SSAB Domex®
OPTIMIZED FOR YOU AND STRUCTURES

SSAB
If other steels give you a hard time, try SSAB Domex®. It’s optimized to improve your production and end-product performance.

SSAB DOMEX®
DESIGNED TO MEET YOUR HIGHEST EXPECTATIONS

SSAB Domex® optimized for you
- Consistent product quality
- Excellent cold forming properties
- Narrower tolerances
- Improved workshop efficiency
- Wider welding process window
- More satisfied customers
- High availability
- Short delivery times
SSAB Domex® is a wide range of versatile structural steels that deliver excellent cold forming, machining and welding performance. SSAB Domex® grades undergo inspection at several points during production to ensure they comply with our rigorous quality requirements for mechanical properties and dimensions.

The problem-solver
Every day you work with SSAB Domex®, you will experience the benefits of our extensive quality control: high productivity, reliable performance, and consistent quality of your end products. SSAB Domex® is optimized to improve your production. With SSAB Domex®, you can reduce machine setup time. Yesterday’s settings will produce the same result today, and for days to come.

SSAB Domex® has a more tightly controlled chemical composition and more narrow tolerances for thickness, flatness and bending properties than specified by most common standards. This is what you get by default when ordering SSAB Domex®.

SSAB Domex® always delivers predictable performance in all kinds of mechanical and thermal processing. There’s no easier way to improve business than using a material you can rely on, every day of the week.

For SSAB Domex® grades, see last spread in the brochure and ssab.com
SSAB Domex® is made from extremely clean steel. The fine grain structure achieved by the carefully controlled production process creates world-class mechanical and cold-forming properties. This is unique for an all-round structural steel.

Whatever the thickness – ranging from 0.4 mm to 70 mm – SSAB Domex® is easy to work with. The steel’s high purity and fine grain structure make for outstanding repeatability, excellent cutting, bending, and welding characteristics in the workshop.

The impact toughness guarantee of SSAB Domex® is better than the required values in the European norm, making it the safer choice also in low temperatures.

**A wider window for welding**

Because SSAB Domex® is a pure steel grade, it also features excellent welding performance. All SSAB Domex® grades can be welded with conventional manual and automatic welding methods. You have a wide window for heat input and working temperature, allowing for high productivity and short lead times in the workshop.
SSAB Domex® Plus is part of a new generation of high-strength – low alloy steels (HSLA). The steel adds a new level of performance for stamping, punching, slitting and complicated die forming. SSAB Domex® Plus is particularly well suited to high-volume automated production lines helping you to keep the highest productivity.

**Practically burr-free**
Thanks to the steel’s fine microstructure the edges show practically no burrs or ridges in mechanical cutting and punching. The cut surface is very smooth and free from micro-cracks, also at very high cutting speeds.

**Bend and press without cracks**
SSAB Domex® Plus has superior local formability. High-stress bending and forming can be performed without cracks, improving yield and quality of the final product drastically.

**The tool-friendly steel**
SSAB Domex® Plus has high tolerance for worn tools. When punching tool edges start to become dull and tool clearances are growing, SSAB Domex® Plus keeps performing. Longer production runs and fewer tool changes naturally make the production more cost-effective.
SSAB Domex® Plus is part of the next generation of high strength, low alloy (HLSA) steels. It is a further developed version of the well-established SSAB Domex®, famous for its extremely consistent properties.

SSAB Domex® Plus features a finer microstructure including refined and evenly distributed perlite. This provides improved properties which help you to overcome technical challenges in stamping, punching and press forming. It has excellent forming properties, both locally and globally. Because we know it’s all in the details.

With SSAB Domex® Plus, you always know what you get, as the properties remain the same from batch to batch. A steel you can trust – every time. It helps you improve productivity, with less scrap, less rejections and lower costs.

To suit every need you might have, SSAB Domex® Plus is available as pickled coils, pickled slitted coils and cut-to-length.

**Domex® Plus offers**

- Improved shear cutting properties
- Improved edge ductility
- Higher productivity in shear cutting and press forming
- Outstanding impact toughness min 40J/-60°C
- Minimum yield strength 355–500 MPa

**Ideal for facing the challenges of serial production in:**

- Stamping
- Punching
- Die forming
- Fine blanking
- Bending

**Helps you to overcome following challenges:**

- edge cracking in forming
- micro cracks in forming or shearing
- other cut-edge problems
- limitation is of smallest bending radius
- need for reworking
**Improved shear cutting properties**

SSAB Domex® Plus provides improved shear cutting properties for various processes, including punching, blanking and even fine blanking. This helps you to improve the shear cut quality and reduce the need for re-working.

**Robust behavior**

Cutting clearance is one of the most important parameters in shear cutting but tends to vary in serial production, for instance because of tool wearing or unstable tooling conditions. Thanks to finer microstructure SSAB Domex® Plus behaves extremely robust under varying cutting clearance. This means more stable edge quality and manufacturing process.

Put simply: this material lets you use your tools longer, while keeping up the quality, even if your tools are worn down. This leads to more efficient production and lower tool maintenance costs.

**Improved edge ductility**

SSAB Domex® Plus features excellent edge ductility and local formability. This is needed when cut edges are exposed to high local tensions. Consequently it greatly outperforms the standard materials in hole-expansion tests, which makes it well suited for forming cases where standard material fails in local forming. This helps you to solve forming challenges and improve the yield and productivity of the most challenging press forming operations.

**Outstanding impact toughness**

Standard steel becomes brittle when it gets cold. But SSAB Domex® Plus stays tough even down to -60°C, letting you keep working hard, tough and safe even as the temperature drops.

**Makes the scrap bin light**

SSAB Domex® Plus lets you reduce scrap percentage and increase productivity in component manufacturing. Cut and form it in a way you want, SSAB Domex® Plus keeps your production running at highest performance.
When you purchase SSAB Domex®, 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 like to attend a technical seminar, or need a trial delivery to test the performance of SSAB Domex® in your production.
SSAB Domex® comes as hot rolled plate, hot or cold rolled strip, tubes and sections. It’s also available in different metal-coated grades for corrosion resistance with zinc, galfan and galvannealed 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. Galvannealed grades have a 6-10 μm zinc-iron alloy coating ideal for spot welding and high-end painting applications.

You can order SSAB Domex® uncoated and metal-coated grades from our stock network or straight from mill, even in smaller volumes 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 DOMEX® – GUARANTEED PROPERTIES FOR OPTIMIZED RESULTS

<table>
<thead>
<tr>
<th>Yield strength (MPa)</th>
<th>Tensile strength (MPa)</th>
<th>Elongation</th>
<th>Bending radius, 90° bend,</th>
<th>Dimensions</th>
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<td>T = Transversal, L = Longitudinal</td>
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<td>A5 (%) t &lt; 3 mm</td>
<td>A6 (%) t ≥ 3 mm</td>
<td>3 mm &lt; t ≤ 3 mm</td>
<td>t &gt; 6 mm</td>
<td>Thickness (mm)</td>
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<td>min</td>
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<td>max</td>
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<td>Hot rolled plate</td>
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**SSAB Domex® 355ML**
8.00–16.00 mm: 355 470 630 - 22
16.01–40.00 mm: 345 470 630 - 22
40.01–63.00 mm: 335 450 610 - 22

**SSAB Domex® 420ML**
8.00–16.00 mm: 420 520 680 - 19
16.01–40.00 mm: 440 540 720 - 17
40.01–63.00 mm: 490 500 660 - 19

**SSAB Domex® 460ML**
8.00–16.00 mm: 460 540 720 - 17
16.01–40.00 mm: 440 540 720 - 17
40.01–63.00 mm: 430 530 710 - 17

**SSAB Domex® 500ML**
8.00–16.00 mm: 500 570 760 - 16
16.01–40.00 mm: 480 570 760 - 16
40.01–63.00 mm: 470 560 760 - 16

**Hot rolled strip**

**SSAB Domex® 240YDP**
240 360 460 19 28 0.2 x t 0.3 x t 0.4 x t 1.80 20 760 1850

**SSAB Domex® 315MC**
315 390 510 20 24 0.2 x t 0.3 x t 0.4 x t 1.80 16 760 1850

**Cold rolled strip**

**SSAB Domex® 220LA**
220-290 330 400 30 0.4 x t 0.3 x t 0.4 x t 1.80 20 760 1527

**SSAB Domex® 290LA**
260-330 350 430 26 0.4 x t 0.3 x t 0.4 x t 1.80 20 760 1527

**Metal-coated**

**SSAB Domex® 220GD**
220 340 400 31 0.4 x t 0.3 x t 0.4 x t 1.80 2.1 125 1527

**Tubes and sections**

**SSAB Domex® tube Double Grade 355/420**
355/420 470/500 63/660 20 2 12.5 26.9 / 25x25 32.3 / 300x300

**SSAB Domex® tube 460MH**
460 530 720 17 2 12.5 26.9 / 25x25 32.3 / 300x300

**SSAB Domex® tube 500MH**
500 580 760 15 2 12.5 26.9 / 25x25 32.3 / 300x300

**SSAB Domex® tube 550MH**
550 600 760 14 2 12.5 26.9 / 25x25 32.3 / 300x300

* Depending on thickness
<table>
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<tr>
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<tbody>
<tr>
<td><strong>Yield strength (MPa)</strong></td>
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<tr>
<td>A_{0.2} (%)</td>
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<tr>
<td>1 &lt; 3 mm</td>
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<tr>
<td>Hot rolled strip</td>
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<tr>
<td>SSAB Domex® 355 MC Plus</td>
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<td>SSAB Domex® 420 MC Plus</td>
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<td>SSAB Domex® 460 MC Plus</td>
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<td>SSAB Domex® 500MC Plus</td>
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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 the Nasdaq OMX Nordic Exchange in Stockholm and has a secondary listing on the Nasdaq OMX in Helsinki.

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