



FICHTNER
SCHICHT

FUTURE OF SHAPING

NiProFoam™

Nickel-Polyurethane-Hybrid Foam

Technology for Maximum Performance

QUASI-STATIC PARAMETERS

	10 ppi	20 ppi
Layer Thickness in μm	150	150
Stiffness in MPa	50.89 – 169.55	106.76 – 298.1
Plateau Stress in MPa	1.45 – 2.99	2.24 – 4.17
Plastic Collapse Stress in MPa	2.23 – 3.84	4.55 – 7.03
Energy Absorption at 50% Compression in J/cm^3	0.7 – 1.03	1.56 – 2.16

Other layer thicknesses available upon request.

PATENTED MANUFACTURING PROCESS

Our electroplating coating technology ensures uniform nickel distribution throughout the material depth.

PROVEN & RELIABLE

10 or 20 ppi, 20 mm or 40 mm thickness, 50–200 μm nickel – suitable for a wide range of technical requirements.

NiProFoam™

Our innovative new brand NiProFoam™ stands for a high-performance nickel-polyurethane hybrid foam that effectively combines mechanical stability, thermal conductivity, and exceptional porosity. With precisely variable cell sizes (10–20 PPI) and highly flexible layer thicknesses, the material is ideally

APPLICATION AREAS

- AVIATION
- MILITARY APPLICATIONS
- AUTOMOTIVE
- BATTERY PROTECTION
- E-MOBILITY
- LIGHTWEIGHT STRUCTURES



suited for applications such as energy absorption, protective structures, filtration, damping, or thermal management. Despite its extremely low weight, NiPro-Foam™ exhibits outstanding compressive strength values and fragment-free ductile strut bending even under extreme conditions.



KEY FACTS



HIGH POROSITY



HIGH COMPRESSIVE STRENGTH



LOW WEIGHT



TEMPERATURE-RESISTANT FROM $-40\text{ }^{\circ}\text{C}$ TO $+150\text{ }^{\circ}\text{C}$



HIGH ENERGY ABSORPTION



FRAGMENT-FREE DUCTILE STRUT BENDING



HYBRID PROTECTION



engineered by Fichtner & Schicht

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