



# **SPE «IMVO»**

## One profile movement joints for bridge construction





#### SPE "IMVO" implements One profile movement joints WSF80, WSF100 own production

## Appointment of movement joints

Movement joints are used for the perception of the maximum displacement of 80 mm and 100 mm. They provide a smooth passage of vehicles over them. They also protect the bridge structure from premature destruction.

#### Manufacture and supply of products

Movement joints are supplied in full operational availability. They are convenient for installation and have the ability to be replaced or repaired after the useful life.

The product is manufactured under license and in accordance with the technology of the Austrian company REISNER & WOLF Engineering Ges.mbH "(Wales, Austria).





## Scope:

Expansion joints are used in construction, repair, reconstruction of bridges, roads and other structures of different destinations. They meet the requirements of the water resistance, strength and durability. Also they are recommended for widespread use in all transport facilities.

#### Geological and geophysical conditions:

- the usual conditions;
- construction in seismic regions with the participation research organization in the design of specialized in earthquake-resistant construction;
- construction on subsiding soils under the condition of the same values of vertical and horizontal displacements of connected structures particles.

#### Natural and climatic conditions:

- The degree of aggressiveness of the environment not aggressive, slightly aggressive, middle aggressive, highly aggressive;
- Humid areas: dry, normal, wet.





#### **Construction features**

The edges of the seam are formed by the extreme bearing beams that provide a secure connection (anchoring) with purlin construction or bridge supports. Connection is available to the reinforced concrete and steel structures. The distance between the outer beams varies depending on the longitudinal displacements. Elastic compensator (EPDM material) has tensile strength 11 MPa at 30 mm below the road surface. It is protected from the impact of vehicle wheels, snow plow attached implements and other equipment. Clamping connection of the seam edges and elastic compensator are hermetic and don't hinder the movement of purlin constructions with its own deformations. It is resistant to the dynamic loads and doesn't require service throughout the warranty period. When solid objects up to 30 mm get stuck in an elastic compensator, it will not be damaged. When changing the temperature exposure objects are pushed out.







## **Specifications Package**

Tab. 1 Physical and mechanical properties of materials and components used for the production of movement joints

| N⁰ | Name of the part         | Material  | Normative document            |
|----|--------------------------|---|-------------------------------|
|    |                          |   |                               |
| 1  | Extreme load beam        | steel S235JRG2                                      | DIN EN 10058                  |
|    |                          |   |                               |
| 2  | Elastic compensator      | Elastomer (SF), ethylene<br>propylene rubber (EPDM) | DIN ISO 1629                  |
|    |                          |   |                               |
| 3  | Anchor plates and hinges | S355J2G2  | DIN EN 10058/<br>DIN EN 10060 |





| ANTICORROSIVE PROTECTION SYSTEM |  |  |
|---------------------------------|--|--|
| Surface preparation             | Blast cleaning Sa 2,5                      |  |
| Primer coating                  | Two-component epoxy, pigment (zinc powder) |  |
| The first intermediate layer    | Two-component epoxy, pigment (iron mica)   |  |
| Second intermediate layer       | Two-component epoxy, pigment (iron mica)   |  |
| The third intermediate layer    | Two-component epoxy, pigment (iron mica)   |  |
| The outer layer                 | Two-component epoxy, pigment (iron mica)   |  |





## Installation of movement joints









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# **Contact us right now**



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