TAU TUBE™ FAMILY | REDIRECTIVE CRASH CUSHIONS

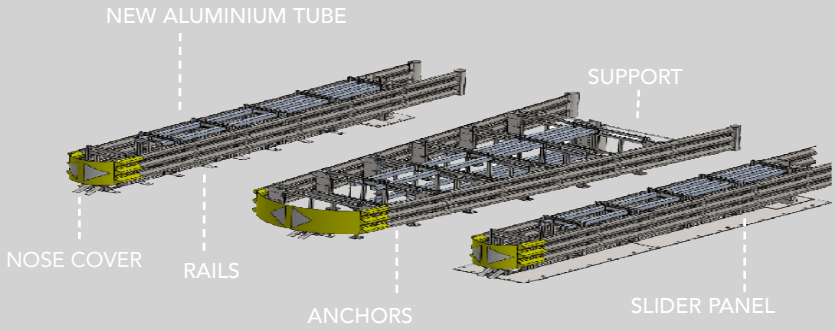
- Cost effective hazards protection
- Absorbs crashes at 110 km/h in less than 6 m
- Easy installation
- Meets EN1317-3 Criteria
- CE Marked
- Parallel TAU TUBE™ also available in the“on plate”temporary version

SNOLINE™ BY LINDSAY

TAU TUBE™ | REDIRECTIVE CRASH CUSHIONS

TECHNICAL SPECIFICATIONS

Classification	Redirective
Length	1900 – 5900 mm
Width	850 - 2600 mm
Height	820 mm
Weight	500 -1500 kg
Speed (P)	50,80,100,110 km/h
Speed (XL)	80,100,110 km/h
Applicable standard	EN 1317-3



A LOW PRICE, HIGH RESISTANT CRASH CUSHION

The TAU Tube™ redirective crash cushions family offers excellent impact performance values with a very interesting price thanks to its telescopic architecture designed to absorb energy in a completely new way. TAU Tube™ crash cushions absorb the impact in a very limited space, in less than 6m with a speed of 110 km/h. Thanks to this particular feature the system can be installed in tunnels and in other locations with limited installation space. The TAU Tube™ redirective crash cushion family is designed following the best engineering solutions and the most innovative materials in order to ensure top level performance. The aluminium tubes used to absorb the impact energy are resistant to any kind of corrosion. The fixing bars anchor version allows every TAU Tube™ system to be reused, since it does not require new foundation work and the ground drilling operation; this goes for every TAU Tube model, from Parallel to XL, both on asphalt and concrete; this solution has been already used to protect the ends of the median opening gates in case of snow.

FAQ

What makes the TAU Tube™ family so different from the others on the market?

TAU Tube™ features an innovative design that allows to optimise the installation work, in that it allows to use the same type of foundation for all versions, from Parallel to XL. The TAU Tube™ family uses a high-tech telescopic set-up to ensure high and consistent performance; the model TAU Tube™ 110 can absorb impact at 110 km/h in less than 6 m.

What type of barrier can the TAU Tube™ crash cushion family be associated with?

The TAU Tube™ is designed to connect with most safety barriers, including two-beams/three-beams and NJ barriers.

Where can the TAU Tube™ crash cushion be installed?

TAU Tube™ can be installed on concrete and asphalt, in tunnels or where reduced space is required.

SPECIFICATIONS

Meets EN 1317-3 criteria

TAU Tube™ 110 can absorb impacts at 110km/h in less than 6m

Suitable for installation in tunnels and high-risk locations even if little space is required

Easy to install on asphalt and concrete surfaces

CE marked

Removable "on plate version"

TAU TUBE may be reused with fixing bars anchors

USE

Any type of road, even high-speed highways, where short and high containment crash cushions are needed

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Snoline spa
Via F. Baracca 19/23 • 20056 Trezzo sull'Adda (MI) • Italia • Tel. +39 02909961 • e-mail: info@snoline.com

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ISTITUTO ITALIANO DI
GARANZIA DELLA QUALITÀ

Certificate of constancy of performance

1608 CPR P158A

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the constructions product:

Vehicle restraint system
Redirective crash cushion TAU Tube family with fixing bar

whose characteristics are detailed in the attached annex,
produced by or for

Snoline Spa

Via F. Baracca, 19/23 20056 Trezzo s/Adda MI - IT

and produced in the manufacturing plant(s)

Trezzo s/Adda - IT

This certificate attests that all provisions concerning the assessment and verification of performance described in Annex ZA of the standard

EN 1317-5:2007+A2:2012/AC:2012

under system 1 are applied and that

the product fulfils all the prescribed requirements set out above.

This certificate was first issued on **07/07/2014** and will remain valid as long as the test method and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

Current issue: **06/11/2015**

The Director
Ing. Dario Agalbato

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ISTITUTO ITALIANO DI
GARANZIA DELLA QUALITÀ

APPENDIX 1 TO CERTIFICATE 1608 CPR P158A

Performance under impact of

Redirective crash cushion TAU Tube Family with fixing bar[1)]

Product name[2)]	Type of test[3)]	Test Report	Technical drawing	Performance level	Impact severity	Lateral displacement	Redirection zone	Durability
TAU Tube P110	TC1.3.110	017/ME/HRB/14 SNO/04/15	085U11CYFB-EXP Rev.0 TAU0024 Rev.F	110	B	D1	Z1	Hot dipped galvanized steel components in accordance with UNI ISO 1461[4)] and polyethylene components
TAU Tube P110	TC1.1.100	023/ME/HRB/14 SNO/04/15	085U11CYFB-EXP Rev.0 TAU0024 Rev.F	110	B	D1	Z1	
TAU Tube P110	TC2.1.100	024/ME/HRB/14 SNO/04/15	085U11CYFB-EXP Rev.0 TAU0024 Rev.F	110	B	D1	Z2	
TAU Tube P110	TC4.3.110	029/ME/HRB/14 SNO/04/15	085U11CYFB-EXP Rev.0 TAU0024 Rev.F	110	B	D1	Z1	
TAU Tube P110	TC5.3.110	031/ME/HRB/14 SNO/04/15	085U11CYFB-EXP Rev.0 TAU0024 Rev.F	110	B	D1	Z1	
TAU Tube P110	TC3.3.110	043/ME/HRB/14 SNO/04/15	085U11CYFB-EXP Rev.0 TAU0024 Rev.F	110	B	D1	Z2	
TAU Tube P100	TC1.2.100	073/ME/HRB/14 SNO/04/15	085U10CYFB-EXP Rev.0 TAU0024 Rev.F	100	B	D1	Z1	
TAU Tube P80	TC1.2.80	090/ME/HRB/14 Rev.1 SNO/04/15	085U08CYFB-EXP Rev.0 TAU0024 Rev.F	80	B	D1	Z1	
TAU Tube P50	TC1.1.50	102/ME/HRB/14 SNO/04/15	085U05CYFB-EXP Rev.0 TAU0024 Rev.F	50	B	D1	Z1	

1)Crash cushion TAU Tube Family with fixing bar is a modified product from crash cushion TAU Tube Family with threaded bar, in conformity with the provision of section A.3 of EN 1317-5:2012 (Rel. SNO/04/15)

2) See the relevant installation and maintenance manuals for fixing devices on ground with fixing bar on asphalt (Manual TAU Tube Family Rev.11)

3) According to EN 1317-3:2010.

4) Can be installed rails with improved resistance to atmospheric corrosion steel.

first issue: **07/07/2014**
current issue: **06/11/2015**

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ISTITUTO ITALIANO DI
GARANZIA DELLA QUALITÀ

APPENDIX 2 TO CERTIFICATE 1608 CPR P158A

Performance under impact of

Redirective crash cushion TAU Tube Family with fixing bar[1)]

Product name[2)]	Type of test[3)]	Test Report	Technical drawing	Performance level	Impact severity	Lateral displacement	Redirection zone	Durability
TAU Tube XL P110	TC4.3.110	0022/ME/HRB/15 Rev.1 SNO/04/15	260U11CYT4-EXP rev. 0 TAU0024 Rev.F	110	B	D1	Z1	Hot dipped galvanized steel components in accordance with UNI ISO 1461[4)] and polyethylene components
TAU Tube XL P110	TC1.1.100	0028/ME/HRB/15 SNO/04/15	260U11CYT4-EXP rev. 0 TAU0024 Rev.F	110	B	D1	Z1	
TAU Tube XL P100	TC4.2.100	0052/ME/HRB/15 SNO/04/15	260U10CYT4-EXP rev. 0 TAU0024 Rev.F	100	B	D1	Z1	
TAU Tube XL P80	TC4.2.80	0053/ME/HRB/15 SNO/04/15	260U08CYT4-EXP rev. 0 TAU0024 Rev.F	80	A	D1	Z1	

1)Crash cushion TAU Tube Family with fixing bar is a modified product from crash cushion TAU Tube Family with threaded bar, in conformity with the provision of section A.3 of EN 1317-5:2012 (Rel. SNO/04/15)

2) See the relevant installation and maintenance manuals for fixing devices on ground with fixing bar on asphalt (Manual TAU Tube Family Rev.11)

3) According to EN 1317-3:2010.

4) Can be installed rails with improved resistance to atmospheric corrosion steel.

first issue: **07/07/2014**
current issue: **06/11/2015**

The Director
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Dario Agalbato

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ISTITUTO ITALIANO DI
GARANZIA DELLA QUALITÀ

Certificate of constancy of performance

1608 CPR P158B

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the constructions product:

Vehicle restraint system
Redirective crash cushion TAU Tube family with threaded bar

whose characteristics are detailed in the attached annex,
produced by or for

Snoline Spa

Via F. Baracca, 19/23 20056 Trezzo s/Adda MI - IT

and produced in the manufacturing plant(s)

Trezzo s/Adda - IT

This certificate attests that all provisions concerning the assessment and verification of performance described in Annex ZA of the standard

EN 1317-5:2007+A2:2012/AC:2012

under system 1 are applied and that
the product fulfils all the prescribed requirements set out above.

This certificate was first issued on **07/07/2014** and will remain valid as long as the test method and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly.

Current issue: **08/11/2015**

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ISTITUTO ITALIANO DI
GARANZIA DELLA QUALITÀ

APPENDIX 1 TO CERTIFICATE 1608 CPR P158B

Performance under impact of

Redirective crash cushion TAU Tube family with threaded bar

Product name[1)]	Type of test[2)]	Test Report	Technical drawing	Performance level	Impact severity	Lateral displacement	Redirection zone	Durability
TAU Tube P110	TC1.3.110	017/ME/HRB/14	085U11CYT4-EXP Rev.D	110	B	D1	Z1	Hot dipped galvanized steel components in accordance with UNI ISO 1461[3)] and polyethylene components
TAU Tube P110	TC1.1.100	023/ME/HRB/14	085U11CYT4-EXP Rev.D	110	B	D1	Z1	
TAU Tube P110	TC2.1.100	024/ME/HRB/14	085U11CYT4-EXP Rev.D	110	B	D1	Z2	
TAU Tube P110	TC4.3.110	029/ME/HRB/14	085U11CYT4-EXP Rev.D	110	B	D1	Z1	
TAU Tube P110	TC5.3.110	031/ME/HRB/14	085U11CYT4-EXP Rev.D	110	B	D1	Z1	
TAU Tube P110	TC3.3.110	043/ME/HRB/14	085U11CYT4-EXP Rev.D	110	B	D1	Z2	
TAU Tube P100	TC1.2.100	073/ME/HRB/14	085U10CYT4-EXP Rev.A	100	B	D1	Z1	
TAU Tube P80	TC1.2.80	090/ME/HRB/14 Rev.1	085U08CYT4-EXP Rev.A	80	B	D1	Z1	
TAU Tube P50	TC1.1.50	102/ME/HRB/14	085U05CYT4-EXP Rev.B	50	B	D1	Z1	

1) See the relevant installation and maintenance manuals for fixing devices on ground with threaded bar on concrete (Manual TAU Tube Family Rev.11)

2) According to EN 1317-3:2010.

3) Can be installed rails with improved resistance to atmospheric corrosion steel.

first issue: **07/07/2014**
current issue: **06/11/2015**

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ISTITUTO ITALIANO DI
GARANZIA DELLA QUALITÀ

APPENDIX 2 TO CERTIFICATE 1608 CPR P158B

Performance under impact of

Redirective crash cushion TAU Tube family with threaded bar

Product name[1)]	Type of test[2)]	Test Report	Technical drawing	Performance level	Impact severity	Lateral displacement	Redirection zone	Durability
TAU Tube XL P110	TC4.3.110	0022/ME/HRB/15 Rev.1	260U11CYT4-EXP rev. 0	110	B	D1	Z1	Hot dipped galvanized steel components in accordance with UNI ISO 1461[3)] and polyethylene components
TAU Tube XL P110	TC1.1.100	0028/ME/HRB/15	260U11CYT4-EXP rev. 0	110	B	D1	Z1	
TAU Tube XL P100	TC4.2.100	0052/ME/HRB/15	260U10CYT4-EXP rev. 0	100	B	D1	Z1	
TAU Tube XL P80	TC4.2.80	0053/ME/HRB/15	260U08CYT4-EXP rev. 0	80	A	D1	Z1	

1) See the relevant installation and maintenance manuals for fixing devices on ground with threaded bar on concrete (Manual TAU Tube Family Rev.11)

2) According to EN 1317-3:2010.

3) Can be installed rails with improved resistance to atmospheric corrosion steel.

first issue: **07/07/2014**
current issue: **06/11/2015**

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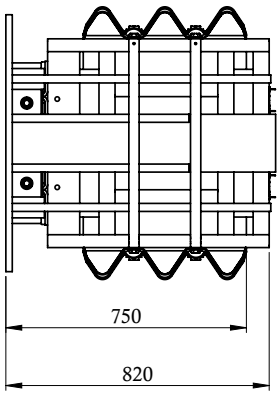

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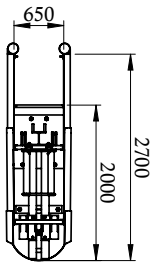
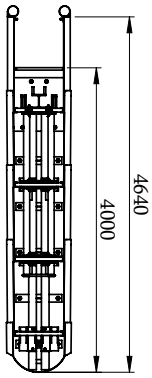
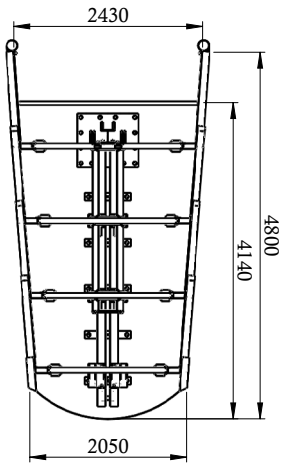
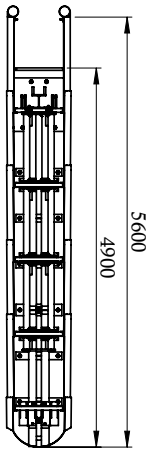
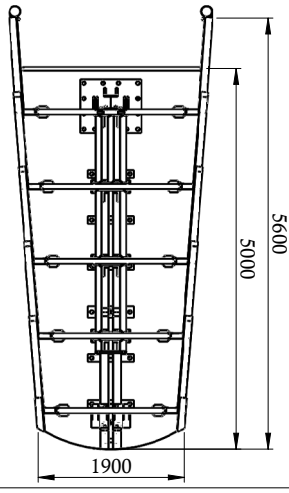
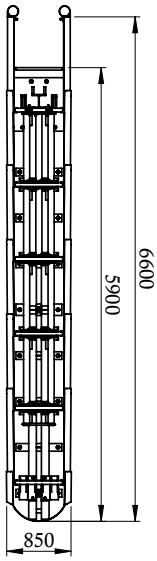
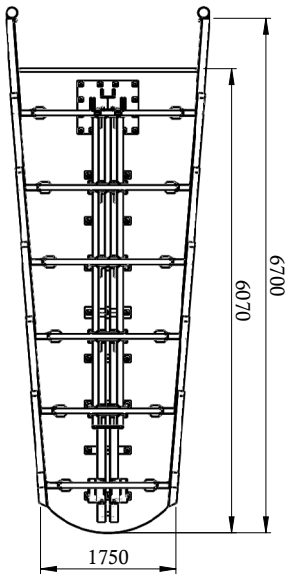
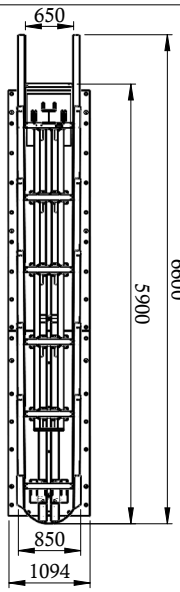
50 km/h			
80 km/h			
100 km/h			
110 km/h			

LINDSAY™ TRANSPORTATION SOLUTIONS

SNOLINE™ BY LINDSAY

CODES

TAU Tube™ with threaded bars (M24) anchors

CODES	DESCRIPTION
085U05CYT4	TUBE Parallel 50 Km/h
085U08CYT4	TUBE Parallel 80 Km/h
085U10CYT4	TUBE Parallel 100 Km/h
085U11CYT4	TUBE Parallel 110 Km/h
260U08CYT4	TUBE XLarge 80 Km/h
260U10CYT4	TUBE XLarge 100 Km/h
260U11CYT4	TUBE XLarge 110 Km/h
085D05CYT4	TUBE Parallel 50 Km/h not assembled
085D08CYT4	TUBE Parallel 80 Km/h not assembled
085D10CYT4	TUBE Parallel 100 Km/h not assembled
085D11CYT4	TUBE Parallel 110 Km/h not assembled

TAU Tube™ "on plate" version

CODES	DESCRIPTION
085P11AY	TUBE Parallel 110 Km/h on plate

TAU Tube ™ with fixing bars anchors

CODES	DESCRIPTION
085U05CYFB	TUBE Parallel 50 Km/h
085U08CYFB	TUBE Parallel 80 Km/h
085U10CYFB	TUBE Parallel 100 Km/h
085U11CYFB	TUBE Parallel 110 Km/h
260U08CYFB	TUBE XLarge 80 Km/h
260U10CYFB	TUBE XLarge 100 Km/h
260U11CYFB	TUBE XLarge 110 Km/h
085D05CYFB	TUBE Parallel 50 Km/h not assembled
085D08CYFB	TUBE Parallel 80 Km/h not assembled
085D10CYFB	TUBE Parallel 100 Km/h not assembled
085D11CYFB	TUBE Parallel 110 Km/h not assembled

* Reference version with yellow nose cover. Different nose cover versions can be applied on request.

TAU Tube™ P100 installed by a median opening gate

TAU Tube™ P100 installed by a median opening gate