

# Mark 2

## Gantrail Resilient Pad For Discontinuous Rail Support

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**Gantrail**<sup>®</sup>

A world of crane rail expertise

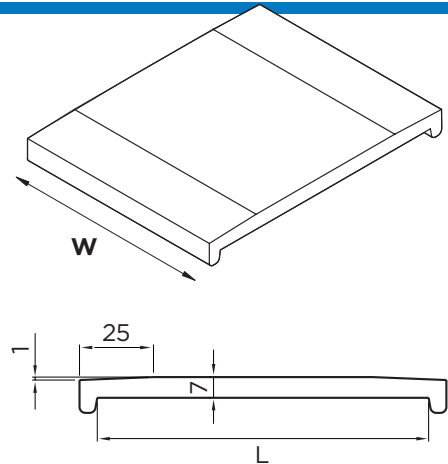
**Gantrail Mark 2 crane rail pads are designed for installations where rails are mounted on individual sole plates. Front and back lips sit over the sole plate to prevent pad displacement. The pad is cut to 5mm less than the width of the rail bottom flange. The pads are made in several sizes so that the total area is chosen to suit the expected wheel load.**

### SPECIFICATIONS:

**Soleplate width must match pad 'L' dimension from table below**

### DIMENSIONS:

| PART No | L mm | W mm                           |
|---------|------|--------------------------------|
| MK2-110 | 110  | Rail foot<br>width less<br>5mm |
| MK2-120 | 120  |                                |
| MK2-165 | 165  |                                |
| MK2-205 | 205  |                                |
| MK2-220 | 220  |                                |
| MK2-250 | 250  |                                |
| MK2-320 | 320  |                                |



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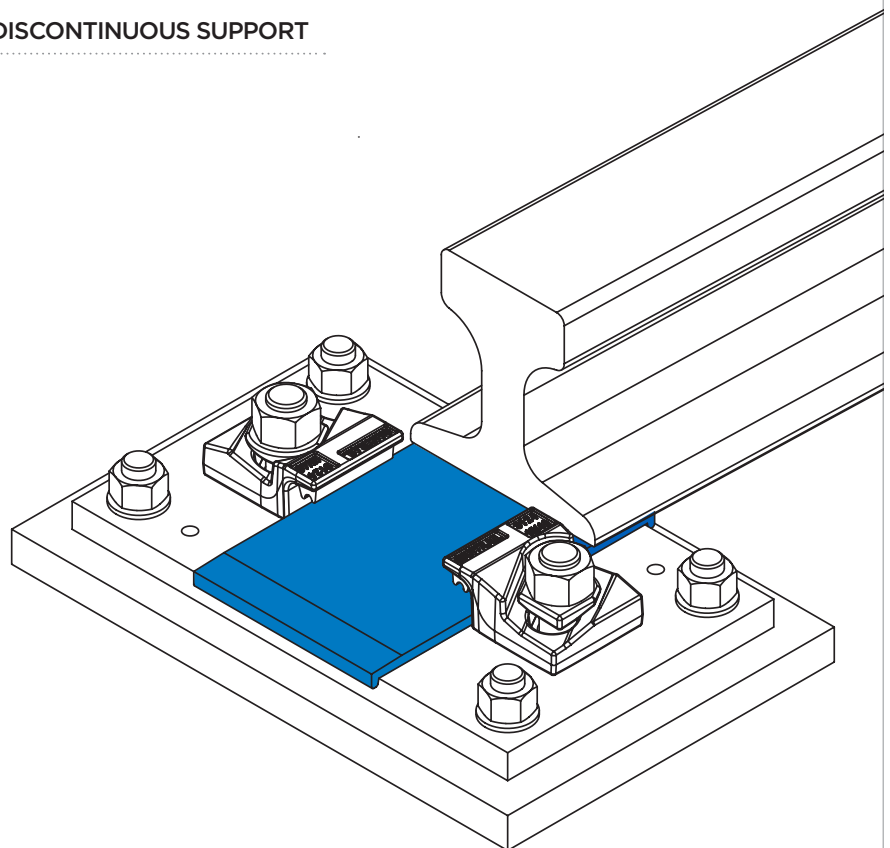
### FEATURES

- The Mark 2 pad incorporates a number of proven features. When used in conjunction with Gantrail adjustable rail clips, Mark 2 crane rail pad will significantly reduce stresses in the rail, grout and concrete below the sole plate.
- It allows the rail to rotate small amounts so that it conforms to the crane wheel.
- This gives an even distribution of wheel loads onto the supporting structure.

The Mark 2 pad:

- Eliminates load concentrations and resultant fatigue stresses in the rail mounting.
- Protects the crane mechanism and increases rail, wheel, bearing and axle life.
- Reduces the wear of rail and support surface by eliminating fretting corrosion.

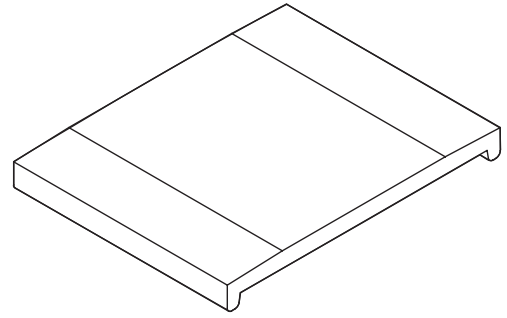
### DISCONTINUOUS SUPPORT



Gantrail can supply standard design details and technical information in support of all crane rail applications.

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Gantrail Mark 2 pads are manufactured from wear resistant durable thermoplastic that has elastomeric properties. They are unaffected by oil, grease or ultraviolet light. They have been tested to many times the design loads and show complete recovery. Tapered leading and trailing edges along the rail reduce edge loading on the sole plate and grout when the crane wheel is between sole plates.

### TYPICAL PROPERTIES

|  |                      |
|--|----------------------|
| Material   | EVA copolymer        |
| Temperature range  | -25° to +75°C        |
| Recommended maximum compressive stress (Compressive stress is installation related and should be reduced above 50°C) | 15 N/mm <sup>2</sup> |
| Tensile strength (ISO R 527)   | 16 MPa               |
| Elastic modulus (ISO R 527)  | 100 MPa              |
| Elongation at break (ISO R 527)  | 750%                 |
| Shore hardness (ISO 868 A scale)   | 95                   |

Note: Typical properties shown, but actual properties may vary according to batch. Gantrail will supply pad suitable for the intended loads and application.

### PAD FOR CONTINUOUSLY SUPPORTED APPLICATIONS

Probably the most widely used crane rails in the world are the A sections to DIN 536:1981. These have a wide flange originally for riveting to girders but they are weak in vertical bending. They are not the best choice for discontinuous applications.

Excellent rails for light applications are railway rails. For heavier wheel loads taller rails are preferred e.g. QU70, ISCR100 and MRS87A.

### TYPICAL DISCONTINUOUS SOLEPLATE ARRANGEMENTS

|            | For vertical wheel loads up to 60kN | For vertical wheel loads up to 200kN     | For vertical wheel loads up to 350kN     |
|------------|-------------------------------------|--|--|
|            | Clips mounted on anchor bolts       | Clips mounted separate to 2 anchor bolts | Clips mounted separate to 4 anchor bolts |
|            | M16 clip                            | M16 clip                                 | M16 clip                                 |
| Plan view  |                                     |  |  |
| Front view |                                     |  |  |

These are only typical examples. There are a number of possible arrangements and gantrail can advise on these for your specific application.

### INSTALLATION INSTRUCTIONS:

The installation method should ensure that the soleplates are level with the base of the rail. This is best achieved by levelling the rail and then bringing the sole plate plus pad, up to meet the bottom surface of the rail over its full area. Gantrail can advise as to suitable methods and supply.

Gantrail reserves the right to make, from time to time, such departures from the detail specifications as may be required to permit improvements in the design of its products and to allow the use of batches of material that fulfil the loading requirements of the intended application. The information included herein is believed to be accurate and reliable. However, Gantrail assumes no responsibility for its use; nor for any infringements of patents or other rights of third parties which may result from its use.

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Mark 2 Pad/DO/01/25