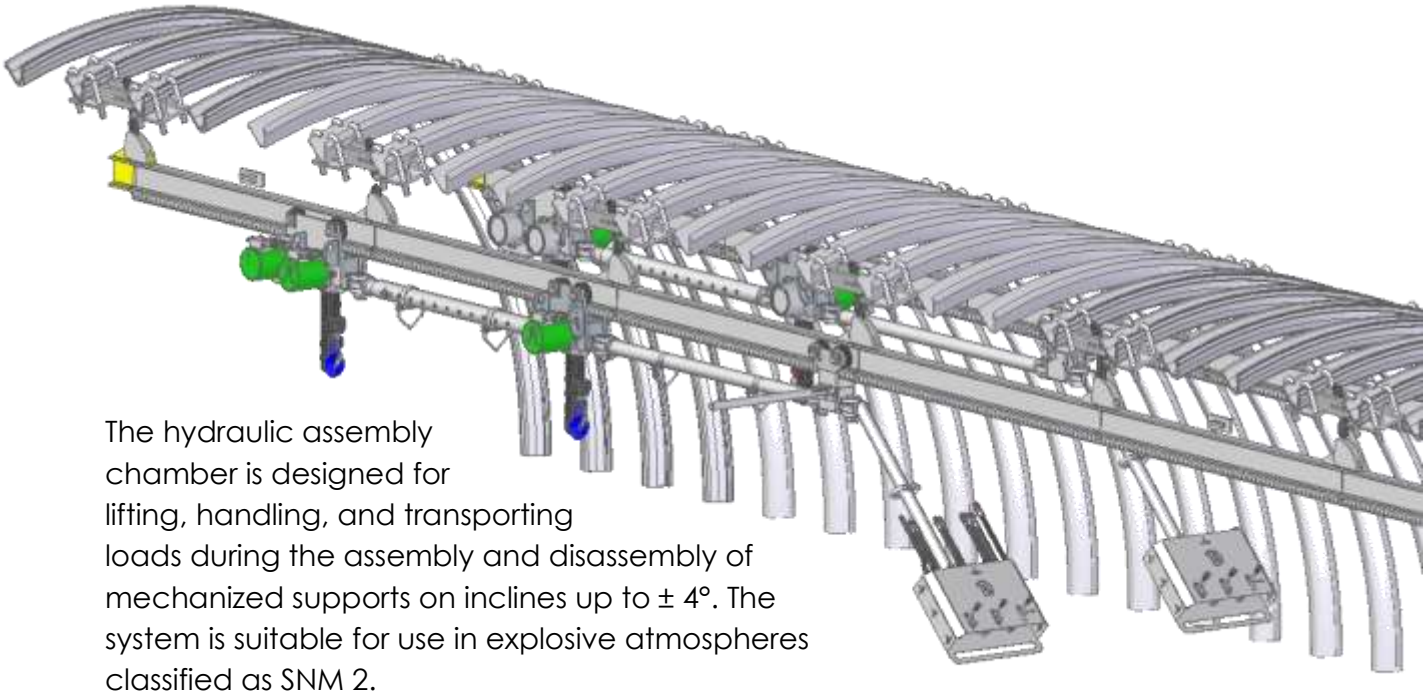

**20 tons**




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Hydraulic assembly chamber HMK TDS



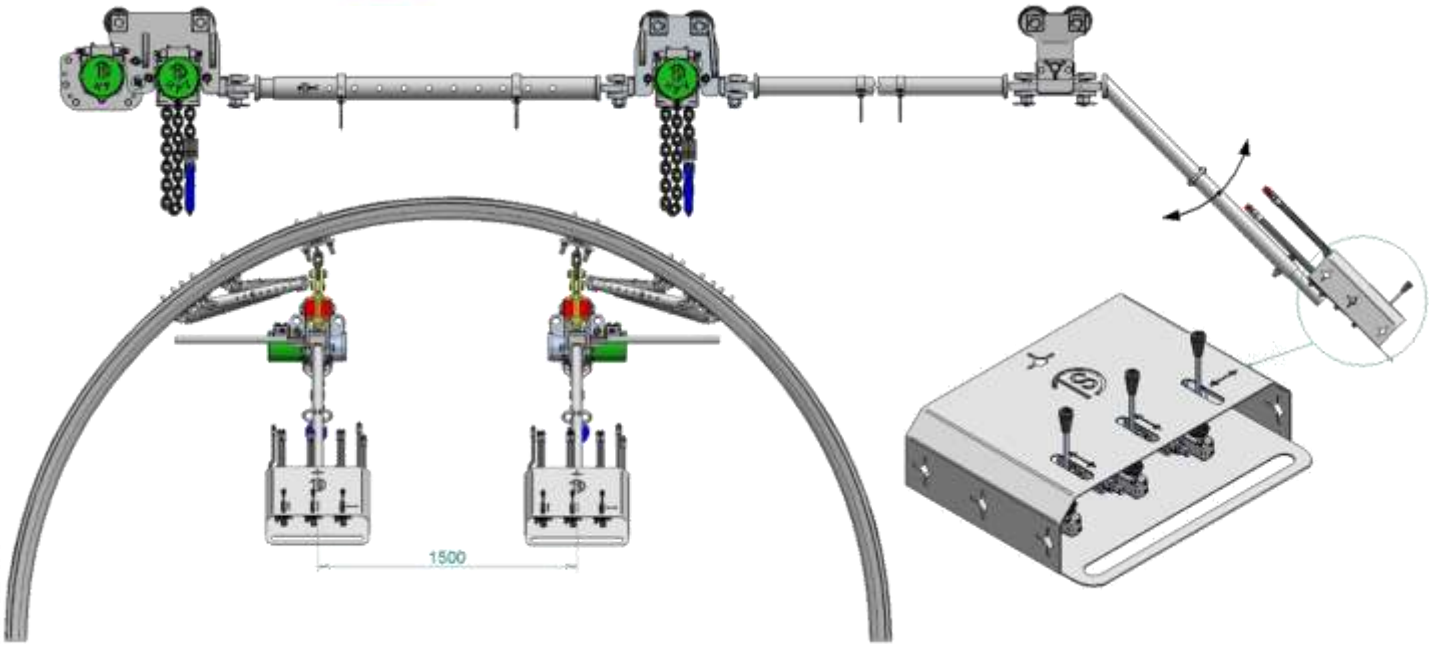
The hydraulic assembly chamber is designed for lifting, handling, and transporting loads during the assembly and disassembly of mechanized supports on inclines up to ± 4°. The system is suitable for use in explosive atmospheres classified as SNM 2.

## Technical parameters

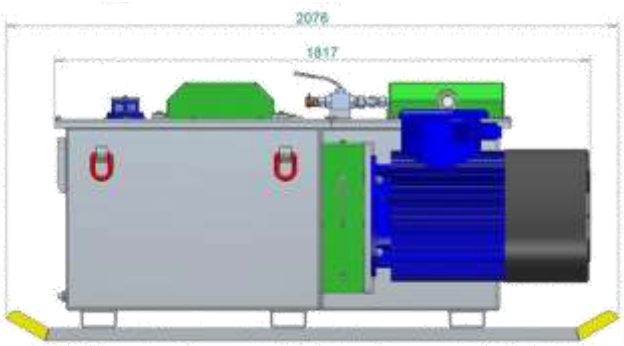
| | |
|---|---|
| Max. load capacity | 4 x 5 500 kg |
| Pull chain | 13 x 36 T 10 |
| Operating stroke – adjustable | 3-6 m |
| Max. pressure | 15–16 MPa |
| Medium | hydraulic oil |
| Min. oil supply | 90 dm³/min |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 0.2 m/s |
| Max. incline of the track | ± 4° |
| Max. tractive force of traction vehicle | 20 kN |
| Product number | **ZP-131011** |

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz



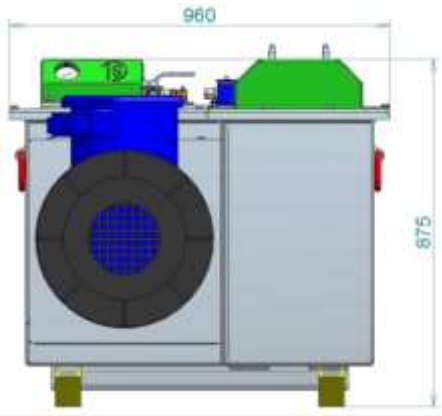

# Hydraulic aggregate for the assembly chamber HMK TDS




The hydraulic aggregate for the assembly chamber HMK TDS serves as the source of hydraulic fluid for the assembly chamber (propulsion and lifting pulley blocks) and other compatible equipment.

## Technical parameters

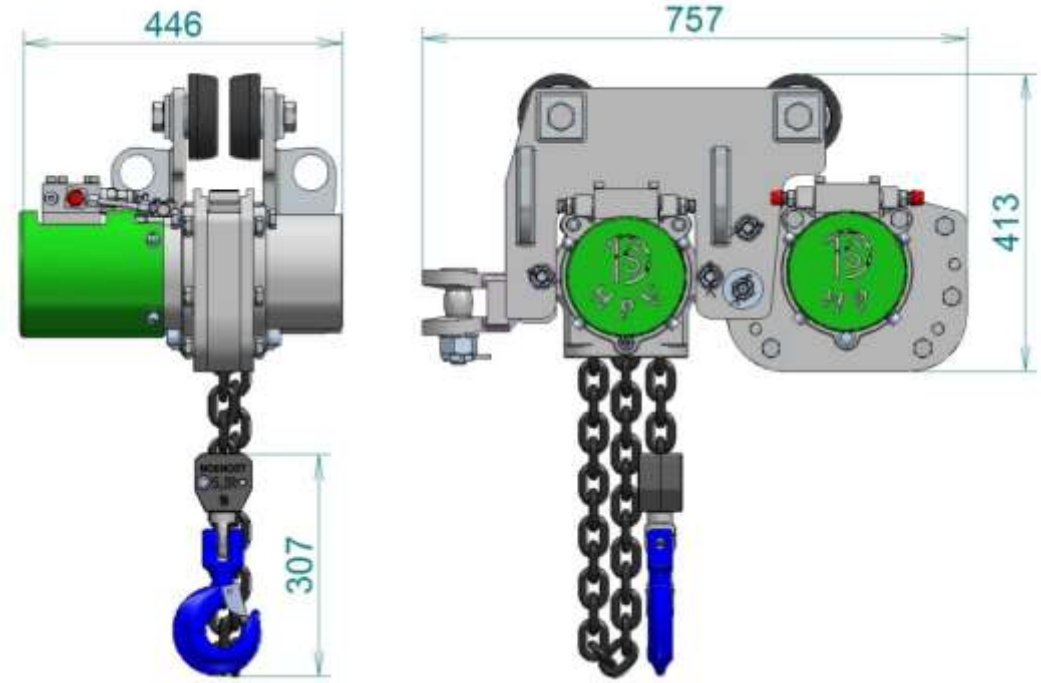
| | |
|---|---|
| The pump power | 2 x 50 l/min |
| Operating pressure | 15-16 MPa |
| Electric motor supply voltage | 500 V |
| Power of the electric motor | 30 kW |
| Supply voltage of control components | 12 V DC |
| Used tank capacity | 400 l |
| Filtration | 16 µm |
| Optimal operating temperature | 40-55 °C |
| Permissible operating temperature | 10-70 °C |
| Product number | **ZP-163014** |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Hydraulic transportation carriage HMK TDS with a locking mechanism




The hydraulic transportation carriage with propulsion is designed for lifting, handling, and transporting loads in assembly chambers during the assembly and disassembly of the mechanized supports at inclines up to ± 4°. The system is suitable for use in explosive atmospheres classified as SNM 2.

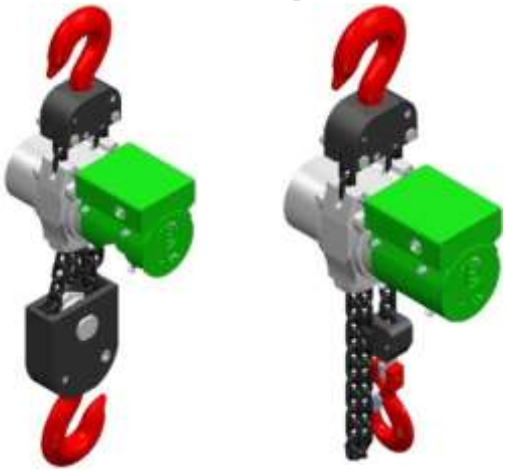
## Technical parameters

| | |
|---|---|
| Max. load capacity | 5 500 kg |
| Pull chain | 13 x 36 T 10 |
| Operating stroke – adjustable | 3-6 m |
| Max. pressure | 15–16 MPa |
| Medium | hydraulic oil |
| Min. oil supply | 90 dm³/min |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Max. speed of the assembly | 0.2 m/s |
| Max. incline of the track | ± 4° |
| Max. tractive force of traction vehicle | 20 kN |
| Product number | **ZP-131011-1** |

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Hydraulic hoist HK TDS 5/10

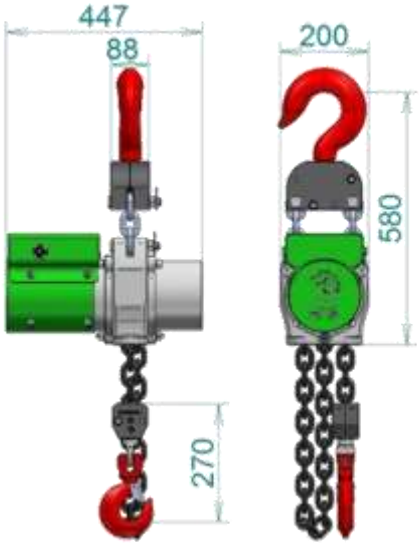


The hydraulic hoist HK TDS is designed for lifting and lowering loads. We offer 2 types, with load capacites of 5 and 10tons. The system is powered by hydraulic pressure oil supplied from a compatible source (a suspension locomotive or an independent hydraulic aggregate).

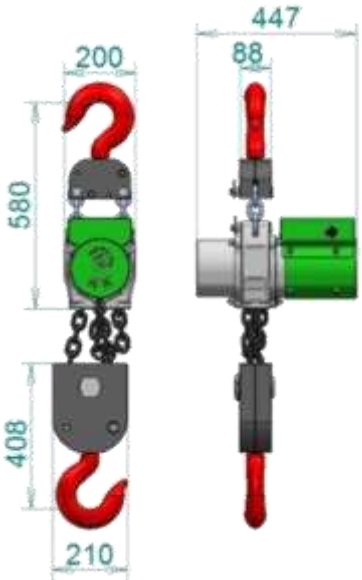
## Technical parameters

| | |
|---|---|
| Max. load capacity | 5 000 kg / 10 000 kg |
| Operating stroke – adjustable | 3 m-6 m |
| Stroke time for 1 metre lift at 30 dm³/min flow rate | 0–3 m/min |
| Max. pressure | 16 MPa + 10 % MPa |
| Medium | hydraulic oil |
| Min. oil supply | 30 dm³/min |
| Pull chain | 13x36 DIN 5684 |
| Product number – version 5 tons | **ZP-167014-5** |
| – version 10 tons | **ZP-167014** |

**HK TDS 5t**



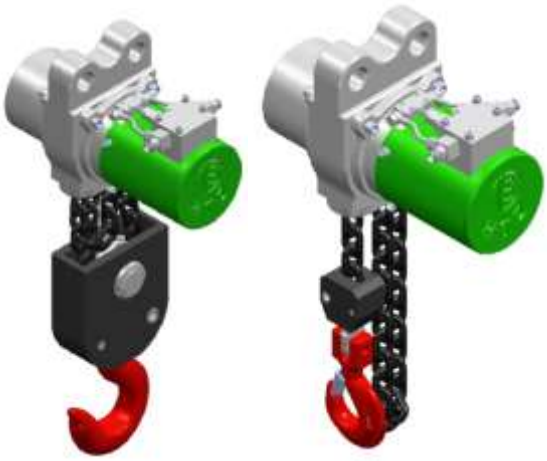

**HK TDS 10t**




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

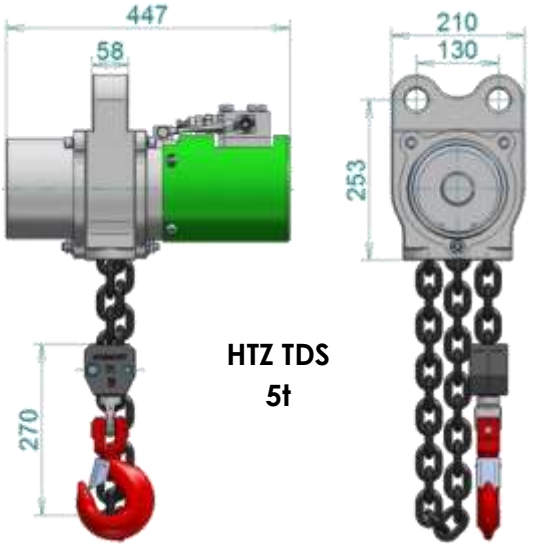
# Hydraulic traction system HTZ 5/10



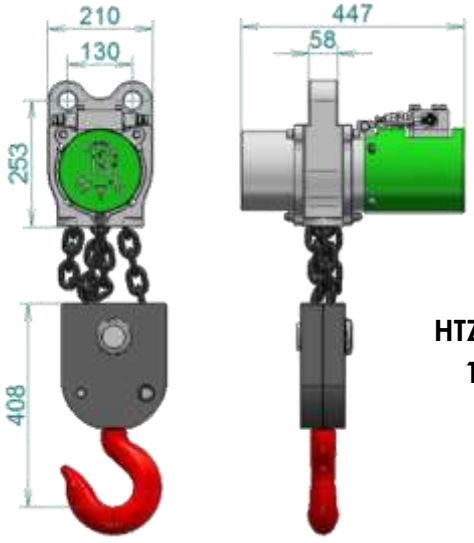
The hydraulic traction system HTZ 5/10 is designed for lifting and lowering loads. We offer 2 types, with load capacities of 5 and 10tons. The system is powered by hydraulic pressure oil supplied from a compatible source (a suspended locomotive or an independent hydraulic aggregate).

## Technical parameters

| | | |
|---|---|---|
| Max. load capacity | | 5 000 kg / 10 000 kg |
| Operating stroke – adjustable | | 3 m–6 m |
| Stroke time for 1 metre lift at 30 dm³/min flow rate | | 0–3 m/min |
| Max. pressure | | 16 MPa + 10 % MPa |
| Medium | | hydraulic oil |
| Min. oil supply | | 30 dm³/min |
| Pull chain | | 13x36 DIN 5684 |
| Product number | - version 5 tons | **ZP-168014-5** |
| | - version 10 tons | **ZP-168014** |




**HTZ TDS 5t**

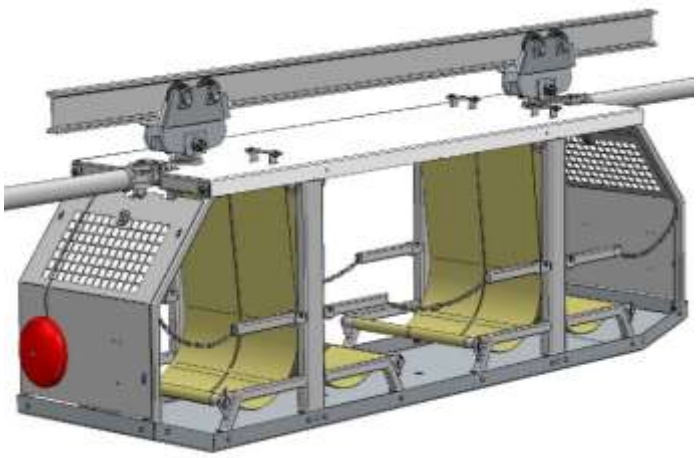



**HTZ TDS 10t**

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

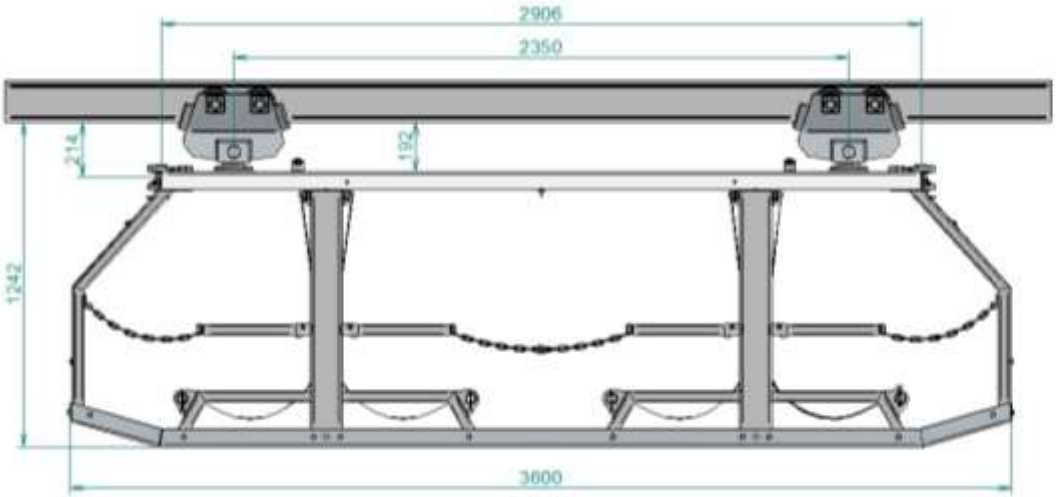
# Cabin for transport of 8 people TDS 160kN - 21

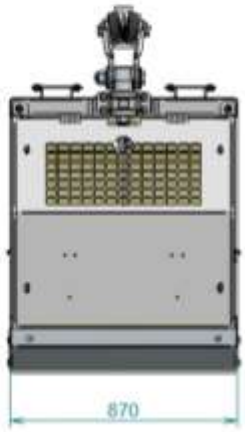


The cabin TDS for 8 people is designed for transporting personnel along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other suitable certified track types, within mine workings having a minimum profile of 8m$^2$ and at maximum inclines of ±30°. It may only be used on inclines not exceeding the maximum permitted for the braking carriage and suspension locomotive.
The cabin assembly is suitable for use in methane-explosive underground environments classified as SNM 2.

## Technical parameters

| | |
|---|---|
| Numer of seats | 8 |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30° |
| Max. tractive force of traction vehicle | 160 kN |
| Utilitarian weight | 960 kg (8 x 120 kg) |
| Product number | **ZP-251021** |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

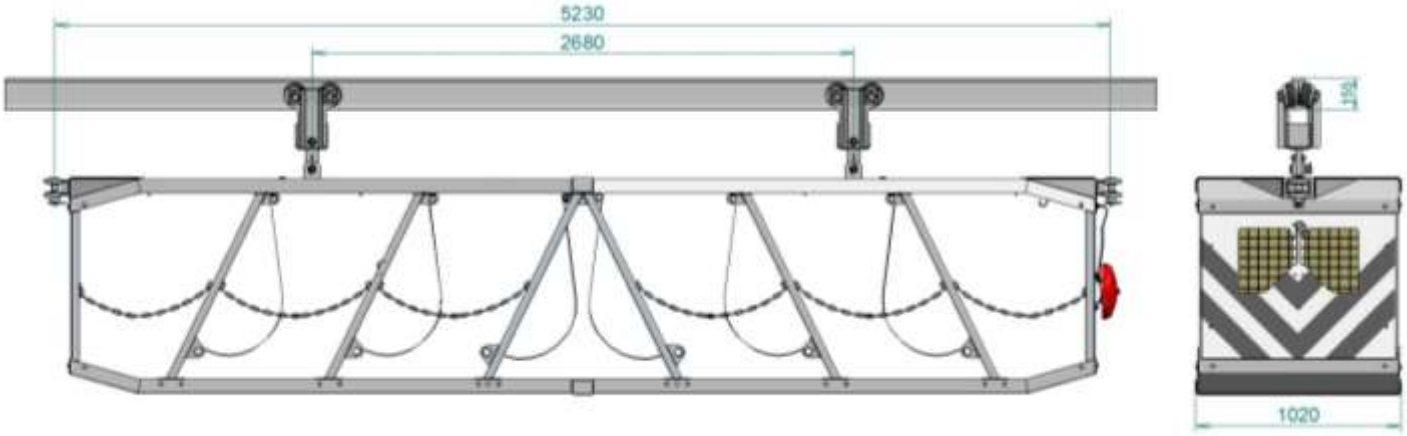
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Cabin for transport of 12 people TDS 160kN - 21

The cabin TDS for 12 people is designed for transporting personnel along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other suitable certified track types, within mine workings having a minimum profile of 8m² and at maximum inclines of ±3 22
It may only be used on inclines not exceeding the maximum permitted for the braking carriage and suspension locomotive.
The cabin assembly is suitable for use in methane-explosive underground environments classified as SNM 2.

## Technical parameters

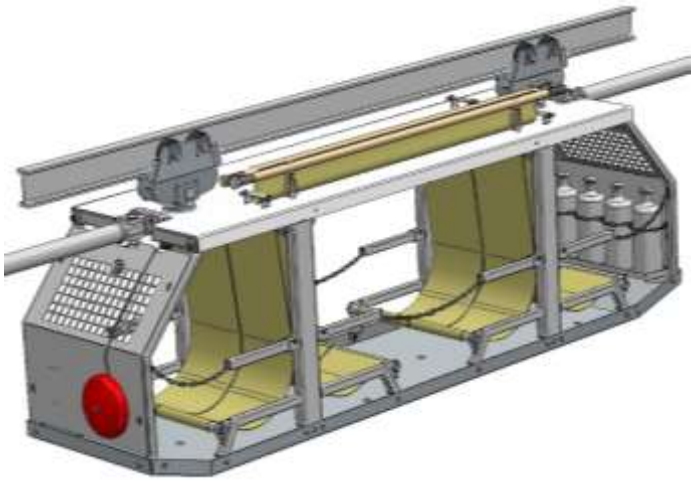
| | |
|---|---|
| Numer of seats | 12 |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30° |
| Max. tractive force of traction vehicle | 160 kN |
| Utilitarian weight | 1440 kg (12 x 120 kg) |
| Product number | **ZP-241020** |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Convertible medical cab for transport of 8 people or injured personnel, type TDS 160 - 21

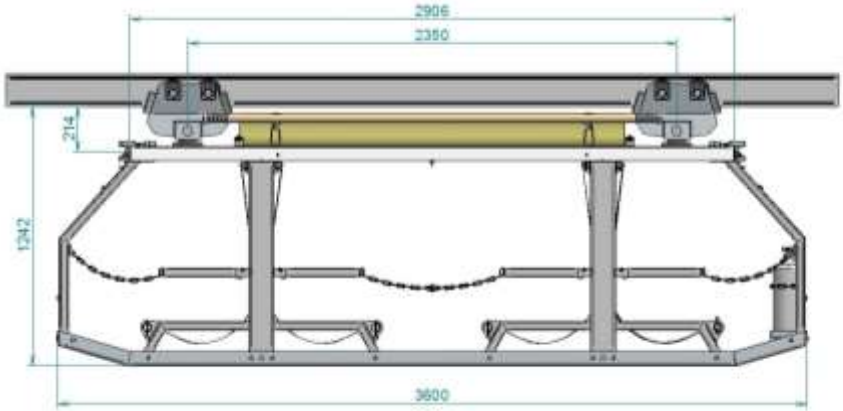


The convertible medical cab for 8 people is designed for transport along suspension tracks ZD24A, ZD 24B, ZD 24C, D130, or other suitable certified track types. The cabin is suitable for use in methane-explosive underground environments classified as SNM 2. In normal operation, the cabin is equipped with 8 canvas seats, with stretchers stored on the ceiling. When converting the cabin into a sanitary unit, the seats are removed and replaced with stretchers for transporting injured personnel.

The front, rear, and side panels of the cabin are openable to allow loading or unloading of injured personnel as needed. Stretchers are secured to the cabin floor.

## Technical parameters

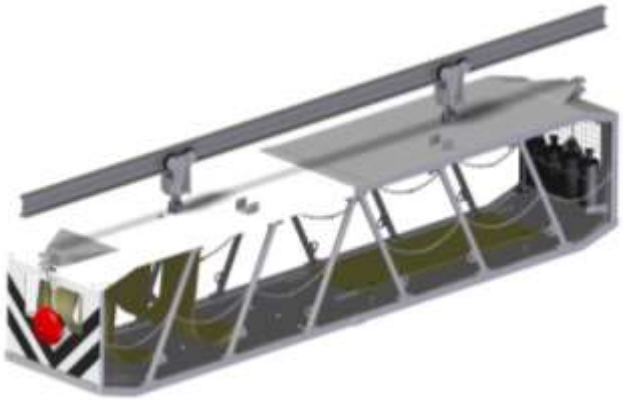
| | |
|---|---|
| Number of seats | 8 / 2 + 1 injured |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30° |
| Max. tractive force of traction vehicle | 160 kN |
| Utilitarian weight | 960 kg (8 x 120 kg) |
| Product number | **ZP-252021** |



Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Convertible medical cab for transport of 12 people or injured personnel, type TDS 160 - 21

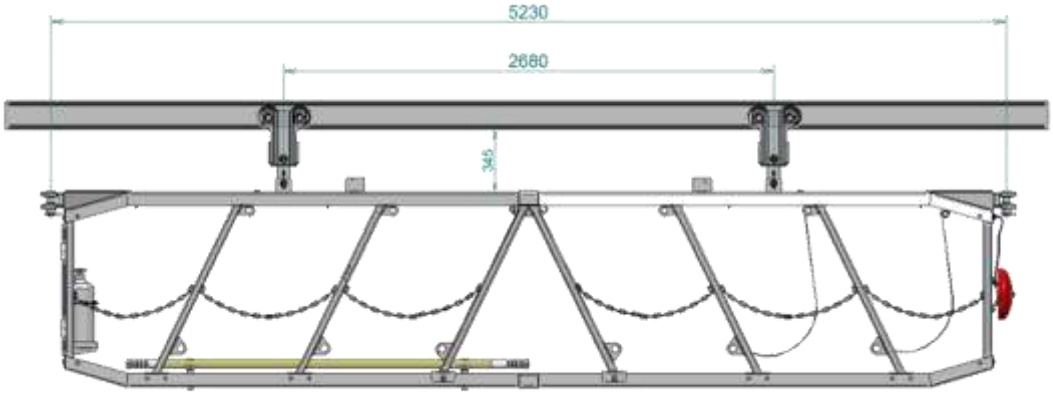


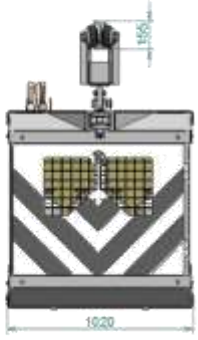
The convertible medical cab for 12 people is designed for transport along suspension tracks ZD24A, ZD 24B, ZD 24C, D130, or other suitable certified track types. The cabin is suitable for use in methane-explosive underground environments classified as SNM 2. In normal operation, the cabin is equipped with 12 canvas seats, with stretchers stored on the ceiling. When converting the cabin into a sanitary unit, the seats are removed and replaced with stretchers for transporting injured personnel.

The front, rear, and side panels of the cabin are openable to allow loading or unloading of injured personnel as needed. Stretchers are secured to the cabin floor.

## Technical parameters

| | |
|---|---|
| Number of seats | 12 / 4 + 1 injured |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30° |
| Max. tractive force of traction vehicle | 160 kN |
| Utilitarian weight | 1440 kg (12 x 120 kg) |
| Product number | **ZP-242020** |

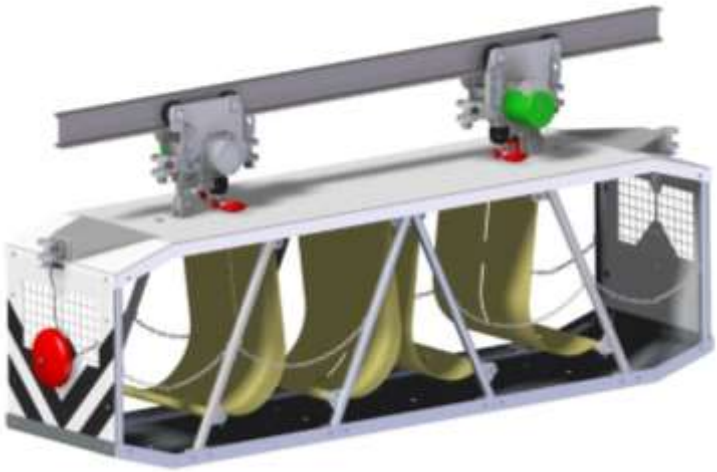



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Cabin for transport of 8 people with HPVU TDS 160kN - 21

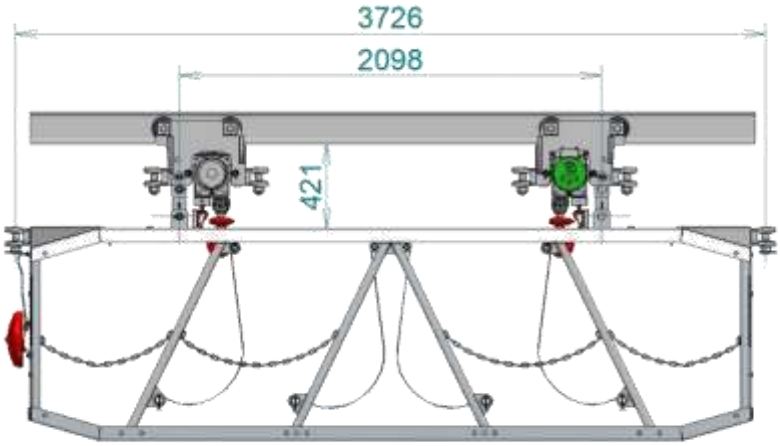


The cabin TDS for 8 people is designed for transporting personnel along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other compatible certified track types, within mine workings having a minimum profile of 8m$^2$ and at maximum inclines of ±30°. It may only be used on inclines not exceeding the maximum permitted for the braking carriage and suspension locomotive.

The cabin assembly is suitable for use in methane-explosive underground environments classified as SNM 2.

## Technical parameters

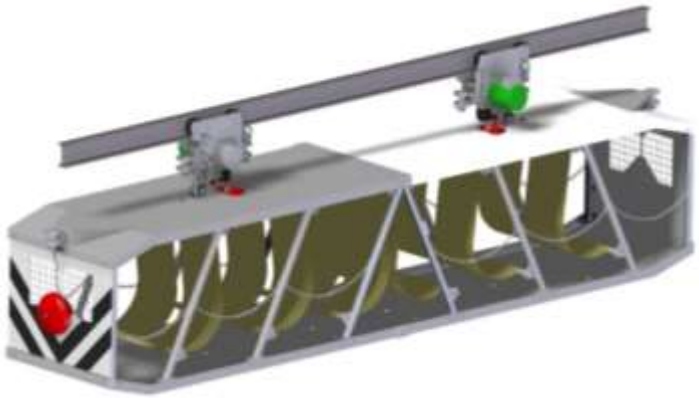
| | |
|---|---|
| Numer of seats | 8 |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30° |
| Max. tractive force of traction vehicle | 160 kN |
| Utilitarian weight | 960 kg (8 x 120 kg) |
| Product number | **ZP-253021** |



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Cabin for transport of 12 people with HPVU TDS 160kN - 21

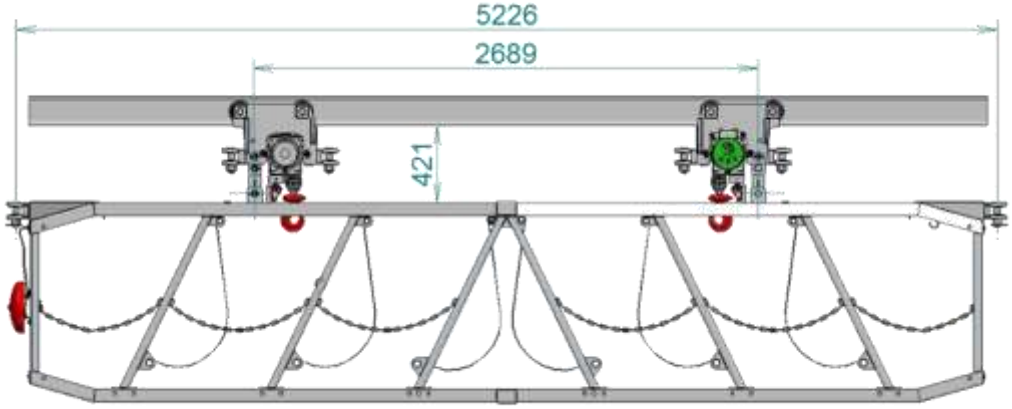


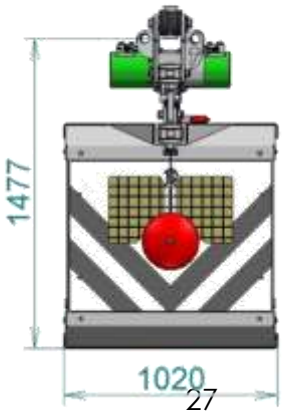
The cabin TDS for 12 people is designed for transporting personnel along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other compatible certified track types, within mine workings having a minimum profile of 8m$^2$ and at maximum inclines of ±30°. It may only be used on inclines not exceeding the maximum permitted for the braking carriage and suspension locomotive.

The cabin assembly is suitable for use in methane-explosive underground environments classified as SNM 2.

## Technical parameters

| | |
|---|---|
| Numer of seats | 12 |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30° |
| Max. tractive force of traction vehicle | 160 kN |
| Utilitarian weight | 1440 kg (12 x 120 kg) |
| Product number | **ZP-254021** |

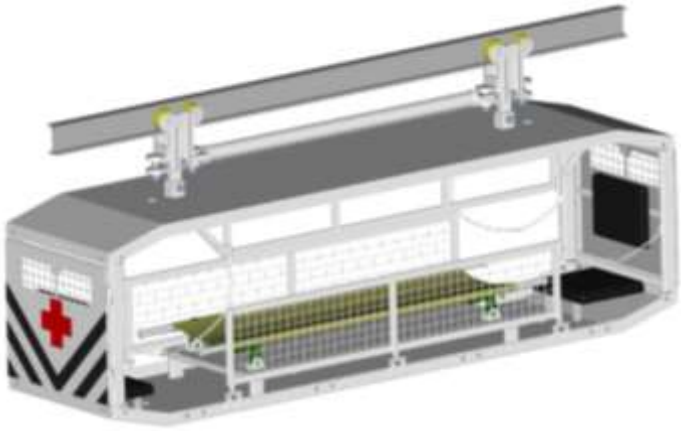



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

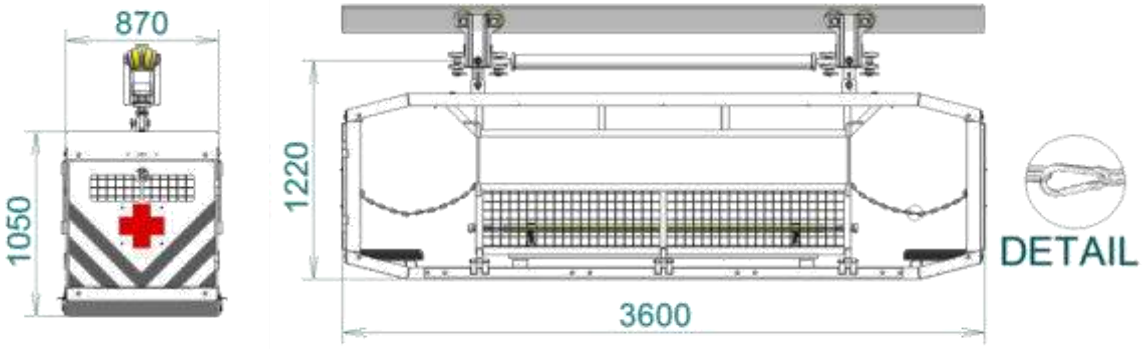
# Medical cab TDS for transport of injured personnel TDS 120



The medical cab TDS is designed for transporting rescue service personnel, including injured individuals, along suspension tracks ZD 24A, ZD 24B, ZD 24C, D130, or other compatible certified track types. It is suitable for use in methane-explosive underground environments classified as SNM 2.
The sanitary unit includes its own rescue stretcher.
The cab is suspended on 2 transport carriages connected by a 1.74 m pull rod. The pull rod is secured to the carriages with an insertion pin and a crown nut with split pin.
The front, rear, and side panels of the cab are openable to allow loading or unloading of injured personnel as needed. Stretchers are secured to the cab floor by pull-out pins.

## Technical parameters

| | |
|---|---|
| Number of seats | 2 + 1 injured |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30° |
| Max. tractive force of traction vehicle | 120 kN |
| Utilitarian weight | 360 kg (3 x 120 kg) |
| Product number | **ZP-340002-K** |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

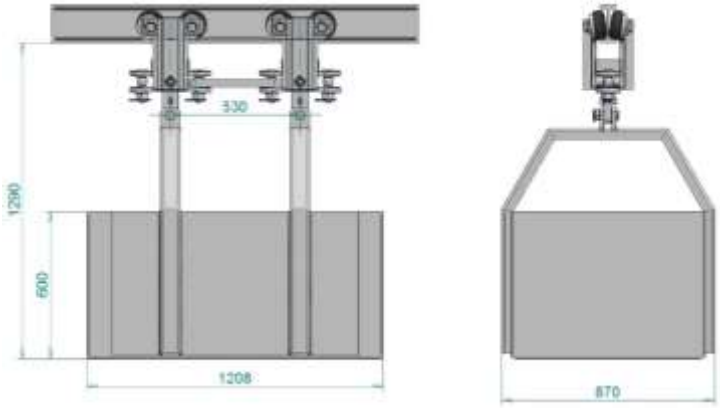
# Pallet for transport of small tools TDS 120kN 1.2m / 2.0m

The pallet is designed for transporting small tools and materials along suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130.
It is suspended on carrying carriages and connected into assemblies with pull rods.

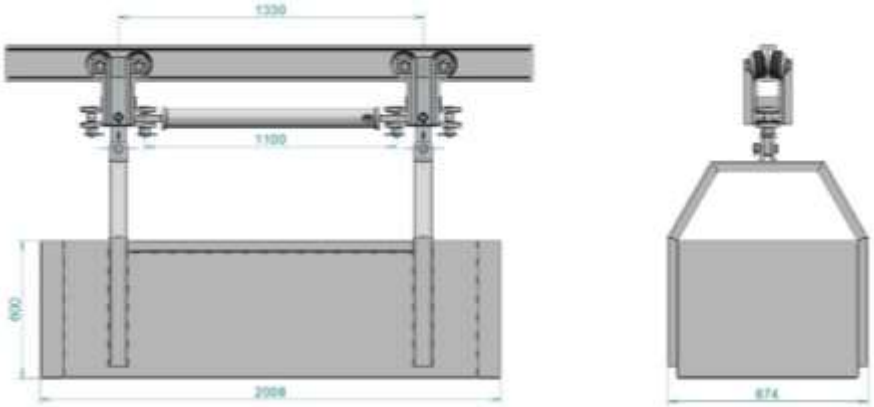
## Technical parameters

| | |
|---|---|
| Load capacity 1.2m / 2.0m | 500kg / 1000kg |
| Product number – 1.2m | **ZP-127010-30** |
| Product number – 2.0m | **ZP-127010-2000-30** |

**Pallet 1.2m**




**Pallet 2.0m**




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

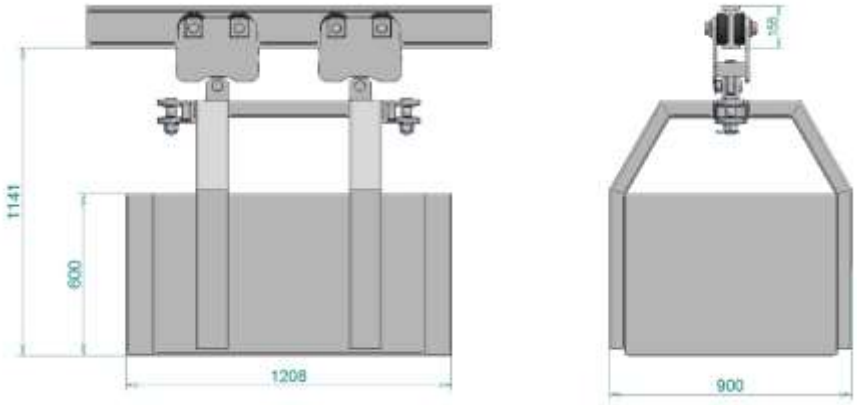
# Pallet for transport of small tools TDS 160kN 1.2m / 2.0m

The pallet is designed for transporting small tools and materials along suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130.
It is suspended on carrying carriages and connected into assemblies with pull rods.

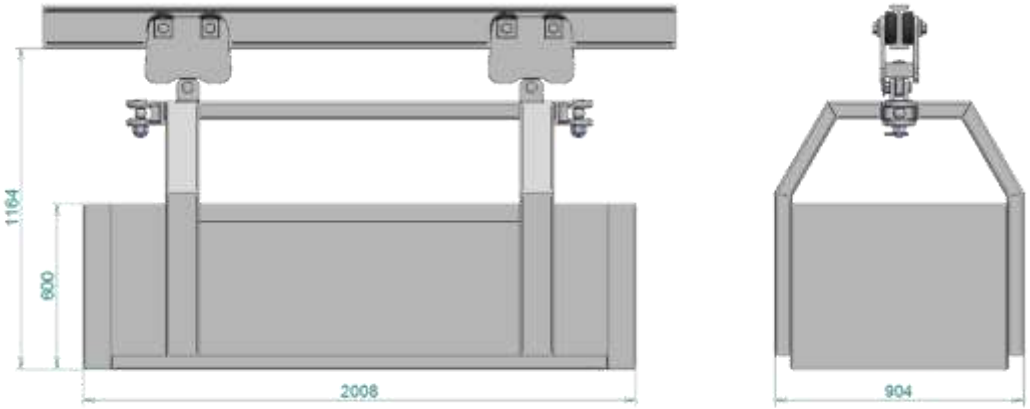
## Technical parameters

| | |
|---|---|
| Load capacity 1.2m / 2.0m | 500kg / 1000kg |
| Product number – 1.2m | **ZP-251021-30** |
| Product number – 2.0m | **ZP-251021-2000-30** |

**Pallet 8/12 1.2m**



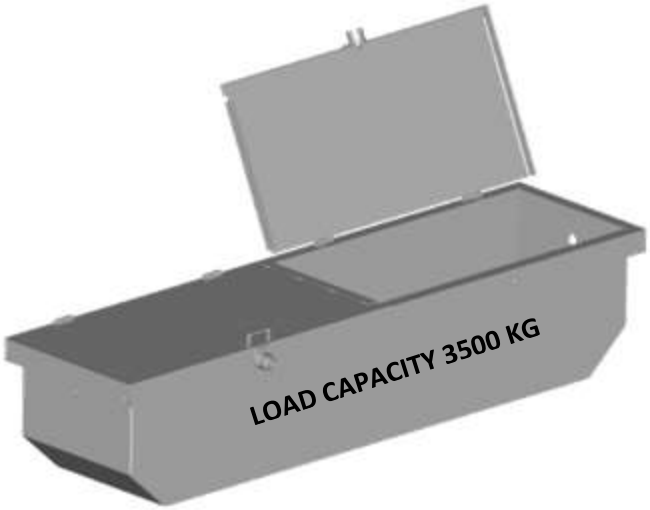

**Pallet 8/12 2.0m**




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

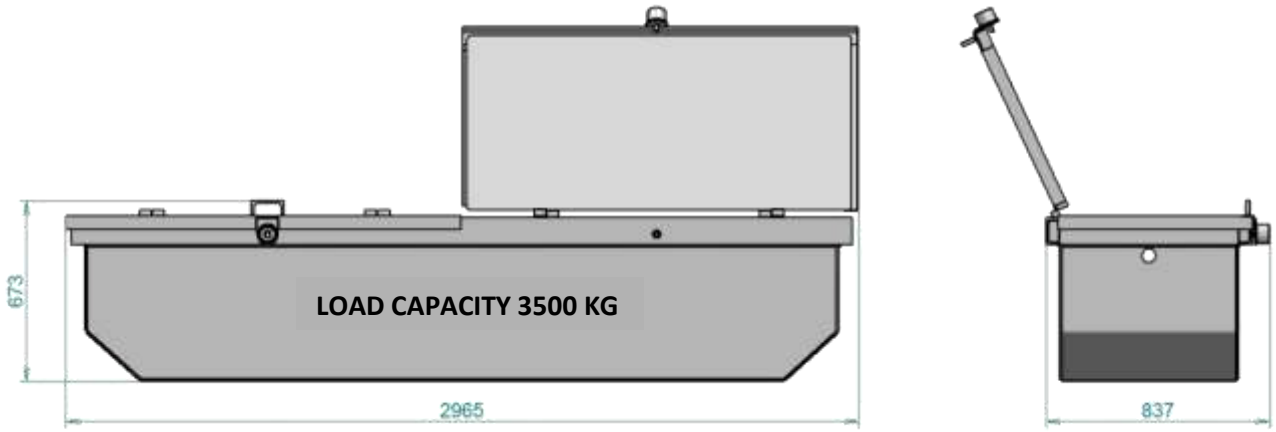
# Transport container




The transport container is designed for transporting materials (casing pipes, fasteners, loose materials, etc.) with a maximum weight of 3500 kg along suspension tracks ZD 24A, ZD 24B, ZD24C, and D130. It is suspended on the transport carriage using a chain carrier or other suspension device with a Ø13 x 45 chain according to ČSN 023222.

## Technical parameters

| | |
|---|---|
| Load capacity | 3500 kg |
| Product number | **ZP-690006** |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

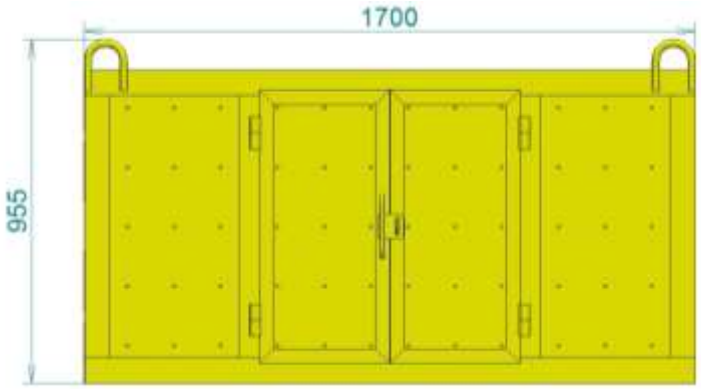
# Container for transport of explosives and storage of electrical materials

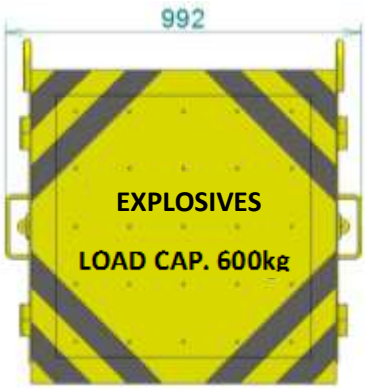
## Side construction / Front construction

The container is designed for transporting and storing explosives and electrical materials with a maximum weight of 600 kg along suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130. The container is lockable and can also be used on technological tracks. During transport, it is suspended on transport carriages using a chain carrier with a Ø13 x 45 chain according to ČSN 023222. The size and shape of the container can be customized according to customer requirements.

## Technical parameters

| | |
|---|---|
| Load capacity | 600 kg |
| Product number – side construction | **ZP-380002-B** |
| Product number – front construction | **ZP-380002-C** |



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Transport carriages TDS

A suspension track vehicle refers to a carrier trolley, a carrier trolley loaded with material, a transport container (container, pallet, etc.) or a cabin for transporting personnel.

It is designed to move along a fixed suspension track (hereinafter "track"), which consists of a system of components assembled from individual sections of suspended profiles, switches, and accessories forming an integrated unit.

The vehicle can be transported along the track using a haulage rope or a suspended locomotive. Only material loads not exceeding 4000 kg per carriage may be transported. The vehicle can be either pushed or pulled. The transport carriage complies with standards ČSN EN ISO 12100-2, ČSN 294, ČSN EN 13463-1, ČSN 332030, and with the Czech Mining Authority (ČBÚ) Decree No. 22/1989 Coll., as amended.
Its design and construction allow for bidirectional transport.

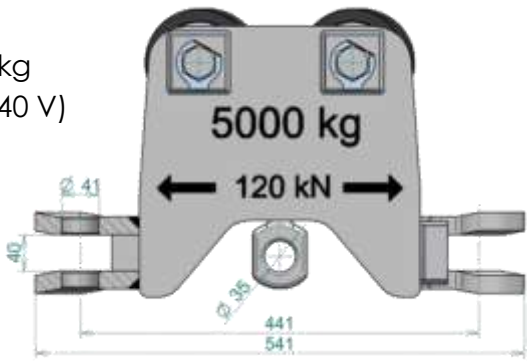
**Types of transportation carriages:**

- 4A *(ZP-180097)*
- 4A-V *(ZP-180097-V)*
- TDS 120 *(ZP-114009-1)*
- TDS 140 *(ZP-123010)*
- TDS 4 Pegas *(ZP-310099)*
- TDS 4 Ragor *(ZP-114009-RG)*
- TDS 4A – KOEXPRO *(ZP-192015)*
- TDS 120 PWL *(ZP-114009-PWL)*
- HPV 80 / 120 / 160 *(ZP-110009-3-80/120/160)*
- HPV 120 / 160 vlak *(ZP-110009-3-V;ZP-110009-3-V-160)*
- HMK 80 / 120 *(ZP-131011-1-1;ZP-131011-120-1-1)*
- HMZ 5t *(ZP-460003-1)*
- Cabin TDS 120 / 160 *(ZP-217017-120-1; ZP-21213017-1)*
- Haulage cabin 160kN *(ZP-251021-10)*

Everything is also available in the following versions: reinforced, with guiding, with hose routing, extended (for toothed-track type)

## Technical parameters

| | |
|---|---|
| Max. load capacity | 4000 kg / 5000 kg |
| Supporting profile | I 155 (I 140E, I 140 V) |
| Min. radius of horizontal turns | 4 m |
| Min. radius of vertical turns | 8 m |
| Max. speed of the assembly | 2.5 m/s |
| Max. incline of the track | ± 30°/± 35° |
| Max. tractive force of traction vehicle | 80 kN / 120kN / 140kN / 160kN |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

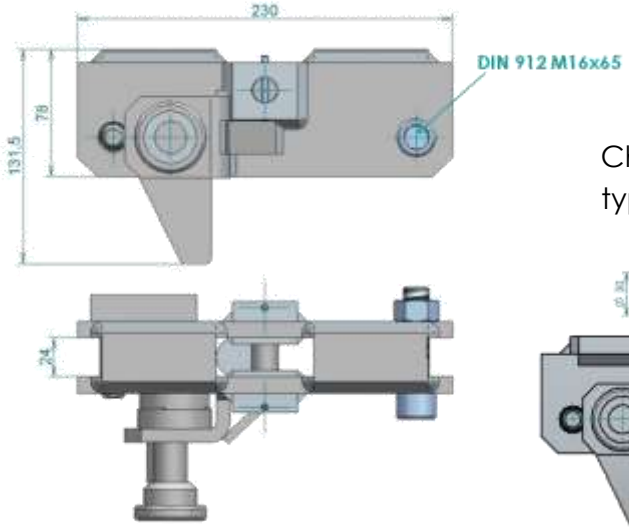
# Chain carriers (type TDS 4000, type HPV TDS)

# Chain grip HPV TDS

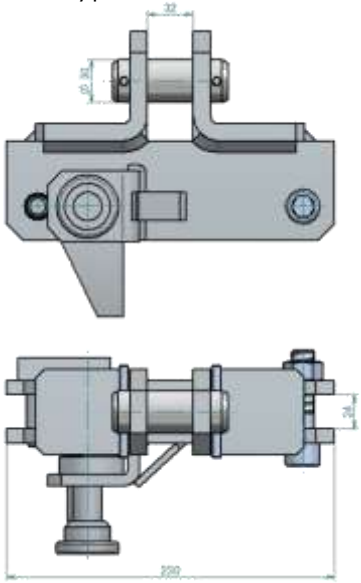
The chain carrier is designed for transporting materials along suspension tracks in combination with transport carriages of types TDS 4, TDS4/A, TDS4/N, NV2000, and NVU. Together, they form an integrated unit within the suspension track system. The maximum weight of the suspended load during transport is specified in the track's operating regulations and depends, among other factors, on the load capacity of the carriage, the characteristics of the suspension track, and the type of chain used for securing the load.

## Technical parameters

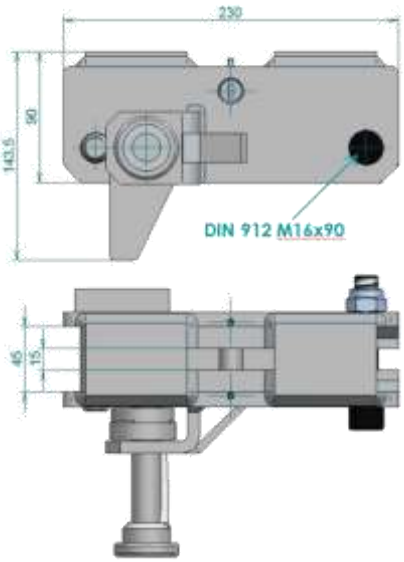
| | |
|---|---|
| Max. load capacity | 4000 kg |
| Product number type TDS 4000 | **ZP-170095** |
| Product number type HPV TDS | **ZP-110009-20** |
| Product number - grip of the chain HPV TDS | **ZP-187015-20** |




Chain carrier
type HPV TDS



Chain carrier
type TDS 4000



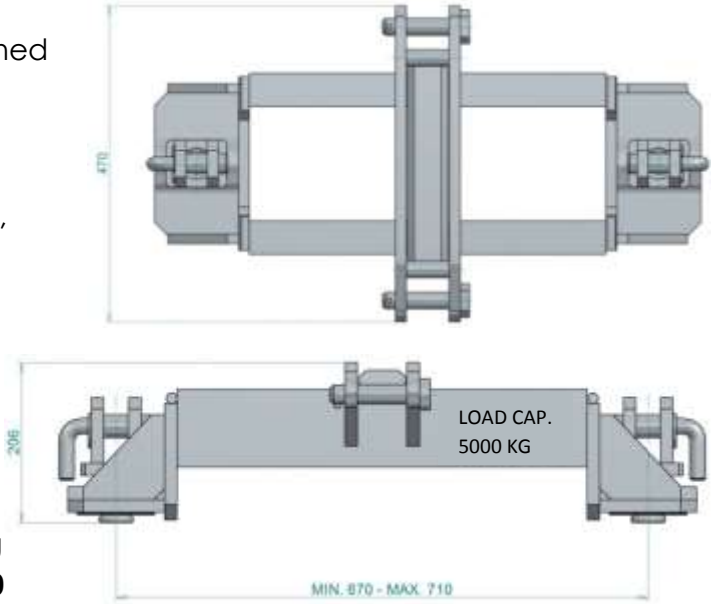

Chain grip
HPV TDS

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Frame carrier of heavy loads type RNTB 5000

The frame carrier of heavy loads is designed for transporting loads and materials in combination with transport carriages of types TDS 4, TDS 4A, and NV 2000 along suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130.
Only material loads not exceeding 5000 kg per carrier may be loaded.



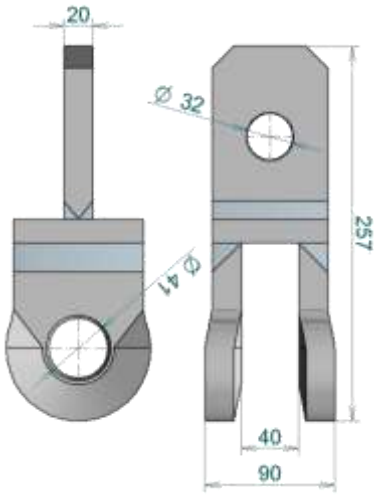

## Technical parameters

| | |
|---|---|
| Max. load capacity | 5000 kg |
| Product number | **ZP-2300** |

---

# Transition piece 80kN – 120kN

The transition piece 80 kN – 120 kN is designed to connect a 120 kN pull rod to transport carriages with an 80 kN coupling point.




## Technical parameters

| | |
|---|---|
| Permissible load in tension (compression) | 120 kN |
| Product number | **ZP-115009-P** |

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

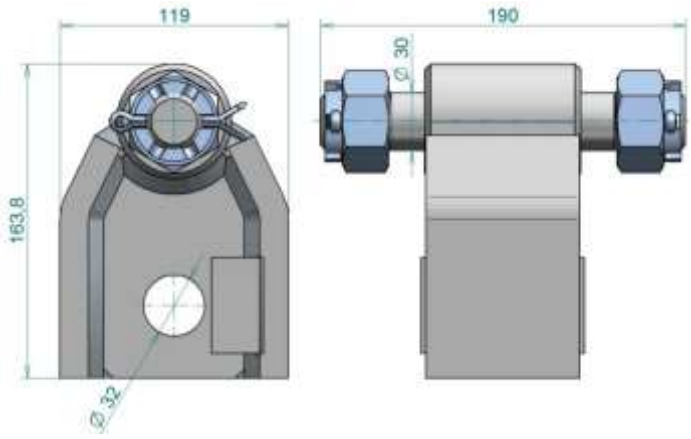
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Transition joint BV1

The transition joint BV1 is designed to connect the braking carriage to a joint rod.
The maximum permissible load in tension (compression) is 80 kN.

## Technical parameters

| | |
|---|---|
| Permissible load in tension (compression) | 80kN |
| Product number | **ZP-330001** |



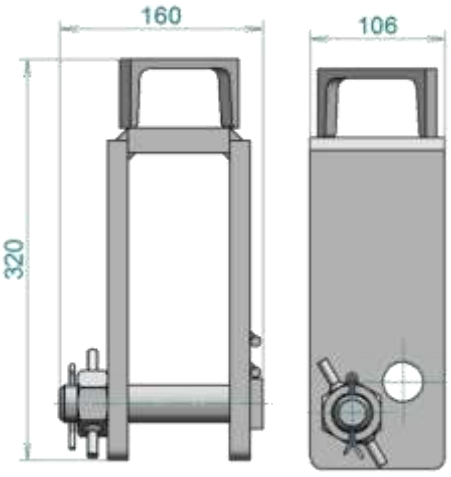

---

# Manual handling stopper TDS D/130

The manual handling stopper is designed to prevent vehicle movement and blocking of the suspension track in areas with a stationary train or during loading and unloading loads on horizontal or inclined track types ZD 80, ZD 24A, ZD 24B, ZD 24C and, D130.
The stopper may be used in places where the maximum axle load does not exceed:
on tracks ZD 24A and ZD24B when supported:

- On the anchored base plate of the section 63kN
- In other cases 42 kN
- On track ZD 24 30 kN
- On the ZD 80 according to the relevant TP
- Along the centerline of track ZD 24 30 kN

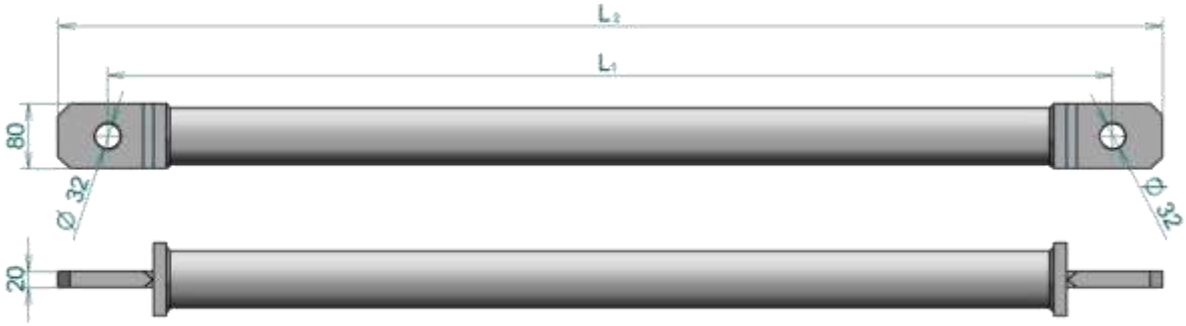
Product number **ZP-141012**




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Pull rod 80 kN – fixed




Permissible load in tension (compression) is 80 kN

| Product number | $L_1$[mm] | $L_2$[mm] |
|---|---|---|
| **ZP-210005-100-S** | 1000 | 1124 |
| **ZP-210005-125-S** | 1250 | 1374 |
| **ZP-210005-140-S** | 1400 | 1524 |

# Pull rod 140 kN

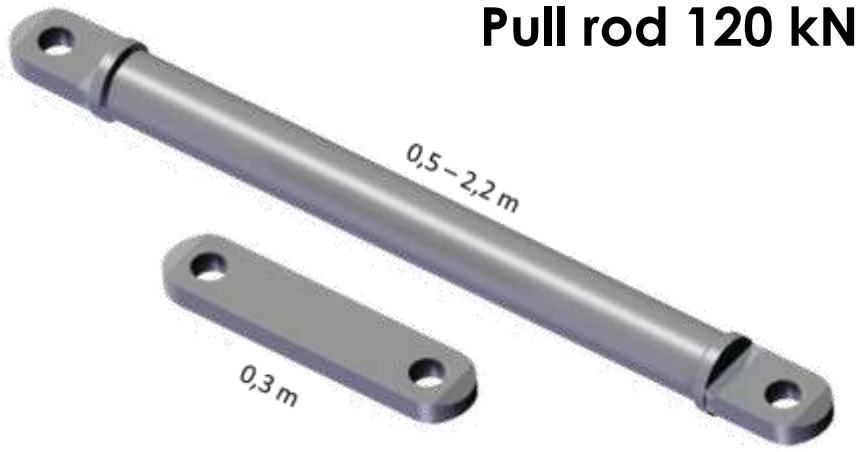
| Product number | $L_1$[mm] | $L_2$[mm] |
|---|---|---|
| **ZP-122010-30** | 300 | 411 |
| **ZP-122010-50-S** | 500 | 611 |
| **ZP-122010-65-S** | 650 | 761 |
| **ZP-122010-80-S** | 800 | 911 |
| **ZP-122010-100-S** | 1000 | 1111 |
| **ZP-122010-110-S** | 1100 | 1211 |
| **ZP-122010-116-S** | 1160 | 1271 |
| **ZP-122010-120-S** | 1200 | 1311 |
| **ZP-122010-125-S** | 1250 | 1361 |
| **ZP-122010-140-S** | 1400 | 1511 |
| **ZP-122010-174-S** | 1740 | 1851 |
| **ZP-122010-180-S** | 1800 | 1911 |
| **ZP-122010-200-S** | 2000 | 2111 |

Permissible load in tension (compression) is 140kN

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Pull rod 120 kN

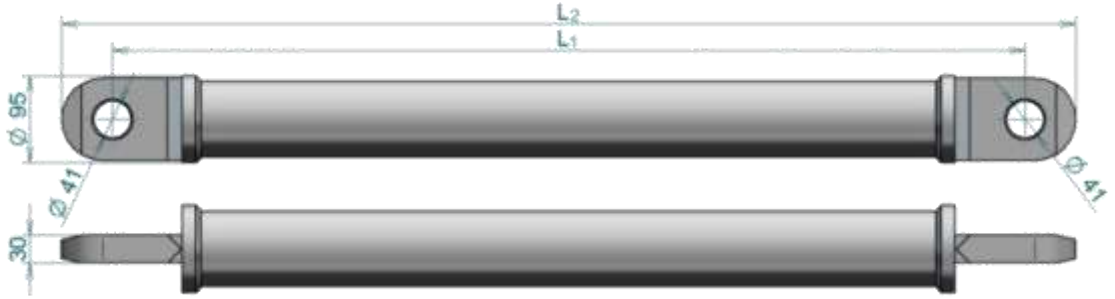



The pull rod (hereinafter PR) is designed to connect vehicles on transport routes along suspension tracks ZD 24A, ZD 24B, ZD24C, and D130. The PR may only be used on tracks where the maximum tensile (compressive) force does not exceed 120 kN. The connection between the PR and the vehicle is made by using an insertion pin secured by wire, a safety lock, or another approved device to prevent it from falling out. The PR complies with standards ČSN EN ISO 12100-2, ČSN 294, ČSN EN 13463-1, ČSN 332030, and with the Czech Mining Authority (ČBÚ) Decree No. 22/1989 Coll., as amended.

| Product number | $L_1$[mm] | $L_2$[mm] |
|---|---|---|
| **ZP-116009-30** | 300 | 411 |
| **ZP-115009-50-S** | 500 | 611 |
| **ZP-115009-70-S** | 700 | 811 |
| **ZP-115009-80-S** | 800 | 911 |
| **ZP-115009-100-S** | 1000 | 1111 |
| **ZP-115009-110-S** | 1100 | 1211 |
| **ZP-115009-116-S** | 1160 | 1271 |
| **ZP-115009-120-S** | 1200 | 1311 |
| **ZP-115009-123-S** | 1230 | 1341 |
| **ZP-115009-125-S** | 1250 | 1361 |
| **ZP-115009-130-S** | 1300 | 1411 |
| **ZP-115009-140-S** | 1400 | 1511 |
| **ZP-115009-156-S** | 1560 | 1671 |
| **ZP-115009-174-S** | 1740 | 1851 |
| **ZP-115009-180-S** | 1800 | 1911 |
| **ZP-115009-200-S** | 2000 | 2111 |
| **ZP-115009-220-S** | 2200 | 2311 |

## Technical parameters

Permissible load in tension (compression) 120 kN



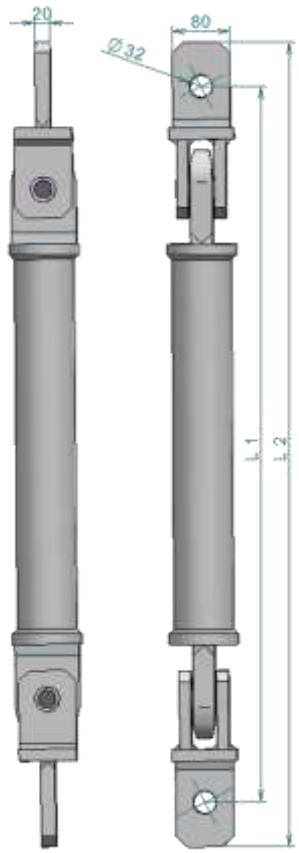

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Pull rod – articulated 120 kN

The articulated pull rod (hereinafter PR) is designed to connect vehicles on transport routes along suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130. The PR may only be used on tracks where the maximum tensile (compressive) force does not exceed 120 kN. The connection between the PR and the vehicle is made by using an insertion pin secured by wire, a safety lock, or another approved device to prevent it from falling out. The PR complies with standards ČSN EN ISO 12100-2, ČSN 294, ČSN EN 13463-1, ČSN 332030, and with the Czech Mining Authority (ČBÚ) Decree No. 22/1989 Coll., as amended.

| Výrobní číslo | $L_1$[mm] | $L_2$[mm] |
|---|---|---|
| **ZP-284024-80-S** | 800 | 924 |
| **ZP-284024-90-S** | 900 | 1024 |
| **ZP-284024-100-S** | 1000 | 1124 |
| **ZP-284024-110-S** | 1100 | 1224 |
| **ZP-284024-120-S** | 1200 | 1324 |
| **ZP-284024-130-S** | 1300 | 1424 |
| **ZP-284024-140-S** | 1400 | 1524 |
| **ZP-284024-150-S** | 1500 | 1624 |
| **ZP-284024-160-S** | 1600 | 1724 |
| **ZP-284024-170-S** | 1700 | 1824 |
| **ZP-284024-180-S** | 1800 | 1924 |
| **ZP-284024-190-S** | 1900 | 2024 |
| **ZP-284024-200-S** | 2000 | 2124 |
| **ZP-284024-210-S** | 2100 | 2224 |
| **ZP-284024-220-S** | 2200 | 2324 |



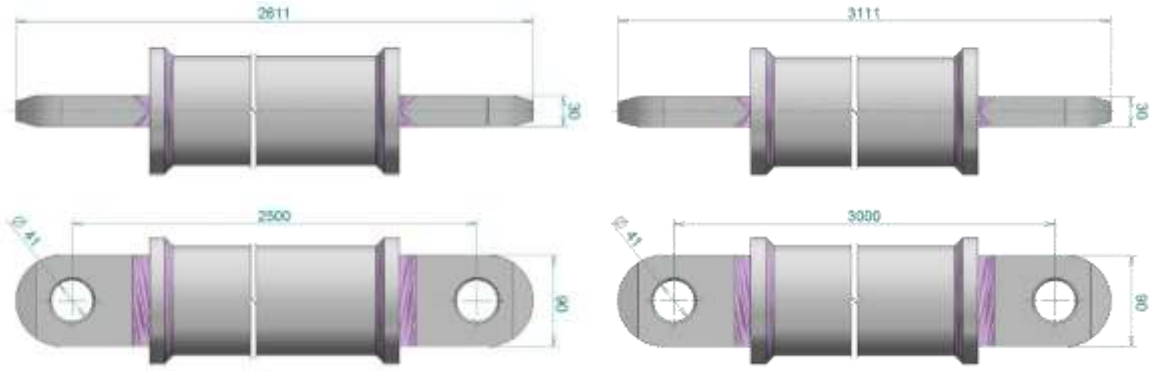

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Pull rod PR 160kN – 2.5m ; 3.0m

Permissible load in tension (compression) is 160 kN.

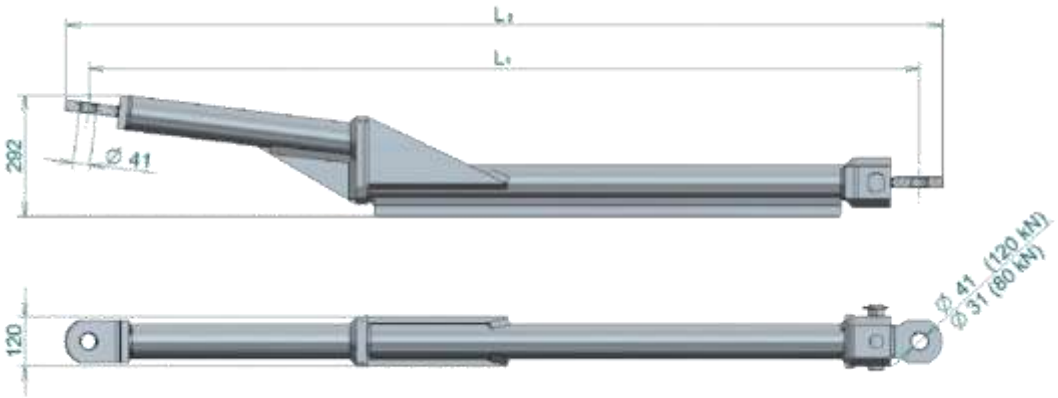
| Product number | $L_1$[mm] | $L_2$[mm] | Weight [kg] |
|---|---|---|---|
| **ZP-250021-250-S** | 2500 | 2611 | 64.8 |
| **ZP-250021-300-S** | 3000 | 3111 | 77.1 |




# Pull rod - cranked

Permissible load in tension (compression) is **120 kN** / 80kN

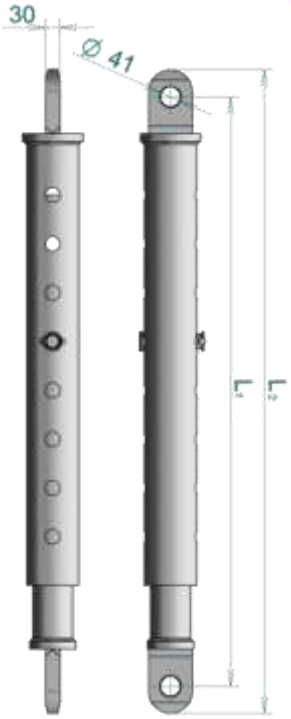
| Product number | $L_1$[mm] | $L_2$[mm] | Weight [kg] |
|---|---|---|---|
| **ZP-880007-1200-S** | 1200 | 1308 | 38.1 |
| ZP-880007-1500-80 | 1500 | 1625 | 55 |
| **ZP-880007-1500-120** | 1500 | 1625 | 55.3 |
| ZP-880007-2000-80 | 2000 | 2125 | 67.4 |
| **ZP-880007-2000-120** | 2000 | 2125 | 67.7 |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Pull rod – telescopic




The telescopic rod (hereinafter TR) is designed to connect vehicles on transport routes along suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130. The TR may only be used on tracks where the maximum tensile (compressive) force does not exceed 120 kN.
The connection between the TR and the vehicle is made by using an insertion pin secured by wire, a safety lock, or another approved device to prevent it from falling out. The TR complies with standards ČSN EN ISO 12100-2, ČSN 294, ČSN EN 13463-1, ČSN 332030, and with the Czech Mining Authority (ČBÚ) Decree No. 22/1989 Coll., as amended.
Permissible load in tension (compression) is 120 kN

| Product number | $L_1$[mm] | $L_2$[mm] | Weight [kg] |
|---|---|---|---|
| **ZP-118010** | 1100-1800 | 1211-1911 | 45.7 |
| **ZP-118510** | 1300-2000 | 1411-2111 | 49.5 |
| **ZP-119010** | 1600-2500 | 1711-2611 | 59.7 |

# Pull rod – locomotive

| Product number | $L_1$[mm] | $L_2$[mm] |
|---|---|---|
| **ZP-233019-30** | 300 | 411 |
| **ZP-233019-50-S** | 500 | 611 |
| **ZP-233019-70-S** | 700 | 811 |
| **ZP-233019-80-S** | 800 | 911 |
| **ZP-233019-100-S** | 1000 | 1111 |
| **ZP-233019-110-S** | 1100 | 1211 |
| **ZP-233019-116-S** | 1160 | 1271 |
| **ZP-233019-120-S** | 1200 | 1311 |
| **ZP-233019-123-S** | 1230 | 1341 |
| **ZP-233019-125-S** | 1250 | 1361 |
| **ZP-233019-130-S** | 1300 | 1411 |
| **ZP-233019-140-S** | 1400 | 1511 |
| **ZP-233019-156-S** | 1560 | 1671 |
| **ZP-233019-174-S** | 1740 | 1851 |
| **ZP-233019-180-S** | 1800 | 1911 |
| **ZP-233019-200-S** | 2000 | 2111 |
| **ZP-233019-220-S** | 2200 | 2311 |

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Switch TDS ZD 24 D/130 – reinforced

The reinforced switch is part of track ZD 24 D/130 and is intended for transporting mechanized mine supports with a total weight of up to 38 t. The switch ZD 24 D/130 type TDS is designed for manual direction changes when routing the suspension track with a supporting profile I 155 (I 140E, I 140V) into two or three directions. The switch and the connected track sections enable the transport of personnel and loads using vehicles whose technical parameters meet the requirements for heavy-duty suspension track operation. Impassable track branches are secured with stoppers. The switches are manufactured in bolted or welded designs.

Switch versions according to the direction of transport:

***three-way***

***left***

***right***

***left-right 16°***

***left-right 32°***

***left-right short***

***left short***

***right short***

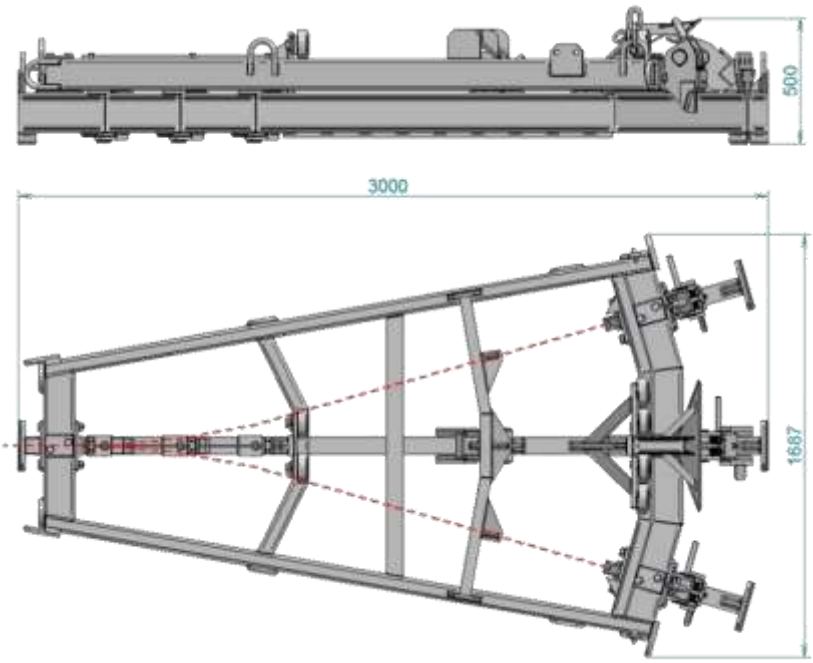
## Technical parameters

| | |
|---|---|
| Max. permissible tractive force of the vehicle | 130 kN |
| Max. permissible load of carrying trolley | 50 kN |
| Supporting profile | I 155, (I 140E, I 140V) |
| Max. diameter of locomotive drive pulleys | 350 mm |
| Max. permissible travel speed | 0.5 m/s |
| Max. incline | 12° |

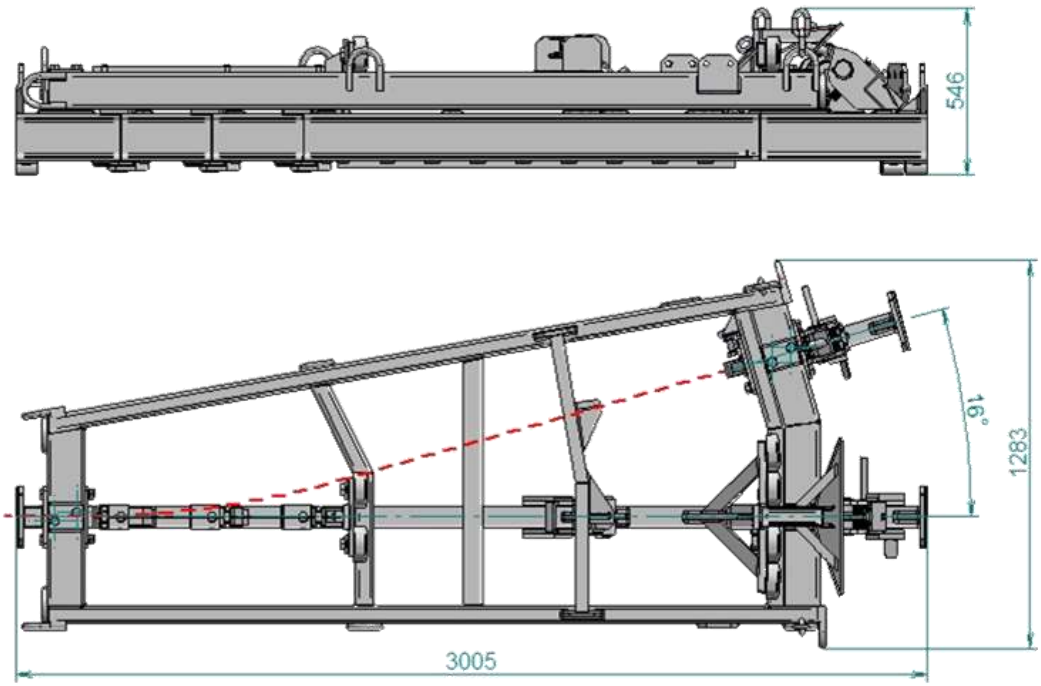
**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

Three-way switch – welded **ZP-147012-1**
Three-way switch – bolted **ZP-147012-1-SR**

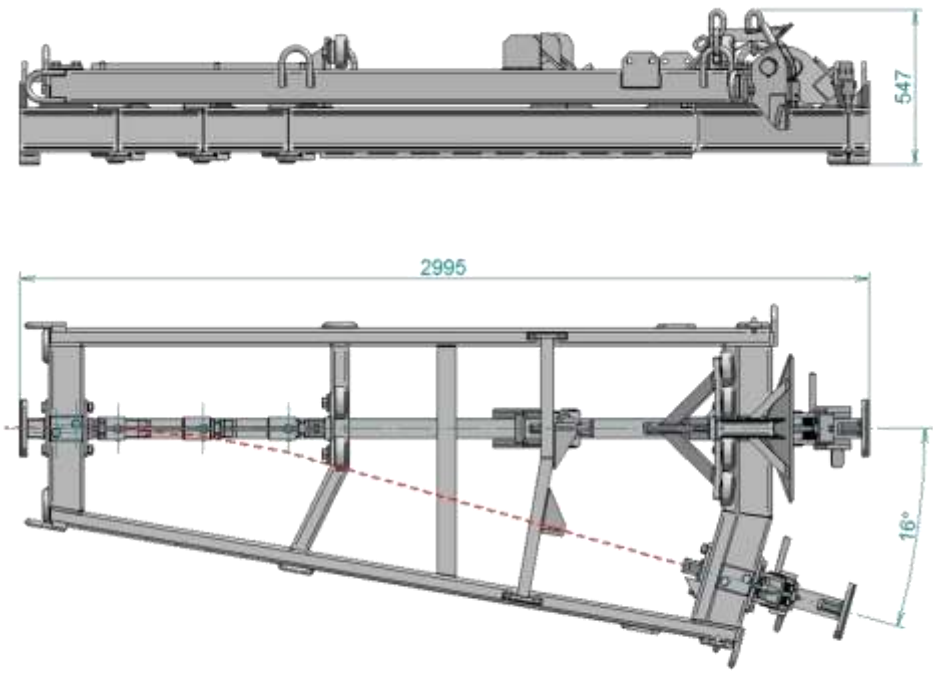



Left switch / Right switch – welded **ZP-147012-2 / ZP-147012-3**
Left switch / Right switch – bolted **ZP-147012-2-SR / ZP-147012-3-SR**

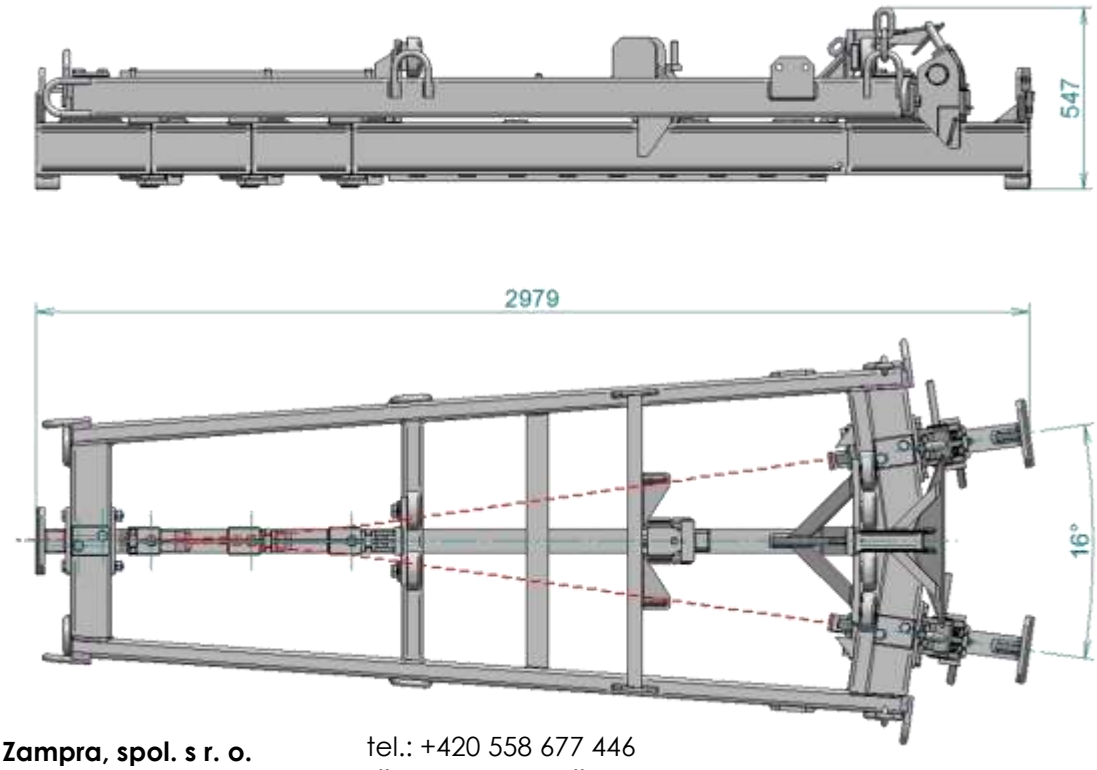



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

Left-right 32° switch – welded **ZP-147012-4**
Left-right 32° switch – bolted **ZP-147012-4-SR**



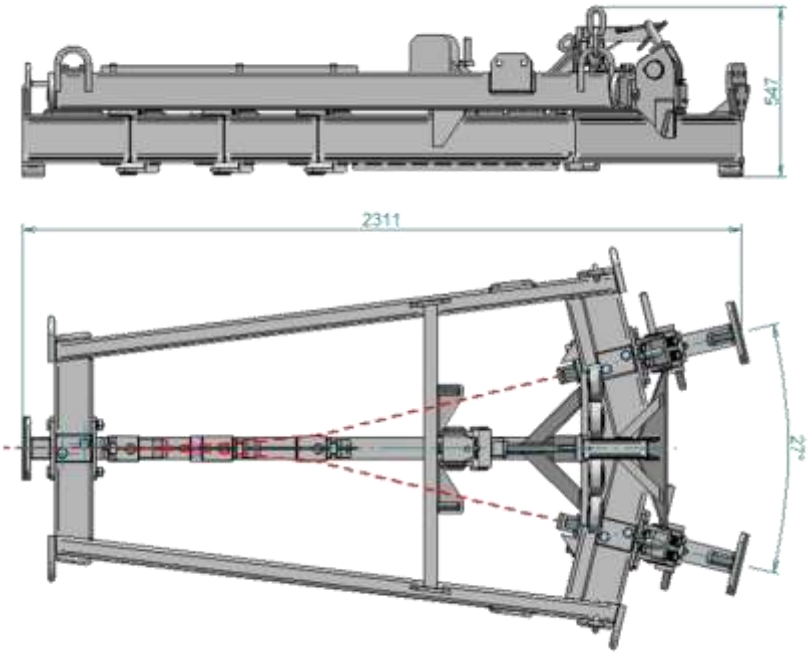

Left-right 16° switch – welded **ZP-147012-5**
Left-right 16° switch – bolted **ZP-147012-5-SR**



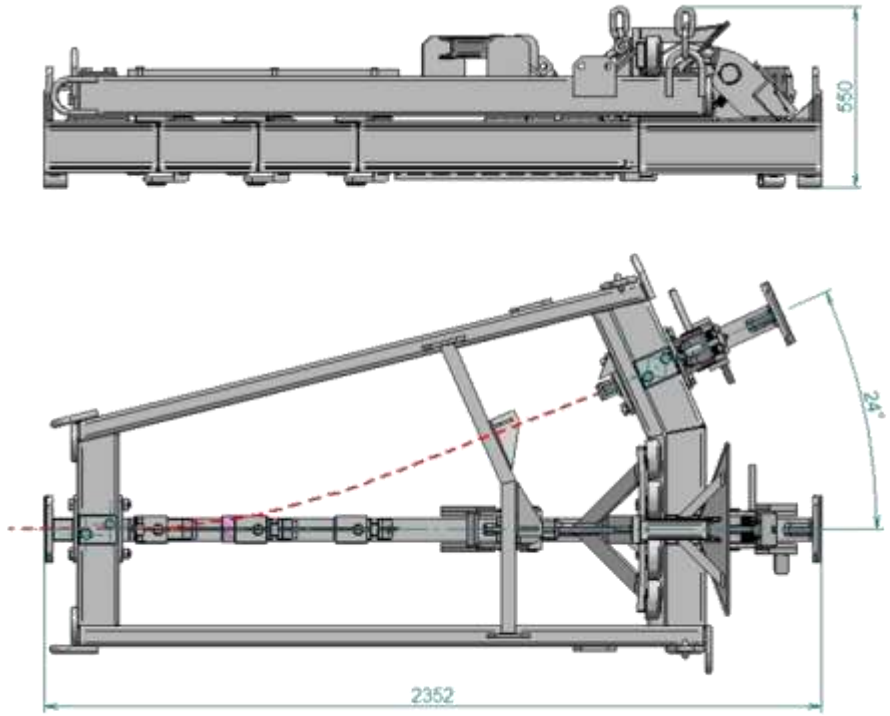

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

Left-right short switch – welded **ZP-154013-1**
Left-right short switch – bolted **ZP-154013-1-SR**




Left / Right short switch – welded **ZP-154013-2 / ZP-154013-3**
Left / Right short switch – bolted **ZP-154013-2-SR / ZP-154013-3-SR**




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Switch ZD 24 A, B, C – pneumatic

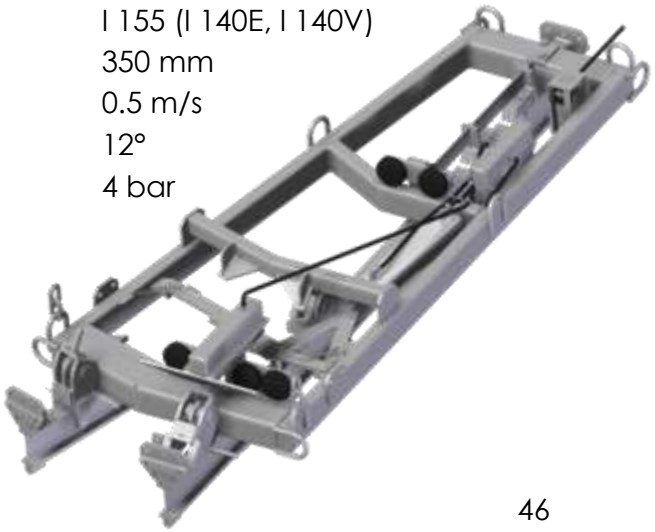
The switch ZD 24 A, B, C type TDS is designed for pneumatic direction changes when routing the suspension track with a supporting profile I 155 (I 140E, I 140V) into two directions.
The switch and the connected track sections enable the transport of personnel and loads using vehicles whose technical parameters meet the requirements for heavy-duty suspension track operation.
Impassable track branches are secured with stoppers. The switch complies with standards ČSN EN ISO 12100-2, ČSN 294, ČSN EN 13463-1, ČSN 33 2030, and with the Czech Mining Authority (ČBÚ) Decree No. 22/1989 Coll., as amended. The switches are manufactured in bolted or welded designs.

Switch versions according to the direction of transport:

***left***
***right***
***left-right***

## Technical parameters

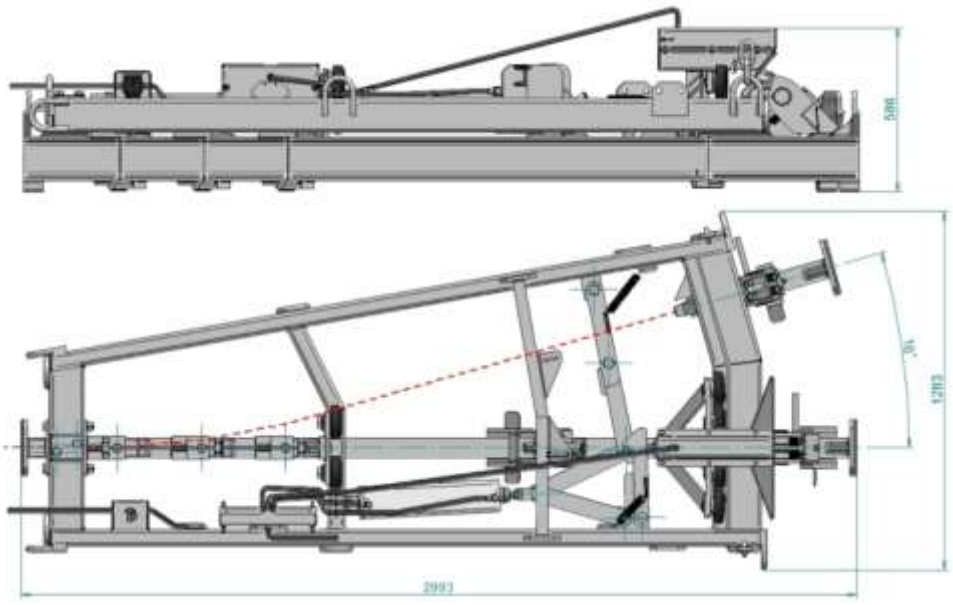
| | |
|---|---|
| Max. permissible tractive force of the vehicle | 130 kN |
| Max. permissible load of carrying trolley | 50 kN |
| Supporting profile | I 155 (I 140E, I 140V) |
| Max. diameter of locomotivedrive pulleys | 350 mm |
| Max. permissible travel speed | 0.5 m/s |
| Max. incline | 12° |
| Min. air pressure | 4 bar |



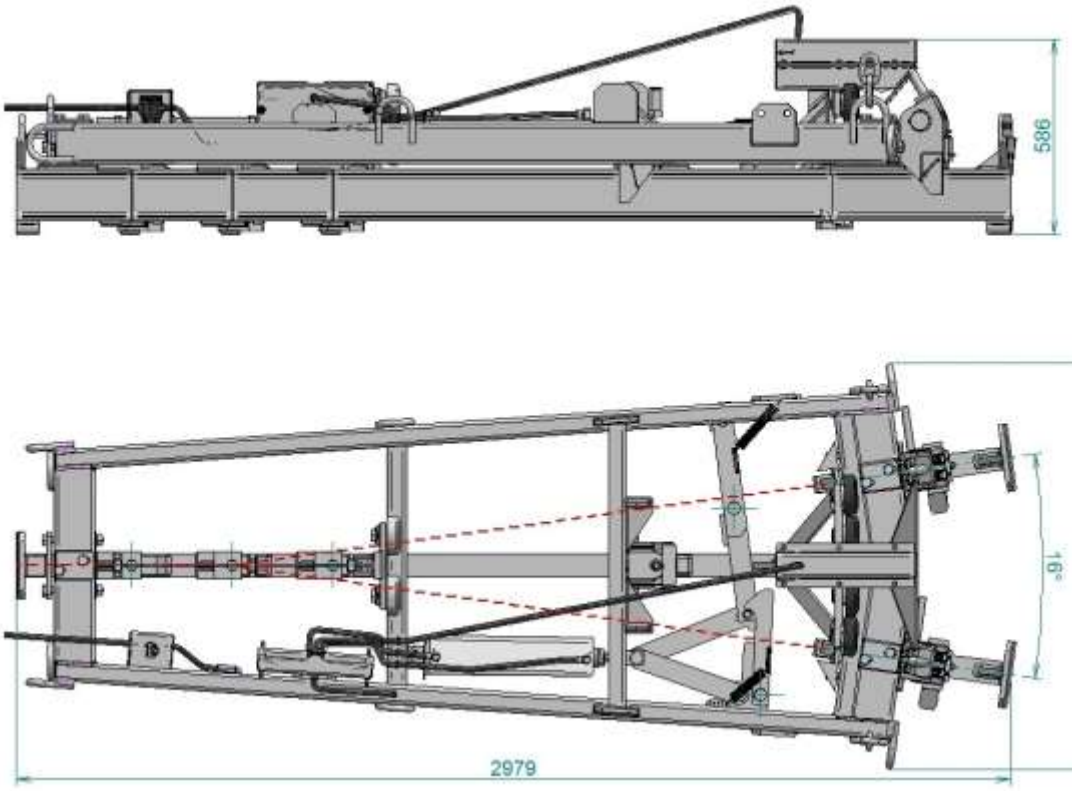
**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

Left / Right pneumatic switch – welded **ZP-520004-2-1 / ZP-520004-3-1**
Left / Right pneumatic switch – bolted **ZP-520004-2-1-SR / ZP-520004-3-1-SR**



Left-right pneumatic switch – welded **ZP-520004-130-5**
Left-right pneumatic switch – bolted **ZP-520004-130-5-SR**




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Switch ZD 24 A, B, C – raised

The raised switch is part of track ZD 24 D/130 and is intended for transporting mechanized mine supports with a total weight of up to 38 t. The switch ZD 24 D/130 type TDS is designed for manual direction changes when routing the suspension track with a supporting profile I 155 (I 140E, I 140V) into two or three directions.
The switch and the connected track sections enable the transport of personnel and loads using vehicles whose technical parameters meet the requirements for heavy-duty suspension track operation. Impassable track branches are secured with stoppers. The switches are manufactured in bolted or welded designs.

Switch versions according to the direction of transport:

***three-way*** *(ZP-173014-1)*

***left*** *(ZP-173014-2)*

***right*** *(ZP-173014-3)*

***left-right 16°*** *(ZP-173014-5)*

***left-right 32°*** *(ZP-173014-4)*

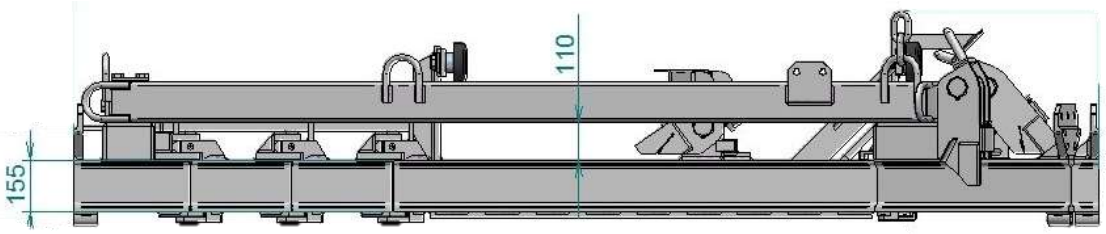
***left-right short*** *(ZP-188015-1)*

***left short*** *(ZP-188015-2)*

***right short*** *(ZP-188015-3)*

## Technical parameters

| | |
|---|---|
| Max. permissible tractive force of the vehicle | 130 kN |
| Max. permissible load of carrying trolley | 50 kN |
| Supporting profile | I 155 (I 140E, I 140V) |
| Max. diameter of locomotive drive pulleys | 350 mm |
| Max. permissible travel speed | 0.5 m/s |
| Max. incline | 12° |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

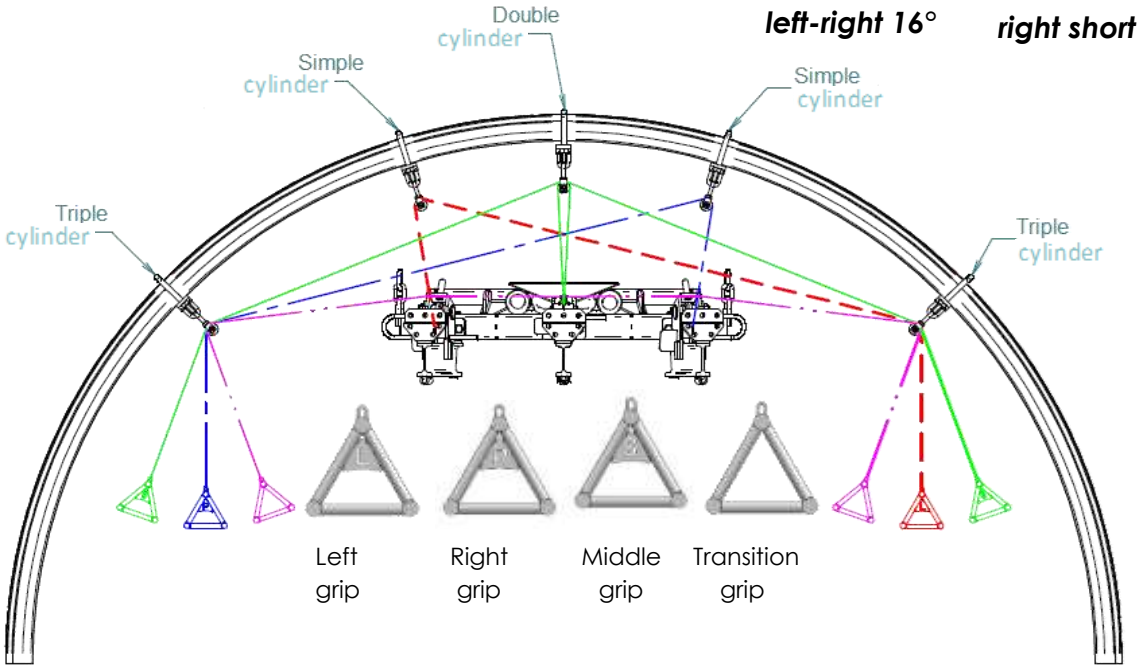
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Switch ZD 24 A, B, C – cable-operated

The cable-operated switch is part of track ZD 24 D/130 and is designed for transporting mechanized mine supports with a total weight of up to 38 t. It is operated using special handles connected to the switch by a cable, which allows the track direction to be changed when routing the suspension track with a supporting profile I 155 (I 140E, I 140V) into two or three directions. The cable-operated switch and the connected track sections enable the transport of personnel and loads using vehicles whose technical parameters meet the requirements for heavy-duty suspension track operation. Impassable track branches are secured with stoppers. The switches are manufactured in bolted or welded designs.

Switch versions according to the direction of transport:

***three-way***
***left***
***right***
***left-right 16°***
***left-right 32°***
***left-right short***
***left short***
***right short***




Additional equipment of the pneumatic switch:

Steel rope Ø5 – length 30m / 45m
Steel cable clamp Ø5 – 24 pcs
Plate with cable holes for the transfer section
Triple / Double / Single cylinder

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Intersection TDS

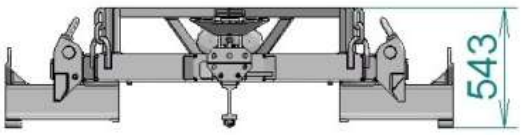
The reinforced intersecion is part of track ZD 24 D/130 which is intended for transporting mechanized mine supports with a total weight of up to 38 tons.

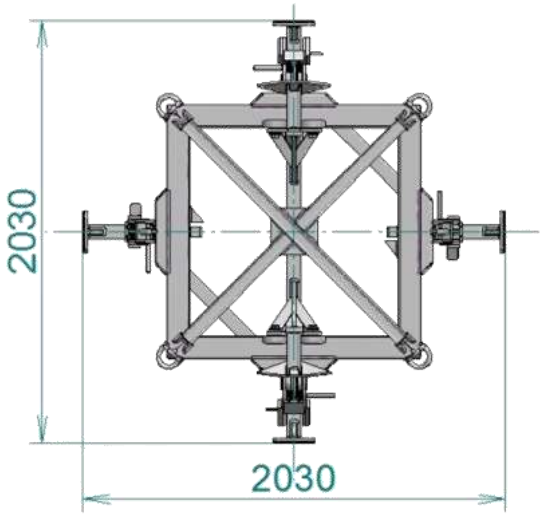
The intersection TDS is designed for manually changing the direction when routing the suspension track with a supporting profile I 155 (I 140E, I 140V).

The intersection and the connected track sections enable the transport of personnel and loads using vehicles whose technical parameters meet the requirements for heavy-duty suspension track operation. Impassable track branches are secured with stoppers.
The intersection is manufactured in a bolted design.

## Technical parameters

| | |
|---|---|
| Max. permissible tractive force of the vehicle | 130 kN |
| Max. permissible load of carrying trolley | 50 kN |
| Supporting profile | I 155,(I 140E,I 140V) |
| Max. diameter of locomotive drive pulleys | 350 mm |
| Max. permissible travel speed | 0.5 m/s |
| Product number | **ZP-430003** |




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

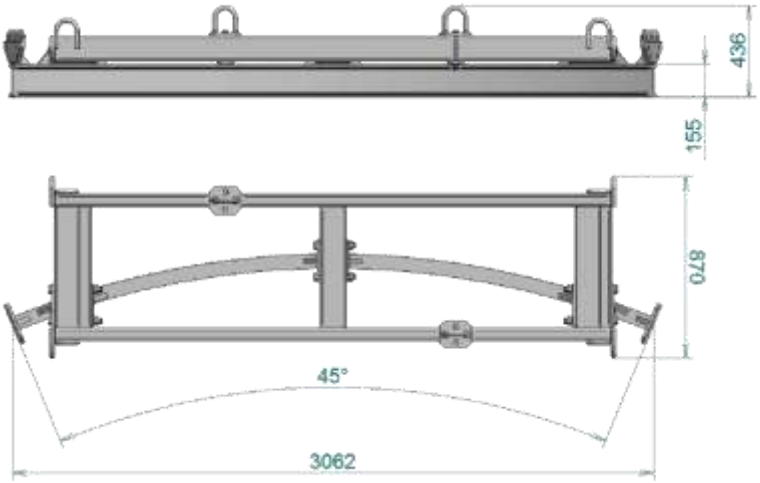
# Curved track section with frame
# ZD 24 D130 – version 0° / 45°

The curved track section with frame is part of track ZD 24 D/130, which is designed for transporting mechanized mine supports with a total weight of up to 38 tons. It is used to define the routing direction of suspension track with a supporting profile I 155 (I 140E, I 140V). The curved track section and the connected track sections enable the transport of personnel and loads using vehicles whose technical parameters meet the requirements for heavy-duty suspension track operation. Impassable track branches are secured with stoppers.

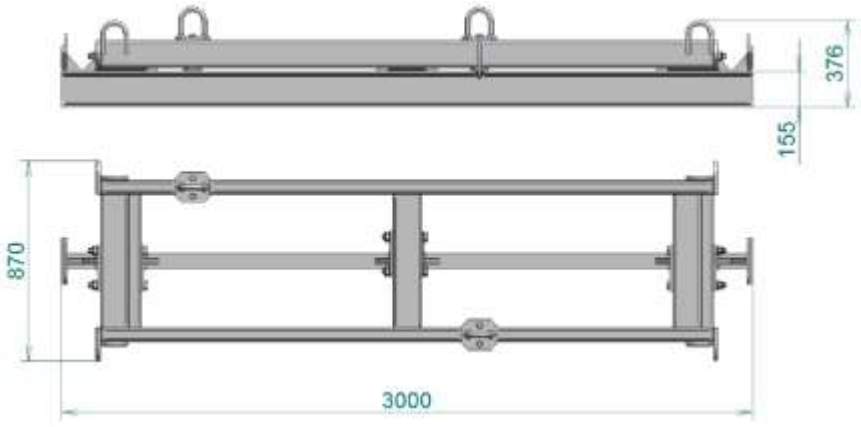
## Technical parameters

| | |
|---|---|
| Max. permissible tractive force of the vehicle | 130kN |
| Max. permissible load of carrying trolley | 50kN |
| Supporting profile | I 155 (I 140E, I 140V) |
| Max. permissible travel speed | 0.5 m/s |
| Max. incline | 12° |
| Product number 0° / 45° | **ZP-151013-2 / ZP-151013-1** |

version 45°




version 0°



# Suspension track type ZD 24 HMZ TDS

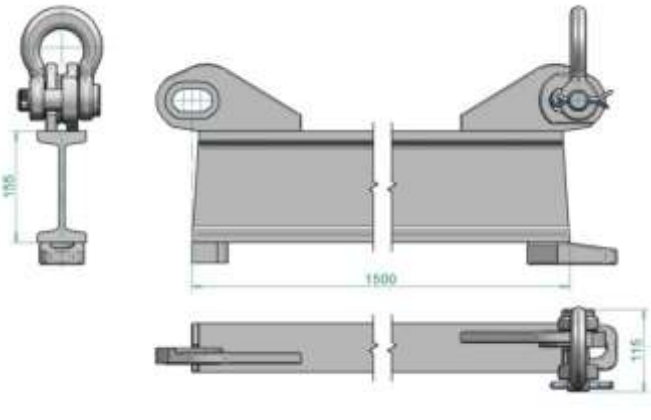
The suspension track is designed for transporting mechanized mine supports with a total weight of up to 38 tons. The sections and components of the ZD 24 HMZ TDS suspension track are designed to be assembled into straight or curved segments and to be suspended from the mine support structure, ensuring the required load capacity.
The track may be installed in mines where the maximum permissible incline of ± 30° is not exceeded, which applies to standard vehicles used on the track.

## Technical parameters

| | |
|---|---|
| Max. tractive force of the traction vehicle | 120 kN |
| Max. permissible force to the suspension chain | 80 kN |
| Max. permissible transport speed | 2 $m/s^{-1}$ |
| Max. track incline | ± 30° |
| Max. distance between suspensions | 1.6 m |
| Anchorage in curved sections | min. after 30° |
| Anchorage on straight sections | 10 - 30 m |
| Radius of horizontal curves | 4 m |
| Radius of vertical curves | 8 m |

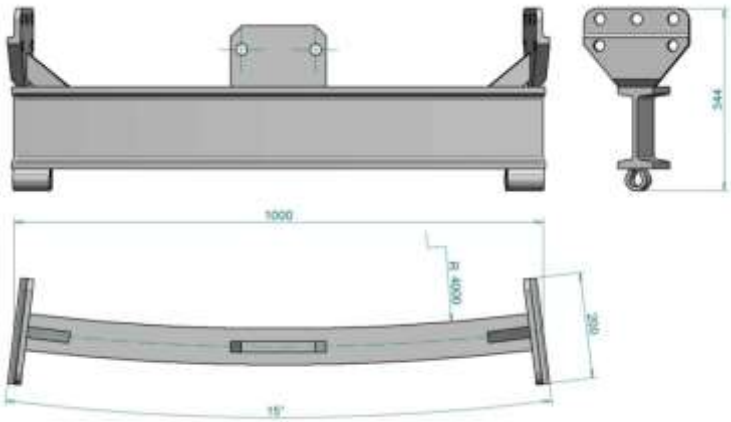
### *Section – flat*

*ZP-103008-1-1*




### *Section – horizontal 15°*

*ZP-103008-1-8-15*

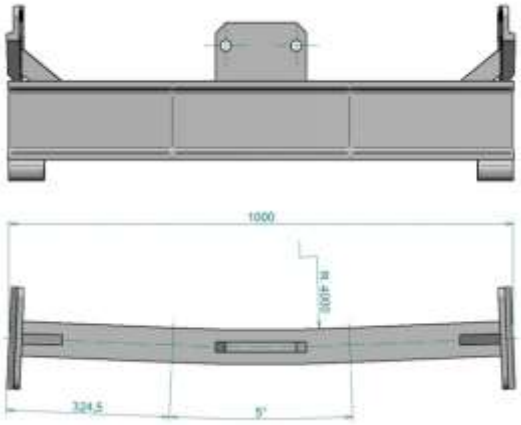



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

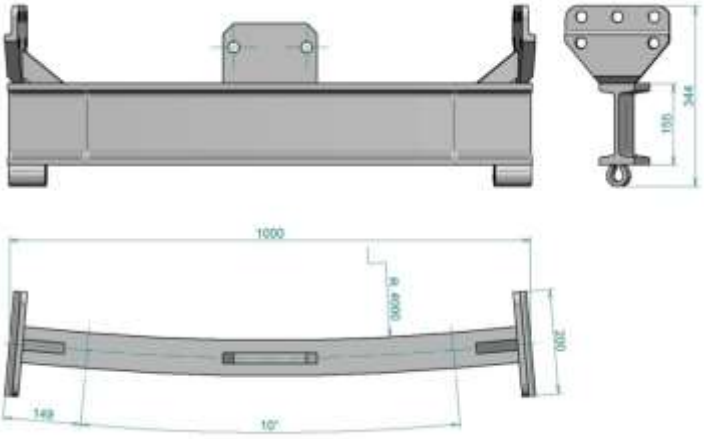
## Section – horizontal 5°

*ZP-103008-1-8-5*



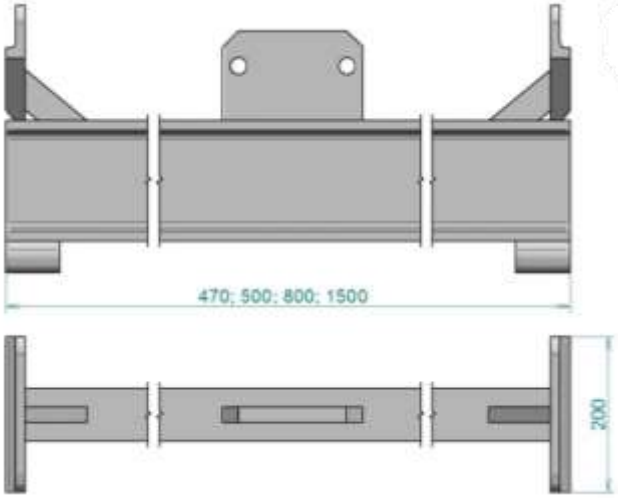

## Section – horizontal 10°

*ZP-103008-1-8-10*



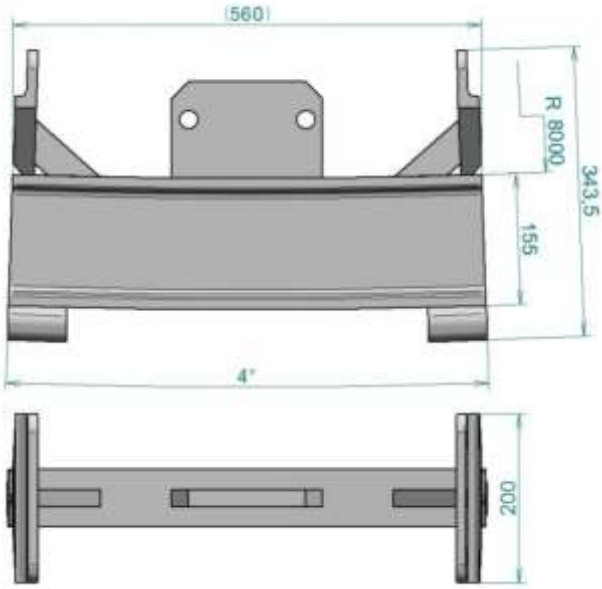

## Section – horizontal 0°

*ZP-103008-1-8-470;*
*ZP-103008-1-8-500;*
*ZP-103008-1-8-800;*
*ZP-103008-1-8-1500*




## Section – concave 4°

*ZP-103008-1-10-4*

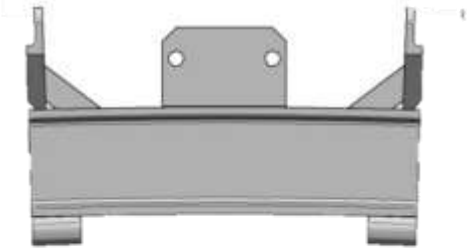



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

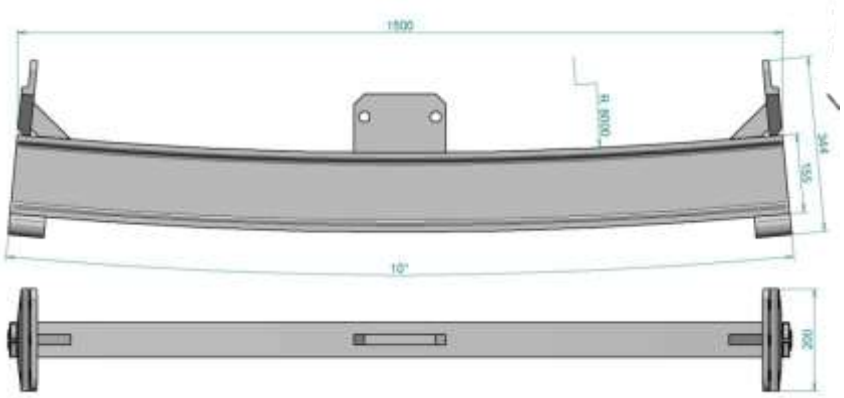
## *Section – convex 4°*

*ZP-103008-1-9-4*



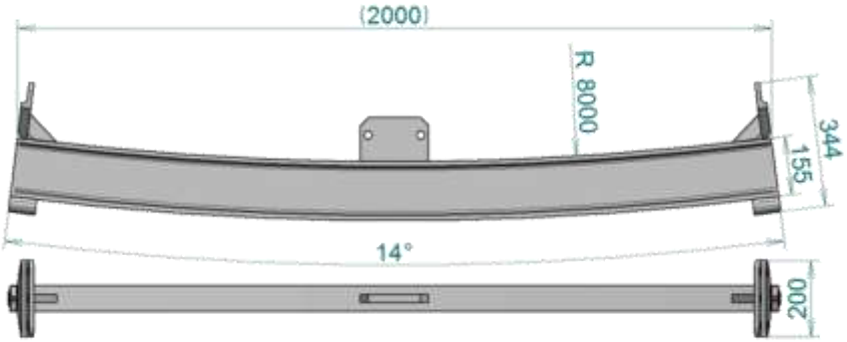
## *Section – concave 10°*

*ZP-103008-1-10-10*



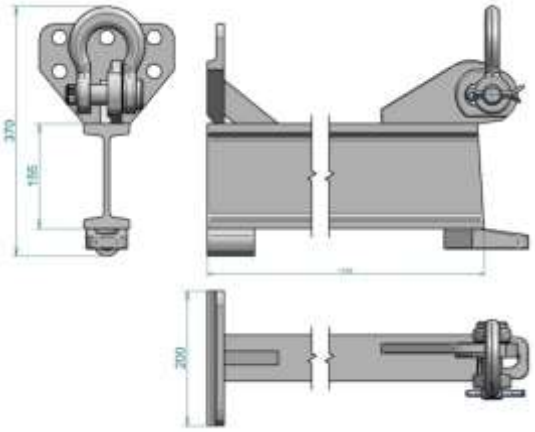

## *Section – concave 14°*

*ZP-103008-1-10-14*



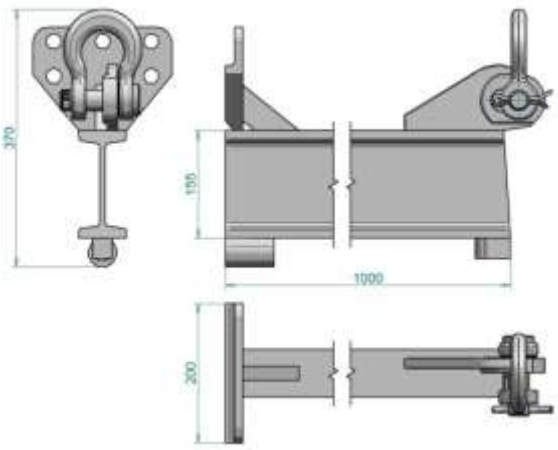

## *Transition section – with a lock*

*ZP-103008-1-4*




## *Transition section – with a guide*

*ZP-103008-1-3*




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

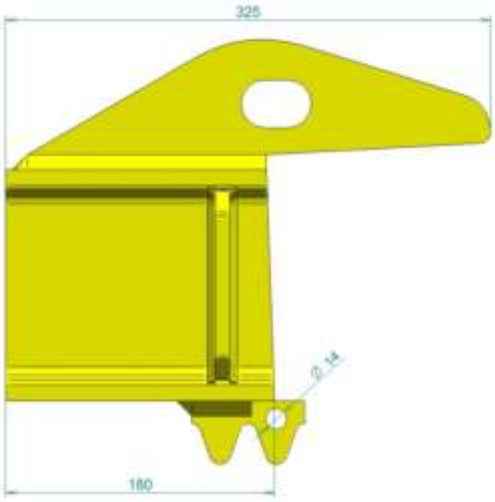
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

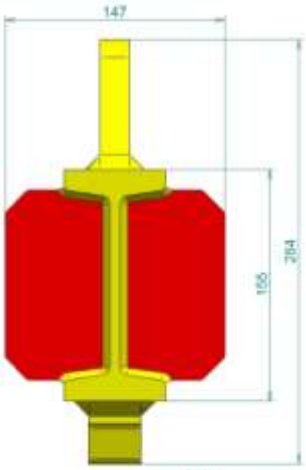
# Section stop with toothed rack – with an anchor / fork

The section stop with a toothed rack is designed as a safety device to prevent vehicles from accidentally rolling on transport routes eqquiped with suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130.
It may be installed in locations where the maximum axial load does not exceed 42 kN.

## Technical parameters

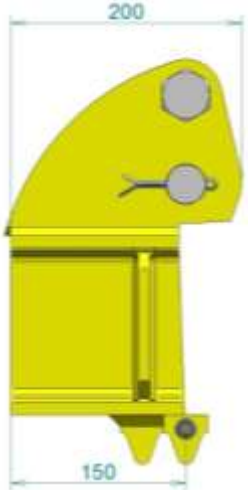
| | |
|---|---|
| Permissible load on the track axis ZD 24 | 42 kN |
| Product number - anchor | **ZP-131011-5-S** |
| Product number - fork | **ZP-131011-6** |

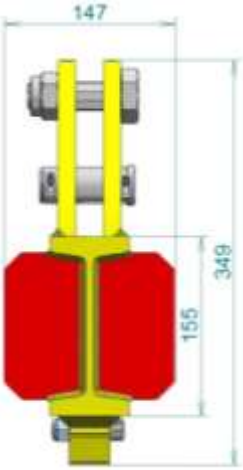



The section stop with a toothed rack, with an anchor

The section stop with a toothed rack, with a fork



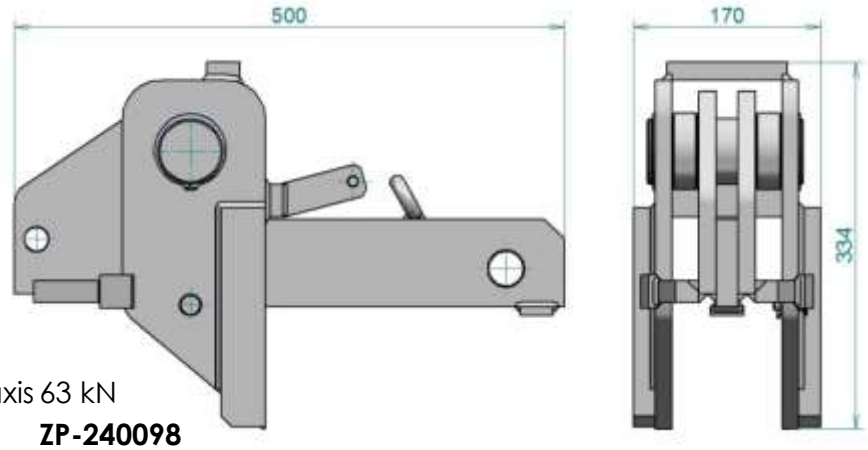




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Base plate stopper TDS

The base plate stopper prevents vehicles from moving downhill on inclined transport routes with suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130.
It may only be installed on tracks where the maximum tractive force does not exceed 63 kN. The stopper is mounted directly onto the section's base plate and secured to the mine support using a pin, a clamp, and a chain.




## Technical parameters

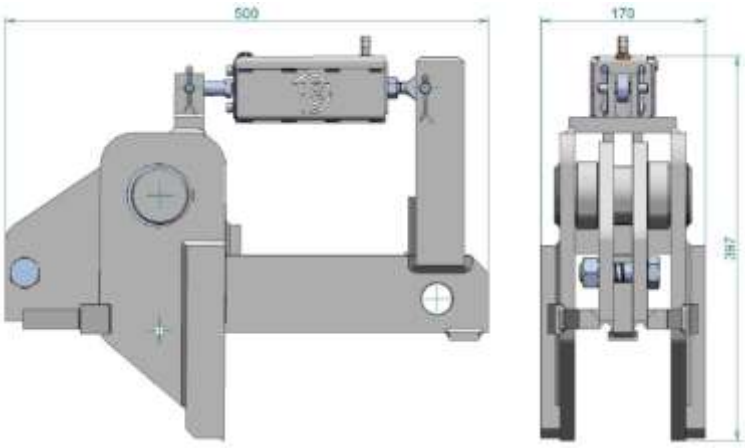
Permissable load in the track axis 63 kN
Product number **ZP-240098**

---

# Base plate stopper – pneumatic TDS

## Technical parameters

Permissible load in the track axis 63 kN
Product number **ZP-240098-P**




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

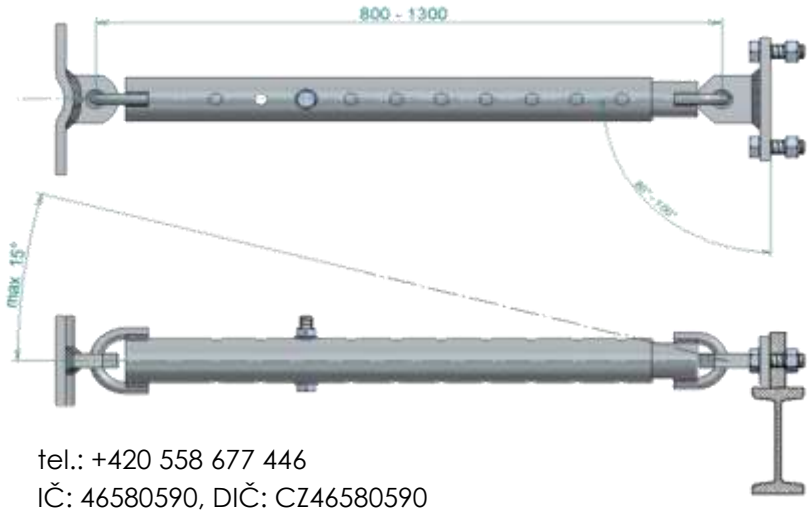
# Anchorage – lateral + short

The lateral anchorageis designed for securing the load-bearing profile of a heavy-duty suspension track to the arched mine support, in compliance with the Czech Mining Authority (ČBÚ) Decree No. 22/1989 Coll., in horizontal and inclined sections of the track, with a maximum traction force of up to 80 kN.

## Technical parameters

| | |
|---|---|
| Max. permissible force on the anchorage | 40 kN |
| Min. and max. range of anchorage | 1.3 – 2.2 m |
| Min. and max. range of anchorage - short | 0.8 – 1.3 m |
| Track inclince angle | 0°-10° - replacement of cross anchorage<br>11°-20° - in combination with V anchorage<br>> 21°- only for track reinforcement |
| Product number | **ZP-140011-3** |
| Product number - short | **ZP-164014-1** |

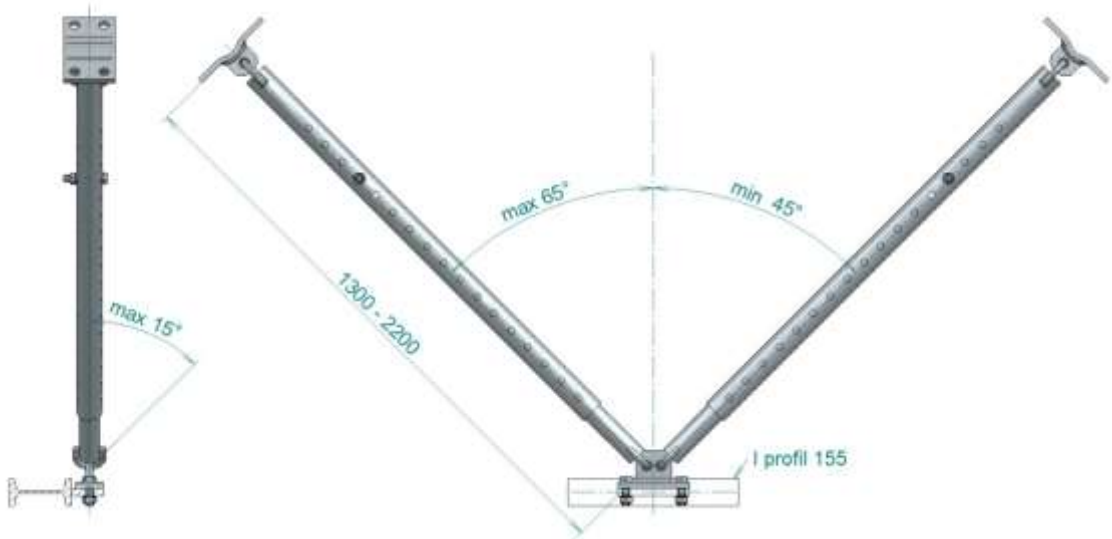
Short version




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

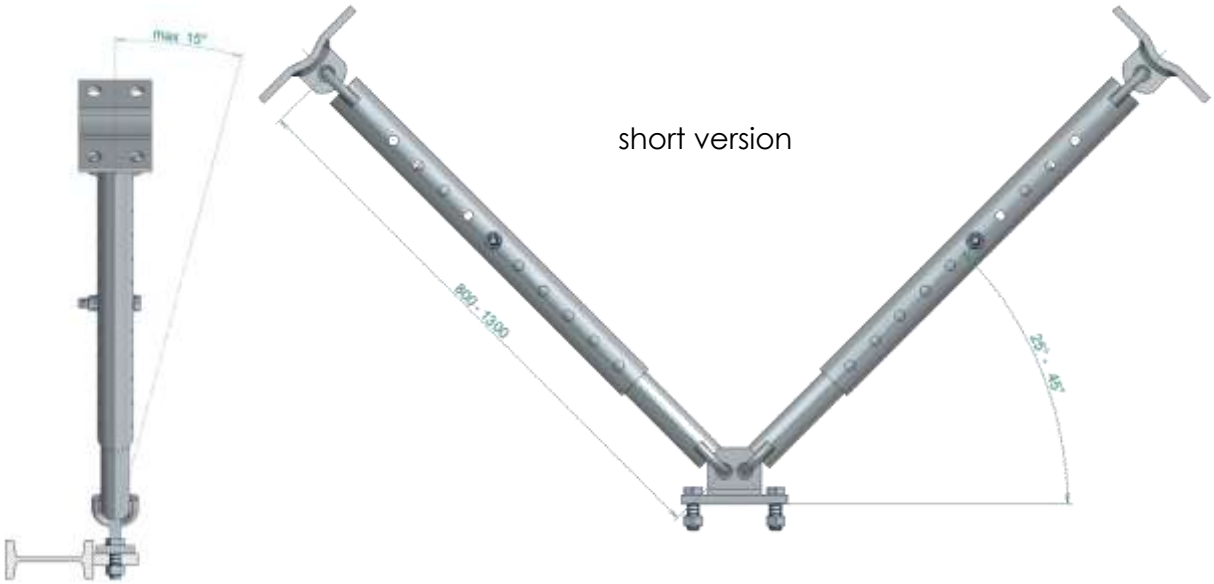
# Anchorage – longitudinal + short




The longitudinal anchorage TDS is designed for securing the load-bearing profile of a heavy-duty suspension track to the arched mine support in both horizontal and inclined sections of the track.

## Technical parameters

| | |
|---|---|
| Min. and max. range of anchorage | 1.3 – 2.2 m |
| Min. and max. range of anchorage - short | 0.8 – 1.3 m |
| Force into the anchorage | 60 kN |
| Product number | **ZP-140011-2** |
| Product number - short | **ZP-164014-2** |




short version

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

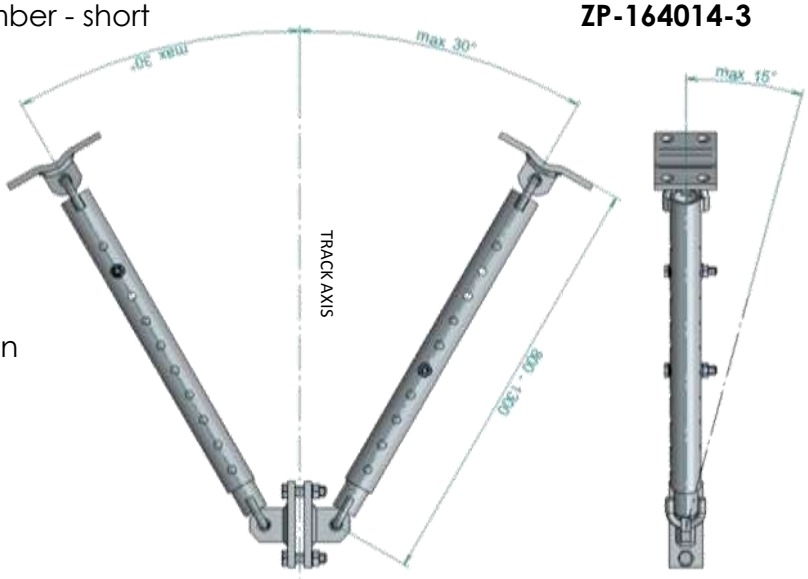
# Anchorage type „V“

The anchorage type „V“ is designed for securing the load-bearing profile of a heavy-duty suspension track to the arched mine support in both horizontal and inclined sections of the track.

## Technical parameters

| | |
|---|---|
| Min. and max. range of anchorage | 1.3 – 2.2 m |
| Min. and max. range of anchorage - short | 0.8 – 1.3 m |
| Force into the anchorage | 60 kN |
| Product number | **ZP-140011-1** |
| Product number - short | **ZP-164014-3** |

short version




**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

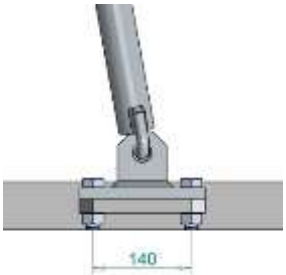
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

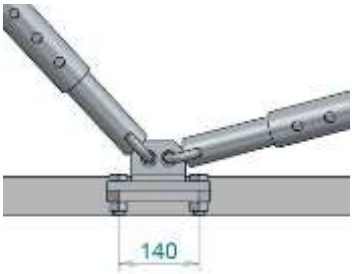
# Anchorage TDS type D/130

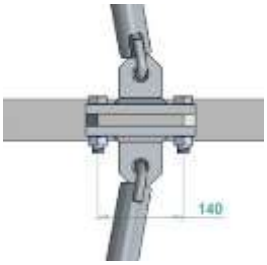
## Technical parameters

| | |
|---|---|
| Max. permissible force in one branch of anchorage | 40 kN |
| Max. permissible force in longitudinal and V anchorage | 60 kN |
| Max. permissible force in transversal anchorage | 40 kN |
| Max. permissible traction of the traction vehicle | 180 kN |
| Max. permissible load of the carrier truck | 50 kN |
| Supporting profile | I 155,(I 140E, I 140V) |

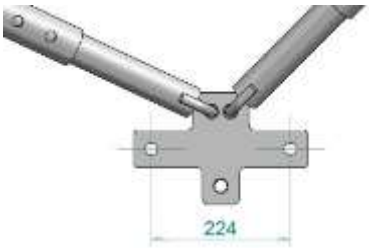
**Clamp on base plate:**

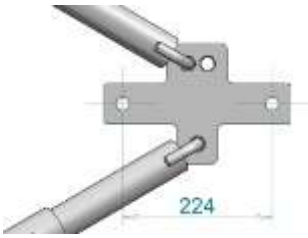



**Cable guide clamp:**




**Clamp for track joint:**

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

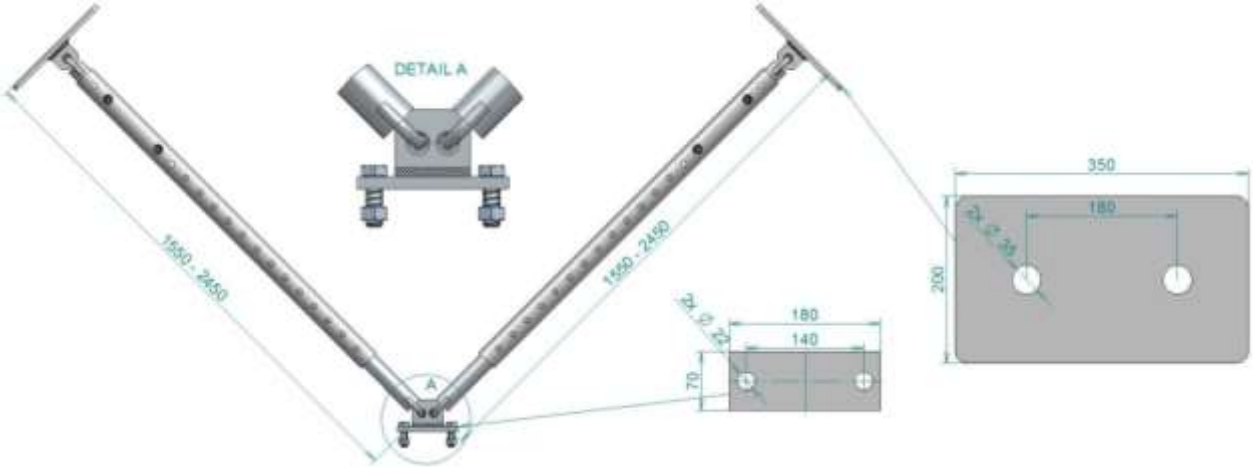
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Anchorage – bolt-type longitudinal

The bolt-type longitudinal anchorage designed for securing the load-bearing profile of a heavy-duty suspension track to the arched mine support in both horizontal and inclined sections of the track.

## Technical parameters

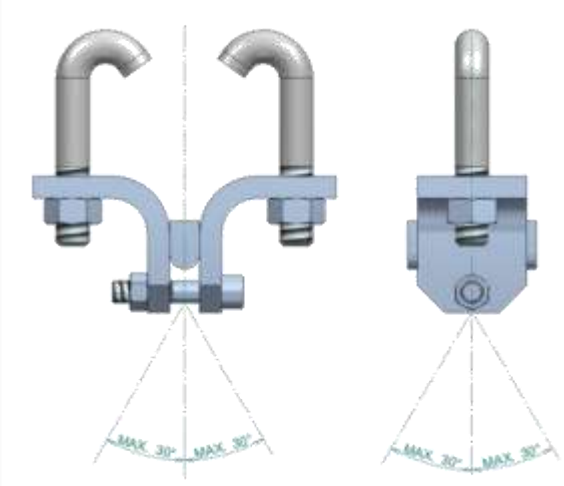
| | |
|---|---|
| Force into the anchorage | 34 kN |
| Drawing number | **ZP-218017-2** |




---

# Anchorage hanger

The anchorage hanger is designed for suspending track types ZD 24A, ZD 24B, and ZD 24C on the steel supports of the corridor types K21, K24, K27, P28, P32, TH21, TH29, and V25. The suspensions of the anchorage are self-locking on the corridor support.
A 14x50/B chain must be used for anchoring the track.



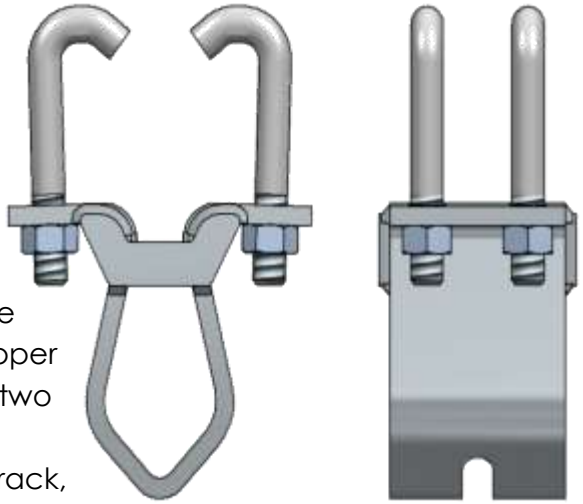

## Technical parameters:

| | |
|---|---|
| Permissible load of the suspension block | 25kN |
| Steel corridor support | K21, K24, K27, P28, P32, TH21, TH29, V25 |
| Product number | **ZP-670006** |

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Suspension block

The suspension block is designed for suspending switches and anchoring suspension tracks ZD 24A, ZDB, ZD24C, and D130 on steel corridor supports of types K21, K24, K27, P28, P32, TH21, TH29, and V25. It feautures a self-locking design on the corridor supports. A single suspension point may be used when the track joint is located under the corridor support arch.
If the track is positioned between arches and the chain angle would be unfavorbale for propper suspension, a configuration composed of two suspensions in a „V" arrangement must be used.
A 18x64/B chain must be used for suspending the track, and a 14x50/B chain anchoring the track.



## Technical parameters

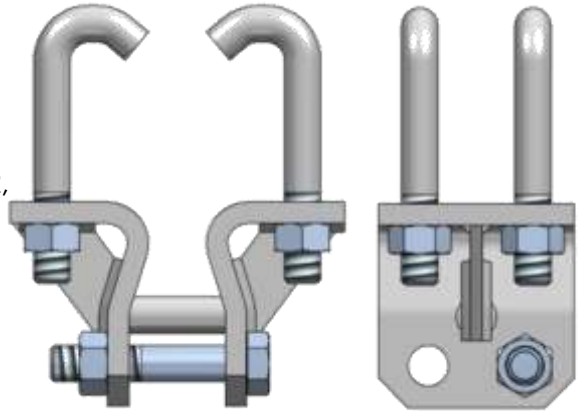
| | |
|---|---|
| Permissible load of the suspension block | 55kN |
| Steel corridor support | K21, K24, K27, P28, P32, TH21, TH29, V25 |
| Product number | **ZP-200097-29-K; ZP-2000097-36-K** |

---

# Light suspension block

## Technical parameters

| | |
|---|---|
| Permissible load of the suspension block | 55kN |
| Steel corridor support | K21, K24, K27, P28, P32, TH21, TH29, V25 |
| Product number | **ZP-280099** |



**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

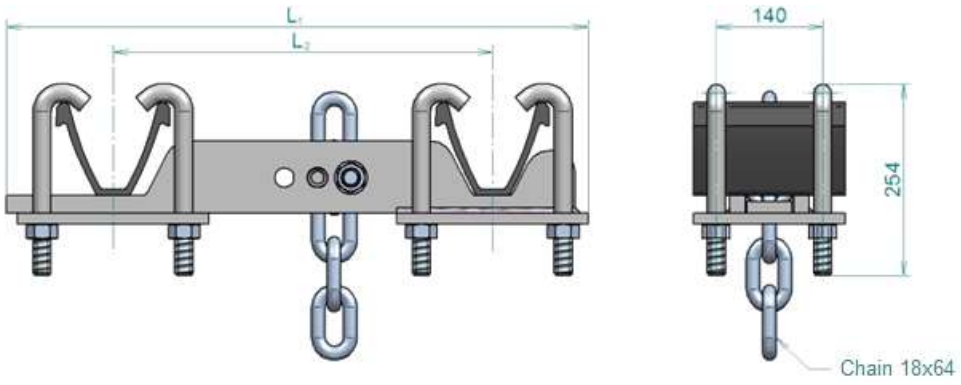
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Double-rope suspension 18x64

The double-rope suspension is designed for suspending suspension tracks of types ZD 24A, ZD 24B, ZD 24C, and D130, or other compatible heavy-duty suspension tracks with supporting profile I 155, (I 140E, I 140V).

| Product number | L1 [mm] | L2 [mm] |
|---|---|---|
| **ZP-930008-300** | 596 | 310–360 |
| **ZP-930008-500** | 766 | 480–530 |
| **ZP-930008-650** | 916 | 630–680 |
| **ZP-930008-667** | 933 | 647–697 |
| **ZP-930008-750** | 1016 | 730–780 |
| **ZP-930008-800** | 1066 | 780–830 |
| **ZP-930008-1000** | 1266 | 980–1030 |

Max. load capacity 80 kN
The chain 18x64

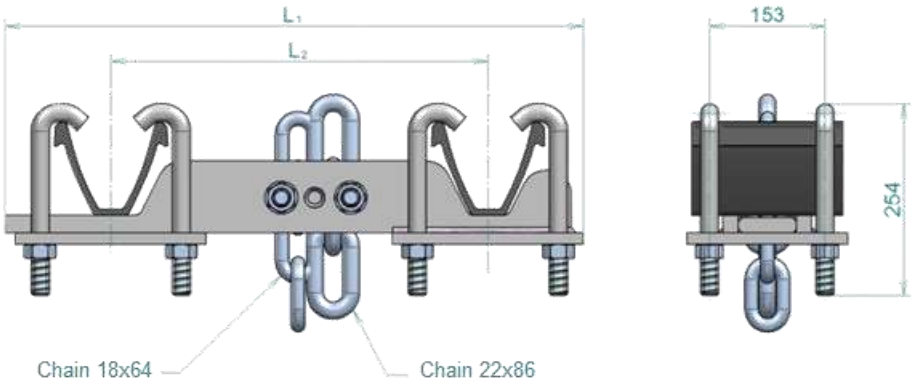



# Double-rope suspension - universal

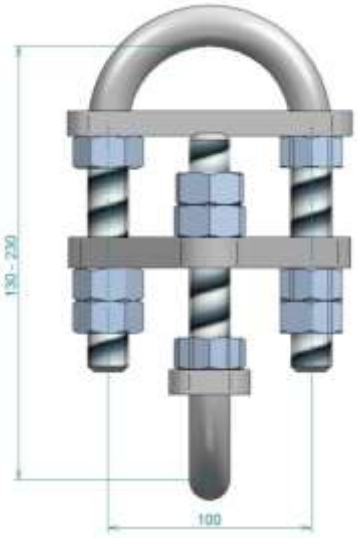
The double-rope suspension is designed to suspend suspension tracks of types ZD 24A, ZD 24B, ZD 24C, and D130, or other compatible heavy-duty susepnsion tracks with supporting profile I 155, (I 140E, I 140V)

| Product number | L1[mm] | L2[mm] |
|---|---|---|
| **ZP-102008-500** | 766 | 490–540 |
| **ZP-102008-600** | 866 | 580–630 |
| **ZP-102008-667** | 933 | 647–697 |
| **ZP-102008-750** | 1010 | 740–790 |
| **ZP-102008-800** | 1066 | 790–840 |

Max. load capacity 80 kN
The chain 18x64
22x86



# Adjustable suspension



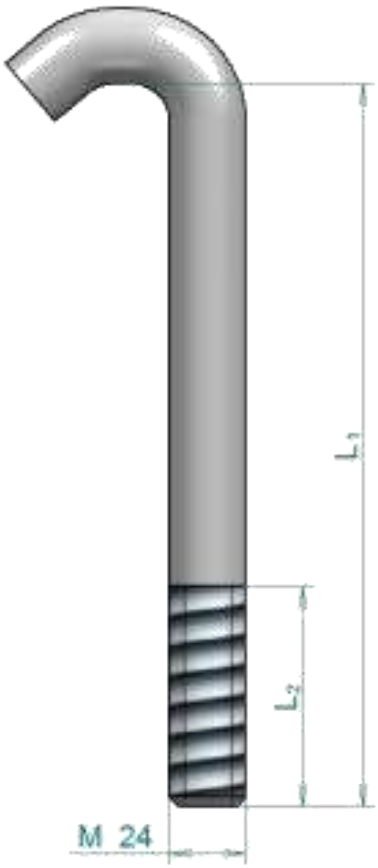

The adjustable suspension is designed for adjusting the alignment of tracks, switches, and similar components.
It may be used with 18x64 or 22x86 ČSN 023215 chains, or with 18x90 DIN 20637 chains.

## Technical parameters

| | |
|---|---|
| Permissible load | 40 kN |
| Adjustment range | 100 mm |
| Chain | 18x64, 22x86 ČSN 023215<br>18x90 DIN 20637 |
| Product number | **ZP-270099-24** |

---

# Suspension bolts




The suspension bolts are designed for attaching suspensions, suspension blocks, and other similar components types ZD 24A, ZD 24B, ZD 24C and D130 to steel corridor supports types K21, K24, K27, P28, P32, TH21, TH29, V25, or other equivalent types.

## Technical parameters

| Product number | L1[mm] | L2[mm] |
|---|---|---|
| **ZP-200097-ZS1** | 135 | 50 |
| **ZP-200097-ZS2** | 160 | 60 |
| **ZP-200097-ZS3** | 190 | 60 |
| **ZP-200097-ZS4** | 220 | 60 |
| **ZP-200097-ZS5** | 230 | 70 |
| **ZP-200097-ZS6** | 300 | 80 |
| **ZP-200097-ZS7** | 165 | 60 |
| **ZP-200097-TH36** | 188.6 | 60 |

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

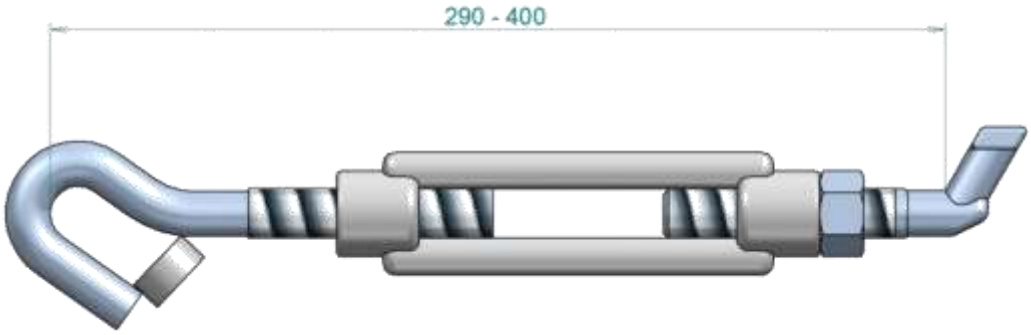
tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

# Anchorage tensioner

The anchorage tensioner is designed for tensioning the anchoring branch of suspension tracks ZD 24A, ZD 24B, ZD 24C, and D130.

## Technical parameters

| | |
|---|---|
| Permissible load in the track axis ZD 24 | 25 kN |
| Product number without chain | **ZP300099** |




---

# Inclined pipe hanger

The inclined pipe hanger is designed for supending all types of pipelines to mine supports of types K21, K24, K27, P28, P32, TH21, TH29, T36, and V25.

The hanger is secured to the support using four flat hooks types TH29, TH34 (or TH36).

Product number **ZP-136011-S**

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz

Thank you for your attention

**TDS Zampra, spol. s r. o.**
Žižkova 94
739 11 Frýdlant nad Ostravicí
Czech Republic

tel.: +420 558 677 446
IČ: 46580590, DIČ: CZ46580590
email: tdszampra@tdszampra.cz
web: www.tdszampra.cz