



TPS 08 SYSTEM DESCRIPTION OF COMPONENTS

TENSION CLAMPS (SKL 21)

General:

As a GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş., we are producing regarding manufacturing of product according to standarts.

Material:

It is manufactured from 38Si7 steel according to TS EN 10089.

C	% 0.35 - % 0.42
Si	% 1.5 - % 1.8
Mn	% 0.5 - % 0.8
S	max. % 0.025
P	max. % 0.025

Hardness:

The Vickers hardness of tension clamps should be between 400-460 HV30 according to DBS 918 127 standart.

Load test:

Min. Load force should be 6.5 Kn according to DBS 918 127.

Magnaflux Test:

Cracks should not be appeared during the test.

Physical Features:

Tension clamps are convenient according to dimensions in technical pictures and tolerances that are given by GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş. Cracks and broken will not happen from any effect from outside.

PLASTIC DOWEL (GDÜ 26)

General:

As a GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş., we are producing regarding manufacturing of product according to standarts.

Material:

PA6 (Polyamid 6)

Density:

It should be between 1.10-1.15 g/cm³ according to EN ISO 1183-1.

Static Stifness:

It should be max 2×10^8 Ω .cm according to DIN IEC 60093/DIN IEC 600167.

Physical Features:

Plastic dowels are convenient according to dimensions in technical pictures and tolerances that are given by GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş. Cracks and broken will not happen from any effect from outside.

RAIL PED (Getzner)

General:

As a GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş, we are producing regarding manufacturing of product according to standarts.

Material:

Plastic peds are manufactured from elastomer. Rail peds have straight edges, are smooth. There is not any problem regarding pattern issue and there is not any material in which cannot be define and unmelted plastic in inside of peds.

Static Elasticity:

Elasticity should be 40 kN according to DBS 219 235.

Static Stifness:

It should be $2 \times 10^8 \Omega \cdot \text{cm}$ according to DIN IEC 60093/DIN IEC 600167.

Physical Features:

Plastic peds are convenient according to dimensions in technical pictures and tolerances that are given by GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş. Cracks and broken will not happen from any effect from outside.

ANGLE GUIDES (GAK-12)

General:

As a GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş., we are producing regarding manufacturing of product according to standarts.

Material:

PA6+GFR30 (Polyamid 6 %30 support of fiber glass)

It was produced by resistance sentetic material against deformation can be occured due to radiation.

Density:

It should be 1.35-1.45 g/cm³ according to ISO 1183-1.

Impact Resistance:

It should be 40 kJ/m² according to ISO 179-1 eU

Physical Features:

Angle guides are convenient according to dimensions in technical pictures and tolerances that are given by GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş. Cracks and broken will not happen from any effect from outside.

BASE PLATE (TPS08-54-40)

General:

As a GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş, we are producing regarding manufacturing of product according to standarts.

Material:

PA6+GFR30 (Polyamid 6 %30 support of fiber glass)

It was produced by resistance sentetic material against deformation can be occured due to radiation.

Density:

It should be 1.35-1.45 g/cm³ according to ISO 1183-1.

Wet Rate:

It should be %1-%2.5 according to ISO 179-1 Eu.

Impact Resistance:

It should be 40 kJ/m² according to ISO 179-1 eU (DIN 53453)

Physical Features:

Base paltes are convenient according to dimensions in technical pictures and tolerances that are given by GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş. Cracks and broken will not happen from any effect from outside.

WASHER (ULS 7)

General:

As a GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş, we are producing regarding manufacturing of product according to standarts.

Material:

Steel was chosen according to TS EN 10139 or TS EN 10025.

Mechanical Features:

It can be produced determined figures:

Tensile Strength	590-740 N/mm ²
Yeild Strength	Min. 520 N/mm ²

Hardness:

It should be 185-225 HV30 according to EN 6507-1.

Coating:

It should be phosphate coating against to corrosion according to TS EN 12478

Physical Features:

Washers are convenient according to dimensions in technical pictures and tolerances that are given by GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş. Cracks and broken will not happen from any effect from outside.

SLEEPER SCREW (Ss36-220)

General:

As a GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş, we are producing regarding manufacturing of product according to standarts.

Material:

Sleeper screws are produced according to DIN EN ISO 898-1 ve EN 10025.

Mechanical Features:

Tensile Strength	min. 500 N/mm ²
Yeild Strength	min. 300 N/mm ²
Elecnation	min. 20%

Bending Test:

When screws are dipped 90°, there is not any cracks and broken.

Coating:

Galvanize and zinco-lamella coating are done against corrosion according to TSE EN 1461.

Physical Features:

Sleeper Screws are convenient according to dimensions in technical pictures and tolerances that are given by GÜRMAK DEMİRYOLU BAĞLANTI ELEMANLARI SANAYİ VE TİCARET A.Ş. Cracks and broken will not happen from any effect from outside.