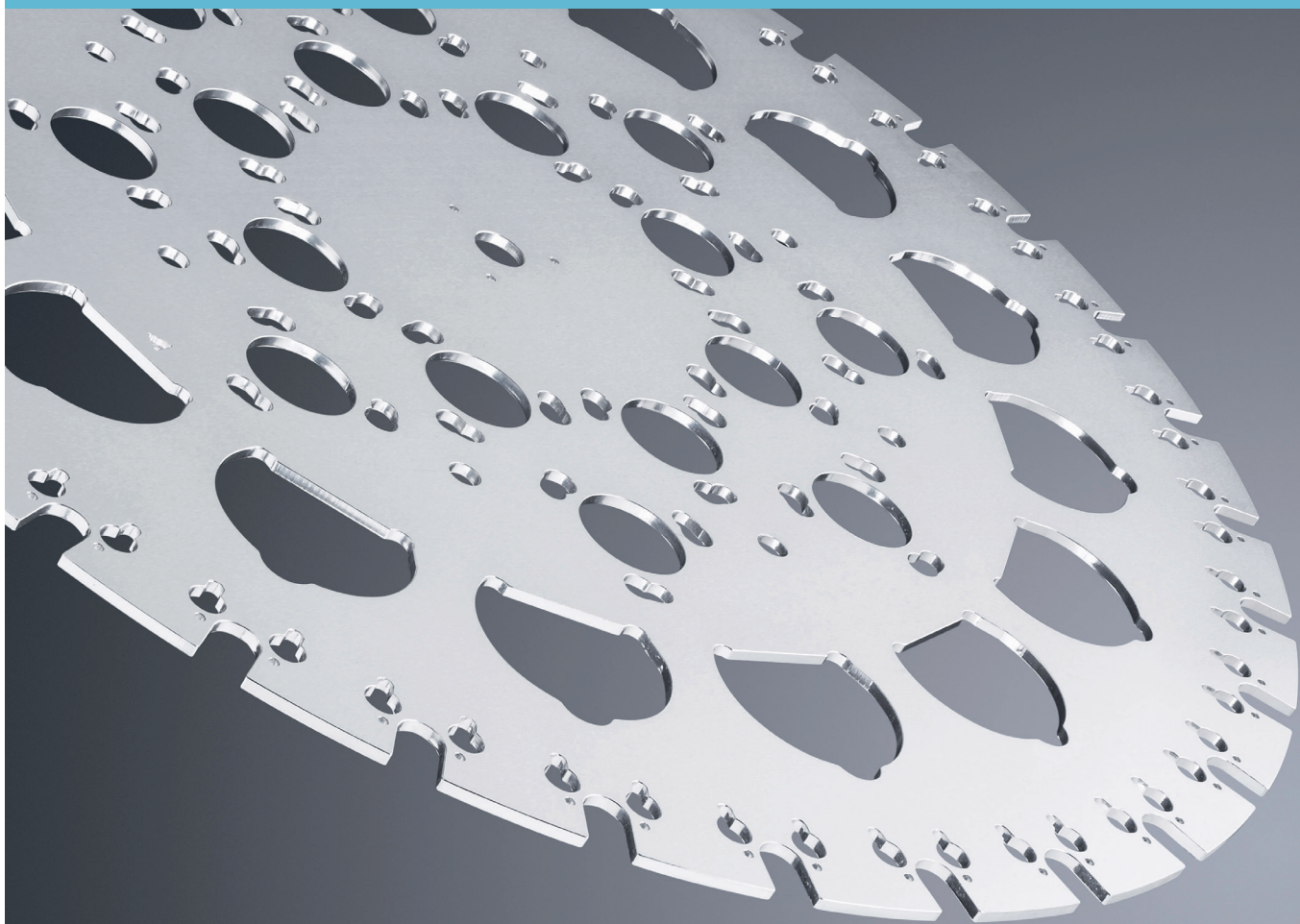


SSAB Laser®

# OPTIMIZED FOR YOU AND LASER CUTTING

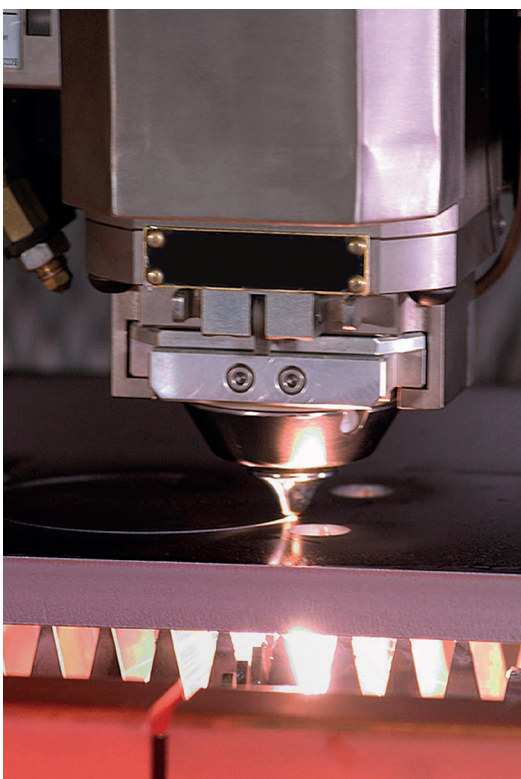


SSAB

If other steel doesn't behave to perfection, try SSAB Laser®. It has guaranteed flatness both before and after cutting.



# SSAB LASER® THE ULTIMATE CHOICE FOR FAST AND PRECISE LASER CUTTING



## SSAB Laser® – optimized for you

- ▶ Superior steel cleanliness
- ▶ Optimized and consistent chemistry
- ▶ Narrow and consistent dimensional tolerances
- ▶ Properties always exceeding EN standards
- ▶ Enhanced impact toughness at low temperatures
- ▶ Optimized surface quality for laser cutting
- ▶ Tight nesting with shared cutting lines
- ▶ High quality cut edges even at high cutting speeds
- ▶ Flatness deviation of cut parts  $\leq 3.0$  mm/m
- ▶ Predictable and repetitive performance in cold forming
- ▶ Same bending guarantees for all directions
- ▶ Inner bending radius  $0.0 \times$  thickness for MC Plus grades



SSAB Laser® is an advanced structural and high strength cold forming steel for laser cutting. It will improve general productivity, yield and end product quality. It comes with guaranteed flatness, both before and after laser cutting.

### Excellent performance

The flatness and cold forming properties of SSAB Laser® set a new standard for performance in automated processes.

Total process control during its production results in a dead flat material. It fulfills the most challenging requirements for fast and trouble-free cutting, providing shorter production time, less need for reworking and higher precision for the cut components.

SSAB Laser® can increase yield by as much as 5-10%, delivering direct cost savings in your production.

SSAB Laser® is the only steel in the world with a guaranteed maximum flatness deviation of 3 mm/m after laser cutting as default.

With the right parameters, SSAB Laser® can help you achieve significantly higher cutting speeds whilst the cut edge quality remains excellent, even up to a plate thickness of 30 mm.



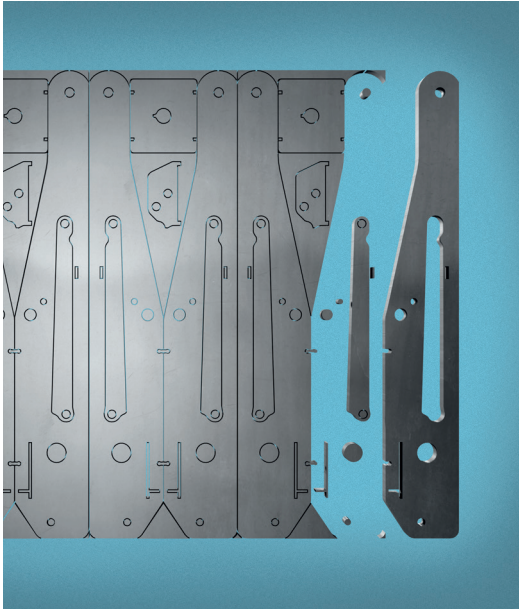
Hot rolled plate



Hot rolled sheet



Cold rolled sheet



# MAXIMIZING YOUR OUTPUT

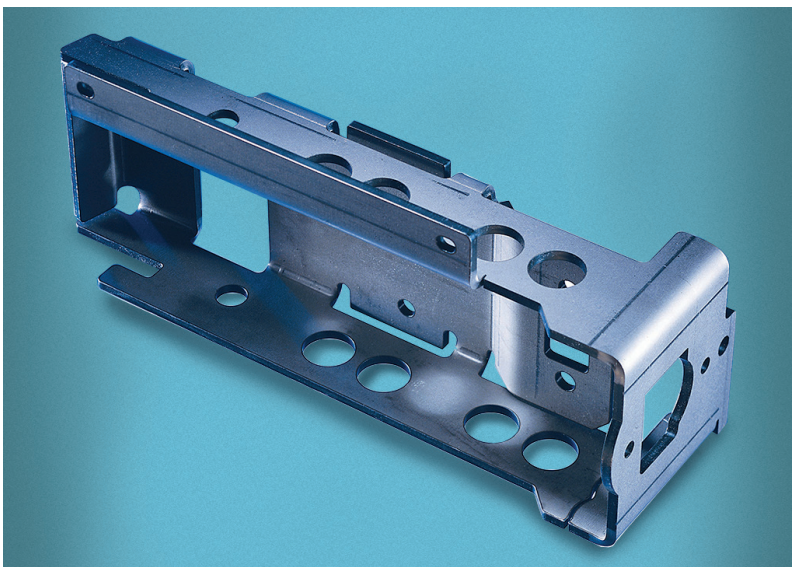
Surface quality has great influence on cutting speed and cut edge quality. SSAB Laser<sup>®</sup>, in all its product forms and delivery conditions, always offers the optimal surface for high quality laser cutting. Cutting lines can be shared, and small diameter holes and narrow slots can be cut with high precision.



The SSAB Laser<sup>®</sup> Plus grades deliver even higher performance. The Plus in the name stands for increased impact toughness and improved bendability.

Increased impact toughness minimizes the risk for cracks during production and in the final product.

SSAB Laser<sup>®</sup> Plus also has a guaranteed bending radius of 0.0-1.0 times the thickness, depending on the grade and product form. The guaranteed minimum bending radius is the same for all directions, allowing more flexible nesting.



A tight bending radius gives designers more freedom to create sophisticated products that require less processing. Forming instead of welding is an effective way to reduce lead times and cut production costs.



# DIRECT ACCESS TO EXPERTISE AND TECHNICAL SUPPORT

When you purchase SSAB Laser<sup>®</sup>, you gain access to SSAB's extensive support resources. You can always contact SSAB via phone or email to ask about everything from design solutions to material choice, workshop recommendations and technical support.



We stand ready to offer optimized products and services that add the kind of value to your business that really matters. Our dedicated Tech Support people provide a strong local presence worldwide. They are happy to be your partner in long-term projects as well as visit your site at short notice for technical assistance.

## **SSAB at your service**

With SSAB, you're just a phone call or email away from great service. Contact us if you would like to attend a technical seminar, or need a trial delivery to test the performance of SSAB Laser<sup>®</sup> in your production.



# DELIVERED AS YOU LIKE IT

SSAB Laser® comes in a wide range of structural and high strength cold forming steel grades. It is available as hot rolled plate, hot rolled sheet and cold rolled sheet. Hot rolled sheet is available in as rolled or pickled condition.



## Many ways to get your steel

Whatever your production and logistic preferences, there's a convenient way to obtain SSAB Laser®. It can be sourced from our mills, local stocks or through the SSAB Laser® distribution network.

## Logistics services

Your local SSAB contact will answer any questions about ordering and shipping, delivery times, marking and packing.

## SSAB LASER® - GUARANTEED PROPERTIES FOR OPTIMIZED RESULTS

	Yield strength	Tensile strength		Elongation		Impact energy		Inner bending radius 90° transverse and longitudinal		Dimensions				CE mark
	Rm [MPa]	Rm [MPa]		A <sub>80</sub> [%] t < 3 mm	A <sub>5</sub> [%] t ≥ 3 mm	Temp. [°C]	Charpy V [J]	t ≤ 6 [mm]	t > 6 [mm]	Thickness (pickled) [mm]		Width [mm]		
	min	min	max	min	min		min	x t	x t	min	max	min <sup>1</sup>	max <sup>2</sup>	
<b>Hot rolled plate</b>														
SSAB Laser® 250C	240	360	460	-	29	-20	40	1.0	1.0	6.0	30.0	1000	3300	yes
SSAB Laser® 275C	275	410	560	-	21	-20	40	-	1.0	8.0	30.0	1000	3300	yes
SSAB Laser® 355C	355	490	630	-	20	-20	40	-	1.5	8.0	30.0	1000	3300	yes
SSAB Laser® 355ML Plus	355	470	630	-	22	-50	40	-	1.0	8.0	30.0	1000	3300	yes
SSAB Laser® 420ML Plus	420	520	680	-	19	-50	40	-	1.0	10.0	25.0	1000	3300	yes
SSAB Laser® 460ML Plus	460	540	720	-	17	-50	40	-	1.0	10.0	25.0	1000	3300	yes
<b>Hot rolled sheet</b>														
SSAB Laser® 250C	240	360	460	23	30	-20	40	0.5	0.7	2.0	15.0 (12.0)	1000	1860	yes
SSAB Laser® 275C	275	410 <sup>3</sup>	560 <sup>4</sup>	-	21	-20	40	1.0	1.0	2.0	15.0 (12.0)	1000	1860	yes
SSAB Laser® 355C	355	490	610	-	20	-20	40	1.5	1.5	2.0	15.0 (12.0)	1000	1860	yes
SSAB Laser® 355MC Plus	355	430	550	19	23	-60	40	0.0	0.0	2.0	12.0 (12.0)	1000	1860	no
SSAB Laser® 420MC Plus	420	490	620	16	21	-60	40	0.0	0.0	2.0	12.0 (12.0)	1000	1860	no
SSAB Laser® 460MC Plus	460	520	670	14	19	-60	40	0.0	0.0	2.0	12.0 (12.0)	1000	1800	no
<b>Cold rolled sheet</b>														
SSAB Laser® DC03	110-240	270	370	34				0.0	-	0.4	3.0	735	1547	no

<sup>1</sup> Width below 1000 mm upon request

<sup>2</sup> Maximum width depending on thickness

<sup>3</sup> Thickness < 3.0 mm 430 MPa

<sup>4</sup> Thickness < 3.0 mm 580 MPa

# OPTIMIZE YOUR BUSINESS CONTACT SSAB

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 [techsupport@ssab.com](mailto:techsupport@ssab.com)



SSAB is a Nordic and US-based steel company. SSAB offers value added products and services developed in close cooperation with its customers to create a stronger, lighter and more sustainable world. SSAB has employees in over 50 countries. SSAB has production facilities in Sweden, Finland and the US. SSAB is listed on the Nasdaq OMX Nordic Exchange in Stockholm and has a secondary listing on the Nasdaq OMX in Helsinki.

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