



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.

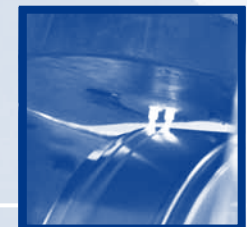
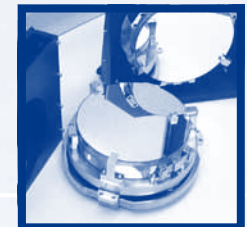
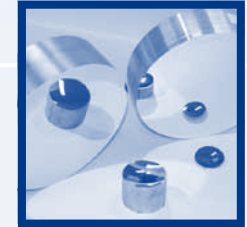
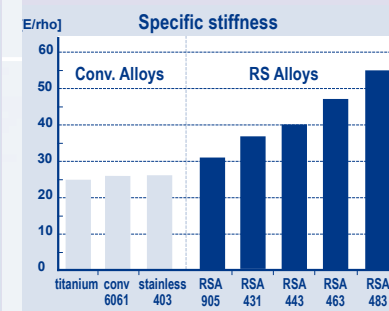
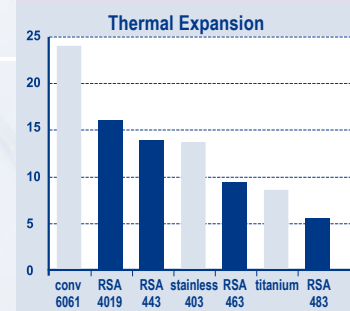
Due to the alloying freedom enabled by the meltspinning technology, RSP is able to make low weight alloys with low thermal expansion and high stiffness.

Specifications are far beyond thinkable values of conventional aluminium alloys. RSP has developed an alloy line with varying specifications. Applications include high precision machines, measuring equipment, mirrors, optical housings, electronic packaging and heat sinks.

RSP alloys can be produced in the following standard dimensions:

- Bars: diameters 18, 22, 26, 35, 45, 60, 80, 110 mm
- Billets: diameters 200, 275, 500, 1.000 mm
- Any other size can be custom made in round, rectangular or any other shape up to 1.000 mm
- In co-operation with shareholder Hittech Group, RSP is able to make parts and assemblies according to customers specification.

Alloy	Condition	Typical composition	Physical properties					Mechanical properties			
			Density ρ [gr/cm ³]	Thermal Expansion α [10 ⁻⁶ /K]	Stiffness E-mod [Gpa]	Specific Stiffness [Gpa/(g/cc)]	Thermal Conductivity k [W/m.K]	Ultimate Tensile Strength UTS [Mpa]	Yield Strength YS [Mpa]	Elongation e [%]	Hardness [HB]
RSA-905	AE	Al Fe2,5 Ni5 Cu2,5 Mn1 Mo0,8 Zr0,8	2,95	19,0	90	31	115	600	475	7	180
RSA-4019	AE	Al Si20 Fe5 Ni2 (AA4019)	2,75	17,3	90	33	120	400	300	2,5	140
RSA-461	T6	Al Si21 Cu4 Mg1,2 Fe2,5 Ni1,5	2,76	17,1	90	33	120	550	455	1	210
RSA-462	T6	Al Si24 Cu1,8 Mg1,2 Fe0,4 Ni0,4	2,63	16,7	90	34	130	470	420	2,5	185
RSA-431	T6	Al Si30 Cu1,5 Mg1,2 Fe0,4 Ni0,4	2,60	15,5	95	36	120	435	375	1	190
RSA-441	T6	Al Si40 Mg2	2,51	13,7	100	40	130	400	260	1	170
RSA-443	AE	Al Si40	2,54	13,6	102	40	135	245	155	1,5	105
RSA-453	AH	Al Si50	2,50	11,6	110	44	130	235	135	<1	140
RSA-463	AH	Al Si60	2,47	9,7	117	47	125	230	130	<1	180
RSA-473*	AH	Al Si70	2,43	7,8	125	51	120	220	125	<1	200
RSA-483*	AH	Al Si80	2,40	6,0	132	55	115	200	120	<1	220
AA-6061 T6	Conv.	Al Si0,6 Cu0,3 Mg1 (AA6061)	2,70	24,0	70	25	160	310	275	9	90
Stainless 403	Conv.	Fe M012,3 Mn0,5	7,80	13,0	200	26	24	515	275	35	150
Ti-6242	Conv.	Ti Al6 Zr4 Mo2	4,54	8,0	114	25	-	940	860	15	304



* Marked alloys are under development