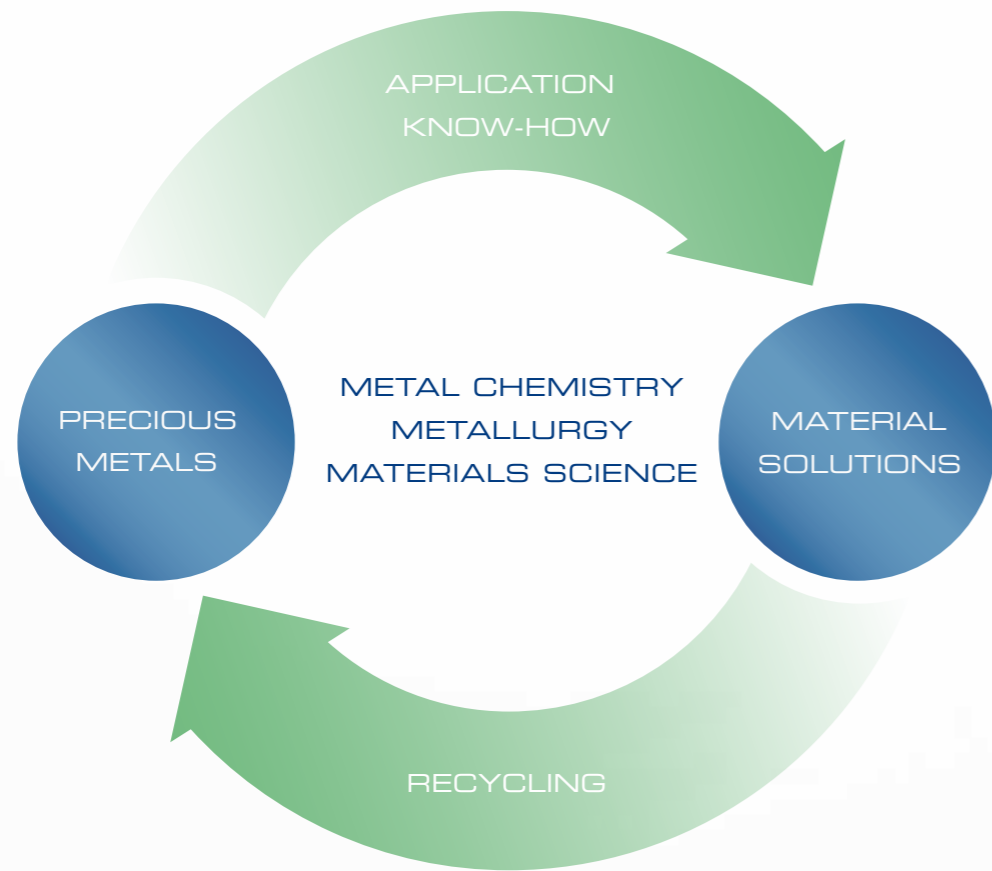




THE WORLD OF PRECIOUS METALS

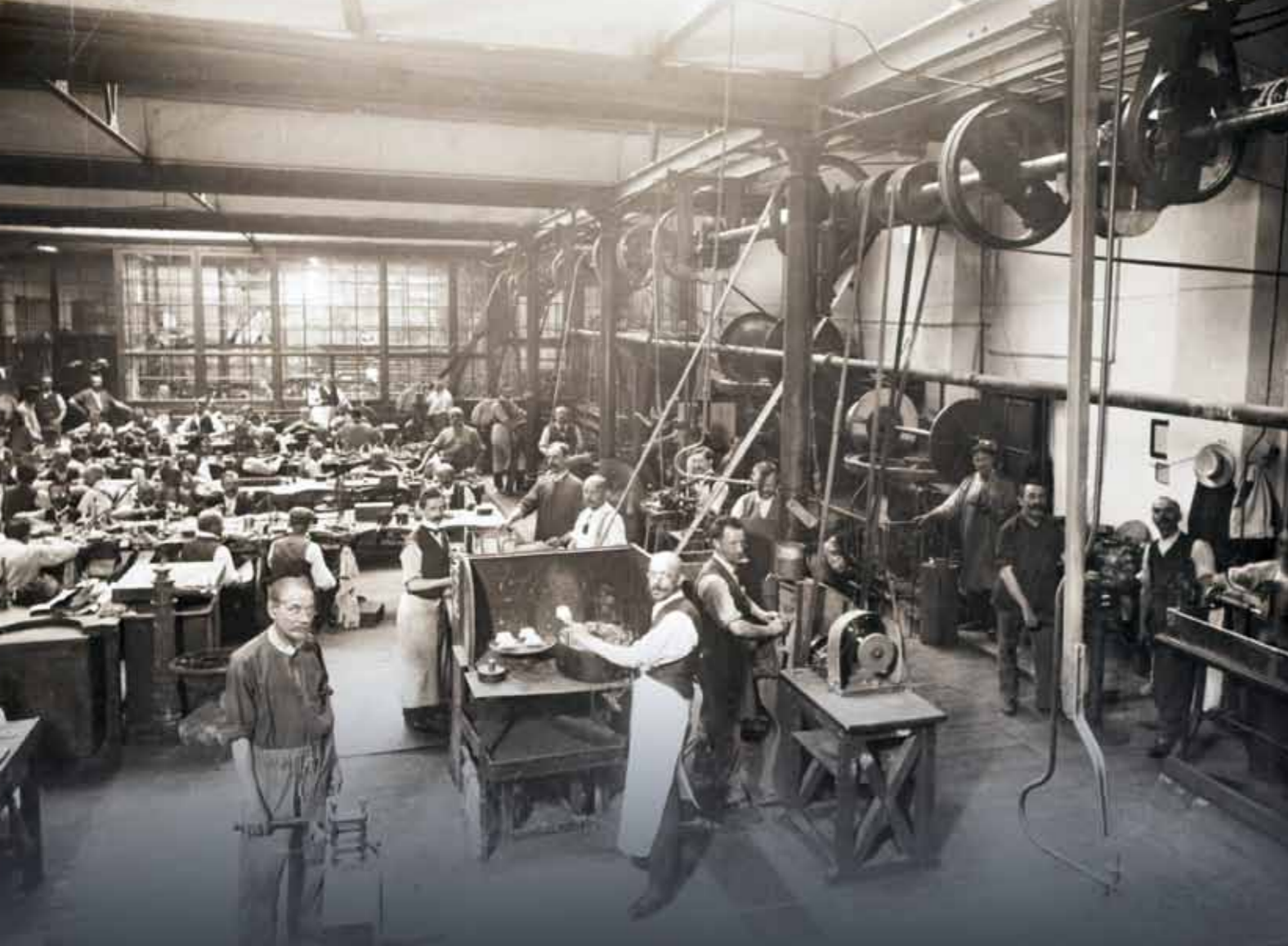


ÖGUSSA

THE WORLD OF PRECIOUS METALS

Ögussa is part of Umicore, a global materials technology and recycling group. Its activities are centred on four business areas: Catalysis, Energy Materials, Performance Materials and Recycling. Each business area is divided into market-focused business units offering materials and solutions that are at the cutting

edge of new technological developments and essential to everyday life. We cover the entire precious metal cycle from one single source and focus on application areas where our combined expertise in materials science, metal chemistry and metallurgy makes the real difference for our customers.



INNOVATIVE SINCE 1862

Practical knowledge, technical development, spirit of innovation and success convey stability to our customers and to us as a company, and they give you the certainty of knowing you have a competent, consistent and reliable partner. They provide us with the confidence of being able to tackle the challenges of the present and future with dedication and innovation.

- 1862** Founding of Markowitsch & Scheid Schmuckwarenerzeugung in Vienna
- 1873** Founding of Degussa in Frankfurt
- 1877** Founding of Louis Rössler, trade and purchase of precious metals
- 1923** Degussa AG buys shares in Louis Rössler
- 1962** Scheid and Rössler merge to become Ögussa
- 1990** Degussa acquires 100 % of Ögussa
- 2003** Degussa Edelmetalle becomes part of Umicore Brussels



MARKET LEADER IN AUSTRIA AND INTERNATIONALLY SUCCESSFUL

Ögussa has approximately 140 employees and is Austria's market leader in precious metal processing and recycling. Our company group generates the majority of its revenues and dedicates most of its R&D efforts to clean technologies such as emission control

catalysts, materials for rechargeable batteries and photovoltaics, fuel cells and recycling. Our overriding goal of sustainable value creation is based on an ambition to develop, produce and recycle materials in a way that fulfils our mission: "Materials for a better life."





QUALIFIED EMPLOYEES PRODUCE SOPHISTICATED PRODUCTS

With our committed employees we offer high quality products and services, are ranked in top positions in the European market and are expanding internationally.

Our company's success is due mainly to the

expertise and dedication of its employees. This is why we place the utmost importance on employee satisfaction and qualification and invest in advanced training on an ongoing basis. The goal is to foster personnel development primarily within the company.

CUTTING EDGE PRODUCTS FOR THE CHALLENGES OF OUR CUSTOMERS

The goal of our efforts is to find individual solutions for each customer requirement and to this end we are always aligning our structures to meet the challenges of our customers:

- Industry and trade
- Goldsmiths and jewelry designers
- Medical device industry, metrology, universities and labs
- Investors and private individuals

Qualified advice and reliable support create the basis for long-term business relations. Our streamlined, mid-sized organization promotes customer focus, flexibility and responsible behavior. A comprehensive warehouse ensures our customers quick access to standard products. We are able to offer special alloys and dimensions at short notice and to produce these with short delivery periods.





RESEARCH TODAY FOR THE TECHNOLOGICAL DEMANDS OF TOMORROW

Ongoing research and development ensure our high technological standard. The continuous development of functional materials is the focus of our innovative work for the future. With new precious metal compounds we fulfill growing customer demands and expand

into new business areas. Together with our customers, universities, research facilities and Umicore experts, we are developing products for tomorrow. Our continuous improvement and innovation process is compatible with safety and the environment.



EXCEPTIONAL MATERIAL QUALITY FOR MEDICAL- TECHNICAL APPLICATIONS

You are the specialist for medical devices and applications. We are the specialists for precious metals and their exceptional properties:

- Biocompatibility
- Oxidation resistance
- Electrical conductivity

We deliver high purity metals and alloys in the form of precise, semi-finished products such as thin sheets, fine wires, strips, tubes and rods. Using coordinated technologies, materi-

als are optimized to exhibit ideal strengths- or punching-, embossing-, extrusion-, deep drawing-, soldering- and welding- characteristics for further processing steps at the customer. Adhering also to the tightest tolerance limits ensures precise dimensions and constant weight as documented in the test report; low surface roughness minimizes the polishing process later on. The customer has less processing residue and time and materials are saved.





SEMI-FINISHED PRODUCTS NOT DONE BY HALVES

In order to meet customer requirements, we invest in state-of-the-art technologies. Metal sheets, tubes, wires and rods are the basis and are processed to special products:

- Seamless and welded tubes
- Round, square and shaped wires
- Ultrafine wires (> 20 µm)
- Clad wires
- Strips and sheets (>10 µm)
- Semi-finished products with first-rate deformation and polishing properties
- Punched, bent und deep drawn parts
- Electrical contact materials



ULTRAFINE WIRES A FINE ISSUE

Innovative technological solutions are often only made possible thanks to innovative materials. Meeting special technological specifications is the focus of our strategic alignment and reflects a key quality character-

istic of our products. With special products like clad wires, ultrafine wires > 20 µm and sheets or strips > 10 µm, we are in a position to comply perfectly with specific requirements of our customers.



PLATINUM DEVICES MAXIMUM PERFORMANCE IN TECHNICAL APPLICATIONS

Devices made of platinum are standard equipment in many chemical analytical laboratories because of their special properties. We produce crucibles, dishes, electrodes and many other lab devices from standard alloys (PtAu, PtIr, PtRh, AuPd). The application determines the combination of alloy metals. Wetting behavior, corrosion resistance, melting point and creep strength are adapted to the application parameters. Specially tailored solutions are possible at any time. For high tempera-

ture measurements (thermo elements) we have thermo wires made from platinum and platinum/rhodium in all standard diameters and make the appropriate thimbles. For the fiber industry we manufacture spinnerets and bushings with the utmost precision. In close cooperation with automotive suppliers, Ögussa develops electrode materials for high performance spark plugs and delivers sensor wires for sensor technology.



FKS PLATINUM FINE GRAIN STABILIZED MARVEL

Zirconium oxide additives harden platinum, promote grain refinement and solidify the material to make it a high performance material that exhibits exceptional material saving characteristics:

- Better mechanical and chemical resistance
- Up to two fold increase in tensile strength and yield strength
- Creep strength triples
- Increase of the maximum operating temperature by up to 20 %

FKS platinum is used in the glass industry, for lab devices, in measurement technology and for customized devices. We offer all devices, particularly for XRF analysis, not only in standard platinum alloys but also in FKS platinum.





JEWELRY METALS BEAUTY IN PERFECTION

For 150 years, goldsmiths and the jewelry industry have been the focus of our activities. Today, our semi-finished products, solders and chains sold by the meter are still the basis for our customers' high quality workmanship. The

jewelry industry has special requirements with regard to color, hardness, workability and the precious metal content of alloys. And we meet them.



SERVICES WITH AN ADDED VALUE

LASER WELDING

This technology facilitates repairs and other work done very close to valuable precious stones without exposing them to heat damage. The focal spot of the laser beam measures just a few tenths of a millimeter which results in a very high and targeted concentration of energy. Laser welding is an indispensable joining technology for the innovative goldsmith and jewelry designer.

JEWELRY CASTING

Using computer assisted high tech vacuum casting machines we cast 20 different precious metals and bronze alloys. Our mold making enables us to go from individual pieces to serial production in no time. The technical know-how and craftsmanship of our employees guarantee optimal results.

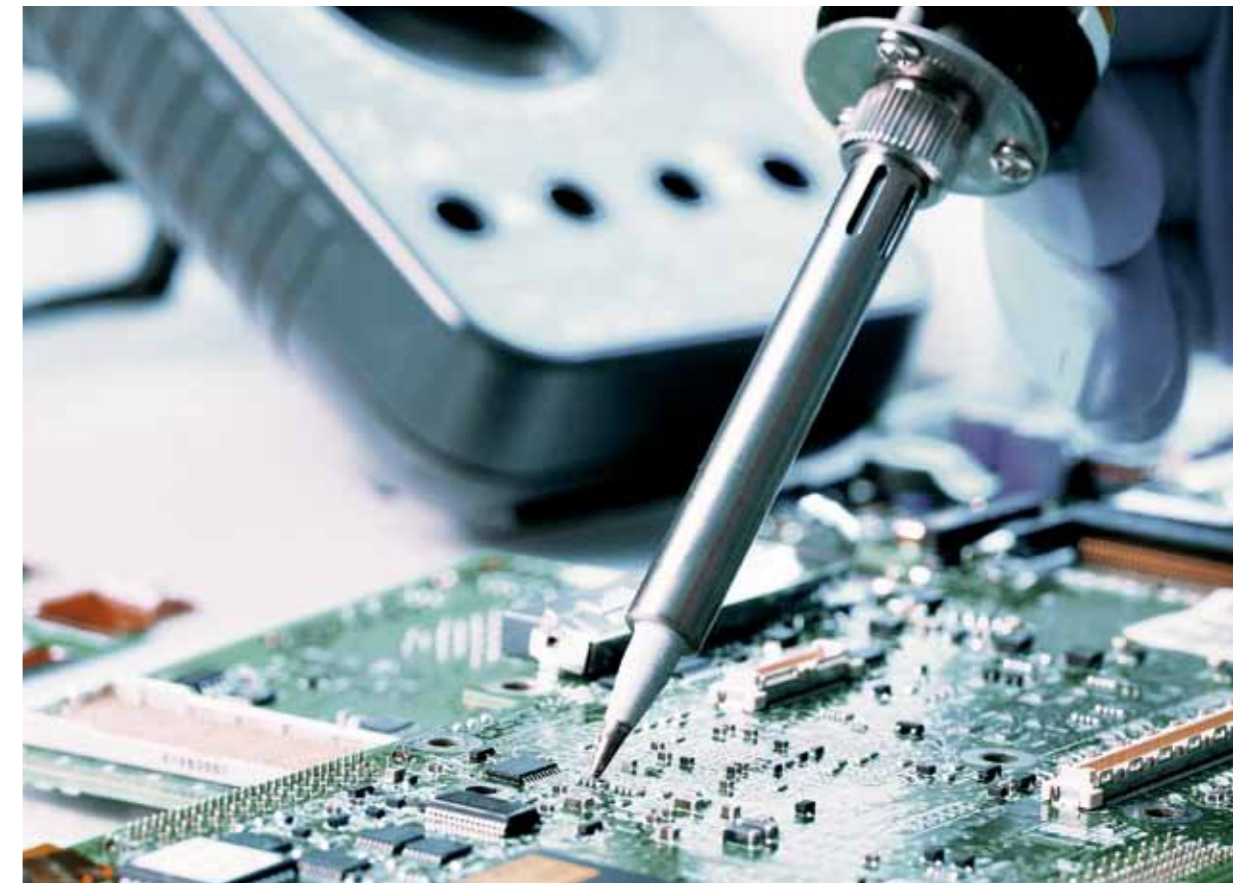




ELECTROPLATING HIGHEST QUALITY LAYER FOR LAYER

Galvanic surface finishing not only gives shine, it is also indispensable in the high tech segment of microchips and cell phones. We offer surface finishing in gold, hard gold, silver, rhodium, ruthenium and palladium for technical and decorative applications. For the brass instruments we provide an aesthetic surface in addition to the perfect sound. But we also bring

back the original shine to watches, jewelry, tableware, cutlery or sacral objects. The electroplating of technical components increases corrosion resistance, reduces electrical transition resistance and improves conductivity and solderability. Layer monitoring with XRF documents the desired layer construction.



BRAZING TECHNOLOGY ALWAYS A GOOD CONNECTION

We are the experts whenever metals have to be connected in a technically reliable manner. The exceptional characteristics of our solder products are used successfully in various branches from the automobile to the tool industry:

We offer both economical and innovative solutions, products and advanced technologies and consistently focus our attention on the needs of our customers. By doing so, we create connections that last - both technically and personally.

- BrazeTec - hard solders and hard solder flux
- Silox - soft solders and soft solder flux
- Silox - special solders
- Welding consumables for non-ferrous metals





PRECIOUS METAL RECOVERY THE END IS THE SOURCE

As a refinery, closing the precious metal loop by recovering precious metals is one of our core competencies. Not only gold and silver but also platinum, palladium, rhodium and iridium are recovered from materials with precious metal content at our site in Vienna.

- Metal production scrap (punching, casting and filing waste)
- End-of-life technical products like lab devices, thermo elements, circuit boards, electrodes and metal catalysts
- Metal waste from dental offices
- Used liquids such as cyanide and acidic

precious metal electrolytes and slimes

- Sweeps for incineration (chemical catalysts, polishing waste, sweepings, filter residues, sludge, ion exchange resins and films)
- Residues for grinding (melting pots, slags, ceramic catalysts and abrasives)

State-of-the-art analysis methods (ICP, XRF) guarantee precise and reliable results that facilitate immediate settlement of your metal contents. Every processing step from the receipt of the material to settling the account with the customer is documented exactly and is fully traceable.



PRECIOUS METAL CHEMISTRY THE PATH TO NEW SOLUTIONS

Pyrometallurgic, wet chemical and electrochemical refining processes yield high purity fine metals or products in the form of precious metal salts and solutions. As experts in the area of precious metal chemistry we offer standard products like silver nitrate or potassium gold and silver cyanide as well as tailor-made palladium compounds or customer-specific qualities of sodium and ammonium gold sulfite which can be ideally adapted to our

customers' manufacturing processes. Moreover, our experts will advise you in all questions of precious metal recycling, such as on savings options by way of ideal batch composition, questions on transport insurance or packaging and transport guidelines for the transport of dangerous goods. Of course, we can, upon request, organize the pickup of your precious metal waste.





WE MANAGE YOUR PRECIOUS METALS

Our range of services includes the complete service package of professional precious metals management:

- Information on current precious metal rates
- Managing precious metal weight accounts
- Economic utilization of the precious metals loop
- Knowledgeable advice on all aspects of precious metal financing

PRECIOUS METALS TRANSFERS

An integral part of our service is the precious metal transfer service. This service enables quick, secure and economical "transportation" of precious metals. We guarantee smooth and customer-oriented processing of every desired transaction.



PRECIOUS METAL INVESTMENTS PURE VALUE

For thousands of years gold has been regarded as particularly noble and valuable and to this day it has not lost any of its magic. Gold bars are not subject to VAT in Austria and are well-suited as a present or an investment. Ögussa gold bars are available in 10 sizes

from 1 to 1,000 grams. Silver and platinum bars are subject to VAT and complete the precious metal investment portfolio. Our customer consultants are more than happy to provide you with information about this type of investment.

PRECIOUS METAL PURCHASING GOOD MONEY FOR OLD GOLD

Be it old jewelry, dental waste gold, cutlery or coins, we buy every kind of precious metal even in small amounts at the current rate.

You will find information about purchasing rates at www.oegussa.at, in one of our branches or by dialing +43 (0) 810 14 15 76.



QUALITY MANAGEMENT EVERY DETAIL COUNTS

We feel that the crucial requirement for success is highest quality which arises from the sum of countless details. Quality management means paying attention to every detail. Striving for perfection has to be consistent with the efficiency of business processes.

We continually invest in future-oriented, environmentally sound operation facilities and manufacturing plants, quality assurance and customer-oriented expertise. As a reliable

partner for our customers we are certified according to:

- ISO 9001 (Quality management)
- ISO 14.001 (Environmental management)
- ISO 13.485 (Medical devices)
- ISO / TS 16.949 (Automotive production)
- Responsible Care (Voluntary commitment of the chemical industry)
- Responsible Jewellery Council Membership (responsible ethical, social and environmental practices)

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SUSTAINABILITY RESPONSIBILITY FOR PEOPLE AND THE ENVIRONMENT

For Ögussa, success is based upon developing and maintaining relations to its partners that are founded on trust and professionalism. The values of the "Umicore Way" which are openness, innovation, respect and teamwork and the "Code of Conduct" create the parameters for how we aim to achieve our goals using responsible, ethical, social and environment friendly business practices. Our production has low emission levels and is energy efficient. Both avoidance and utilization of waste materials

have priority over disposal. We create sustainable values and through our proactive approach we have a share in protecting the environment. We do not compromise on occupational health and safety. Our environmental management system is certified according to ISO 14.001 and Responsible Care. The RJC (Responsible Jewellery Council) accredited our responsible and transparent ethical and environmental practices in the jewellery supply chain by awarding us the status of Certified Members.





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