

ALUMINUM IS OUR PASSION

The Neuman Aluminum Group is an international network of companies that turn aluminum and aluminum alloys into high-quality slugs and direct- and impact-extruded parts. Every Neuman client benefits from our close contact and intimate knowledge of their needs, metallurgical expertise and wide range of synergies in the field of manufacturing – for example with regard to further processing of slugs to impact-extruded parts.



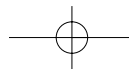
Further information about the manufacture of impact-extruded parts and all the other things we do in addition to the entire **NEUMAN ALUMINUM GROUP** is available at t: +43-(0)2762-500, ext. 950; f: +43-(0)2762-500, ext. 99; e: fpw.office@neuman.at; www.neumanalu.com

IMPACT EXTRUSION IS OUR BUSINESS



Perfect solutions – worldwide.

NEUMAN
ALUMINIUM



EVERYONE TRUSTS NEUMAN IMPACT-EXTRUDED PARTS. YOU SHOULD TOO!

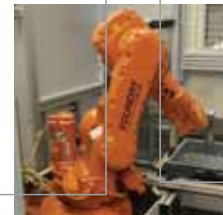


FROM ALUMINUM SLUGS TO IMPACT-EXTRUDED PARTS

The raw material used in the impact-extrusion process is the slug, which has a uniform volume determined by the required material. Slugs are soft-annealed when delivered.

Knuckle-joint and hydraulic presses with ram forces of between 20 und 1.400 tons and speeds of 30 and 150 parts per minute are used to produce parts with lengths of up to 420 mm and outer diameters of up to 170 mm.

Heat treatment of suitable aluminum alloys can double their original strength and hardness (up to 550 N/mm²).



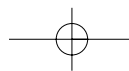
Neuman impact-extrusion plant, Markt, Austria

The Neuman Aluminum Group is one of the world's largest manufacturers of impact-extruded parts. A great deal of expertise in the field of metallurgy, the ability to produce creative solutions, always meeting deadlines, and offering a wide range of services have made us what we are. Every day we prove our commitment to quality through professionalism and precision products. Neuman impact-extruded parts are produced at a number of locations on several continents for a wide range of business sectors around the world.

After the impact-extruded parts are processed on modern CNC lathes, milling machines and machining centers, they satisfy the most exacting requirements imaginable with regard to precision and surface quality.

The parts are cleaned and degreased in an aqueous or organic washing machines. Test pens verify the surface tension for the purpose of checking the surface's cleanliness.

Quality control and numerous assembly processes are automated. The most modern technical aids available are used for packaging and preparing everything for shipping.



WE PRODUCE THE IMPACT-EXTRUDED PARTS YOU NEED



Checking on the line

OUR EXTENSIVE RANGE OF SERVICES

Our extensive range of services Neuman offers simulation, construction and assembly of tools for forming pure aluminum and certain aluminum alloys according to defined shapes and dimensions (including oval or angular surfaces) in addition to machining and finishing of the extruded product for the client's specific needs.

JUST THE RIGHT IMPACT-EXTRUSION PROCESS

With forward extrusion the material flow and ram move in the same direction. Components such as pipe sections with flanges or housings and flares at the open end can be manufactured with this process.

With reverse extrusion the ram and material move in opposite directions. This method can be used to produce simple aluminum cups.

These two processes are normally combined for manufacturing most technical impact-extruded parts.



Pressurized

Decoy Cases

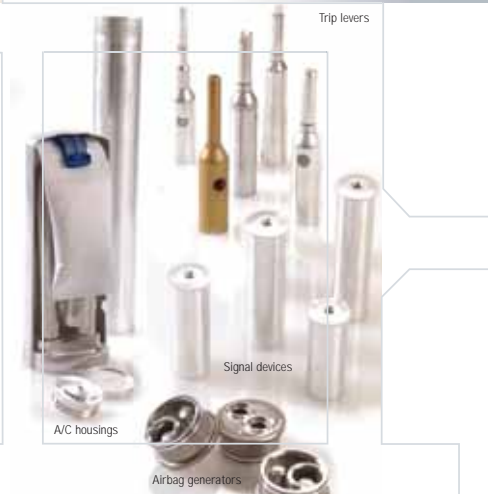
Parts for the electrical industry

MATERIALS

Designation accord. to EN 573-3 Alloy	Symbol	Temper	Mechanical properties		
			Rm (MPa)	Rp0,2 (MPa)	A5 (%)
EN AW-1050A	EN AW-AI99,5	soft-annealed impact-extruded	70 130	45 110	40 6
EN AW-1070A	EN AW-AI99,7	soft-annealed impact-extruded	60 120	18 100	40 4
EN AW-1080A	EN AW-AI99,8A	soft-annealed impact-extruded	60 120	18 100	40 4
EN AW-1200	EN AW-AI99,0	soft-annealed impact-extruded	70 130	45 110	40 6
EN AW-2017A	EN AW-AICu4MgSi	solution heat-treated and naturally aged (T4)	400	350	10
EN AW-3103	EN AW-AIMn1	soft-annealed impact-extruded	90 170	35 145	24 4
EN AW-4032	EN AW-AISI12,5MgCuNi	impact-extruded solution heat-treated and artificially aged (T6)	- 380	- 315	- 9
EN AW-5005A	EN AW-AIMg1	soft-annealed impact-extruded	190 165	80 145	20 4
EN AW-5754	EN AW-AIMg3	soft-annealed impact-extruded	190 265	80 215	20 4
EN AW-6060	EN AW-AIMgSi	impact-extruded solution heat-treated and artificially aged (T6)	165 245	145 195	4 10
EN AW-6061	EN AW-AIMg1SiCu	impact-extruded solution heat-treated and artificially aged (T6)	- -	- -	- -
EN AW-6082	EN AW-AISI1MgMn	impact-extruded solution heat-treated and artificially aged (T6)	190 310	170 260	4 10
EN AW-7020	EN AW-AIZn4,5Mg1	solution heat-treated and artificially aged	350	290	10
EN AW-7022	EN AW-AIZn5Mg3Cu	solution heat-treated and artificially aged (T6)	550	450	7

THE ADVANTAGES OF ALUMINUM PARTS

- Light weight
- Strength similar to steel
- High precision of dimensions and high surface quality
- Excellent resistance to corrosion
- Homogenous structure and uniform grain
- Recyclable
- Cost-efficiency thanks to low tool costs, fast surface speed, high degree of formability in a single work step with little loss of material

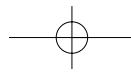


Trip levers

Signal devices

A/C housings

Airbag generators



YOU CAN DEPEND ON OUR IMPACT-EXTRUDED PARTS

Neuman extruded parts are used around the world by the automotive industry, the electrical and electronics industry, for pyrotechnics and packaging. They all have three things in common: absolutely precise dimensions, a long service life and 100% reliability. Neuman is able to satisfy these requirements – day after day and year after year.



AUTOMOTIVE INDUSTRY

Components for airbags, seat-belt tensioners, brake and steering systems, parts for shock absorbers, bumpers, chassis, switching systems, fuel supplies, air-conditioning systems, etc.

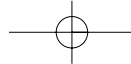
ELECTRICAL ENGINEERING, ELECTRONICS AND PYROTECHNICS

Housings for capacitors, relays and smoke charges/pots, signal devices, and ignition sleeves, heat sinks and safety components for home appliances and power tools for use by amateurs



PACKAGING INDUSTRY

Designer boxes and containers, perfume containers, etc.



QUALITY AND ON-TIME DELIVERY – THAT'S WHAT MAKES THE DIFFERENCE!



WE'RE THE TECHNOLOGICAL LEADER

Expertise in the field of metallurgy, high-tech equipment and in-house toolmaking enable us to provide the greatest possible flexibility and safety.

WE MAKE EVERYTHING, FROM A TO Z

As the world's only impact-extrusion manufacturer we produce everything in-house, up to and including the finished part, all the way from molten material. That guarantees the highest possible quality from the very beginning.

WE MAKE USE OF SYNERGIES

Experience is gathered at each of our locations around the world, shared within the company regularly, and then put to use in the development of all new impact-extruded parts.

WE'RE ALSO DEVELOPMENT EXPERTS

We realize our clients' ideas and solve problems as part of development partnerships, sometimes in ways you might never have expected from aluminum safety components.

