

**Battery Racks, VRLA**

1.0 Supports

1.1 Material and shaping

Supports are produced (stamped and bended) out of sheet steel (S 235) with a thickness of 3mm (0.12") and rectangular tube according DIN 2395 with a thickness of 2,0mm (0.08") and 2.5mm (0.10").

1.2 Surface treatment

Depending on the surface finish sheet material, the parts will be pickled or pickled and shot blasted.

1.3 Coating

Supports are coated with a powder coating of epoxy. The thickness is approximate 100 µ. The coating colour is black (RAL 9005).

Chemical and physical properties see Technical Information TIGB300.03

2.0 Beams

2.1 Material and shaping

Beams are contoured out of 2.0mm (0.08") for h-profiles and 2.2 (0.09") or 3.0mm (0.12") for c-profiles in sheet steel material (S 235).

2.2 Surface treatment

Depending on the surface finish sheet material, the beams will be washed or pickled.

2.3 Coating

Beams are completely coated with a powder coating of Thermofix KPE 03. The thickness is approximate 400 µ. The colour of the coating is black (RAL 9005).

Chemical and physical properties see Technical Information TIGB321.03

2.4 Strength

The moments of inertia <sup>1)</sup> are:	h-profiles	J = 7,3 cm <sup>4</sup>
	c-profiles up to 1200 mm	J = 5,4 cm <sup>4</sup>
	c-profiles 1500 mm	J = 7,6 cm <sup>4</sup>

3.0 Connecting elements

3.1 Material

Bolts, nuts and washers are according to the DIN. Anchor plates are produced out of steel.

**Battery Racks, VRLA**4.0 Insulators4.1 Material

Insulators are ABS injection moulded parts.  
The colour of the coating is black (RAL 9005).

4.2 Chemical properties

see Technical Information TIGB306.03.

4.3 Strength

The permissible load is 1600kg.  
see Technical Information TIGB306.03.

5.0 Quality5.1 Quality control

During the production of the above mentioned parts for battery racks, the quality is insured by a quality system. The conformity of the quality system standard UNI EN ISO 9001:2000 (ISO 9001:2000) is certified by DET NORSKE VERITAS with the document CERT-00231-94-AQ-MIL-SINCERT.

<sup>1)</sup> see also test report no.: M 99 0796 by Staatlichen Materialprüfungsanstalt Darmstadt