

SSAB Form

**OPTIMIZED
FOR YOU
AND COLD
FORMING**



SSAB

If you can't allow dimensional variations in your high-speed, high-volume production, SSAB Form has the consistent tolerances you are looking for.



SSAB FORM DESIGNED FOR MAXIMUM PRODUCTIVITY



SSAB Form optimized for you

- ▶ Clean steel
- ▶ Excellent cold forming properties
- ▶ Consistent thickness
- ▶ Versatile tailoring possibilities
- ▶ Metal-coated grades
- ▶ Zinc, galfan and galvanized coatings
- ▶ High availability from mill or stock
- ▶ Stable quality of end products
- ▶ More satisfied customers



SSAB Form is designed to give maximum productivity in stamping, stretching, deep drawing, roll forming, bending, metal spinning and other cold forming procedures, particularly in production that requires exact and consistent properties.

Predictable performance, every time

Since the steel is so clean and has a consistent chemical composition, it performs equally well in all standard production methods. The consistency together with narrow dimensional tolerances will give you predictable performance in the workshop every time.

Whether you are forming, bending, machining or welding, SSAB Form provides a more cost-effective

production, higher yield, and an end-product quality that meets or exceeds your customers' high expectations.

Typical applications for SSAB Form are pulleys, consoles, drawn cylinders, ball bearing cages, wheel rims, cabinets, tubular structures, special hoods and decorative shutters with special shapes.



Hot rolled strip



Cold rolled strip



Metal-coated



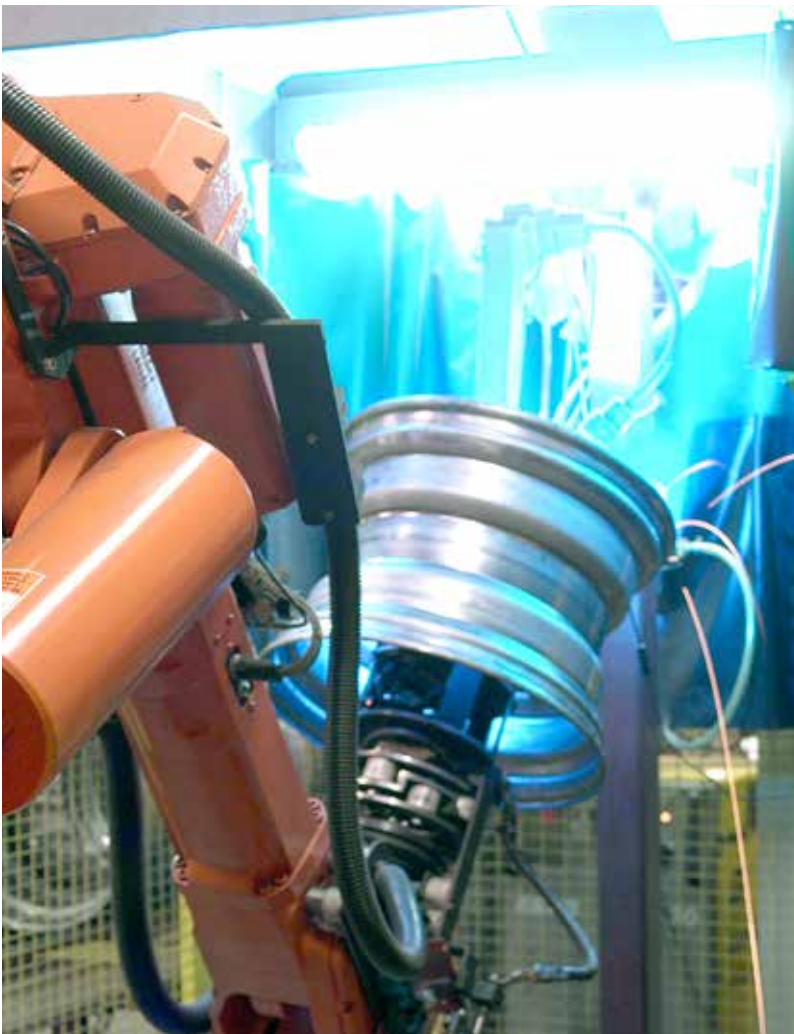
Tubes

For SSAB Form grades, see last spread in the brochure and ssab.com



A WIDE SELECTION OF STRIP AND TUBES

SSAB Form has the versatility you are looking for. Whenever a forming operation is part of your production, you can find an SSAB Form grade, shape and delivery condition optimized to suit your needs.



SSAB Form BH is a cold-rolled phosphorous alloy steel specially suited for deep drawing and complex pressing. When the product is formed it will reach its final strength after 20 minutes in approximately 170°C.

SSAB Form metal-coated strip products are developed for demanding customers who require excellent cold forming properties combined with galvanic corrosion protection. These grades have better guarantees than standard for elongation. Galfan and galvanized coatings offer enhanced corrosion protection for both non-painted and painted applications, respectively.

SSAB Form tubes come with a unique combination of strength, material properties, formability, narrow tolerances and surface quality. Outstanding elongation properties help you to reduce manufacturing costs in the tube forming process.



DIRECT ACCESS TO EXPERTISE AND TECHNICAL SUPPORT

When you purchase SSAB Form, you gain access to SSAB's comprehensive 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.



Our dedicated Tech Support people provide a high local presence worldwide. They are happy to be your partner in long-term development projects, as well as visit your site at short notice to solve urgent problems.

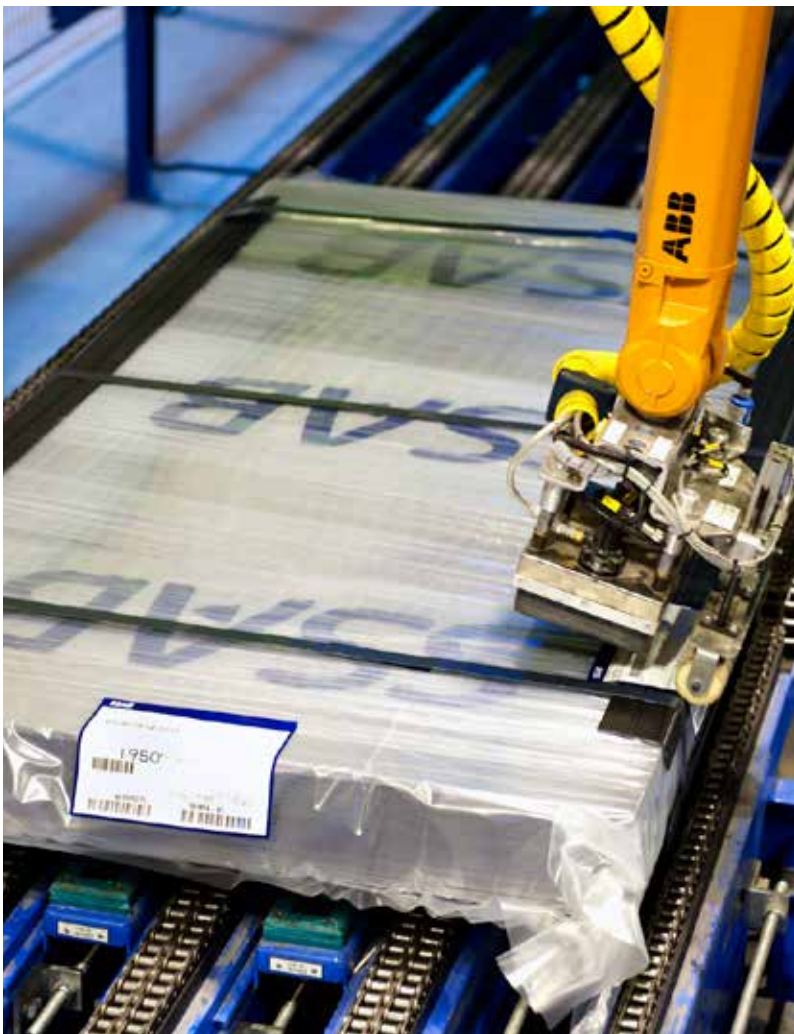
SSAB at your service

You are just a phone call or email away from great service with SSAB. We stand ready to provide optimized products and services that add value to your business and improve your customers' satisfaction. Contact us if you would like to attend a technical seminar, or need a trial delivery to test the performance of SSAB Form in your production.



DELIVERED AS YOU LIKE IT

SSAB Form comes in a wide range of grades, making it easier for you to optimize your production and the performance of the end product. SSAB Form is delivered as hot rolled strip, cold rolled strip, metal-coated grades, and tubes. Delivery condition can be with or without anti-corrosion surface protection.



SSAB Form metal-coated grades for corrosion resistance are available with zinc, galfan, and galvanealed coatings. Zinc coating by hot-dip galvanizing up to 42 μm on both sides can give a service life of up to 80 years. Galfan grades give excellent corrosion resistance, weldability and formability with a thinner 7-23 μm zinc-aluminum coating. Galvanealed grades have a 6-10 μm zinc-iron alloy coating ideal for spot welding and high-end painting applications.

Many grades to choose from

You can order a wide range of plates, tubes and sections of SSAB Form from our stock network or straight from mill. Smaller volumes are also available to suit your production and storage capacity.

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

SSAB FORM – GUARANTEED PROPERTIES FOR OPTIMIZED RESULTS

Hot rolled strip

	Yield strength (MPa)		Tensile strength (MPa)		Elongation		Bending radius. 90° bend T = Transversal			Dimensions			
					A ₈₀ (%) t < 3 mm	A ₅ (%) t ≥ 3 mm	t ≤ 3 mm	3 mm < t ≤ 3 mm	t > 6 mm	Thickness (mm)		Width (mm) Tubes OD/HxB (mm)	
	min	max	min	max	min	min				min	max	min ¹⁾	max ¹⁾
SSAB Form 200	max 300		-	400	33	37	0 x t	0 x t	0.4 x t	3.01	15	760	1600

Cold rolled strip

	Yield strength (MPa)		Tensile strength (MPa)		Elongation		Plastic Strain Ratio	Strain Hardening Exponent	Dimensions			
					A ₈₀ (%) t < 3 mm		r ₉₀ ³⁾	n ₉₀ ³⁾	Thickness (mm)		Width (mm) Tubes OD/HxB (mm)	
	min	max	min	max	min	min	min	min	min	max	min ¹⁾	max ¹⁾
SSAB Form 200	260		280	380	29		-	-	0.4	3	125	1500
SSAB Form 03	240		270	370	34		1.3 ⁴⁾	-	0.4	3	125	1500
SSAB Form 04	210		270	350	38		1.6 ⁴⁾	0.18	0.4	3	125	1500
SSAB Form 05	180		270	330	40		1.9 ⁴⁾	0.20	0.5	3	125	1500
SSAB Form 06	170		270	330	41		2.1 ⁴⁾	0.22	0.4	3	125	1500
SSAB Form 07	140		250	310	44		2.3	0.23	0.5	3	125	1500
SSAB Form 220BH	220-280		340	420	30				0.7	2	125	1527
SSAB Form 260BH	260-320		380	460	28				0.99	2	125	1527

Metal-coated

	Coating	Yield strength (MPa)		Tensile strength (MPa)		Elongation		Plastic Strain Ratio	Strain Hardening Exponent	Dimensions			
						A ₈₀ (%) t < 3 mm		r ₉₀ ³⁾	n ₉₀ ³⁾	Thickness (mm)		Width (mm) Tubes OD/HxB (mm)	
		min	max	min	max	min	min	min	min	min	max	min ¹⁾	max ¹⁾
SSAB Form 200	Z, ZA, ZF	200	400	300	450	24		-	-	0.45	3.00	1000	1520
SSAB Form 52	Z, ZA, ZF	140	300	270	420	28		-	-	0.50	3.00	1000	1520
SSAB Form 53	Z, ZA, ZF	140	260	270	380	32		1.3 ⁵⁾	0.15	0.50	3.00	1000	1520
SSAB Form 54	Z, ZA, ZF	120	220	260	350	37		1.6 ⁵⁾	0.19	0.50	3.00	1000	1520
SSAB Form 56	Z, ZA, ZF	120	180	260	350	40		2.0 ⁶⁾	0.21 ⁶⁾	0.50	2.50	1000	1520
SSAB Form TSP	Z	190 ²⁾		330 ²⁾		40 ²⁾		-	-	0.50	0.60	1000	1490

Tubes

	Yield strength (MPa)		Tensile strength (MPa)		Elongation			Dimensions			
					A ₈₀ (%) t < 3 mm			Thickness (mm)		Width (mm) Tubes OD/HxB (mm)	
	min	max	min	max	min	min	min	min	max	min ¹⁾	max ¹⁾
SSAB Form Tube 190	190		270		35			0.9	3	15/ 19x19/ 20x15	88,9/ 70x70/ 100x40
SSAB Form Tube 220	220		310		28			0.9	3	15/ 19x19/ 20x15	88,9/ 70x70/ 100x40
SSAB Form Tube 320	320		410		23			0.9	3	15/ 19x19/ 20x15	88,9/ 70x70/ 100x40
SSAB Form Tube 420	420		490		14			0.9	3	15/ 19x19/ 20x15	88,9/ 70x70/ 100x40

1) Depending on thickness

2) Typical values

3) The values of r₉₀ and n₉₀ only apply to products with a thickness equal to or greater than 0.5 mm

4) When the thickness is less than or equal to 0,7 mm and greater than 0,5 mm, the minimum value for elongation is reduced by 2 units. For a thickness less than or equal to 0,5 mm, the minimum value is reduced by 4 units

5) SSAB Form 53 and 54: decreased minimum r₉₀-values for product thickness 1.5mm < t < 2 mm (minus 0.2 units) and t ≥ 2 mm (minus 0.4 units) apply. In addition, in case of ZF coating the minimum r₉₀-value is reduced (minus 0.2 units)

6) SSAB Form 56: decreased minimum r₉₀-values for product thickness 1.5mm < t < 2 mm (minus 0.2 units) and t ≥ 2 mm (minus 0.4 units) apply

OPTIMIZE YOUR BUSINESS CONTACT SSAB

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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 Nasdaq Stockholm and has a secondary listing on Nasdaq Helsinki.

www.ssab.com

Join us also on social media: Facebook, Instagram, LinkedIn, Twitter and YouTube.

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