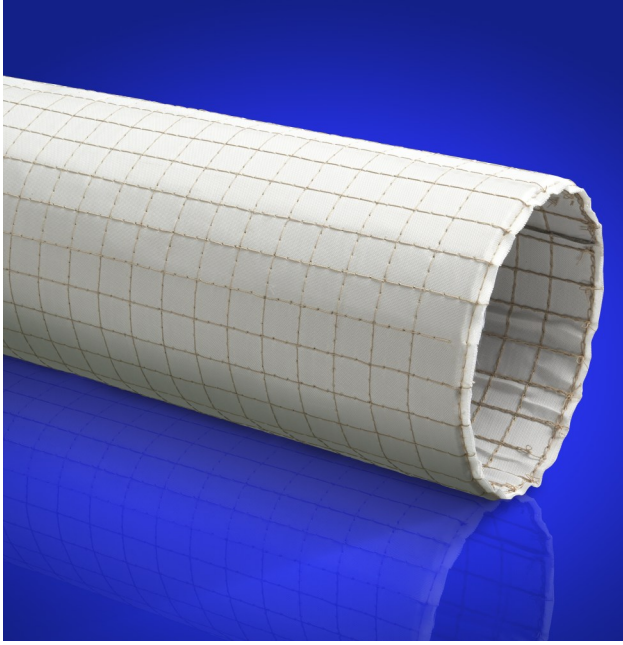
WDS® MultiRoll and MultiRoll HY

Product Data Sheet



Product Description

WDS MultiRoll and MultiRoll HY are large format flexible microporous insulation designed for applications requiring flexibility and twisting properties, together with low shrinkage and very low thermal conductivity up to 1000°C (1832°F).

Like any other microporous insulation of our industrial range produced with our exclusive WDS Technology process, it features extremely good handling and cutting properties, low thermal conductivity coefficient giving it very good insulating properties in limited thickness allowing to design equipment where high energy efficiency, space optimization and reduction of weight are premium factors to be considered.

Features

- Flexible in two dimensions
- Large format size
- Inorganic
- Very low thermal conductivity in a wide temperature spectrum
- Not affected by thermal shock
- Good resistance to compression associated to its low density
- Homogeneity throughout the entire surface and thickness of the blanket leading to consistency in performances per square area of material installed
- MultiRoll HY is a water-repellent version

Benefits

- Dimensionally stable over time up to the maximum using temperature
- Helps to control energy efficiency and heat flow very precisely
- Easy to cut and with proven installation techniques
- Increases effective volume inner capacity or reduces encumbrance in equipment, pipes and apparels of various nature having curved or irregular surface and geometry.
- Large size allowing faster installation time
- Environmentally friendly

Applications

- Process and transfer pipes and pipelines
- Insulation of turbines
- Ducting
- Any equipment and apparatus with curved or irregular surfaces

Environmental and Health Safety

WDS MultiRoll do not contain any hazardous substance as defined by EU Directive 2006/1907/EEC and IARC. The fibers or filaments used as reinforcement of the mineral core are also exonerated from any classification falling under EU Directive 97/69/EC.

Resistance to Moisture and Water

WDS MultiRoll can also be supplied in an hydrophobic version (HY) which is water repellent in its entire thickness; the water repellent treatment withstands up to 250°C (482°F) continuously.

Alternatively, the product can be supplied with an aluminum encapsulation which prevents water absorption up to 500°C (932°F). Non condensed moisture does not affect the product, even in its hydrophilic version.

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Properties	WDS MultiRoll	WDS MultiRoll HY
Grade	Hydrophillic	Hydrophobic
Classification Temperature, °C (°F)	1000 (1832)	1000 (1832)
Density, kg/m^3 (pcf), nominal	275 (17.2)	275 (17.2)
Cold Compression Strength, MPa (psi), ASTM C 165	>0.30 (>43.5)	>0.30 (>43.5)
Linear Shrinkage, %, ASTM C 365		
Full soak, 1000°C (1832°F), 24 hours	<3.0	<3.0
Chemical Analysis, %		
Silica, SiO_2	55 - 75	55 - 75
Silicon Carbide, SiC	25 - 40	25 - 40
Others	3 - 10	3 - 10
Loss of Ignition, Dry condition	<2.5	<2.5
Thermal Conductivity, W/m•K (BTU•in/hr•ft^2•°F), ASTM C 177		
200°C (392°F)	0.024 (0.17)	0.024 (0.17)
400°C (752°F)	0.026 (0.18)	0.026 (0.18)
600°C (1112°F)	0.031 (0.22)	0.031 (0.22)
800°C (1472°F)	0.038 (0.26)	0.038 (0.26)

Shelf Life

- WDS MultiFlex and MultiFlex HY has unlimited shelf life if it stored properly
- WDS MultiFlex and MultiFlex HY must be handled and stored in dry conditions in its original packaging
- WDS MultiFlex and MultiFlex HY material will remain stable over time and has no aging effect

Standard Dimensions and Availability

Board dimensions, LxW, mm (in)	Thickness, mm (in)	Quitling options, on demand
7500 x 500 (295.3 x 19.5)	6 (0.25)	2D: Semi-Quilted (W)
7000 x 500 (275.6 x 19.5)	8 (0.31)	
6000 x 500 (236.2 x 19.5)	10 (0.39)	Stitching path options:
5000 x 500 (196.8 x 19.5)		50 x 50mm (2 x 2in)

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