

Corus Strip Products IJmuiden

Ympress[®] S355

Generously satisfies the requirements of S355MC
according to EN10149-2

Typical Applications

Ympress S355 is widely used to replace general structural steels in many strength critical applications. Ympress has better formability properties combined with a high yield strength. Ympress S355 is ideal for a wide range of pressed parts including automotive seat parts, radiator parts and fuel system components. Ympress S355 is also widely used in the yellow goods sector.

Impact Strength

Ympress® S355 (parallel to the rolling direction)

Thickness	J/cm² @ -20°C
6 - 15 mm	
Guaranteed minimum	100
Average 2004	240

Mechanical Properties

Ympress® S355 (Thickness ≤ 15 mm) (parallel to the rolling direction)

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend*
Typical	390	485	30	27	
Guaranteed	≥ 355	430 - 550	≥ 22	≥ 25	0 t

* Transverse to the rolling direction.

EN 10149-2 Standard

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend
EN 10149-2	≥ 355	430 - 550	≥ 19	≥ 23	0.5 t

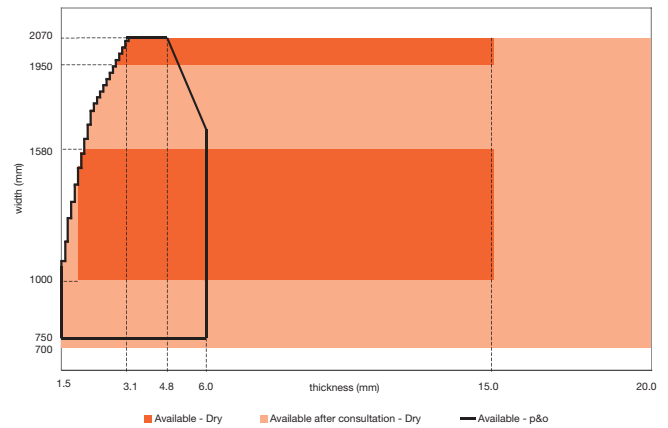
Chemical Composition

Ympress® S355 (% by weight)

	C	Mn	Si	P	S*	Altot	Nb	V	Ti	Mo
Guaranteed	≤ 0.10	≤ 1.40	≤ 0.03	≤ 0.020	≤ 0.010	≥ 0.015	≤ 0.05	-	-	-
EN 10149-2	≤ 0.12	≤ 1.50	≤ 0.50	≤ 0.025	≤ 0.020	≥ 0.015	≤ 0.09	≤ 0.20	≤ 0.15	-
Typical CEV	thickness < 6 mm = 0.17									
	thickness 6 - 15 mm = 0.29									

* Sulphur 0.005% max possible on request.

Dimensional Availability



Weldability

All Ympress products are readily weldable. If you have any questions, please do not hesitate to contact your technical support engineer.

Test certificate

A 2.2 certificate is issued as standard. Other types available on request.

Gauge Tolerance

All Ympress products comply for 98.5% of the coil length to 1/2 EN 10051.

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Ympress[®] S315

Generously satisfies the requirements of S315MC
according to EN10149-2

Typical Applications

Ympress S315 is used to replace general structural steels in a wide variety of applications. Ympress has better formability properties than required in the European Standard and is used for applications such as shelving and racking or pressed automotive parts, where low weight and good formability are advantageous.

Impact Strength

Ympress® S315 (parallel to the rolling direction)

Thickness	J/cm² @ -20°C
6 - 8 mm	
Guaranteed minimum	80
Average 2004	220
8 - 10 mm	
Guaranteed minimum	60
Average 2004	135

Mechanical Properties

Ympress® S315 (Thickness ≤ 10 mm) (parallel to the rolling direction)

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend*
Typical	350	435	32	35	
Guaranteed	≥ 315	390 - 510	≥ 23	≥ 26	0 t

* Transverse to the rolling direction.

EN 10149-2 Standard

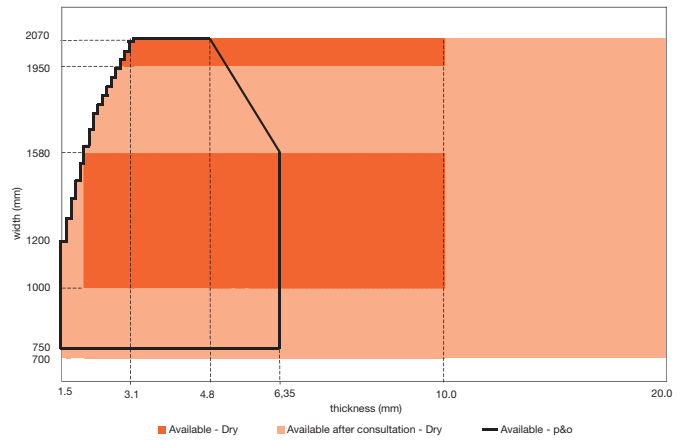
	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend
EN 10149-2	≥ 315	390 - 510	≥ 20	≥ 24	0 t

Chemical Composition

Ympress® S315 (% by weight)

	C	Mn	Si	P	S	Altot	Nb	V	Ti	Mo
Guaranteed	≤ 0.10	≤ 0.60	≤ 0.03	≤ 0.020	≤ 0.012	≥ 0.015	≤ 0.04	-	-	-
EN 10149-2	≤ 0.12	≤ 1.30	≤ 0.50	≤ 0.025	≤ 0.020	≥ 0.015	≤ 0.09	≤ 0.20	≤ 0.15	-
Typical CEV	thickness ≤ 8 mm = 0.11									
	thickness > 8 mm = 0.17									

Dimensional Availability



Weldability

All Ympress products are readily weldable. If you have any questions, please do not hesitate to contact your technical support engineer.

Test certificate

A 2.2 certificate is issued as standard. Other types available on request.

Gauge Tolerance

All Ympress products comply for 98.5% of the coil length to 1/2 EN 10051.



Ympress[®] E690

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Typical Applications

Ympress E690 combines high strength with excellent formability and weldability. It is used in applications like earth moving vehicles, large cranes, mobile cranes and telescopic booms. In these applications the high strength of steel is used to save weight and increase the load bearing capacity.

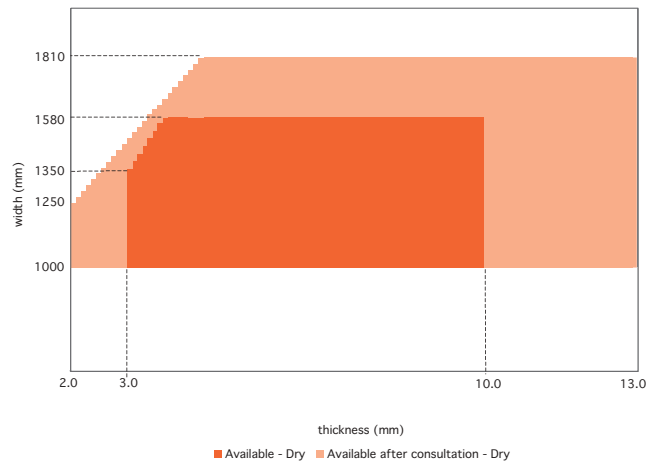
Impact Strength

Ympress® E690

(parallel to the rolling direction)

Thickness	J/cm ² @ 0°C	J/cm ² @ -20°C	J/cm ² @ -40°C
6 - 8 mm			
Guaranteed minimum	60	50	40
Average 2004		130	100
8 - 10 mm			
Guaranteed minimum	40	30	20
Average 2004		110	85

Dimensional Availability



Weldability

All Ympress products are readily weldable. If you have any questions, please do not hesitate to contact your technical support engineer.

Test certificate

A 3.1.b certificate is issued as standard. Other types available on request.

Gauge Tolerance

All Ympress products comply for 98.5% of the coil length to ½ EN 10051.

Mechanical Properties

Ympress® E690

(Transverse to the rolling direction)

	Thickness	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend
Typical	2 - 3 mm	825	840	13		
	4 - 8 mm	800	845		19	
	8 - 10 mm	750	825		18	
Guaranteed		≥ 690	750 - 950	≥ 12	≥ 14	0.5t for thickness ≤ 3mm 1t for thickness ≤ 6mm 1.5t for thickness > 6mm

Chemical Composition

Ympress® E690

(% by weight)

	C	Mn	Si	P	S	Altot	Nb	V	Ti	Mo	
Guaranteed	≤ 0.08	≤ 1.90	≤ 0.15	≤ 0.020	≤ 0.005	≥ 0.015	≤ 0.09	≤ 0.01	≤ 0.15	≤ 0.02	
Typical CEV	0.35										
Typical Pcm	0.16	(Japanese welding society standard)									





Corus Strip Products IJmuiden

Ympress[®] S420

Generously satisfies the requirements of S420MC
according to EN10149-2

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Typical Applications

Ympress S420 is used for a wide range of applications where low weight, high strength and good formability are necessary. Typical applications include towing hooks, industrial silos and automotive seat components.

Impact Strength

Ympress® S420 (parallel to the rolling direction)

Thickness	J/cm² @ -20°C
6 - 15 mm	
Guaranteed minimum	100
Average 2004	270

Mechanical Properties

Ympress® S420 (Thickness ≤ 15 mm) (parallel to the rolling direction)

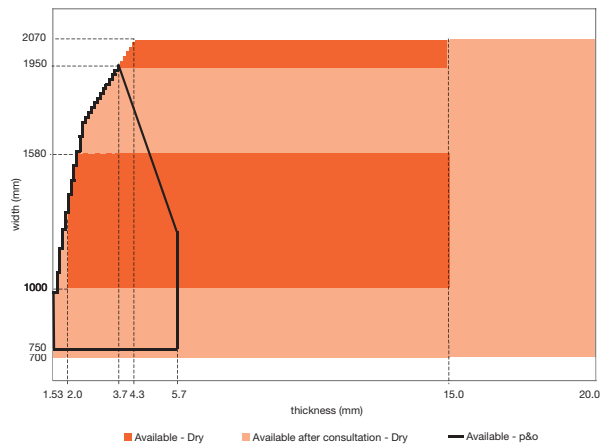
	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend*
Typical	460	545	26	27	
Guaranteed	≥ 420	480 - 620	≥ 19	≥ 21	0 t

* Transverse to the rolling direction.

EN 10149-2 Standard

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend
EN 10149-2	≥ 420	480 - 620	≥ 16	≥ 19	0.5 t

Dimensional Availability



Weldability

All Ympress products are readily weldable. If you have any questions, please do not hesitate to contact your technical support engineer.

Test certificate

A 2.2 certificate is issued as standard. Other types available on request.

Gauge Tolerance

All Ympress products comply for 98.5% of the coil length to 1/2 EN 10051.

Chemical Composition

Ympress® S420 (% by weight)

	C	Mn	Si	P	S*	Altot	Nb	V	Ti	Mo
Guaranteed	≤ 0.10	≤ 1.50	≤ 0.03	≤ 0.020	≤ 0.008	≥ 0.015	≤ 0.08	-	≤ 0.05	-
EN 10149-2	≤ 0.12	≤ 1.60	≤ 0.50	≤ 0.025	≤ 0.015	≥ 0.015	≤ 0.09	≤ 0.20	≤ 0.15	-
Typical CEV	thickness < 6 mm = 0.29									
	thickness 6 - 15 mm = 0.31									

* Sulphur 0.005% max possible on request.





Corus Strip Products IJmuiden

Ympress[®] S460

Generously satisfies the requirements of S460MC
according to EN10149-2

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Typical Applications

Ympress S460 is used in applications such as flood lights, telescopic booms, earth moving equipment, agricultural machines and truck frames. In these applications the high strength of the steel is used to save weight and / or to increase the load bearing capacity.

Impact Strength

Ympress® S460
(parallel to the rolling direction)

Thickness	J/cm ² @ -20°C
6 - 15 mm	
Guaranteed minimum	100
Average 2004	295

Mechanical Properties

Ympress® S460
(Thickness ≤ 15 mm) (parallel to the rolling direction)

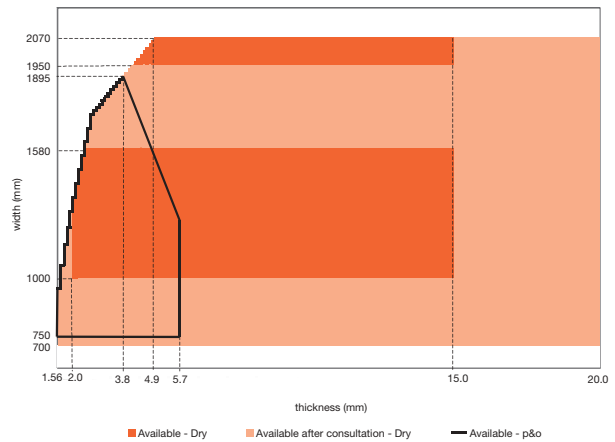
	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend*
Typical	520	600	23	23	
Guaranteed	≥ 460	520 - 670	≥ 17	≥ 19	0t ≤ 10mm 0.5t for 10 - 15mm

* Transverse to the rolling direction.

EN 10149-2 Standard

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend
EN 10149-2	≥ 460	520 - 670	≥ 14	≥ 17	1 t

Dimensional Availability



Weldability

All Ympress products are readily weldable. If you have any questions, please do not hesitate to contact your technical support engineer.

Test certificate

A 2.2 certificate is issued as standard. Other types available on request.

Gauge Tolerance

All Ympress products comply for 98.5% of the coil length to 1/2 EN 10051.

Chemical Composition

Ympress® S460
(% by weight)

	C	Mn	Si	P	S*	Altot	Nb	V	Ti	Mo
Guaranteed	≤ 0.10	≤ 1.50	≤ 0.03	≤ 0.020	≤ 0.008	≥ 0.015	≤ 0.08	-	≤ 0.05	-
EN 10149-2	≤ 0.12	≤ 1.60	≤ 0.50	≤ 0.025	≤ 0.015	≥ 0.015	≤ 0.09	≤ 0.20	≤ 0.15	-
Typical CEV	thickness < 6 mm = 0.31									
	thickness 6 - 15 mm = 0.34									

* Sulphur 0.005% max possible on request.





Corus Strip Products IJmuiden

Ympress[®] S500

Generously satisfies the requirements of S500MC
according to EN10149-2

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Typical Applications

Ympress S500 combines high strength with great formability. Ympress S500 is used in applications like earth moving vehicles, cranes and crane booms, containers and safety critical automotive components. In these applications the high strength of steel is used to save weight and / or to increase the load bearing capacity.

Impact Strength

Ympress® S500
(parallel to the rolling direction)

Thickness	J/cm² @ -20°C
6 - 15 mm	
Guaranteed minimum	80
Average 2004	250

Mechanical Properties

Ympress® S500
(Thickness ≤ 15 mm) (parallel to the rolling direction)

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend*
Typical	560	650	20	22	
Guaranteed	≥ 500	550 - 700	≥ 15	≥ 16	0.5t

* Transverse to the rolling direction.

EN 10149-2 Standard

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend
EN 10149-2	≥ 500	550 - 700	≥ 12	≥ 14	1 t

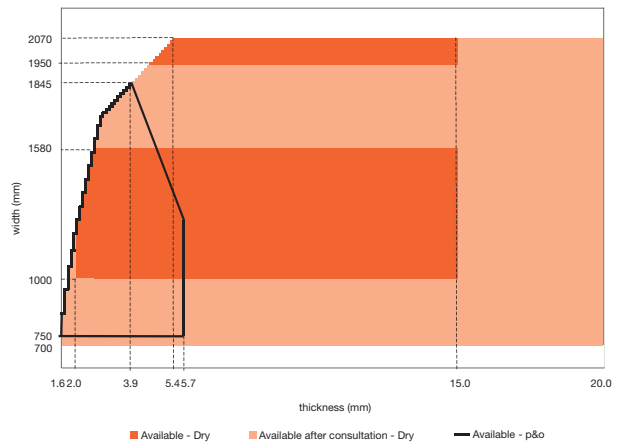
Chemical Composition

Ympress® S500
(% by weight)

	C	Mn	Si	P	S*	Altot	Nb	V	Ti	Mo
Guaranteed	≤ 0.10	≤ 1.65	≤ 0.03	≤ 0.020	≤ 0.008	≥ 0.015	≤ 0.08	-	≤ 0.06	-
EN 10149-2	≤ 0.12	≤ 1.70	≤ 0.50	≤ 0.025	≤ 0.015	≥ 0.015	≤ 0.09	≤ 0.20	≤ 0.15	-
Typical CEV	0.32									

* Sulphur 0.005% max possible on request.

Dimensional Availability



Weldability

All Ympress products are readily weldable. If you have any questions, please do not hesitate to contact your technical support engineer.

Test certificate

A 2.2 certificate is issued as standard. Other types available on request.

Gauge Tolerance

All Ympress products comply for 98.5% of the coil length to 1/2 EN 10051.





Corus Strip Products IJmuiden

Ympress[®] S550

Generously satisfies the requirements of S355MC
according to EN10149-2

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Typical Applications

Ympress S550 combines high strength with great formability. It is used in applications like earth moving vehicles, large cranes and crane booms. In these applications the high strength of steel is used to save weight and increase the load bearing capacity.

Impact Strength

Ympress® S550
(parallel to the rolling direction)

Thickness	J/cm² @ -20°C
6 - 8 mm	
Guaranteed minimum	80
Average 2004	250

Mechanical Properties

Ympress® S550
(Thickness ≤ 8 mm) (parallel to the rolling direction)

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend*
Typical	600	660	20	22	
Guaranteed	≥ 550	600 - 760	≥ 15	≥ 16	0.5t

* Transverse to the rolling direction.

EN 10149-2 Standard

	ReH in MPa	Rm in MPa	A80 in %	Adp5 in %	Bend
EN 10149-2	≥ 550	600 - 760	≥ 12	≥ 14	1.5 t

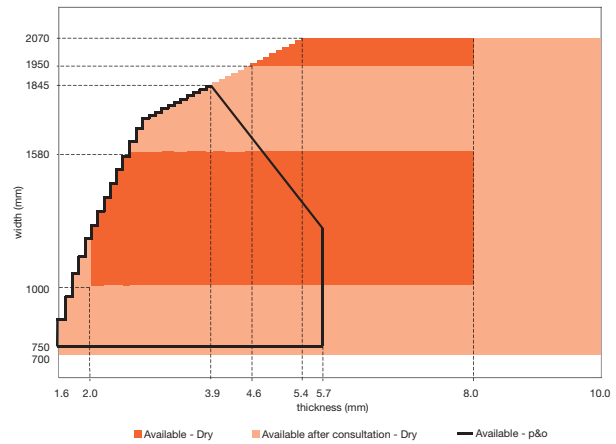
Chemical Composition

Ympress® S550
(% by weight)

	C	Mn	Si	P	S*	Altot	Nb	V	Ti	Mo
Guaranteed	≤ 0.10	≤ 1.65	≤ 0.03	≤ 0.020	≤ 0.008	≥ 0.015	≤ 0.09	-	≤ 0.06	-
EN 10149-2	≤ 0.12	≤ 1.80	≤ 0.50	≤ 0.025	≤ 0.015	≥ 0.015	≤ 0.09	≤ 0.20	≤ 0.15	-
Typical CEV	0.32									

* Sulphur 0.005% max possible on request.

Dimensional Availability



Weldability

All Ympress products are readily weldable. If you have any questions, please do not hesitate to contact your technical support engineer.

Test certificate

A 2.2 certificate is issued as standard. Other types available on request.

Gauge Tolerance

All Ympress products comply for 98.5% of the coil length to 1/2 EN 10051.