Gap compensation in steel construction

The specialists for force-fitting gap compensation jobs
“Producing companies set high values on reliability and speed. With MM1018 you are able to compensate tolerances in just one working step.”
Bridges belong to the most fascinating constructions in our world and similarly challenge engineers as well as architects. Steel- and steel-composite bridges are often designed for heavy loads and bridge long distances. Enormous expenditures on time and costs because of constructions using huge and heavy components demanding force-fit connections best done with MM1018 providing the most economical and widely approved solution for 100% gap compensations.

"In the field of steel- and steel composite bridges materials have to take highest loads. MM1018 has been proven in more than 1,000 applications worldwide."
- High compressive strength and corrosion resistance
- No mechanical machining of face or back plates
- 100% force-fit connections between bearing and construction
- Insignificant shrinkage and high dimensional stability
- One-sided bonding to ensure a change of the bearing
Power plant Maritza, Bulgaria

Power plant construction projects are a special class within the construction industries. Engineers in this field have to envisage extreme strengths, complex structures and very hard restrictions. Moreover, the constructions have to meet the highest level of safety standards while operating under limited budgets and tight timelines. A typical case was the construction project at Maritza East in Bulgaria in 2009. Gaps between ledges, face plates and diagonal trusses were observed. The gaps were successfully compensated using the MM1018 system with 100% force-fit gap compensations. No re-construction or mechanical processing has been required since. Additionally, significant advantages were realized in safety, time and cost since the application was completed in place without disturbing the structure.

“Apply MM1018 directly on the spot without any re-construction or mechanical machining – at a friction of conventional costs.”
- High compressive strength and corrosion resistance
- No mechanical processing of face or back plates needed
- Easy application, even at great heights
- Insignificant shrinkage and high dimensional stability
- Injectable material, applicable right in place into the gaps
The Rhine-Main-Danube canal is 171 kilometers long and connects North and Black Sea. This makes the canal also known as the “Euro-Canal”. The waterway includes 16 water locks which overcome a total height difference of more than 240 meters. The highest point, called “lower length”, is 406 meters above sea level which is the uppermost point in the European waterways network. The bearings of the water gates had to be replaced during general maintenance works. The resulting gaps between steel bar and new bearing were compensated by MM1018. The material provides a 100% force-fit gap compensation whereby cost-intensive disassembly, rebuilding and further mechanical machining could be avoided.

„The mechanical adjustment of hard rubber plates is cost and time intensive. MM1018 provides a fast and easy solution.}
- High compressive strength, corrosion – and saltwater resistance
- No mechanical machining required
- Insignificant shrinkage and high dimensional stability
- 100% force-fit connections between bearing and concrete
- Vibration damping
Offshore plants are one of the greatest challenges for steel constructions. Limited possibilities and constantly changing conditions on sea make the work difficult and often enough a race against time. Considering the aggressive and salty atmosphere a significant importance has to be set on corrosion protection.

Offshore wind energy turbines get more and more important viewing the future significance of the energy mix. Even though wind power is one of the oldest ways of generating energy, it still challenges engineers to find new ways e.g. for assemblies in great heights and the ever growing complexity of the construction parts.

“MM1018 compensates tolerances without any mechanical machining – right at the spot. That saves your time and money.”
- High compressive strength, corrosion – and saltwater resistance
- No mechanical processing of flange surfaces is needed
- Preemptively or subsequently applicable by injection
- Insignificant shrinkage and high dimensional stability
- Easy application, even at great heights and on sea
Our visions

Since 1886 we supply worldwide satisfied customers with excellent materials for the metal-working industries. Our core activities are for foundries, machine tool manufacturers, automotive, maintenance for machines and plants in general as well as steel and bridge constructions where we set new standards with our innovative and practice-orientated solutions.

We are leading in our areas of expertise in customer- and solution-orientated supports and guarantee optimum results last not least through our long years of close cooperation with leading universities and institutes. Since 2012, Diamant is a Board Member of INSTec (International Networking Science Technologies) at the Excellence University RWTH Aachen.
Our services

We are one of the most experienced Full-Service-Suppliers of high performance polymeric metal systems for the steel industries. We accompany you starting with the problem identification, through the technical feasibility to the point of product choice and on-site application. By choosing DIAMANT products, you can always rest assured to have the right partners for reliable applications in gap compensation jobs.

MM1018 helps you to compensate tolerances on the spot and avoid corrosion on the contact surfaces. The widely proven metal polymer allows you to work within tight tolerances without any mechanical machining realizing considerable cost and time benefits.
**Product catalogue**

**Products**

**MM1018 P**
- 2-component gap compensation material (spatula)
  - putty  #1436  1 unit  1,5 kg / 4,5 kg

**MM1018 FL**
- 2-component gap compensation material (injectable)
  - liquid  #1866  1 unit  1,5 kg / 4,5 kg

**MM1018 rapid**
- 2-component joint-sealing-material
  - putty  #2108  1 unit  300 g

**QuickRepair (steel)**
- Emergency kit for leakages during the injection
  - putty  #1761  1 unit  130 g

**Processing accessories**

**Cleaner**
- liquid  #1417  1 unit  1 l / 5 l / 200 l
- spray  #1534  1 unit  0,5 l

**Separator**
- liquid  #1354  1 unit  1 l / 5 l / 200 l
- spray  #1355  1 unit  0,5 l

**Mixing tool**
#0789  1 unit

**Palette knife**
#8017  1 unit

**Screw protector PU**
on request
**Injection equipment**

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<th>Quantity</th>
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<td>Block valve</td>
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<td>Screw-in fitting R1/4&quot;</td>
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**Cartridge systems**

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<td>Static mixing tubes</td>
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*Place your order today.*

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