RSP Technology develops, produces and sells aluminium super alloys with high end properties. By using its own Meltspinning process, ultra fast cooling rates can be reached, converting more than 1 million degrees per second. As a result very fine nanostructured alloys with new functionalities are being developed and produced.

RSP High Strength Alloys offer highest mechanical properties possible in aluminium. They form the gap between conventional aluminium and titanium.

RSA-7034 is a well balanced alloy combining high strength and fatigue performance with good ductility and fair corrosion behaviour. RSA-501 (Scalmalloy) offers a unique property compromise combining high strength and high ductility and high corrosion resistance with good weldability.

Machinability can be qualified as easy.
Application areas include machine building, racing, sport equipment, fasteners, aerospace and orthopedics.

RSP alloys can be produced in the following standard dimensions:

- Extruded bars: diameters 22, 45, 60 mm
- Custom made (near net) forgings
- Any other size can be custom made in round, rectangular or any other shape.
- In co-operation with shareholder Hittech Group, RSP is able to make parts and assemblies according to customers specification.

### Specific Yield Strength RSP alloys vs conventional 7075 and titanium

<table>
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<tbody>
<tr>
<td>RSA-501</td>
<td>T6</td>
<td>Al Mg5 Mn1 Sc0,8 Zr0,4</td>
<td>2,65</td>
<td>23</td>
<td>70</td>
<td>26</td>
<td>140</td>
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<tr>
<td>RSA-7034</td>
<td>T6</td>
<td>Al Zn11 Cu1 Mg2,3</td>
<td>2,89</td>
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<td>71</td>
<td>25</td>
<td>130</td>
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<td>AA7075</td>
<td>T6</td>
<td>Al Zn5,6 Cu1,6 Mg2,5</td>
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<td>23,5</td>
<td>72</td>
<td>26</td>
<td>130</td>
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<tr>
<td>Ti-6242</td>
<td>A</td>
<td>Ti Al6 Sn2 Zr4 Mo2</td>
<td>4,54</td>
<td>8,0</td>
<td>114</td>
<td>25</td>
<td>7</td>
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</tbody>
</table>

### Mechanical properties

- **RSA-7034**
  - UTS [Mpa]: 575
  - YS [Mpa]: 525
  - Elongation [%]: 12
  - Hardness [HB]: 160
  - Fatigue [Mpa]: 400
  - Fracture toughness: 35
  - Corrosion resistance: ++++
  - Weldability: -
  - Specific Yield Strength [E/p]: 198,1

- **RSA-501**
  - UTS [Mpa]: 750
  - YS [Mpa]: 730
  - Elongation [%]: 8
  - Hardness [HB]: 215
  - Fatigue [Mpa]: 425
  - Fracture toughness: 25
  - Corrosion resistance: -
  - Weldability: -
  - Specific Yield Strength [E/p]: 252,6

- **AA7075**
  - UTS [Mpa]: 575
  - YS [Mpa]: 505
  - Elongation [%]: 8
  - Hardness [HB]: 150
  - Fatigue [Mpa]: 225
  - Fracture toughness: 25
  - Corrosion resistance: -
  - Weldability: -
  - Specific Yield Strength [E/p]: 180,4

- **Ti-6242**
  - UTS [Mpa]: 940
  - YS [Mpa]: 870
  - Elongation [%]: 15
  - Hardness [HB]: 304
  - Fatigue [Mpa]: 480
  - Fracture toughness: -
  - Corrosion resistance: -
  - Weldability: -
  - Specific Yield Strength [E/p]: 191,6

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