



Isover Technical Insulation for industrial storage tanks

Fast & efficient

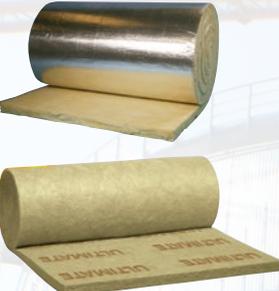
Fast & efficient Isover insulation solutions for industrial storage tanks

Rising energy prices and awareness of the climate goals are important drivers for reducing energy losses and the associated CO₂ emissions as much as possible in industry as well.

Energy-efficient solutions are therefore the starting point for the technical insulation range of Saint-Gobain Isover Technical Insulation. The range consists of glass wool, stone wool and ULTIMATE™ mineral wool.

Industrial storage tanks exist in many sizes and contain different media at different process temperatures. Yet they all have something in common: all of them need efficient insulation of the outer sheath to keep the temperature stable and ensure safety.

For tanks, we therefore offer a complete TECH range of energy-efficient solutions:

Application	Material	Product	Page
Tank walls 	Glass wool	TECH Climcover Crimped Roll 2.0 Alu2	4
	ULTIMATE™	U TFN 23	5
Tank roofs 	Stone wool	TECH Slab MT 4.0	6
	Stone wool	METAC FLP 1 Duratec	7
Cryogenic tanks 	Glass wool	CRYOLENE	7

Useful tools & services

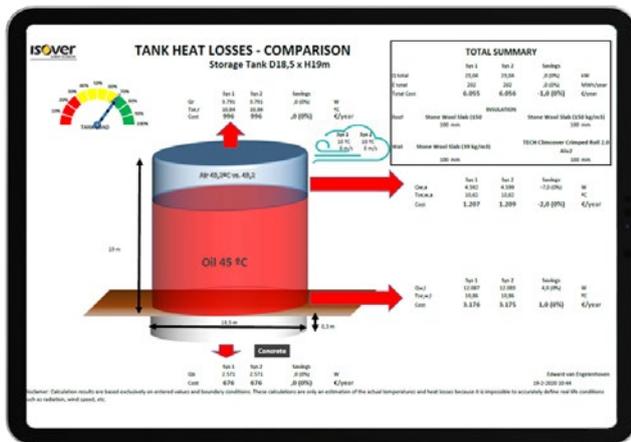
In addition to a range tailored to industry and storage tanks, we are also happy to help you with our tools and personal advice.

Isover TECHCALC 2.0

Calculating thermal performance in complex installations can be demanding and time-consuming. Isover has therefore developed TechCalc 2.0, a thermal calculation program that provides support to engineers and installers in the design and calculation of insulation solutions.



- Heat flows and surface temperatures
- Required insulation thickness for required heat resistance
- Operating costs and CO₂ savings
- Relationship between energy saving and construction of the insulation
- Minimum insulation thickness to prevent condensation
- Multilingual (including Dutch, English and German)
- Easy to use
- Possibility of applying data from a database (products, climate data, locations, etc.)



Isover TANKCALC

Especially for tank insulation!

How do you make the most energy- and cost-efficient choice for tank insulation systems? We have developed Isover TankCalc specifically for tanks. This tank insulation tool makes the heat loss transparent, depending on medium type, tank filling and the insulation system. With Isover TankCalc, we work with you to determine the optimal solution for your project. For more information or advice please contact us.



CONTACT

If you have any questions about the Isover technical insulation solutions for the industry, please contact Edward van Engelenhoven: edward.vanengelenhoven@saint-gobain.com or +31 (0)6 12 27 49 72.

Isover TECH CLIMCOVER Crimped Roll 2.0 Alu2

Pressure-resistant glass wool blanket with crimping technology

Isover TECH CLIMCOVER Crimped Roll 2.0 Alu2 is a glass wool blanket with reinforced aluminium that, thanks to the special crimping technology (see box), combines a number of very specific advantages and leads to fast and economic insulation of tank walls.



Range

Thickness (in mm)	Dimensions (in mm)	m ² per roll	m ² per pallet	kg per roll
50	4800 x 1200	5.76	103.68	10.08
60	4000 x 1200	4.80	86.40	10.08
70	3400 x 1200	4.08	73.44	10.00
80	3000 x 1200	3.60	64.80	10.08
100	3750 x 1200	4.50	54.00	15.75

Thermal conductivity coefficient measured in accordance with EN 12667

Average temperature (°C)	10	50	100	150	200
λ (W/m.K)	0.035	0.041	0.050	0.061	0.073

The technology: crimping principle

During the crimping process, glass wool fibres are inserted into the final blanket by means of a special processing technique based on variable speeds. The result is a glass wool blanket with a unique orientation of glass wool fibres that combines mechanical strength with excellent thermal insulation.

The crimping technology results in insulation blankets with high pressure resistance and excellent insulation values. They are also lightweight, easy to handle, weather-resistant and mechanically strong.



High pressure resistance



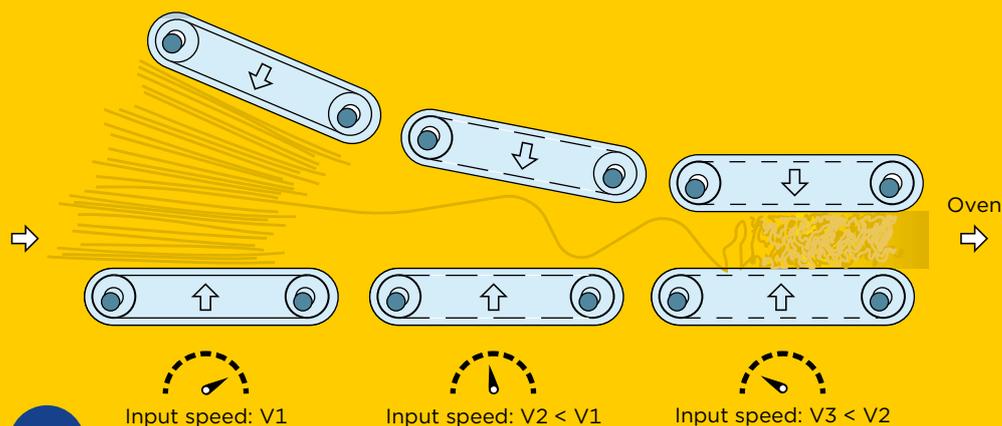
Excellent insulation value



Flexible



Lightweight



Isover U TFN 23

ULTIMATE™ blanket available in large thicknesses and lengths

Isover U TFN 23 is a sturdy but flexible ULTIMATE™ mineral wool insulation blanket for efficient thermal and acoustic insulation for industrial tanks. The blankets are available in very large thicknesses (up to 250 mm). This, in combination with the favourable insulation value, makes them particularly suitable for heat-buffer tanks with a minimum of insulation layers.



Range

Thickness (in mm)	Dimensions (in mm)	m ² per roll	m ² per pallet	kg per roll
100	7000 x 1200	8.40	100.80	19.32
120	6000 x 1200	7.20	86.40	19.87
150	4600 x 1200	5.52	66.24	19.04
200	3500 x 1200	4.20	50.40	19.32
220	3100 x 1200	3.72	44.64	18.82
250	2800 x 1200	3.36	40.32	19.32

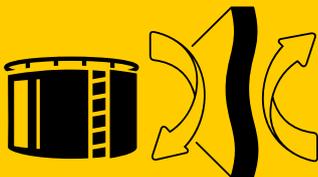
Thermal conductivity coefficient measured in accordance with EN 12667

Average temperature (°C)	10	50	100	150	200	300
λ (W/m.K)	0.034	0.040	0.049	0.062	0.080	0.124

Why choose Isover insulation blankets?

Thermal performance

Excellent insulation value



10%
BETTER
INSULATION
VALUE*

Sustainable

- 8% extra energy savings
- Reduced raw material consumption



8%
EXTRA
ENERGY
SAVING*

Installation

Fast installation time with extra long rolls and up to 17% fewer seams



17%
FEWER
SEAMS*

Logistics

Less volume: up to 33% fewer pallets on the construction site, less packaging and waste.



33%
FEWER
PALLETES*

* Comparison based on conventional insulation solution with stone wool (3000x500) thickness 100 mm for a tank with diameter 34 m and height 18 m - medium temperature 60 °C

Isover TECH Slab MT 4.0

Flexible stone wool insulation board for industrial applications

TECH Slab MT 4.0 is a sturdy and flexible stone wool insulation board suitable for insulating industrial storage tanks and drums. This insulation board is particularly suitable for insulating non-walkable tank roofs and tank roofs with a small radius.



Range

Thickness (in mm)	Dimensions (in mm)	m ² per package	m ² per pallet	kg per pallet
30	1200 x 625	7.50	90.00	243.00
40	1200 x 625	4.50	67.50	243.00
50	1200 x 625	4.50	54.00	243.00
60	1200 x 625	3.75	45.00	243.00
80	1200 x 625	2.25	33.75	243.00
100	1200 x 625	2.25	27.00	243.00

Thermal conductivity coefficient measured in accordance with EN 12667

Average temperature (°C)	50	100	150	200	300	400	500	600
λ (W/m.K)	0.039	0.045	0.053	0.064	0.088	0.121	0,164	0,219



Insulating tank roofs pays off!

In practice, storage tank roofs are often left uninsulated. Convection currents occurring in the layer of air above the liquid surface cause significant heat loss through the tank roof. Therefore, tank roofs must be insulated as well as tank walls!

Isover has two stone wool boards in its range for insulating tank roofs:

- METAC FLP 1 Duratec
- TECH Slab MT 4.0

Isover METAC FLP 1 Duratec

Highly pressure-resistant stone wool insulation board for tank roofs

Isover METAC FLP 1 Duratec is a very pressure-resistant (pressure resistance CS(10) 60kPa) stone wool board that can be used for (walkable) tank roofs. The METAC FLP 1 Duratec insulation boards are available in both large and small sizes.



Small size range

Thickness (in mm)	Dimensions (in mm)	m ² per package	m ² per pallet	kg per pallet
80	1200 x 600	2.16	21.60	254.0
100	1200 x 600	1.44	17.28	254.0
120	1200 x 600	1.44	14.40	254.0
140	1200 x 600	1.44	11.52	237.1

Large size range

Thickness (in mm)	Dimensions (in mm)	m ² per pallet	kg per pallet
80	1900 x 1200	36.48	429.0
100	1900 x 1200	29.64	435.7
120	1900 x 1200	25.08	442.4
140	1900 x 1200	20.52	422.3
160	1900 x 1200	18.24	429.0
180	1900 x 1200	15.96	422.3
200	1900 x 1200	13.68	402.2



Thermal conductivity coefficient measured in accordance with EN 12667

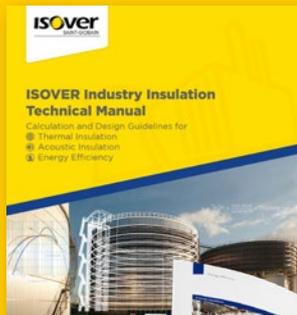
Average temperature (°C)	50	100	150	200	300	400	500	600	680
λ (W/m.K)	0.042	0.047	0.053	0.062	0.084	0.120	0,147	0,189	0,228



Thermal insulation for Cryogenic applications

For cryogenic storage tanks, for example liquid natural gas (LNG), liquid oxygen or nitrogen, there are very specific requirements. Isover has developed the CRYOLENE range for this purpose. You can read more about this in our special brochure "Isover CRYOLENE for LNG and LPG applications".





Isover Technical Manual

Want to know more about insulation in the industry? Then download our Technical Manual at benelux.saint-gobain-technical-insulation.com/documentatie. Here you will find extensive theoretical and practical information about industrial insulation as well as many practical examples. In short, an indispensable reference work for anyone who has to do with insulation in the industry.



Isover founding partner EiiF



Saint-Gobain Isover is the founding partner of the European Industrial Insulation Foundation (EiiF), a European non-profit organisation based in Geneva, Switzerland. The EiiF was set up to promote and establish the use of industrial insulation as a widely understood and accepted means of achieving sustainability. For more information, visit eif.org.



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