COMMENTRAY
【1】The main direction of the development of primary aluminum production technology - low emissions and low energy consumption
【2】The only way for the development of China’s aluminum processing industry
【3】The stars twinkle for new aluminum alloys: the article of China
【4】Development status and suggestions of shanghai nonferrous metal industry in 2018
【5】Reform and development of Henan nonferrous metal industry
【6】How China’s role in reshaping the US aluminium rolling sector could be the driver of major domestic investment（England）
【7】Reed Exhibitions accompanies Chinese aluminium enterprises to build a green future
【8】The stars twinkle for new aluminum alloy: the article of Russia and others
【9】Exploring the high-quality development of the aluminum wheel industry in the new era
【10】The stars twinkle for new aluminum alloy: the article of Japan
【11】10 major technological breakthroughs in the development of the aluminum industry
【12】Development of high performance aluminum alloy analysis technology
【13】Review on the ELYSIS carbon-free smelting technology for aluminum production
【14】The existing problems and solutions of electrolytic aluminium industry
【15】Upgrading of the aluminum processing industry based on the innovation-driven and low-cost strategy
【16】Direction and measures of energy saving in aluminum processing industry
【17】The core thinking mode of real economy breakthrough

Alloys
【18】Effects of pre-stretching and aging treatment on the microstructure and mechanical properties of 2195 Al-Li alloy hot-extruded from spray-formed billets
【19】Hot deformation behavior of spray-formed ultra-high strength aluminum alloy
【20】The production of Ca-Al alloy and it's future market
A brief discussion on the continuous rolling compound of the structural bimetallic tubes and bars
Production technology of aluminum-plastic composite pipe
Development of aluminium foam fabrication technology
Preparation and application of aluminum foam and sandwich panels
Fracture behavior of aluminum alloy based on finite element method and meshless method
Research status and application of ER5356 aluminum alloy welding wire
Effects of aging treatment on the microstructure and mechanical property of the 7050 aluminum alloy
Fatigue crack initiation site density and strength distribution in aluminum alloys
Effect of transition elements on the mechanical properties and quench sensitivity of medium- and high-strength aluminum alloys
Investigation of the effect of electromagnetic field on the electrical resistivity and thermoelectric power of Al-Fe alloys
Effect of trace Cu on microstructure and properties of Al-Si-Mg-Cu alloy
Effect of zinc on brazing properties of 3003 aluminum alloy
Effect of Mn and Cr on the sequence and morphology of Fe-rich phases in secondary A356 aluminum alloy
In situ electrical resistivity measurement and its application in the study on the aging process for aluminum alloys
The effect of Cu content on phase transition and metallurgical reaction of Fe-Al laser molten pool
Effect of Cu content on precipitation behavior of Al-Zn-Mg-Cu aluminum alloy
Effect of interaction between Mg-Si phase and Fe-rich phase on microstructure and properties of Al-10Si-Mg alloy
Effect of Mg content on the microstructure and mechanical properties of cast Al-Si-Zn alloy
Low cycle fatigue behaviour and microstructure of Al-Si-Mg casting alloys
Hot deformation behavior and processing map of Al-Zn-Mg-Cu-Zr alloy
Effect of Fe and Si on precipitation of AA8111 β-AlFeSi phase and its genetic inheritance
Evolution of the second phase structure of 3003 aluminum alloy before and after thermal deformation
Classification and deformation mechanism of aluminum alloy texture
Texture characteristics of rolled 1235 Al Alloy
tResearch on the microstructure and mechanical properties of Al-Cu alloys with high Fe and Si contents
Effects of minor adjustment in compositions and special heat treatment on the properties of A380 die casting
Tensile deformation behavior and microstructure of the 5754 aluminum alloy
High-plastic casting aluminum alloy materials and passenger vehicle structures

Main types of surface defects on aluminum products and preventive measures

Effect of alloying elements on surface quality of 6063 aluminum alloy and its control

Study on the corrosion resistance of recycled 7075 aluminum alloy extrusions

Research progress on intercrystalline corrosion of Al-Mg-Si-Cu series aluminum alloys

Effect of Zn content in brazing layer on corrosion resistance of collector tube

Effect of zinc on corrosion properties of 3003 aluminum alloy

Study on preparation and mechanism of LAO semi-solid magnesium alloy AZ91D slurry

Ultrasound dispersion technology of nickel-plated graphene-aluminum composite powders

Heat dissipation of cooling medium combined with stirring and its application for the preparation of semisolid aluminum alloy slurry

Application of electrolytic aluminium liquid pretreatment device in aluminium alloy melting-casting

Development trend of direct casting to produce aluminum alloy billets from molten primary aluminum

Study on solid-liquid interface characteristics during directional solidification of high purity aluminum

Mechanisms of hydrogen formation in aluminum melt caused by water remaining in raw materials

Effect of hydrogen content in aluminum melt on billet surface

Effect of ultrasonic field on the degassing of Al-2Mg alloy melt

Influence of hydrogen on the quality of extruded 6063 aluminum alloy products

The application and technical progress of hydrogen measurement in high purity aluminum and aluminum alloys

Quantitative measurement of hydrogen level in aluminum melt and application

Control of hydrogen content in aluminum alloy melt

Effect of cavity vacuum on microstructure and mechanical properties of die-cast communication components

Energy saving application of magnetization energy saver of gas in aluminum melting furnace

The direct current electromagnetic stirrer in application of the cast aluminum industry

Application of electromagnetic technology and equipment in aluminum casting industry

Quality management system applied to in-line electromagnetic purification of aluminum melt

Discussion on technology of precisely controlling the chemical compositions of aluminum alloys
【74】Cause analysis and control measures of magnesium content fluctuation during aluminium alloy melting-casting
【75】Standardize the management and maintenance of spectrometer to reduce the error of analysis data
【76】Technical principles and application principles of aluminum alloy metal element addition and melt refining method
【77】New melt development of degassing bed by Ar gas bubbles for aluminum alloy
【78】A brief discussion on loose defects of die casting
【79】Effect of refiners on microstructure and properties of 6061 aluminum alloy ingot
【80】Effect of anode gas mass transfer on the mechanisms of the formation of alumina inclusions in aluminum melt
【81】Effect of combination modifier on the microstructure and mechanical properties Al-Mg-Si alloys
【82】Elementary discussion on factors affecting the throughput of tubular filtration
【83】Effect of ultrasonic power on microstructure and properties of Al-Zn-Mg-Cu alloy prepared by semi-continuous casting
【84】Analysis of continuous casting and continuous extrusion technology of Al-Sr alloy
【85】Development of semi-continuous automatic casting formula for aluminum alloy slab ingot
【86】The aluminum slab ingot mold technology development
【87】Trial production of 2A14 aluminum alloy of 550mm diameter billet for forging
【88】Production characteristics of circle hard-alloy ingot
【89】Study on hot top casting of hollow billets of 2A12 aluminum alloy
【90】Study on hot top casting technology of large size 4032 aluminium alloy round ingot for extrusion
【91】Difficulties and solutions in the production for large diameter round ingot of 7 series superhard aluminum alloy
【92】Effect of graphite ring height on the quality of aluminum billets produced by using the hot-top casting technology
【93】Effect of subsurface segregation in 6082 aluminum alloy billets on the mechanical properties of extrusions
【94】Homogenization effect of aluminium alloy ingot by analysing its metallographic structure
【95】Homogenization heat treatment process of as-cast 6061 aluminum alloy
【96】Effect of cooling rate for 6110 alloy on precipitation during homogenization heat treatment
【97】Effect of heat treatment on microstructure and properties of 6061 casting plate
【98】ANSYS - fluent -based simulation to control the edge quality of the casting board
【99】Key technology of wide width double zero aluminum foil billet produced by continue casting material
【100】Production technology of double-zero-five ultra-thin aluminum foil casting and rolling billet research
Effect of trace Cu on grain size of 1060 aluminum foil casting and rolling billet
Cause analysis of aluminium foil stock black silk defects And preventive measures
Characteristics of the products processed via Hazelett continuous casting and rolling and their applications
Development and application of continuous casting and rolling for aluminum sheets and strips
Aluminum metal treatment technology study of Hazelett continuous casting and rolling line
Ultrathin wide 8111 alloy strips produced by means of continuous casting and rolling for the production of aluminum foils
Cause analysis of aluminium foil stock black silk defects And preventive measures
Characteristics of the products processed via Hazelett continuous casting and rolling and their applications
Development and application of continuous casting and rolling for aluminum sheets and strips
Aluminum metal treatment technology study of Hazelett continuous casting and rolling line
Ultrathin wide 8111 alloy strips produced by means of continuous casting and rolling for the production of aluminum foils
Research the improving microstructure quality of Hazelett continuous casting and rolling product
Research on composition segregation of billets made by Hazelett continuous casting and rolling
Grain structure analysis of casting slab from Hazelett continuous casting and rolling line
Low-Cost, High-output, scrap-based continuous casting and in-line rolling process for wide aluminum sheet production
Microstructure analysis of AA8079 double zero aluminum foil billet of casting and rolling
Simulation study on rolling process of Al-6.2Zn-2.3Mg-2.3Cu aluminum alloy plate
Effect of pre-annealing on the microstructure and mechanical properties of 6016-T4P automobile body sheet
Effect of aging treatment on the microstructure and mechanical properties of 7N01 aluminum alloy plates
Effect of homogenization on the as-rolled and as-annealing microstructures of Mn-containing aluminum alloy plates
Furnaces to homogenize and reheat aluminum ingots for hot rolling
Mechanical properties of 1100 aluminum alloy decorative plates produced from hot-rolled and cast-rolled blanks
Study on production process of 0.23mm-thick Aluminum alloy plate for high frequency welded pipe----WANG Qiang
Influencing factors and improvement measures of single side wave defect of decorative foil
Study on process technology of continuous casting and rolling 3003 aluminum strip used for making power battery
Research on the technology of 5151 strip aluminum alloy for wine cap
Study on the technology of producing 8011 alloy air conditioning foil by casting rolling billet
Effect of lubrication on the brightness of mirror aluminum
Research on improving the surface glossiness of aluminum foil for beer label
Study on the second phase of cast rolling AA8079 double-zero aluminum foil
Insight into the corrosion and inhibition behavior of aluminum surface in rolling process
Application of IMS thickness gauge in Hazelett three-step rolling mill
【128】Effect of diffusion annealing on bonding interface of stainless steel/aluminum sandwich cladding sheet
【129】Contamination monitoring of aluminum sheet hot rolling emulsion
【130】Fire-fighting system design and fire-preventing measures for aluminum foil rolling mill
【131】The reason of the differential protection action of main transformer causing by single-phase ground fault

EXTRUSION & DIE
【132】New technology and equipment for the production of aluminum extrusions
【133】Research on the development of aluminum alloy extrusion technology
【134】Aluminum extruded products for applications to promote environmental sustainability（Kingdom of Bahrain）
【135】Extrusion Productivity, Part I - Billet Geometry（Canada）
【136】Extrusion Productivity, Part II - Predicting Ram Speed（Canada）
【137】The Main Pump and the Hydraulic System for New Generation Press（Japan）
【138】DFEn energy-saving system for extrusion press（Germany）
【139】Study on the production process for 7075 aluminum alloy profiles with complex cross sections
【140】Technology research of 7050 T74511 aluminum alloy extruded profile
【141】Case study of aluminum alloy production for automobile
【142】Production technology of aluminum heat transfer (radiator) extrusion profile
【143】A study on the forming process during extrusion to produce multi-cavity, large-section extrusions for automotive applications
【144】Study on the production process for 7003 aircraft luggage carrier profiles
【145】Discussion on the production technology of high strength 6061 aluminum alloy profiles for new energy vehicle battery trays
【146】Analysis of the transverse tensile strength of polyamide profiles
【147】Control of peripheral coarse grain structure in extruded 2618A aluminum alloy bars
【148】Research on rod production of 2618 aluminum alloy for automobile press impeller
【149】Processing study of controlling coarse grain zone of 2B06 alloy bar
【150】Study on production technology of high strength bar of Al-Cu-Mg alloy
【151】Analysis of the causes for inhomogeneity in mechanical properties of 6A02 aluminum alloy tubes and bars
【152】Effect of different drawing deformation on performance of 2110H14 aluminum alloy rivet wire
Conform continuously extruded aluminum systems
Effect of TiB$_2$ weight percent on the microstructure and mechanical properties of in-situ TiB$_2$/6061 aluminum-matrix composites
Effect of Zn/Mg ratio and aging temperature on precipitation behavior of Al-Zn-Mg-Cu aluminum alloy
Effect of extrusion and heat treatment on microstructure and mechanical properties of AHS alloy
Effect of pre-stretching on microstructure and mechanical properties of high pure Al-Cu-Mg alloy extruded profile
Influence of aging process on exfoliation corrosion resistance of 7020 Al alloy
Effect of extrusion process on microstructure and properties of Al-Mg-Si-Cu alloy
Analysis of the effect of parking time on the mechanical properties of 7075 aluminum alloy extrusions
Modifications of production processes to improve the electric conductivity of 6101B conductive rail profiles
Improvement process of coarse grain of 6063 aluminum alloy extruded sheet
Analysis of point defects in 7××× aluminum alloy extruded materials
Influence of liquid nitrogen cooling applied to die on the color defects of architectural aluminum extrusions
Causes for blister defect on extruded aluminum profiles and preventive measures
Simulation of Quenching and Distortion of Aluminum Extrusions (USA)
Aluminium profile extrusion and product quality control by means of simulation (England)
Production process for 2A12 large-diameter, thin-wall seamless pipes
Wrinkle and fracture behavior of thin-walled 6063 aluminum alloy pipes occurring during bending
Study on the production processes for ultra-small thin-wall seamless aluminum alloy tubing
Analysis of metal deformation flow during reverse extrusion
Design and use of cleaning needle ring of seamless tube extruding needle
Research on the technology of aluminum billet hot piercing with hollow needle
Optimizing heat treatment process to realize T6 state of 6063 aluminum alloy profile
Annealing process study of 5A06 Φ120×20mm aluminum alloy tube
Study on heat treatment of 7H3A aluminum alloy hollow profile
Study on aging process of 6061 T6 profile
Effect of aging time and temperature on microstructure and properties of Al-6Zn-1.1Mg alloy
Effects of non-isothermal ageing on the microstructures and properties of 7003 aluminum alloy
Effect of aging on the microstructure of 6105 aluminum alloy
Effect of aging treatment on the crushing property of Al-5.9Zn-0.8Mg alloy
Effect of two-stage aging on the microstructure and mechanical properties of automotive high-strength aluminum alloys
Experimental study on Immersion ultrasonic inspection of large-size, thin-wall cold-drawn (rolled) aluminum alloy pipes
Application of bottom echo in aluminum and aluminum alloy extrusion inspection
Application research of main frequency furnace in profile extrusion production of high quality aluminum
Present situation of large online quenching equipment and solutions for improvement
Analysis of translational AC servo fixed length flying shear system
Analysis of the reasons that affect the steady operation of heating equipment
Advantages and trend of intelligent profile stacking robot
Oil monitoring application in various fields - discussion on manufacturing and industrial oil inspection 4.0
New practice of the multi-hole die technology
A protecting type of flow-guided extrusion die with twin cavities
A protective type of porthole die with four cavities
Research on the elimination of "Shadow/Bone Line" on aluminum profile surface by optimizing die design
A covering type of porthole die for the production of semi-hollow aluminum alloy profiles
Design and manufacture of mould for foot column
How to improve the lifespan of extrusion dies effectively
Analysis on the die design and manufacturing technical scheme of building aluminum alloy formwork
Introduction to porous die extrusion production control key points
Two large industry extrusion profile die design-
Optimization of surface nitriding of H13 tool steel
Comparison of the using effects of the mold furnace with different heating methods
Study on nitriding process of aluminum extrusion die
Development of a grinding paste for extrusion dies
Industrial application of full automatic aluminum die cleaning with caustic soda recovering system

FINISHING
Development and application of functional anodized film on aluminum surface
Controlling the morphology of metal nanowires in porous anodic aluminum oxide film
Nitric acid cleaning alternative technology
New improvement on standard of accelerated weather resistance, accelerated corrosion resistance test method (Japan)
Review and outlook of automatic production line for aluminum profile oxidation
Current situation and development of electrophoretic coating technology of aluminum and aluminum alloy in China
The analysis of several common defects of aluminum profile electrophoretic paint films
Performance of chromium-free passivation on electrophoresis profiles
Study on the problem of pitting surface of high light oxidation surface of 6013 alloy profile
Solutions to scraping products due to coarse grains visible on aluminum profiles after streamlined alkaline anodizing
Causes for streaking defects on anodized 6005 aluminum alloy products and solutions
Effects of the voltage and frequency of alternating current electricity on electrolytic coloring
Analysis of the factors affecting the abrasion resistance of anodic oxidation coatings
Application of double-sided anodization
Prevention of crazing defects in the anodic oxide layer
Studies on the process transformation from Sn-Ni mixed salt to Sn salt in the electrolytic coloring for architectural AL profile
Wide-temperature rapid anodizing of aluminum extrusions
Study on chocolate-brown matte electrodeposition painting process of aluminum profile
Analysis of the causes for anodic oxidation defects of fabricated aluminum alloy handles and preventive measures
Research on and application of SPC in the process control of bath solution for color electrophoresis
Production technology and application of aluminum wood grain transfer printing
Application of VOC processing technology from oven in spray painting
Chromium-free chemical conversion coatings on aluminum and aluminum alloys
The discussion for the chromate-free pre-treatment producing processes practice
Filiform corrosion of polymer-coated aluminum and aluminum alloys
Discussion on the application of recovered powder in metal powder spraying
Energy-saving and environment-friendly powder coating technology and its application to aluminum alloy extrusions for building and construction
Lean management applied to vertical powder coating line

The technology innovation of powder continuous supply system

Powder coating of thermally insulated aluminum profiles

Microchannel flat tube surface pre-coating flux technology and its application

Comparative analysis of the influence of switch model rectifier and silicon controlled rectifier on the structure of aluminum anodic oxide coating

The method to prepare a new flocculant for the treatment of industrial waste water from extrusion plants producing aluminum alloy profiles for building and construction

FORGING

Effects of $\text{Al}_3\text{Zr}$ dispersoid on mechanical properties of 7050 forging plates

Production technology and examples of aluminum forging ring

Process structural elements and forging die design of aluminum alloy die forgings

Main process parameters and determination principle of aluminum alloy forging process

VALUE-ADDED & APPLICATION DEVELOPMENT

Deepen supply-side structural reformation, High quality development of window door and curtain wall industry

Briefly introduce the benefits of intelligent windows and doors

Design principle and application of aluminum outswinging casement window

Effect of opening process on longitudinal shear characteristics of strip-through heat-insulated profiles

The past, current and future situations of the fire-resistant windows, doors and curtain wall industry

Thermal insulation and anti-fogging properties of energy-efficient curtain walls

System definition of doors and windows

Aluminum template industry status and development trend in the future

Customizing furniture -- a new field of aluminum processing

A simple analysis of aluminum furniture industry

Technology innovation and development of all-aluminum furniture industry

All-aluminum furniture surface color difference and joint solution

Aluminum furniture-cabinet body design sharing

Prospect of application of aluminum alloy climbing apparatus
Applications and developments of large-span aluminum alloy structures
Joint design of nanjing niushoushan culture and tourism zone-Fo Ding Palace single-layer aluminum dome
Development of lithium ion battery market and demand of aluminum material in China-
Analysis of bending failure test of 6082 extrusion profile
Research on bending and forming technology of hollow aluminum alloy profile
Study on brazing technology of aluminum alloy oil cooler coated with flux without internal flux
Experimental study on flux free brazing of aluminum oil cooler
Study on plastic metal motion behavior of FSW joint
Study on formation and mechanical properties of ultra-high speed friction stir welded 6000 aluminum alloys joints
Study on the microstructures and mechanical properties of friction-stir-welded 7003-T4 aluminum alloy plates
Effect of pin diameter on macrostructure and mechanical properties of dissimilar Al alloy friction stir welding T-Joints
Microstructure and mechanical properties of friction-stir-welded 7003-T7 aluminum alloy joints
Design and production of equipment for processing rail transit bullet train body super-long aluminum profiles

Development status and prospect of China’s recycling aluminum industry
Aluminum scrap environmental recycling and equipment configuration
Several key processes of aluminum scrap recycling
Improvements of Mechanical Properties and Were Resistance of Recycled 6061 Wrought Aluminum Alloy
Study on the technologies to retain the grade of recycled aluminum alloys for aviation applications
Study on melting and casting process of recycled aluminum for producing 3104 can body

Safe production of aluminum alloy smelting casting
The safety problems and preventive measures in the process of electrolytic aluminum production
Company culture and management of large aluminum processing enterprises
The thinking of non-conformity rectification in quality management system audit
Application of equipment lifecycle management in aluminum processing enterprises
Technical assessment and analysis of new products