



EtroX<sup>®</sup> V

## For high-precision test sockets

> Up to 0.1 mm small boreholes



#### EtroX<sup>®</sup> V

### New premium material for the machining of high-precision test sockets

The new premium material EtroX<sup>®</sup> V. Developed for the high demands in the electronics industry. EtroX<sup>®</sup> V is particularly suitable for machining high-precision test sockets with extremely small boreholes. These have a **minimum diameter of up to 0.1 mm** and are very well formed with only minimal burr formation. With this high precision EtroX<sup>®</sup> V increases the reliability and cost-effectiveness of the time-consuming and costintensive production of equipment for testing electronic components.



#### **High precision**

EtroX<sup>®</sup> V is particularly suitable for machining high-precision test sockets with extremely small boreholes. These have a minimum diameter of up to 0.1 mm and are **very well formed with only minimal burr formation**. The risk of individual, defective boreholes and thus defective components is reduced. Even a single faulty borehole would lead to a complete defect in the machined part. These errors are usually only noticed during the final inspection by manual or optical tests.

#### **Precise positioning**

The softer a material is, the higher the likelihood that the positioning of individual holes will deviate. Optical position tests carried out by customers on test sockets made of EtroX<sup>®</sup> V have demonstrated especially **precise positioning of boreholes.** This underscores the low stress level and excellent machinability of the new premium material.

High-precision: EtroX<sup>®</sup> V is particularly suitable for machining high-precision test sockets with extremely small boreholes. These have a minimum diameter of up to 0.1 mm and are very well formed with only minimal burr formation.

## Tested and approved by leading manufacturers

Leading manufacturers of electronic components have tested the properties of the new material EtroX<sup>®</sup> V and have approved it for the quality control of their electronic components after evaluating the results.

#### **Proven benefits**

The material properties determined by Röchling Industrial in its own material laboratories according to ISO standards for tensile modulus of elasticity, ball indentation hardness and water absorption show that EtroX® V offers proven advantages over the typical materials from other suppliers tested in comparison.

#### Very high tensile modulus of elasticity



At 5300 MPa, the tensile modulus of elasticity of EtroX® V is considerably higher than that of the tested reference materials and thus ensures higher strength and reduced burr formation during machining. Measured according to DIN EN ISO 527.\*





With EtroX $^{\otimes}$  V you increase the reliability and cost-effectiveness of the time-consuming and cost-intensive production of equipment for testing electronic components.

# Compare the performance

EtroX<sup>®</sup> V



Very high ball indentation hardness

At 275 MPa, the ball indentation hardness measured according to DIN EN ISO 2039-1 is impressively higher than the values of comparable materials and allows precise machining of components\*.

#### Very low water absorption



With 0.1%, EtroX<sup>®</sup> V has almost no water absorption and the lowest value compared to the tested reference materials\*.

\*Measured according to ISO standards in the company's own material laboratory.

#### EtroX<sup>®</sup> V

## Developed for the high demands in the electronics industry



#### Properties of EtroX<sup>®</sup> V

- Very high tensile modulus of elasticity
- Very high ball indentation hardness
- Very low water absorption
- Very low residual stress
- Very high dimensional stability even at high continuous operating temperatures of up to 250 °C
- Excellent machinability



#### Your advantages with EtroX<sup>®</sup> V

• EtroX<sup>®</sup> V increases the reliability and cost-effectiveness of the time-consuming and cost-intensive production of equipment for electronic components.

#### Areas of application

- Test sockets
- Holders for the assembly of smartphones and other electronic devices

#### Product programme sheets

#### • Dimension

620 x 1230 mm / 24 x 48" 500 x 1230 mm / 20 x 48"

- Thickness
- 5, 6, 8, 10, 12, 20 and 30 mm

Other dimensions and shapes, like round rods, possible on request.

## Extensive offer for the electronics industry

**EtroX**<sup>®</sup> **V** is part of our extensive product range of materials specifically for the electronics industry. Röchling offers a wide range of composites and thermoplastics for the electronics industry. In addition to insulating materials, we also provide numerous ESD modifications as well as Durostone<sup>®</sup> solder pallets made of fibre-reinforced plastics.





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