



ITALFIMET®
ELECTRO PLATING CHEMICAL & PLANTS

GENERAL CATALOGUE
ELECTRO PLATING CHEMICAL & PLANTS





PLATING DIVISION



Electroforming



Fashion accessories and costume jewellery



Jewelry and Goldsmith



PLANT DIVISION



Galvanic plants



Water treatment



Fume treatment



Metal refining



Precious metals compounds



Goldsmith surface treatments

RESEARCH,
INNOVATION
AND EXCELLENCE IN ASSISTANCE





PLATING DIVISION

	<i>pag.</i>		<i>pag.</i>
Prickling agents	8	Medium thickness plating	14
Pretreatment processes	9	High thickness plating	14
Ultrasonic soaps	9	Gold plating baths for antique finish	15
Electrolytic degreasing	10	Gold plating baths for electroforming	15
Copper plating	10	Barrel plating products	16
Nickel plating	10	Passivation baths	18
Bronze plating	11	Cataphoretic coating paints	18
Brass plating	11	Blackener	18
Silver plating	11	Polishing treatments	19
Palladium plating	12	Resins	20
Rhodium plating	12	Draining	20
Platinum plating	12	Electrolytic stripping	20
Ruthenium plating	12	Chemical stripping	21
Acid gold plating	13	Jewellery color chart	22
Alkaline gold plating	13	High fashion color chart	23
Neutral gold plating	13		



PLANT AND ELECTRO DIVISION

	<i>pag.</i>		<i>pag.</i>
Galvavic plants	26	Acid emptying plant mod. IA ATTCL	40
Industrial water treatment plants	27	Gold refining plants mod. IA AFFAU	41
Fume extraction and purification plants	28	Gold electrolytic refining plants	42
Gold electroforming system	29	mod. IA AFFAUCL	
Rectifiers for electroplating applications	30	Silver refining plants mod. IA AFFAG	42
Galvanic rotobarrels	33	Reactor in stainless steel	43
Electroplating racks	34	Granulators for jewellery	43
Chemical polishing plant "bombing"	35	mod. IA GRANUL	
mod. IA PRET		Copper refining plants mod. IA AFFCU	44
Precious metal recovery plants	35	Fume abatement system mod. IA AFA	44
mod. IA RECPRET5		Selective resin plants for precious	45
Pickling plant mod. IA DECAP	36	metals recovery mod. IA RECRES	
Water demineralization plants	36	Electrolytic recovery unit	46
mod. IA DEMI		mod. IA RECMOD	
Water depuration plant	37	Precious metals recovery unit	46
mod. IA DEMI MIX		mod. IA RECBILL	
Water recirculation plant mod. IA RICIRC	37	Gold Stripping and recovery system	47
Plants for the production of gold	38	mod. IA STRIPPAU	
potassium cyanide (GPC)		Galvanic module mod. IA GALV	47
mod. IA CIANOR		GALVADESK Benchtop galvanic unit	48
Plant for the production	38	GALVAPEN Galvanic pen machine	48
of Rhodium sulfate mod. IA RHSOLF		Analytical balance for assay laboratory	49
Plant for the production	39	Assay furnace mod. IA FS	49
of Platinum salt mod. IA PTSALT		Assay furnace mod. IA FST	50
Acid etching plant mod. IA ATT	40	Assay hood mod. IA CAP	51



ITALFIMET®
ELECTRO PLATING CHEMICAL & PLANTS

PLATING DIVISION





PLATING DIVISION

ITALFIMET srl has been a leader in process supplies for the electroplating sector in jewelry, costume jewelry, and high fashion for over 25 years. Known for its dynamic approach, ITALFIMET combines the traditional quality of Italian craftsmanship with ongoing investments in advanced technology and research and development, consistently innovating new products and solutions for the electroplating industry.

The company prides itself on a robust post-sales technical support structure, providing on-site assistance to customers. Backed by in-house analytical laboratories, equipped with state-of-the-art tools and staffed by qualified professionals, **ITALFIMET** ensures precise chemical analysis and effective resolution of any issues related to galvanic baths.

ITALFIMET serves the jewelry, costume jewelry, and high fashion sectors, offering solutions for process challenges, aesthetic finishes, and oxidation protection. Their comprehensive product range includes:

PRETREATMENT FOR BASE MATERIALS: Degreasing, neutralization, and ultrasonic soaps.

NON-PRECIOUS METAL FINISHING BATHS: Copper, nickel, bronze, and brass.

PRECIOUS METAL FINISHING BATHS: Gold, rhodium, palladium, silver, and ruthenium.

ELECTROFORMING BATHS: Gold, silver, and copper.

AGING PROCESSES: Black gold, oxidating agents

POST-PROTECTIVE TREATMENTS: Electrophoresis, passivation, and painting.

Additionally, **ITALFIMET** offers custom production specifications to ensure optimal results for each finishing proposal, providing a complete solution tailored to the specific needs of their clients.



Electroforming



Fashion accessories
and costume jewellery



Jewelry and Goldsmith



PRICKLING AGENTS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
DECAP 250	Liquid product to remove oxidation from silver	Silver
DECAP251	Liquid product to remove oxidation from silver	Silver
DECAP 425	Acidic liquid product for use on Ironus material	Materials containing iron
DECAP 426	Acidic liquid product for use on Ironus material: removes processing oils and greases	Materials containing iron
DECAP 475	Liquid product used for light de-oxidisation of stainless steel or copper and its alloys	Steel, copper and copper alloys
DECAP 478	Liquid product used for the activation of steel alloys	Steel alloys
DECAP 479	Concentrated liquid product used to remove oxides originating from welding or thermal processing	Steel
DECAP 480 P	Liquid product used for the activation of steel alloys	Steel
DECAP 499 EL	Liquid product for electrolytic processing used to activate steel alloys. It allows depositing directly the precious metal.	Steel
DECAP 523	Acidic solid product used to reactivate copper and brass deposited through a plating treatment used after acid copper	Copper, brass
DECAP 524	Acidic solid product used to reactivate copper and brass deposited through a plating treatment used between alkaline copper and acid copper	Copper
DECAP525	Liquid product to clean and prickle copper and brass	Copper/Brass
DECAP 526	Liquid product to clean and prickle copper and brass	Copper/Brass
DECAP 701	Solid product used to reactivate nickel both as a prickling agent and neutering agent	Nickel
DECAP 825	Liquid product to clean and prickle Zamakk	Zamak
DECAP 875	Liquid product to clean and prickle Sn/Bi alloys	Sn/Bi
DECAP All Cem 650 A DECAP All Cem 650 B	Liquid products to cement aluminium	Cement aluminium
DECAP CR 10	Liquid products for the metallization of plastic	Metallization of plastic



PRETREATMENT PROCESS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
PREP 500	Liquid product to remove pastes and oils, especially on aluminium	Ammuminium and other materials
PREP 523	Solid product for the removal of pastes and oils through ultrasonic or chemical bath processing	Brass

ULTRASONICS SOAPS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
DECRO 152 L	Liquid product to remove pastes and oils with polishing effect	Gold / Silver / Rhodium
DECRO 252 L	Liquid product to remove pastes and oils through ultrasonic or chemical bath processing on tin alloy material	Alloys based on Tin / Copper / Brass
DECRO 253 L	Liquid product to remove cleaning pastes and oils, barrel plating pastes, oils and greases with non aggressive action through ultrasonic processing	Silver / German silver / Copper and copper alloys
DECRO 325 L	Liquid product to remove cleaning pastes, barrel plating pastes, oils and greases through ultrasonic processing	pure alluminium / Steel inox / Brass
DECRO 375 L	Liquid product to remove cleaning pastes, barrel plating pastes, oils and greases through ultrasonic processing	Alluminium alloys / Zinc
DECRO 452	Liquid product to remove cleaning pastes, barrel plating pastes, oils and greases through ultrasonic processing	Steel inox / Iron
DECRO 475 L	Liquid product to remove cleaning pastes, barrel plating pastes, oils and greases through ultrasonic processing	Steel inox / Iron
DECRO 521	Solid product to remove pastes and oils through ultrasonic or chemical bath processing	Brass / Copper
DECRO 522	Solid product to remove pastes and oils through ultrasonic processing	Brass / Copper
DECRO 550 L	Liquid product to remove pastes and oils with polishing effect	Brass / Copper
DECRO 802	Solid product to remove pastes and oils through ultrasonic or chemical bath processing	zinco / alluminio / alloys light
DECRO 825 L	Liquid product to remove cleaning cleaning pastes, barrel plating pastes, oils and greases with non aggressive action and polishing effect through ultrasonic	zinco / alluminio / alloys light



ELECTROLYTIC DEGREASING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
DEXO 102	Electrolytic cathodic degreasing for roll and fCopper processing	Gold and Silver
DEXO 411	Electrolytic cathodic and anodic degreasing for roll and fCopper processing	Iron
DEXO 452	Electrolytic anodic degreasing for roll and fCopper processing	Iron / Steel
DEXO 555	Electrolytic cathodic degreasing for roll and fCopper processing	Copper and Copper alloys
DEXO 701	Low foam electrolytic degreasing to reactivate nickel and white bronze. It can be used for roll and fCopper processing.	Nickel
DEXO 833	Electrolytic cathodic and anodic degreasing for roll and fCopper processing	Zamak
DEXO 950	Electrolytic anodic degreasing to remove ruthenium deposits for roll and fCopper processing	Ruthenium

COPPER PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
RAMATURA RAMAL	Cyanide alkaline copper electroplating process	Rotobarrel and Rack application
RAMATURA CUPPER SATIN	Brushed acid copper electroplating process	Rack application
RAMATURA CUPRO	High thickness cyanide-free alkaline copper electroplating process	Rotobarrel and Rack application
RAMATURA CUPPER 350	High levelling polish-effect copper electroplating process in acidic environment	Rack application
RAMATURA CUPPER EF	Copper electroplating process that allows achieving high thickness with low tensions inside the deposit	Rotobarrel and Rack application

NICKEL PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
NICHEM 43	A chemical process that allows obtaining nickel phosphorus deposits at low temperature on aluminium	Rack application
NICHELATURA ELENIC SP 189	Electroplating process on high thickness polished nickel	Rotobarrel and Rack application
NICHELATURA ELENIC OPALIN	Electroplating process on semi-polished nickel	Rotobarrel and Rack application



NICHELATURA ELENIC STAR PLUS	Electroplating process opaque nickel	Rack application
NICHEL STAR BLACK 100	Electroplating process of zinc-free and tin-free black nickel in alkaline environment	Rack application
NICHELATURA ELENIC WOOD	Electroplating process of nickel strike to reactivate nickel-plated surfaces and for stainless steel plating	Rotobarrel and Rack application
NICHELATURA ELENIC NickelINOX	Nickel-phosphGoldus electroplating to increase corrosion resistance	Rotobarrel and Rack application

BRONZE PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
BRINOX™ TH	High performance Cyanide alkaline white bronze electroplating process	Static/set
BRINOX® GOLD 6.3	High levelling polish-effect cyanide alkaline yellow bronze electroplating process	Rotobarrel and Rack application

BRASS PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
OTTONATURA BRASS C	Copper and zinc allow electroplating process in cyanide alkaline environment	Rack application

SILVER PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
SILVER PLATE PRE AG	Cyanide silver strike electroplating process	Rotobarrel and Rack application
SILVER PLATE CR	Cyanide (metallic brightner agent) medium thickness silver electroplating process	Rotobarrel and Rack application
SILVER PLATE BL	Cyanide (organic brightner agent) medium thickness silver electroplating process	Rotobarrel and Rack application
FORMAT 960	Cyanide high thickness silver strike electroplating process (metallic brightner agent)	Rotobarrel and Rack application
FORMAT BL	Cyanide high thickness silver strike electroplating process (organic brightner agent)	Rotobarrel and Rack application
SILVER PLATE ECO	Cyanide-free medium thickness silver electroplating process	Rack application



PALLADIUM PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
PALLASTAR PD/NI	Polished high thickness palladium-nickel electroplating process with low nickel release	Rotobarrel and Rack application
ITALFIMET PC 4627 INOX	Polished high thickness palladium-cobalt electroplating process	Rotobarrel and Rack application
ITALFIMET PN 4628 INOX	Palladium-nickel electroplating process with low nickel content for polished medium-high thickness (according to nickel release regulations)	Rotobarrel and Rack application
ITALFIMET PD 4679	Palladium-gold electroplating process for decorative purposes	Rack application
ITALFIMET P 4600	Pure palladium electroplating process at low and high thickness, with high performances performance tests extremely bright and brilliant	Rack

RHODIUM PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
ITALFIMET RHODIUM 4500	High-shine, high polish white rhodium electroplating process	Rack
RODIOSTAR C	White rhodium electroplating process suitable for necklaces and fashion jewellery	Rack
RODIOSTAR BLACK AC	Black rhodium electroplating process	Rack
ITALFIMET RHPT 4578	White platinum/rhodium alloy (50%-50%) electroplating process suitable for fashion jewellery and gold smithery	Rack
ITALFIMET PLATINA 4578	White platinum/rhodium alloy (80%-20%) electroplating process suitable for fashion jewellery and gold smithery	Rack

PLATINUM PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
ITALFIMET PLATINUM 7800	White platinum electroplating suitable for necklaces and fashion jewellery	Rack
ITALFIMET RUPT 4478	Platinum / ruthenium alloy electroplating for decorative purposes	Rack

RUTHENIUM PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
RUTENET WHITE	Alkaline ruthenium electroplating with L= 69-72	Rotobarrel and Rack application
RUTENET 10-05	Alkaline ruthenium electroplating with L= 62-65	Rotobarrel and Rack application
RUTENIO WHITE	Acid ruthenium electroplating with L= 69-72	Rack application
RUTENIO BLACK 101	Acid ruthenium electroplating with L= 61-64	Rotobarrel and Rack application
RUTENIO BLACK 5011	Acid ruthenium electroplating with L= 54-56	Rack application
RUTENIO BLACK 4011	Acid ruthenium electroplating with L= 50-54	Rack application



ACID GOLD PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
DORATURA AMBRA 20	Gold alloy electroplating process in an acid environment for decorative purposes L: 73 - 76 / a : 0 - 5 / b : 25 - 27	Rack application
DORATURA AMBRA 1000	Gold alloy electroplating process in an acid environment for decorative purposes L: 76 - 81 / a : 8.5 - 11 / b : 28 - 31	Rack application
DORATURA AMBRA 2000	Gold alloy electroplating process in an acid environment for decorative purposes L: 72 - 76 / a : 7.5 - 9 / b : 22 - 26	Rack application
DORATURA AMBRA 3000	Gold alloy electroplating process in an acid environment for decorative purposes L: 67 - 71 / a : 6 - 8 / b : 9 - 11	Rack application
DORATURA GA 123 AC	Gold alloy electroplating process in an acid environment for decorative purposes	Rotobarrel and Rack application
DORATURA GOLDEX BROWN C	Gold alloy electroplating process in an acid environment for decorative purposes - chocolate colour	Rack application
DORATURA GOLDEX BROWN TM	Gold alloy electroplating process in an acid environment for decorative purposes - brown colour	Rack application
DORATURA INOX GOLD 20	Gold alloy electroplating process in an acid environment for decorative purposes. It can be used also on layers in stainless steel and its alloys	Rotobarrel and Rack application

ALKALINE GOLD PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
ITALFIMET AUROFLASH	Decorative electroplating process that allows a wide range of colours from 0 N to 5 N for the fashion jewellery and jewellery sectors, Cyanide free products	static
DORATURA MC	Decorative electroplating process that allows a wide range of colours from 0 N to 5 N for the fashion jewellery and jewellery sectors, with free cyanide	Rotobarrel and Rack application
ITALFIMET ECOFLASH	Decorative electroplating process that allows a wide range of colours from 0 N to 5 N with free from free cyanide	Rack application
GoldSOL 2 PINK	Copper free pink colour palladium decorative electroplating process	Rotobarrel and Rack application

NEUTRAL GOLD PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
DORATURA MCN 123	Decorative electroplating process used in fashion jewellery as final decoration or prior to gold plating. Color obtained: 24 Kt	Rack application



MEDIUM THICKNESS PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
PLACCATURA 223 N	Electroplating process containing nickel used to obtain a 0N colour deposit with 20 Kt	Rotobarrel and Rack application
PLACCATURA 223 1N	Electroplating process containing nickel used to obtain a 1N colour deposit with 22.4 Kt	Rotobarrel and Rack application
PLACCATURA GA 823 1N/14	Electroplating process containing nickel used to obtain a 1N/14 colour deposit with 22.4 Kt	Rotobarrel and Rack application
PLACCATURA GA 823 2N/18	Electroplating process containing nickel used to obtain a 2N/18 colour deposit with 22.7 Kt	Rotobarrel and Rack application

HIGH THICKNESS PLATING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
PLACCATURA AURITAL 3N	Acid electroplating process containing cobalt used to obtain a 3N colour deposit with 23.5 Kt	Rotobarrel and Rack application
PLACCATURA GA 823 3N	Acid electroplating process containing cobalt used to obtain a 3N colour deposit with 23.5 Kt	Rotobarrel and Rack application
PLACCATURA GA 2779	Acid electroplating process containing cobalt used to obtain a 3N high strength colour deposit with 23.5 Kt	Rotobarrel and Rack application
PLACCATURA AURAME 1418	Cyanide alkaline electroplating process used to obtain a pink colour gold-copper deposit ranging between 14 to 18 Kt	Rotobarrel and Rack application
PLACCATURA 400	Acid electroplating process containing iron with a wide range of thicknesses	Rotobarrel and Rack application
PLACCATURA 412	Acid electroplating process containing iron with a wide range of thicknesses	Rotobarrel and Rack application
PLACCATURA 498	Acid electroplating process containing iron with a wide range of thicknesses	Rotobarrel and Rack application
ITALFIMET ECOGC 18	High thickness 18 Kt rose gold alloy electroplating process, Cyanide FREE	static
ITALFIMET GCY 18	High thickness 18 Kt yellow gold alloy electroplating process, contains Cyanide	static
ITALFIMET DERMOGOLD® 322	Cobalt and nickel FREE acid electroplating process, used for a 1N colour deposit	static



ITALFIMET DERMOGOLD® 425	Cobalt and nickel FREE acid electroplating process, used for a 2N colour deposit	static
ITALFIMET DERMOGOLD® 526	Cobalt and nickel FREE acid electroplating process, used for a 2N colour deposit	static
ITALFIMET DERMOGOLD® 630	Cobalt and nickel FREE acid electroplating process, used for a 3N colour deposit	static

GOLD PLATING BATHS FOR ANTIQUE FINISH

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
RUTENOR 10-08	Acid electroplating process on gold or palladium substrates to obtain an antique finish effect with a brown hue	Rotobarrel and Rack application
BLACKOR® 4479	Acid electroplating process on gold or palladium substrates to obtain an antique finish effect with a black hue	Rotobarrel and Rack application

GOLD PLATING BATHS FOR ELECTROFORMING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
GOLD FLEX®	Cyanide electroplating process used to obtain thickness over 50 micron and ranging between 9 and 22 Kt, with good strength and excellent mouldability	Rotobarrel and Rack application
ORODOR®	Alkaline electroplating process containing Cyanide used to obtain thickness over 50 micron and ranging between 18 and 22 carat yellow gold	Barrel and Rack
ITALFIMET AURO 24	Cyanide-free neutral electroplating process used to obtain high thickness in gold at 24 Kt with good strength and excellent mouldability	Barrel and Rack



BARREL PLATING PRODUCTS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
SABUR 500	Barrel plating soap to polish the base material	Brass
SABUR 800	Barrel plating soap to polish the base material	Zamak
SABUR UNI	Barrel plating soap to polish the finished product	Finishing
ABRASIVO UNIVERSALE	Powder to make the finished product opaque	Finishing
CERITAL 100	Liquid product for finishing, limiting imprints	Finishing
CERITAL 01	Liquid product for finishing, limiting imprints to be mixed with sawdust V	Finishing
ABRALUX LEGNO 700	Finishing paste to mix with sawdust for polished effect reworks	Finishing
SEGATURA GN 6	Walnut shell for finishing processes, granulometry 6 for polished effect reworks	Finishing
SEGATURA GN 12	Walnut shell for finishing processes, granulometry 12 for polished effect reworks	Finishing
SEGATURA GN 16	Walnut shell for finishing processes, granulometry 16 for polished effect reworks or to dry the items	Finishing
SEGATURA GN 20	Walnut shell for finishing processes, granulometry 20 for polished effect reworks or to dry the items	Finishing
SEGATURA V 6	Corn cob for finishing processes, granulometry 6 for polished effect reworks	Finishing
SEGATURA V 12	Corn cob for finishing processes, granulometry 12 for polished effect reworks	Finishing
SEGATURA V 16	Corn cob for finishing processes, granulometry 16 for polished effect reworks or to dry the items	Finishing
SEGATURA V 20	Corn cob for finishing processes, granulometry 20 for polished effect reworks or to dry the items	Finishing
CILINDRO CERAMICA 2X5 ABRASIVA GRIGIA	Abrasive ceramics diameter 2 mm length 5 mm used to opacify or rework items (to be added to an universal abrasive, if necessary)	Finishing
CILINDRO PORCELLANA 2X5 BIANCA	Porcelain diameter 2 length 5 mm used to opacify, rework or polish items (to be added to an universal abrasive, as needed)	Finishing



CILINDRO CERAMICA 3X10 ABRASIVA GRIGIA	Abrasive ceramics diameter 3 mm length 10 mm used to opacify or rework items (to be added to an universal abrasive, if necessary)	Finishing
CILINDRO PORCELLANA 3X10 BIANCA	Porcelain diameter 3 length 10 mm used to opacify, rework or polish items to be added to an universal abrasive or soap, as needed	Finishing
CILINDRO CERAMICA 4X10 ABRASIVA GRIGIA	Abrasive ceramics 4 mm x 10 mm to opacify or rework items to be added to an universal abrasive, as needed	Finishing
CILINDRO PORCELLANA 4X10 BIANCA	Porcelain diameter 4 length 10 mm used to opacify, rework or polish items to be added to an universal abrasive or soap, as needed	Finishing
CILINDRO CERAMICA 6X10 ABRASIVA GRIGIA	Abrasive ceramics 6 mm x 10 mm to opacify or rework items to be added to an universal abrasive, as needed	Finishing
CILINDRO PORCELLANA 6X10 BIANCA	Porcelain diameter 6 length 10 mm used to opacify, rework or polish items to be added to an universal abrasive or soap, as needed	Finishing
CILINDRO CERAMICA 4X10 ABRASIVA GIALLA	Abrasive ceramics 4 mm x 10 mm to opacify, rework or prepare the base material for the items (SUCH AS UREA CONES) to be added to an universal abrasive, as needed	Base preparation and Finishing
CONO UREICO	Abrasive ureic material pyramid for preparation of base material to opacify or rework items	Base preparation and Finishing
SFERA CERAMICA 2 mm ABRASIVA GRIGIA	Abrasive sphere in ceramic material diameter 2 mm to opacify or rework items to be added to an universal abrasive, as needed	Finishing
SFERA PORCELLANA 2 mm BIANCA	Porcelain sphere diameter 2 mm to opacify, rework or polish items to be added to an universal abrasive or soap, as needed	Finishing
SFERA CERAMICA 4 mm ABRASIVA GRIGIA	Abrasive sphere in ceramic material diameter 4 mm to opacify or rework items to be added to an universal abrasive, as needed	Finishing
SFERA PORCELLANA 4 mm BIANCA	Porcelain sphere diameter 4 mm to opacify, rework or polish items to be added to an universal abrasive or soap, as needed	Finishing



PASSIVATION BATHS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
ITARNISH	Electrolytic passivation based on nano-biotechnologies to increase resistance to oxidation for silver-plated and copper-alloy items	Rack application
ITARNISH CHEMISTRY	Immersion electrolytic passivation based on nano-biotechnologies to increase resistance to oxidation for silver-plated and copper-alloy items	Rack application
ITARNISH SHIELD	Passivation by immersion based on nanobiotechnology to increase oxidation resistance, chromium free	Static

CATAPHORETIC COATING PAINTS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
ITALAC 150	Catodic electrophoretic material to deposit protective film on electrically conductive materials	Rack application
ITALAC 150 ITALCOLOR	Catodic electrophoretic material to deposit protective film on electrically conductive materials. It can be added to coloured pigments to create coating in a variety of colours	Rack application
ITALAC 250	Electrophoretic coating material to deposit protective film on electrically conductive materials with high performance to alcoholic solution resistance test	Rack application

BLACKENERS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
OXIT 200	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Silver
OXIT 201	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Silver
OXIT 210 A OXIT 210 B	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Silver
OXIT 450	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Iron / Steel



OXIT 451	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Iron / Steel
OXIT 500	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Copper / Brass
OXIT 511	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Brass / Copper
OXIT 512	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Brass / Copper
OXIT 514	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Brass / Copper
OXIT 550 S	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Brass / Copper
OXIT 610	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Bronze
OXIT 620	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Bronze
OXIT 701	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Nickel
OXIT 800	Liquid product to darken by immersion the treated material It changes the intensity of the colour based on the time of use	Zamak

POLISHING TREATMENTS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
BRILLANTATURE ACIDA 9 - 14 KT	Eco-friendly chemical de-oxidation process to polish precious metal alloys with medium/low karats	Gold
BRILLANTANTURA ACIDA 18 KT	Eco-friendly chemical de-oxidation process to polish precious metal alloys with high karats	Gold
BRILLANTATURA ALCALINA	Chemical de-oxidation process with cyanide to polish metal alloys of any karat	Gold
PGE	Cyanide free neutral electropolishing process	Gold alloys



RESINS

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
RESINA A 30	Product used to recover precious metals in acid solutions	Gold
RESINA B 30	Product used to recover precious metals in alkaline solutions	Gold
RESINA D 100	Product used to eliminate metallic pollution from acid solutions	For all metals
RESINA D 160	Product used to eliminate metallic pollution from ruthenium	Ruthenium
RESINA D 500	Product used to eliminate metallic pollution from alkaline solutions	For all metals
RESINA PD 20	Product used to recover precious metals	Palladium

DRAINING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
EMPTY 100 - 14	Acid product used to drain lowfusing on gold	Gold
EMPTY 100 - 18	Acid product used to drain lowfusing on gold	Gold
EMPTY 200 - CU	Alkaline product used to drain copper on silver	Silver
EMPTY 260	Acid product used to drain lowfusing on silver	Silver
EMPTY 850	Acid product used to drain lowfusing material	Low melting alloy
EMPTY 860	Acid product used to drain lowfusing material	Low melting alloy

ELECTROLYTIC STRIPPING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
STRIPPER RECOVERY	Solid product used to recover precious metals from exhausted solutions	Precious metals
ELETTROSNICHELATURA UNI	Liquid product used to remove copper, nickel, and chrome from the stainless steel tips of the fCoppers.	Nickel
ELETTROSNICHELINOX	Liquid product used to remove nickel-stainless steel from nickel substrates	Nickel
RACK CLEANER	Liquid product used to clean and polish the fCoppers from plating residues, such as silver, gold, palladium, rhodium and ruthenium	Racks
ELETTROSDORATURA	Cyanide-free liquid product used to remove gold and silver.	Gold / Silver



CHEMICAL STRIPPING

<i>Product Name</i>	<i>Description</i>	<i>Application</i>
STRIPPER 701	Powder product to be added to acids to remove nickel from copper and its alloys	Nickel
STRIPPER 702	Powder product to be added to acids to remove nickel from iron, copper and its alloys	Nickel / Iron
STRIPPER 710	Cyanide-free alkaline liquid product used to remove nickel from copper, brass, iron, coppered and nickeled Zamakk	Nickel
STRIPPER AU 94 L	Liquid product used with the addition of cyanide to remove gold.	Gold
STRIPPER PD 101	Liquid product used to remove palladium.	Palladium
STRIPPER VARNISH	Acid liquid product used to remove paint and enamels	Paint



JEWELLERY COLOR CHART



SILVER PLATE
BL



ITALFIMET
P4600



ITALFIMET
RHODIUM 4500



RODIOSTAR
BLACK



DORATURA
MC7



DORATURA
MC1



DORATURA
MC2



DORATURA
MC0



DORATURA
MC 3N



DORATURA
MC RR



DORATURA
MC9 / ECOFLASH 5N



BRINOX™
GOLD 6.3



RUTENIO 4011
ULTRA BLACK



RUTENIO
BLACK 101



PLACCATURA 400
(UP TO 4 MICRON)



HIGH FASHION COLOR CHART



RUTENET
WHITE



RUTENET
10-05



RUTENIO 5011
ULTRA BLACK



RUTENIO 4011
ULTRA BLACK



ITALFIMET PF
5000 INOX



PLACCATURA
223 1N



PLACCATURA
GA 823 1N/14



PLACCATURA
GA 823 2N/18



PLACCATURA
GA 2779



DORATURA
AMBRA 20



DORATURA
AMBRA 1000



DORATURA
AMBRA 2000



OROSOL
2 PINK



ORO
VINTAGE



PALLADIO
INVECCHIATO





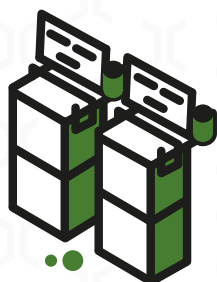


ITALFIMET®
ELECTRO PLATING CHEMICAL & PLANTS

PLANT DIVISION



GALVANIC PLANTS



DESIGN

CONSTRUCTION

START-UP AND CONSULTANCY



Italfimet S.r.l.: Complete Solutions for Galvanic Plants

Galvanic Plant Manufacturing

Italfimet S.r.l. designs and manufactures custom galvanic plants for the finishing of goldsmithery and costume jewelry.

Our Process

- **Feasibility Study:** Preliminary analysis of the customer's needs.
- **Executive Design:** Tailored project development.
- **Production and Installation:** Manufacturing and installation of the plant.
- **Commissioning:** Full commissioning of the plant.

Products and Services Offered

- **Turnkey Plant:** Comprehensive support for chemical treatment and plant design.
- **Ongoing Assistance:** Maintenance of the system and chemical applications by qualified technical staff and our internal analytical lab.

Demineralization Plant

- **Function:** Continuous supply of deionized water for perfect washing cycles.
- **Operational Safety:** Counter-tanks, anti-slip and anti-acid platforms, extraction of gaseous acids and alkalis.

Available Chemical Products

- Galvanic baths and supplies for:
 - Silver/Gold Plating
 - Electroforming
 - Palladium, Ruthenium, Rhodium, Nickel, Copper Plating
 - Electrolytic Polishing
 - Degreasing, Neutralization, Decanting

Support for Existing Plants

- **Chemical Products and Technical Assistance:** Supply of materials and technical support for existing plants, thanks to the expertise of our internal laboratory.



INDUSTRIAL WATER TREATMENT PLANTS



PRESERVE THE ENVIRONMENT

SAVE WATER

RECYCLING



ITALFIMET
 CIRCULAR
 ECONOMY

ITALFIMET designs and manufactures customized purification systems to achieve the customer's goal.

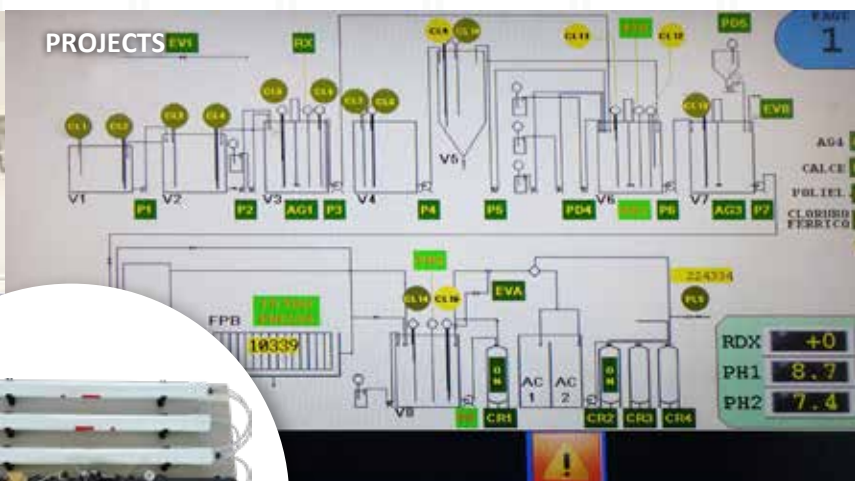
We are able to supply systems of: demineralization, reverse osmosis, ultrafiltration, water-softeners, evaporators, ion exchange, chemical-physical treatment, filter presses and all supporting products.

To meet the needs of electroplating, goldsmith and refining companies

ITALFIMET, design, assistance and achievement of objectives.



DEMINERALIZATION PLANT



**REVERSE
 OSMOSIS PLANT**



SETTLING PLANT



CHEMICAL-PHYSICAL PLANT

FUME EXTRACTION AND PURIFICATION PLANTS



WORK SAFELY

DEFEND THE ENVIRONMENT

OPTIMIZE CONSUMPTION

ITALFIMET designs and manufactures customized fumes extraction and purification systems for companies in the electroplating, goldsmith, refining and industrial sectors.

Fumes abatement systems for acid or alkaline vapors of different nature in compliance with increasingly stringent anti-pollution regulations.

ITALFIMET, design, assistance and achievement of objectives.



BAG FILTER PLANT FOR FOUNDRY LINE



INDUSTRIAL EXTRACTION SYSTEM



FUME SCRUBBER TOWERS

GOLD ELECTROFORMING SYSTEM

ITALFIMET is a professional one-stop-shop partner for every step of the 9-22 KT gold electroforming process from object preparation to finished product analysis.

ITALFIMET is able to supply and follow the customer in every production phase:

1. Preparation of objects to be electroformed
2. Mechanical polishing
3. Pre-galvanic treatment for tin bismuth prototypes
4. Gold electroforming
5. Emptying
6. Heat treatment
7. Final finish



MAKE YOUR DREAM POSSIBLE



RECTIFIERS FOR ELECTROPLATING APPLICATIONS

Italfimet's switching rectifiers, designed specifically for the jewellery, costume jewellery, eyewear, and goldsmithing industries, allow meeting the main electroplating requirements.

The various product lines are easy to use and program, meeting the customer's needs for wide range of currents. All rectifiers can be adjusted in both current and voltage through a simple and intuitive digital keypad.

MODEL	DESCRIPTION	VOLTAGE	CURRENT
R200	A compact current rectifier ideal for labs . Ampereminutemeter with partial and total step counter	12V 40V	10A 2A
R300	. Adjustable current and voltage . Possibility of timed, stepped or free operation . Possibility of setting work ramps	12V 40V	10A 20A 30A 2A
R800	A compact current rectifier ideal for labs . Ampereminutemeter with partial and total step counter . Adjustable current and voltage . Possibility of timed, stepped or free operation	12V 24V 48V	10A 20A 30A 50A 60A 10A 20A 30A 50A 60A 10A 20A 30A 50A 60A
EASY	Medium-sized current rectifier with integrated keypad ideal for electroplating plants . Ampereminutemeter with partial and total step counter . Possibility to control dosing pumps . Adjustable current and voltage . Possibility of timed, stepped or free operation . Possibility of recording work programs	12V 24V 48V 60V	50A 100A 200A 300A 10A 20A 30A 50A 10A 20A 30A 50A 15A
TWIN	Medium-size current rectifier with built-in dual keypad ideal for electroplating plants . Dual ampereminutemeter with partial and total step counter . Possibility to control dosing pumps . Adjustable current and voltage . Possibility of timed, stepped or free operation . Possibility of recording work programs	12V	50A 100A 200A
Q* Series	Medium-size current rectifier without built-in keypad ideal for electroplating plants . Ampereminutemeter with partial and total step counter . Possibility to control dosing pumps . Adjustable current and voltage . Possibility of timed, stepped or free operation . Possibility of recording work programs	12V 24V 48V	50A 100A 200A 300A 30A 50A 10A 20A 30A 50A
RAEP*	Innovative and patented current rectifier capable of delivering current at various intensities within the standard work frame . Designed specifically for the precious items and decorative electroplating industry	8V	5+5+5A÷60+60+60A

RECTIFIERS FOR ELECTROPLATING APPLICATIONS

Technical data Rectifiers:

MODELS	WEIGHT	LENGTH	DEPTH	HEIGHT
R300	5,5 kg	19 cm	34 cm	14 cm
R800	8 kg	30 cm	33 cm	20 cm
EASY	25 kg	41 cm	42 cm	25 cm
TWIN	26 kg	42 cm	42 cm	25 cm
SERIE Q	16 kg	24 cm	48 cm	24 cm
RAEP	18 kg	26 cm	45 cm	30 cm



RECTIFIERS FOR ELECTROPLATING APPLICATIONS

Control panel models

Keypad BASE BOX

Control panel with:

- Ampereminutemeter with partial and total step counter
- Possibility to control dosing pumps
- Adjustable current and voltage
- Possibility of timed, stepped or free operation
- Possibility of recording work programs

Keypad LAN/WIFI BOX

Control panel with:

- LAN or WIFI connection capability
- Ampereminutemeter with partial and total step counter
- Possibility to control dosing pumps
- Adjustable current and voltage
- Possibility of timed, stepped or free operation
- Possibility of recording work programs

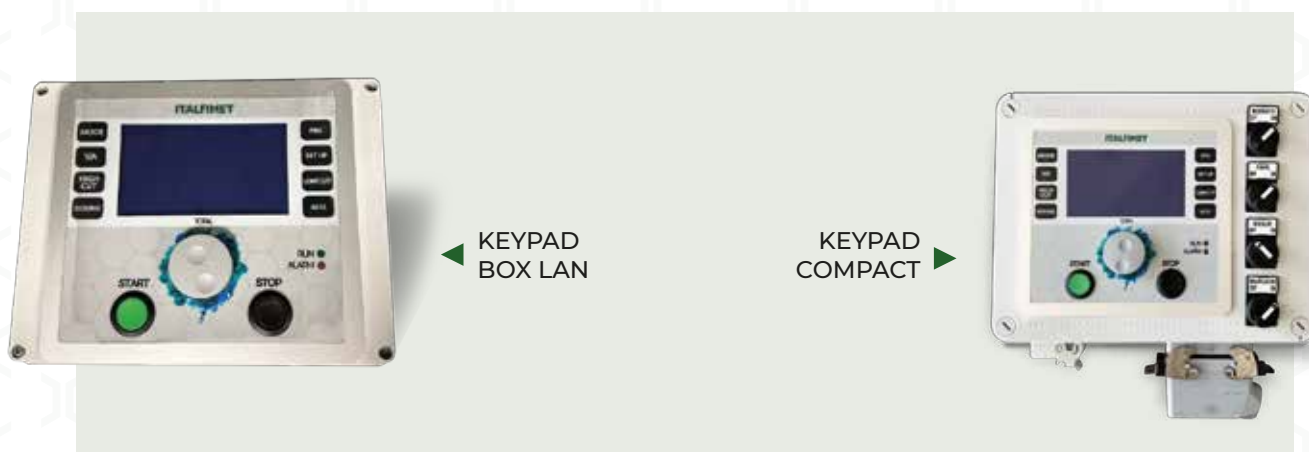
Keypad COMPACT 4.0 LAN/WIFI

Control panel with:

- LAN or WIFI connection capability
- 4.0 configuration for managing 5 programmable outputs
- Ampereminutemeter with partial and total step counter
- Possibility to control dosing pumps
- Adjustable current and voltage
- Possibility of timed, stepped or free operation
- Possibility of recording work programs

Technical data Control panels:

MODELS	WEIGHT	LENGTH	DEPTH	HEIGHT
BOX BASE	1.3 kg	20 cm	11 cm	26 cm
BOX LAN/WIFI	1.3 kg	20 cm	11 cm	25 cm
COMPACT LAN/WIFI	3 kg	31 cm	17 cm	35 cm



The plant bears the EC MARKING in compliance with Machinery Directive 2006/42/EC and Directives 2006/95/EC (low voltage) 2004/108/EC (electromagnetic compatibility)



GALVANIC ROTOBARRELS

description:

Italfimet manufactures a range of roto barrels for galvanic use in various sizes and types. Each roto barrel is meticulously designed to meet the specific needs of the electroplating sectors in high fashion, costume jewelry, and fine jewelry.

The product lines include:

ITALROTOR:

Compact roto barrels with 1, 2, or 3 small baskets, ideal for processing small quantities (usable volume ranging from 0.2 dm³ to 1 dm³).

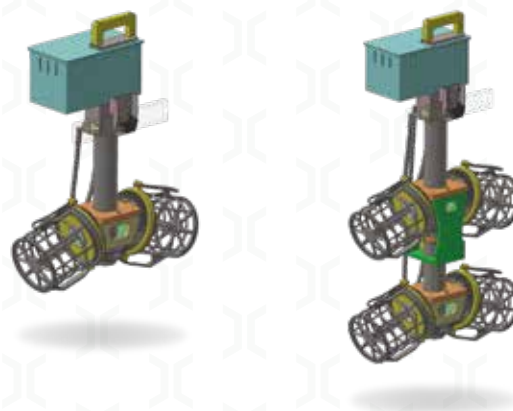


GALVALIGHT:

Medium-sized roto barrels with a single basket and a cathodic bar attachment, designed for larger batches (usable volume ranging from 3.5 dm³ to 10 dm³).



GALVAROTOR: Medium-sized roto barrels featuring 2 or 4 baskets, with a cathodic bar attachment and adjustable speed control (usable volume ranging from 2.5 dm³ to 10 dm³).



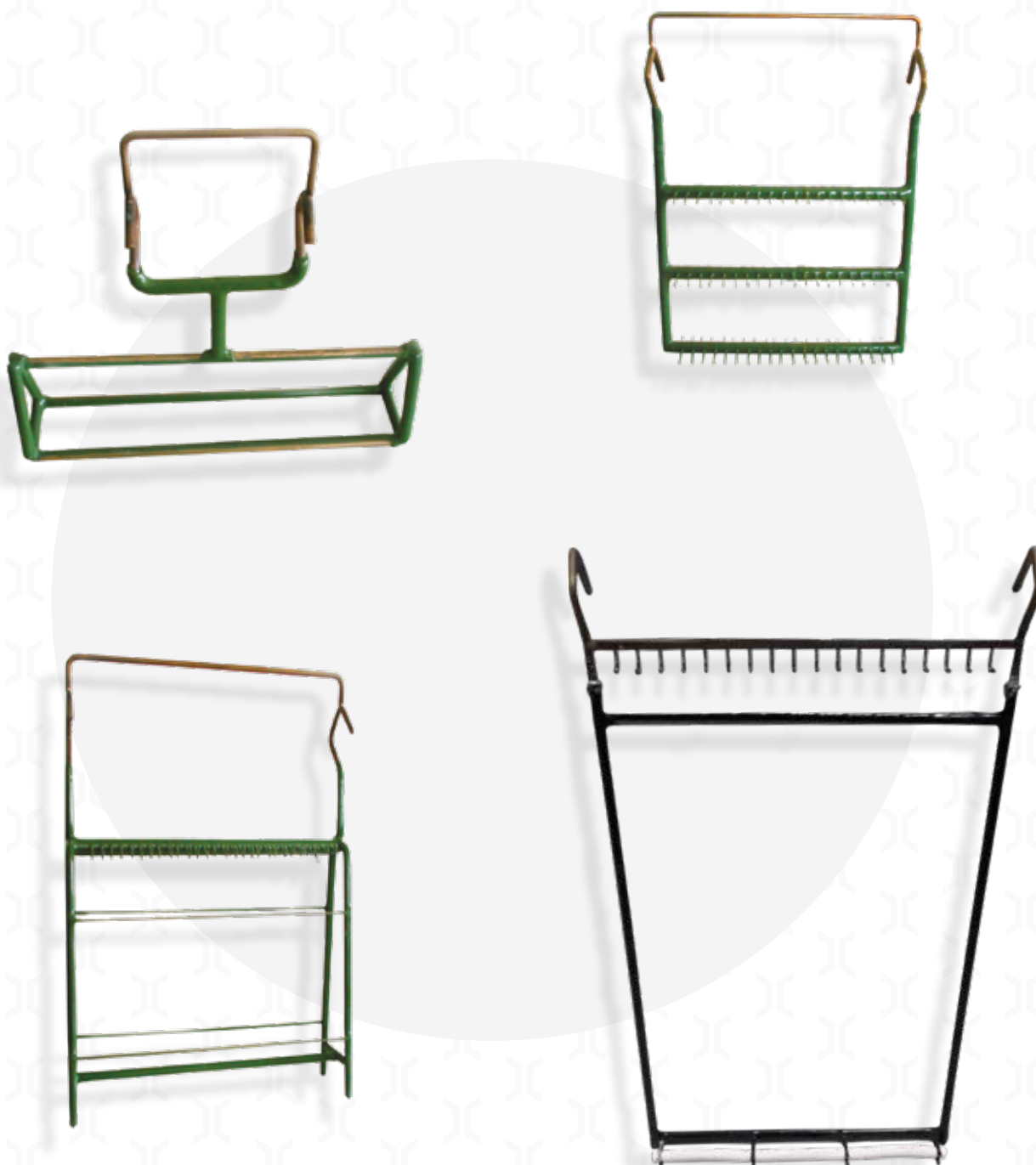
Each of these roto barrels is engineered to deliver optimal performance for the specific requirements of the electroplating industry.

ELECTROPLATING RACKS

description:

Italfimet S.r.l. designs and manufactures a wide range of electroplating racks in various sizes, tailored to meet the specific needs of each customer and suited for any type of electroplating process in high fashion, costume jewelry, fine jewelry, and PoP (plastic metallization).

Every rack is meticulously designed, engineered, and produced in-house, ensuring the highest quality and precision. Customizable models are available to meet the exact specifications of the client, providing a perfect fit for any application.



CHEMICAL POLISHING PLANT "BOMBING" mod. IA PRET

description:

Automatic plant used to recover precious metals from cyanide solutions from: "BOMBING", exhausted galvanic baths, alkaline solutions and exhaust solution coming from gold potassium cyanide production or other chemical processes.

The system allows the complete recovery of the precious metals contained in the solution and the oxidation of the cyanide contained, thus facilitating the subsequent disposal or treatment.



TECHNICAL FEATURES:

Overall dimensions (mm)	1500x800xh2400
Power supply (V)	380
Electric power required (kW)	3

PRECIOUS METAL RECOVERY PLANTS mod. IA RECPRET

description:

Automatic plant used to recover precious metals from cyanuric solutions coming from: "BOMBING", the production of gold cyanide salt or other chemical processes. The plant allows the complete recovery of the precious metals contained in the solution and the oxidation of the cyanide contained in them, thus facilitating subsequent disposal or treatment.



MODELS	IA RECPRET 100	IA RECPRET 300	IA RECPRET 600	IA RECPRET 1000
Overall dimension (LxWxH)	1,000 x 800 x 1,900 mm	1,200 x 800 x 2,200 mm	1,200 x 1,200 x 2,400 mm	1,500 x 1,500 x 2,400 mm
Required power	380 V	380 V	380 V	380 V
Electrical power required	1.5 kW	3.5 kW	4 kW	6 kW
Capacity	100 L	300 L	500 L	1,000 L

PICKLING PLANT mod. IA DECAP

description:

Pickling plant for objects made of precious alloy.

The plant, thanks to its heated tanks, allows the removal of surface oxides and the total removal of the refractory lining from the surface of the precision cast pieces.

Made entirely of self-extinguishing PPL with safety tray.

TECHNICAL FEATURES:

Overall dimensions (mm)	1600x800xh2000
Power supply (V)	380
Electric power required (kW)	1,6



WATER DEMINERALIZATION PLANTS mod. IA DEMI

description:

Plant for the production of demineralized water through the use of three columns filled with ion exchange resins (one anionic and one cationic) and activated carbon. The plant is equipped with a recirculation tank.



MODELS	IA DEMI 3x50	IA DEMI 3x100	IA DEMI 3x200	IA DEMI 3x300
Column filling capacity	50 L	100 L	200 L	300 L
Flow rate	50-60 L/min	80-100 L/min	120-160 L/min	350-550 L/min
Overall dimensions	2,500 x 800 x 1,700 h mm	2,500 x 800 x 2,200 h mm	3,000 x 1,000 x 2,500 h mm	4,000 x 1,000 x 2,500 h mm
Power supply	380 V	380 V	380 V	380 V
Electric power required	1 kW	1.5 kW	3 kW	4 kW

WATER DEPURATION PLANT mod. IA DEMI MIX

description:

The **IA DEMI MIX** water treatment machine with mixed bed resin employs anionic and cationic resins to purify water by reducing its conductivity. This treatment is essential to ensure superior quality water for sensitive processes, significantly contributing to the reduction of impurities and the protection of plants and equipment that utilize water in their operation.



MODELS	IA DEMI MIX 2x25	IA DEMI MIX 2x50	IA DEMI MIX 2x100
Vol. activated carbon	25 L	50 L	100 L
Vol. mixed bed resin	25 L	50 L	100 L

WATER RECIRCULATION PLANT mod. IA RICIRC

description:

Recirculating washing water is a very useful technique, as it favours not only the reduction of water consumption (the plant, in fact, provides constantly the same water found inside it, in perfect conditions of use), but also the production of waste to be sent to the treatment plant (the only waste water to be treated turns out to be the backwashing of the column fillings, to be carried-out periodically).



TECHNICAL FEATURES:

Overall dimension	1,500 x 800 x 1,100 - 2,200 h mm
Electrical power required	0.5 - 1.5 kW

PLANTS FOR THE PRODUCTION OF GOLD POTASSIUM CYANIDE (GPC) mod. IA CIANOR



description:

Plant for the production of potassium gold cyanide salt ($\text{KAu}(\text{CN})_2$).

The plant allows the production of potassium gold cyanide ($\text{KAu}(\text{CN})_2$) starting from sheets of pure gold. The plant is complete with the gold recovery system.



MODELS	IA CIANOR 01	IA CIANOR 03	IA CIANOR 05
Production capacity (kg / day of salt)	0.5 - 2	1 - 3	1 - 6
Overall dimensions (mm)	1800x800xh2500	1800x800xh2500	3600x800xh2500
Power supply (V)	380	380	380
Electric power required (kW)	1,5	2,5	4

PLANT FOR THE PRODUCTION OF RHODIUM SULFATE mod. IA RHSOLF



description:

The plant mod. **IA RHSOLF** allows the production of a solution of rhodium sulfate starting from pure rhodium metal. The resulting solution can be used as an additive for galvanic baths or other applications.

The plant mod. **IA RHSOLF** allows the production of 250 g of rhodium for each work cycle.



TECHNICAL FEATURES:	
Overall dimension	4,500 x 2,000 x 2,500 h mm
Power supply	380 V
Electrical power required	13 kW

PLANT FOR THE PRODUCTION OF PLATINUM SALTS mod. IA PT SALT



description:

The plant mod. IA PT SALT allows the production of a solution of platinum salts starting from pure platinum.

The solution obtained can be used as an additive for galvanic baths or other applications.

The plant mod. IA PT SALT allows the production of 100 g of platinum for each work cycle.



TECHNICAL FEATURES:

Overall dimension	1,500 x 900 x 2,300 h mm
Power supply	380 V
Power supply	220 - 380 V
Electrical power required	1.5 kW

ACID ETCHING PLANT mod. IA ATT

description:

Acid etching system designed for the removal of copper metal matrices from the interior of objects. This system is essential in gold electroforming processes and in the production of gold alloy jewelry, ensuring precision and high-quality results.



TECHNICAL FEATURES:

Overall dimension	1,500 x 1,000 x 3,000 h mm
Weight	230 kg
Power supply	220 - 380 V
Electrical power required	6 kW

ACID EMPTYING PLANT mod. IA ATTCL

description:

The IA ATTCL emptying system allows the production of hollow-barreled goldsmith objects by dissolving the "base" metal cores on which the noble metal had previously been deposited by electrodeposition. The plant can be used with hydrochloric or sulfuric acid.



TECHNICAL FEATURES:

Overall dimension	1,400 x 1,300 x 2,200 h mm
Weight	200 kg
Required power	220 - 380 V
Electrical power required	6 kW

GOLD REFINING PLANTS

mod. IA AFFAU (aqua regia system)


ITALFIMET
 CIRCULAR
 ECONOMY

description:

Plants to refine gold alloys (with at least 600 % of gold) composed by:

- a borosilicate glass reactor, where the dissolution of the alloy to be refined takes place thanks to the mixing of hydrochloric acid and nitric acid (a mixture called aqua regia);
- a polypropylene reactor where AgCl precipitation occurs complete with a buchner filter;
- a polypropylene reactor where the chemical reduction of the refined gold (with more than 999,2‰ purity) takes place complete with buchner filter.

Thanks to the vacuum liquid transfer system and the dosing system with automatic pumps, the operator never comes into direct contact with the acids used.



MODELS	IA AFFAU 02	IA AFFAU 05	IA AFFAU 10	IA AFFAU 50
Maximum daily refining quantity	4 kg / 8 h	10 kg / 8 h	20 kg / 8 h	50 kg / 8 h
Borosilicate glass reactor volume	20 L	50 L	100 L	2 x 100 L
PP reactors volume	100 L	250 L	500 L	500 L
Overall dimensions (LxWxH)	2,500 x 1,500 x 2,400 mm	4,000 x 1,500 x 2,600 mm	5,000 x 1,500 x 2,600 mm	6,500 x 1,500 x 2,600 mm
Power supply	400 V - 50 Hz	400 V - 50 Hz	400 V - 50 Hz	400 V - 50 Hz
Electric power required	4 kW	8 kW	12 kW	16 kW



GOLD ELECTROLYTIC REFINING PLANTS mod. IA AFFAUUEL

description:

Plant used to perform a high purity gold refining. The plant allows to electrolytically refine gold alloys (having a minimum purity of 995 ‰) up to a purity of 999.9 ‰.



ITALFIMET
CIRCULAR
ECONOMY



MODELS	IA AFFAUUEL 02	IA AFFAUUEL 10
Maximum daily refining quantity (kg/24h)	2	10
Overall dimensions (mm)	1000x600x1200	1200x1000x2000
Power supply (V)	380	380
Electric power required (kW)	1,5	3

SILVER REFINING PLANTS mod. IA AFFAG

description:

IA AFFAG is the Italfimet S.r.l. line of machines for electrolytic silver refining, designed to process material with a minimum purity of 800‰.

IA AFFAG allows silver to be refined to a purity of 999.5‰, while also ensuring the complete recovery of precious metals present in the alloys to be treated. The machine is designed to be simple and practical to use. Upon request, customized versions with higher production capacity than the standard models can be created.



ITALFIMET
CIRCULAR
ECONOMY

MODELS	IA AFFAG 10	IA AFFAG 35	IA AFFAG 70	IA AFFAG 100
Maximum daily refining quantity (kg/24h)	10	35	70	100
Total volume (L)	200	1300	2600	3400
Overall dimensions (mm)	1500x800x2400	3000x1200x2500	4750x1200x2500	6500x1200x2500
Power supply (V)	380	380	380	380
Electric power required (kW)	2	8	16	25

REACTOR IN STAINLESS STEEL

description:

Stainless Steel Reactor for Silver Dissolution:

- . Nitric acid-resistant
- . Electrically heated
- . Equipped with a mechanical agitator
- . Fitted with a tilting system
- . Includes an exhaust fume cooling system

characteristics:

- . Powered mixer 0.25 hp
- . Trap for cooled condensing the smoke
- . AISI 316 stainless steel butterfly valve 2.5 to 3 inches
- . Removable pipe to blow gas in reactor
- . Manual for the tipping
- . Support structure in AISI 304
- . Electric panel for temperature control timing of reversal agitator
- . Heater from 5 kW



GRANULATORS FOR JEWELLERY mod. IA GRANUL

description:

IA GRANUL is a machine designed for the production of precious metal granules and chips.



MODELS	IA GRANUL 135	IA GRANUL 250
Volume	600 L	900 L
Dimensions (LxWxH)	900 x 900 x 1,200 h mm	1,490 x 1,040 x 1,200 h mm
Au max	45 kg	100 kg
Ag max	25 kg	55 kg
Voltage	400 V - 50 Hz	400 V - 50 Hz

COPPER REFINING PLANTS mod. IA AFFCU

description:

The plant allows the electrolytic refining of copper-containing alloys (with at least 95% copper) with the aim of obtaining electrolytic copper and anodic sludges containing precious metals.



ITALFIMET
CIRCULAR
ECONOMY

MODELS	IA AFFCU20	IA AFFCU40	IA AFFCU80	IA AFFCU120
Maximum daily refining quantity	20 kg / 24 h	40 kg / 24 h	80 kg / 24 h	120 kg / 24 h
Total volume	600 L	1800 L	3000 L	4200 L
Electrolytic positions	4	9	18	27
Overall dimensions (LxWxH)	3,000 x 1,600 x 1,500 mm	4,500 x 1,600 x 3,500 mm	6,500 x 1,600 x 3,500 mm	8,500 x 1,600 x 3,500 mm
Power supply	400 - 50 Hz	400 - 50 Hz	400 - 50 Hz	400 - 50 Hz
Electric power required	8 kW	12 kW	17 kW	20 kW

FUME ABATEMENT SYSTEMS mod. IA AFA

description:

IA AFA is the line of wet scrubber towers produced by Italfimet S.r.l.. The IA AFA towers are designed to reduce pollutants generated by industrial chemical processes, such as precious metal refining, galvanic treatments, and any processes that involve the use of acids producing harmful emissions. Each process is carefully analyzed and studied to identify the most effective solutions, ensuring optimal performance and compliance with environmental regulations.



MODELS	IA AFA 600	IA AFA 1000	IA AFA 1250	IA AFA 2000/2
Tower diameter	600 mm	960 mm	1250 mm	2000 mm
Circulation tank volume	400 L	630 L	980 L	3000 L
Pump flow	105 L / min	180 L / min	250 L / min	800 L / min
Suction flow rate	300 m ³ / h	500 m ³ / h	800 m ³ / h	1,600 m ³ / h
Contact time	4.5 sec	5 sec	5.5 sec	5.3 sec
Overall dimensions (LxWxH)	800 x 1,200 x 2,200 mm	1,000 x 1,500 x 3,000 mm	1,250 x 1,750 x 3,600 mm	2,000 x 3,000 x 6,500 mm
Power supply	380 V	380 V	380 V	380 V
Electric power required	1.5 kW	2 kW	2.5 kW	4.5 kW



SELECTIVE RESIN PLANTS FOR PRECIOUS METALS RECOVERY

mod. IA RECRES



descrizione:

The selective resin machine is designed for the recovery of precious metals (such as Au, Pt, Pd, Rh) from various processes, including gold refining, acidic solutions, alkaline solutions, galvanic solutions, and other types of solutions.

The resins used in the system have the ability to effectively retain precious metals, preventing their dispersion in subsequent processes. The recovery of the retained metals is carried out later through the incineration of the resins, a process that is not included in the operation of the machine itself.

The machine consists of a recirculation tank made of polypropylene, connected to a chemical-resistant magnetic pump that ensures the continuous recirculation of the solution within the columns containing the resins.

The resins used are selected based on the nature of the solutions to be treated, ensuring optimal efficiency in the recovery process.



MODELS	Volume recirculation tank	Columns (n°)	Resin volume per column	Dimension (in line)	Power supply
IA RECRES 2X15	-	2	15 L	50 x 50 x 120 h cm	380 V - 1 kW
IA RECRES 2X50	200 L	2	50 L	150 x 100 x 150 h cm	380 V - 1 kW
IA RECRES 3X50	200 L	3	50 L	200 x 100 x 150 h cm	380 V - 1 kW
IA RECRES 2X75	500 L	2	75 L	160 x 100 x 150 h cm	380 V - 1 kW
IA RECRES 3X75	500 L	3	75 L	220 x 100 x 150 h cm	380 V - 1 kW

ELECTROLYTIC RECOVERY UNIT mod. IA RECMOD



descrizione:

The Electrolytic recovery unit is a useful device for the recovery of precious metals by electroplating. Designed for those who need to recover precious metals such as gold palladium silver from chemical solutions. Ideal for the recovery of galvanic baths, recovery waters of galvanic baths, stripper solutions and liquids containing precious metals.



TECHNICAL FEATURES:

Overall dimensions of the electrolytic cell	300 x 50 x h 600 mm
Power supply	220 V
Electric power required	0,5 kW

PRECIOUS METALS RECOVERY UNIT mod. IA RECBRILL



descrizione:

IA RECBRILL is a machine capable of recovering gold from electropolishing solutions and gold, silver, platinum, palladium and rhodium from galvanic solutions. It is a device specifically designed and developed to achieve efficient and complete recovery.

The metal is electrolytically deposited on a cathode which can then be melted and refined for total metal recovery.

The work tank has a volume of 30 liters which can be expanded up to 200 liters by simply connecting any external tank.



TECHNICAL FEATURES:

Overall dimensions of the electrolytic cell	800 x 400 x 1,200 h mm
Power supply	220 V
Electrical power required	1 kW

GOLD STRIPPING AND RECOVERY SYSTEM mod. IA STRIPPAU



descrizione:

The system **IA STRIPPAU** is useful to remove gold from any component coming from: custom jewellery, electronics, galvanised materials.

The system **IA STRIPPAU** enables complete recovery of the gold removed from the aforementioned components. The metal is recovered in the form of metal powder.



TECHNICAL FEATURES:

Overall dimensions	2,500 x 1,400 x 2,200 h mm
Weight	100 kg
Required power	380 V
Electrical power required	3.5 kW

GALVANIC MODULE mod. IA GALV MINI

descrizione:

Galvanic module model **IA GALV MINI** has been designed to allow the galvanic finishing of precious metals on jewelry, fashion jewelry, watchmaking and precision mechanics.

The machine allows the galvanic finishing of Rhodium, Gold, Palladium, Ruthenium, Silver, Platinum and related de-greasing.



MODELS	IA GALV MINI SG	IA GALV MINI PLATING
Description	Basic module for de-greasing processes	Module for Rhodium-plating, Gold-plating, Palladium-plating, Ruthenium-plating, Platinum-plating and Silver-plating
Dimension and weight	68 x 65 H 133 cm	68 x 65 H 133 cm
Power supply	220 V – 1.0 Kw	380 V – 1.0 Kw

GALVADESK Benchtop Galvanic Unit

description:

GALVADESK is a practical and easy-to-use machine, ideal for those who need to perform galvanic finishes with small volumes of liquid (1 L, 2 L, and 5 L). Compact and simple to position, it fits comfortably on a workbench.

Designed for electroplating baths with various precious metals such as rhodium, gold, palladium, ruthenium, silver, and platinum, including the preliminary.

GALVADESK is the perfect solution for those looking to enhance the quality of their galvanic processing.



MODELS	GALVADESK 1	GALVADESK 5
Volume	1 and 2 Liters Beakers	5 Liters Polypropylene Tank
Power supply	220 V - 1.0 kW	220 V - 1.0 kW
Dimensions (LxWxH)	23 x 40 x 46 cm	23 x 40 x 46 cm
Weight	12,5 kg	12,5 kg
Temperature regulation	✓	✓
Fluid speed control	✓	✓
Heating type	Heating plate	Glass heater
Rectifier power	10 V - 10 A	10 V - 10 A
Graphic display	3 inches	3 inches

GALVAPEN Galvanic Pen Machine

description:

GALVAPEN is an innovative and versatile tool designed to perform galvanic depositions with utmost precision using pen technology.

Perfect for detailed decorations and small repairs, **GALVAPEN** stands out for its craftsmanship and is 100% Made in Italy.

In addition to galvanization, it also allows for degreasing and cup deposition for more complex tasks. Custom design options are available upon request to meet specific needs.



TECHNICAL FEATURES:

Dimensions (LxWxH)	18 x 16 x 8 cm
Weight	0.3 kg
Power supply	220 V
Output	20 V - 5 A

ANALYTICAL BALANCE for Assay Laboratory

description:

GALVADESK is a practical and easy-to-use machine, ideal for those who need to perform galvanic finishes with small volumes of liquid (1 L, 2 L, and 5 L).

Compact and simple to position, it fits comfortably on a workbench.

Designed for electroplating baths with various precious metals such as rhodium, gold, palladium, ruthenium, silver, and platinum, including the preliminary.

GALVADESK is the perfect solution for those looking to enhance the quality of their galvanic processing.



MODELS	Max Capacity gr.	Division mg	Divis. Validation mg	Min. Load mg	Reproducibility	Linearity mg
ABT 120-5DM	42 - 120	0.01 - 0.1	1	1	0.02 - 0.1	+/- 0.05 0.2
ABT 220-5DM	82 - 220	0.01 - 0.1	1	1	0.05 - 0.1	+/- 0.1 0.2

TECHNICAL DATA:

Large LCD display	figure height 14 mm
Weighting plate dimension	Ø 80 mm
Balance dimensions (LxWxH)	217 x 356 x 338 mm
Weighing compartment (LxWxH)	168 x 172 x 223 mm
NET weight	approx. 7 kg
Permitted ambient temperature	10°C/30°C

ASSAY FURNACE mod. IA FS

description:

Machine used for assay production of precious metals for the fire assaying process. The assay furnaces have electronically adjustable power, electrical temperature control and stylite heating.

The plant consists of:

- . Heating system with 9 stylite rods Ø 14/22, length mm 750 including the furnace
- . Max temperature 1300°C
- . Internal compartment in Carborundum with internal measurements of 240 x 335 x 135 h mm
- . Digital temperature control with the possibility of setting two temperatures (one work and one for night maintenance)
- . 3 digital ammeters for resistor absorption display
- . 3 transformers with temperature controller type TKS



MODEL	Dimensions	Weight	Power Supply	Power	Work Compartment
IA FS	900 x 850 x 1850 h mm	500 kg	380 / 220 V	7,5 / 9 kW	240 x 335 x 135 h mm

ASSAY FURNACE mod. IA FST

description:

Machine used for assay production of precious metals for the fire assaying process.

The assay furnaces have electronically adjustable power, electrical temperature control and stylite heating.

The plant consists of:

- . Heating system with 6 stylite rods Ø 14/22, length mm 700
- . 3 independent adjustments
- . Max temperature 1250°C
- . Automatic system for temperature maintenance during the night
- . Internal compartment in Carborundum with internal measurements of 220 x 170 x 100 h mm
- . Weekly clock
- . Digital temperature control
- . 3 ammeters for resistor control



MODEL	Dimensions	Weight	Power Supply	Power	Work Compartment
IA FST	850 x 850 x 1600 h mm	500 kg	380 / 220 V	7,5 / 9 kW	220 x 170 x 100 h mm

ASSAY HOOD mod. IA CAP

description:

Equipped extractor hood for precious metal assaying. Manufactured in self-extinguishing polypropylene, it enables nitric acid and sulphuric acid assaying.



MODELS	Dimensions	Weight	Power Supply	Power	6 Position Furnaces	24 Position Pyrex Systems
IA CAP 06	1,200 x 600 x 2,000 h mm	50 kg	220 V	1.5 kW	1	0
IA CAP 12	1,400 x 600 x 2,000 h mm	60 kg	220 V	3 kW	2	0
IA CAP 50	1,800 x 600 x 2,000 h mm	60 kg	220 V	4 kW	1	2



The plants are CE-MARKED in compliance with Machinery Directive 2006/42/CE
and Directives 2006/95/CE (low voltage)
and 2004/108/CE (electromagnetic compatibility)

ITALFIMET S.p.A. VIA XXV APRILE, 88 - 52048 MONTE SAN SAVINO - AR (ITALY)
TEL. +39 0575 844 688 - INFO@ITALFIMET.IT - ITALFIMET.IT

