The Festooning, that carries all types of energy.
It can . . .

. . . travel at relatively high speeds
. . . operate in relatively hostile conditions
. . . negotiate 360° curves and more
. . . negotiate horizontal and vertical planes within one run
. . . carry round and flat cables, hoses, curtains and other light matter
**POWERMITE® CARRIER N° 290**

**CONSTRUCTION**
- Body: aluminium, coated
- Hardware: galvanised
- Rollers: galvanised, ZZ sealed
- Buffer: rubber

**S = 20 mm if carriers ambush buffer to buffer**

**Maximum S = 40 mm**

*1) When ordering carriers within a system the quantity must suit the cable length, not the track length.*

---

**POWERMITE® MASTER CARRIER N° 291**

**CONSTRUCTION**
- Body: aluminium, coated
- Hardware: galvanised
- Rollers: galvanised, ZZ sealed
- Buffer: rubber

**S = 20 mm if carriers ambush buffer to buffer**

**Maximum S = 40 mm**

---

**POWERMITE® CARRIER SPECIALS**

**CONSTRUCTION**
- Body: stainless steel - galvanised steel - PVC
- Rollers: steel - stainless steel - PVC - Brass

**ADAPTION 4)**
- To carry all shapes of cables or hoses, carriers made up to suit operational and dimensional requirements.
- Length of carrier as depicted 160 mm.

*4) The cable length must be calculated: Straight track length + 15% + 2 tail lengths for connecting. For higher speeds and/or duty cycles the percentage length addition must be increased.*

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**POWERMITE® ENDCLAMP N° 272C**

**CONSTRUCTION**
- Body: steel, coated
- Clamp: aluminium coated
- Spacer: gf Nylon
- Hardware: galvanised or stainless steel
- Buffer: rubber

**S = 20 mm if carriers ambush buffer to buffer**

**Maximum S = 40 mm.**

---

**POWERMITE® ENDSTOP N° 273C**

**CONSTRUCTION**
- Body: steel, coated
- Alternative: stainless steel or aluminium
- Spacer: gf Nylon
- Hardware: galvanised or stainless steel
- Buffer: rubber

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**POWERMITE® HANGER CLAMP N° 282C**

**CONSTRUCTION**
- Body: steel, coated
- Alternative: stainless steel or aluminium
- Spacer: gf Nylon
- Hardware: galvanised or stainless steel
**POWERMITE™ JOINT NO. 261B**

**CONSTRUCTION**
- Body: gf Nylon
- Alternative: stainless steel or aluminium
- Hardware: galvanised or stainless steel

**DRILLING JIG NO. 2800**

**CONSTRUCTION**
- Body: Steel with hardened bushes, galvanised
- Weight: 2.5 kg

**APPLICATION**
The drilling of holes to Track for fitting of:
- Joint No. 281
- Endclamp No. 292
- Hanger Clamp No. 293
- Endstop No. 253

**POWERMITE™ TRACK PROFILE NO. 2801.1)**

<table>
<thead>
<tr>
<th>Material</th>
<th>steel, galvanised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard length</td>
<td>6 m</td>
</tr>
<tr>
<td>Minimum bending radius</td>
<td>0.4 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 1.77 kg/m</td>
</tr>
</tbody>
</table>

1. On curved installations the spacing of hanger clamps shall be max. 2/3 of that of a straight run.
2. On curved installations the Loop height should not exceed radius x 0.7

**POWERMITE™ TRACK PROFILE NO. 280alu 1.1)**

<table>
<thead>
<tr>
<th>Material</th>
<th>aluminium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard length</td>
<td>6 m</td>
</tr>
<tr>
<td>Minimum bending radius</td>
<td>0.4 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 0.5 kg/m</td>
</tr>
</tbody>
</table>

1. On curved installations the spacing of hanger clamps shall be max. 2/3 of that of a straight run.
2. On curved installations the Loop height should not exceed radius x 0.7

**POWERMITE™ TRACK PROFILE NO. 280ss 1.1)**

<table>
<thead>
<tr>
<th>Material</th>
<th>stainless steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard length</td>
<td>6 m</td>
</tr>
<tr>
<td>Minimum bending radius</td>
<td>0.4 m</td>
</tr>
<tr>
<td>Weight</td>
<td>approx. 1.8 kg/m</td>
</tr>
<tr>
<td>Special curves in different planes on request</td>
<td></td>
</tr>
</tbody>
</table>

1. On curved installations the spacing of hanger clamps shall be max. 2/3 of that of a straight run.
2. On curved installations the Loop height should not exceed radius x 0.7

**FURTHER PRODUCTS TO FEED ENERGY TO MOBILE EQUIPMENT**

- C-Track - Flattbar - ØTrack RSJ-Beam Rope Systems
- Energy drag chains to carry cable & hoses
- All types of cable & hose reeling drums
- Enclosed down shop conductor systems
- Open down shop conductor systems
- All flexible cables and hoses to suit above Festooning
- Open & enclosed slipring collector columns
- Couplers for flexible cable in HT & LT
**-TRACK BASIC DATA**

The No. 290 carrier will be able to carry 20 kg of load. This applies only to the roller bearings on the carriers. When you utilise the full load of the bearing capacity, kindly cross check with the loading capacity in the diagram of the No. 280/290 POWERMITE Φ-track, which is shown below.

The life of anti-friction bearings depends mainly on their operational factors as well as on environmental influences. Furthermore, important factors are the speed (travel speed of the machinery). In the table shown below you will find indications as to the speed of travel in relation to the weight and life of the carrier bearings.

The figures mentioned below are of an approximate nature, as further factors, such as dirt penetrating into the bearings, corrosion, fatigue of material etc., can change the tabulated figures considerably.

**CAPACITY OF RAIL PROFILE NO. 280**

The maximum permissible loading of the POWERMITE Φ-track, No. 280 Profile can be determined calculated on the following assumptions:

1. The section is suspended on 2 supports, and the load is spread over its length symmetrically from the middle.
2. The load (in kg) of the carrier P is distributed evenly along the carrier length lw (in mm).
3. The total loaded length is obtained from the length L(m) of all carriers placed at one end.
4. Permissible bending strength 100N/mm²
5. The maximum permissible deflection of the ΦTrack section due to loading plus its own weight = Lₜ x 1/250

**Example of calculation (yellow line):**

**Given parameter**

P = load + carrier (weight of cable plus own weight) = 5 kg
lw = length (in mm) of cable carrier No. 290 = 130 mm
Z = No. of cable carriers = 10
L = loaded length = Z x lw

From Loading diagram: required support distance between suspension clamps No. 282 = 1.8 m

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**LOADING DIAGRAM**

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034 375 8704

**Cape Town**

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021 510 6572

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DESIGN AND DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE