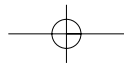


MANFREDI

*...overlooking
to the future*



*2005
jewellery catalogue*



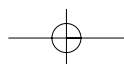
Index

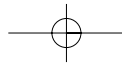
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Join the Club



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and subscribe to become a member of
**Manfredi Worldwide Jewellery
Technicians Community**





MANFREDI

Overlooking to the future

Proceeding to the new edition of Manfredi Jewellery Catalogue we wish to express optimistic wishes and hope in this moment full of essence of doubt and confusion.

The global market has strongly modified the conditions in which during decades we were used to operate. In 2004 Manfredi celebrated 70 years of activity 50 of which in the jewellery range and, thanks to the long and strong experience, keeps on expanding in to the 5 continents market.

In this catalogue we are proving that we have a strong will to follow our tradition: to be in the first row in the forefront innovation.

Our quality and service

MANFREDI was one of the first European Companies among the jewellery equipment manufacturers to obtain, since 1997, the Quality Certificate ISO 9001 issued by the German Institute TÜV.

Our service is worldwide recognized as one of the most efficient; our staff of technicians and engineers never leave a customer alone to face problems. Even after decades we can grant a proper service, so the users look upon us not only like a supplier, but a reliable partner too.

Vacuum casting

Besides our traditional wide range of induction casting machines, we are proud to propose the new vacuum casting machines SMARTYCAST REGULAR and SMARTYCAST PLUS that already have overcome the hardest tests, working successfully for long time in well reputed factories in many countries.

Platinum and titanium

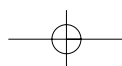
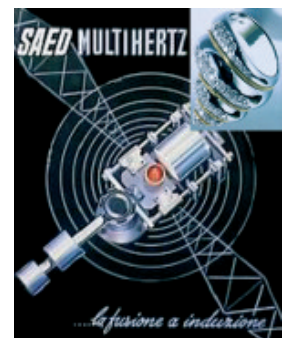
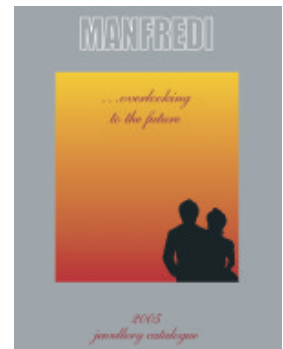
Our experience in platinum casting dates back to the sixties of last century, while titanium casting, that is a new entry in the jewellery, is for us a well known technology since 15 years ago in the dental and medical fields.

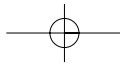
Lasers

Since few years, we are succeeding in the market with JEWELLASER, a choice of 4 models of welding lasers.

(For Jewellaser please ask for special catalogue)

The pride of the past generates the certainty of the future. (W.Goethe)





2

Induction vacuum casting



Smartycast Plus



Smartycast Regular

SMARTYCAST

Approaching to the vacuum casting technology, we choose to propose a machine that complies to any customer need.

On the same body and hardware, we are offering a machine, SMARTYCAST PLUS, allowing to use the most sophisticated and complete automatic cycle as well as a fully manual one.

The other machine we offer, SMARTYCAST REGULAR, is more simple and all cycle phases are decided by the operator but with the help of a smart instrumentation protecting from wrong or false manoeuvres.

THE MOST RELEVANT FEATURES FOR BOTH MODELS ARE

- easy installation plug-and-go
- quick-to-learn (easy to learn)

MELTING CAPACITY

- up to 350cc of liquid metal corresponding to about 6 kg of 24 k gold

CASTING RING TYPE

Both SMARTYCAST can fit any kind of casting ring: traditional flat, perforated flat, perforated and flanged

CASTING RING SIZES

- Any size of casting ring can be used on the SMARTYCAST within the limit of: minimum \varnothing 80 x 100 mm - maximum \varnothing 130 x 250 mm
 - The SMARTYCAST is designed to operate with 4 standard sizes of casting rings: \varnothing 80x100 mm - \varnothing 100x150 mm - \varnothing 120x200 mm - \varnothing 130x250 mm
- Other sizes of casting rings and suitable tools to work with are available upon request.

RELEVANT DETAILS

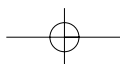
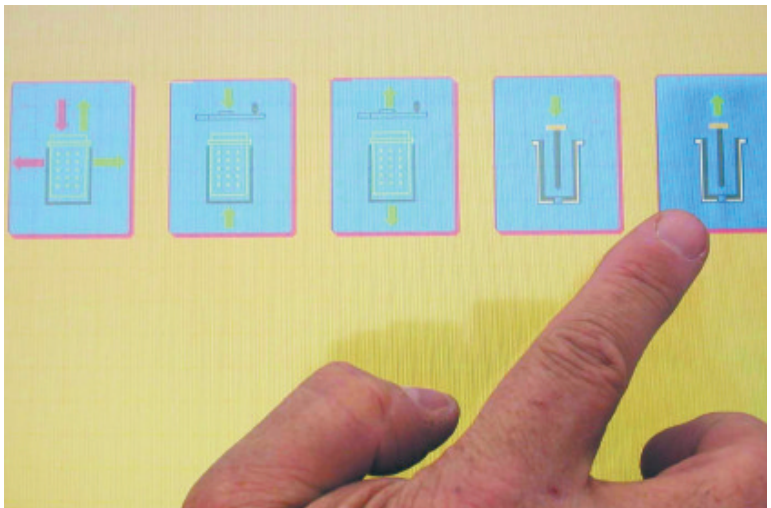
- atmosphere of melting: natural, vacuum, inert (argon)
- melting pressure: adjustable up to 2 bar
- possibility of adding metal during melting
- max. melting temperature: 1300°C
- adjustable temperature rate
- melting time: 2 Kg melted in 7 minutes
- automatic safe positioning and removing of the casting ring

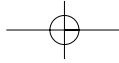
WATER COOLING SYSTEM

- demineralized water cooling in closed circuit by an electric pump
- continuous check-out of the cooling water by means of a pressure switch and a flow-meter
- emergency connection to water tap in case of black-out
- safety thermal switch against water overheating

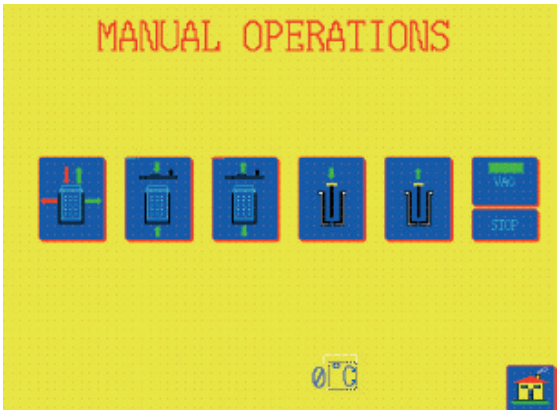
CRUCIBLES

- isostatic graphite crucible: CGH 320 XQ for casting; RCGH 310 XQ for granulating
- easy-to-replace crucible and stopper

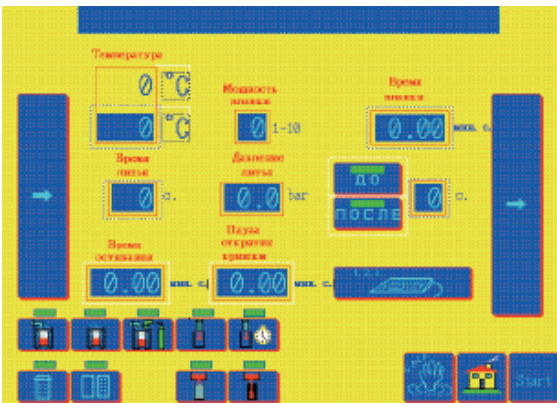




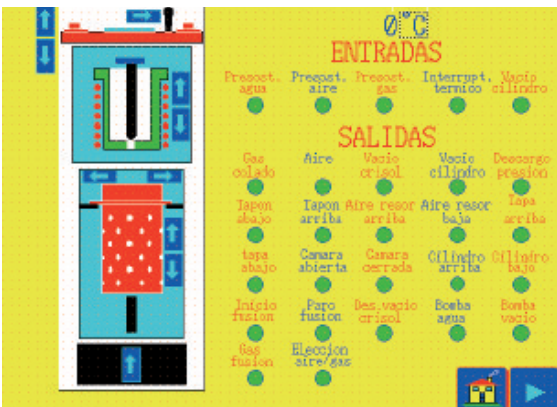
Start-up screenshot



Manual cycle screenshot



Data input screenshot



Diagnostic screenshot

SMARTYCAST PLUS

is the casting machine more flexible and easy to use available on the market.

SCREEN

The 8 colours, 12" wide touch screen shows, since the switching on of the machine, every step to follow.

- Recording of the optimal melting conditions according to the alloy in use
- storage up to 105 programs
- languages available: English, French, Italian, Russian, Spanish (other languages, available upon request)
- real time data displayed on the screen
- diagnostic and operating display through icons
- button access to helping screen always available
- any parameter (time, temperatures, inert gas and air pressure, vacuum) can be programmed
- each cycle can be programmed upon operator's needs from complete manual up to fully automatic

EASY INPUT AND EASY DISPLAY OF DATA

The full cycle, from the start-up of the SMARTYCAST PLUS, is displayed step by step with friendly screenshots.

The touch screen is also a keyboard where the buttons are replaced by icons. Home and help icons allow to delete any faulty action while the diagnostic screenshot displays, anytime required, the status of all the functions.

A smart software drive the operator and avoid any fault manoeuvre.

SMARTYCAST PLUS SPEAKS MORE LANGUAGES

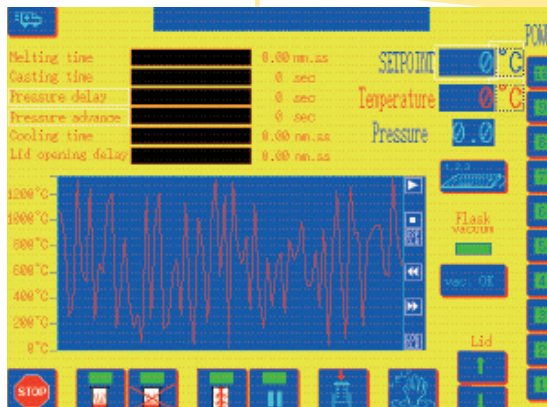
Just pressing the required icon, SMARTYCAST PLUS switches to your choice language.

TO EACH ALLOY ITS OWN CASTING CYCLE

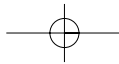
SMARTYCAST PLUS can store up to 105 casting cycles thus allowing the chance to use the most suitable one for any alloy and quantity.

Besides this, the high flexibility of the software allows to choose the best condition of atmosphere, pressure, timing etc. for each phase of the cycle.

A further chance is the wide choice of the casting ring type (flat, perforated or flanged) available in many sizes, allowing to always reach the best result.



Melting conditions screenshot



SMARTYCAST REGULAR

Operating cycle tutored step-by-step on the following parameters:

- melting temperature controlled by self-regulating pyrometer
- choice of atmosphere: natural, vacuum, inert (argon)
- choice of casting ring: traditional, perforated, perforated and flanged
- setting of pressure input
- pressure level
- casting time



SMARTYCAST REGULAR

Much more for much less

SMARTYCAST REGULAR allows to cast in any condition with the best result.

Especially suggested when the production foresees the repetition of more castings with the same alloy, the same size and type of casting ring, the same atmosphere and pressure conditions.

To prepare a casting, the smart regulator drive the operator to set up the cycle that once recorded, is maintained up to when it will be replaced by a new one.

During the melting process it is possible to modify some of the parameters of the cycle to avoid miscastings, in case of a faulty manoeuvre or programming or in case of a mistake.

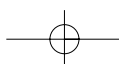
After a short training, any operator has the possibility to manage SMARTYCAST REGULAR in a friendly way.

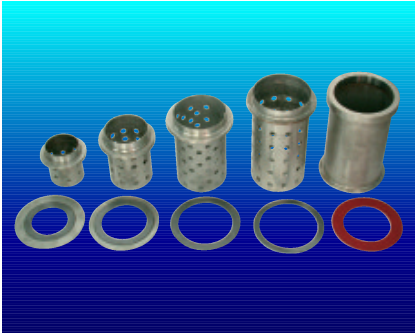
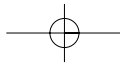


The cycle remains countinuously under control

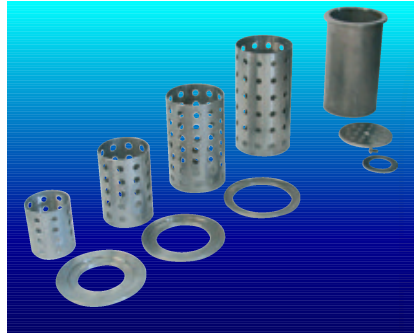
The high precision pyrometer as well as all the control and maoeuvre instruments are always available for an emergency like a current black-out or water overheating intervention, to avoid damages to the casting and to the machine. Also the heating power can be continuously regulated to accelerate or reduce the heating power of the generator.

Features and technical data	SMARTYCAST
Power supply	Threephase 220 V or 380 V – 6 kW . 50 or 60 Hz
Cooling circuit	Closed circuit cooling system – Pressure and temperature control .Emergency switch on water tap
Melting/Casting atmosphere	Natural – Vacuum - Argon
Max temperature	1300 °C
Crucibles	Isostatic graphite capacity 6 kg liquid 24 k gold – Casting CGH320 . Graining RCGH310
Casting rings kit	Kit for flat or perforated or flanged rings each including accessories plus 1 set of 4 standard rings (Ø 80 x 100 - Ø 100 x 150 - Ø 100 x 200 - Ø 130 x 250 mm)
Casting pressure	Up to 2 bar
Data Input and display	Smartycast Regular - Alphanumeric display with keyboard Independent digital pyrometer • Smartycast Plus - 12" colour touch screen – All parameters of the melting diagram constantly displayed
Casting Ring vacuum	Continuously operating during casting
Frequency generator	Solid state – 24 kHz
Overall dimensions (cm)	
Machine	Width 75 – Depth 60 – Height 120 – Weight 220 kg
Water pump	Width 36 – Depth 20 – Height 19 – Weight 10 kg
Vacuum pump	Width 40 – Depth 30 – Height 40 – Weight 30 kg
Optional	Granulator GRANYMAT – Camera and video screen – Ingot moulding srts . PC connection

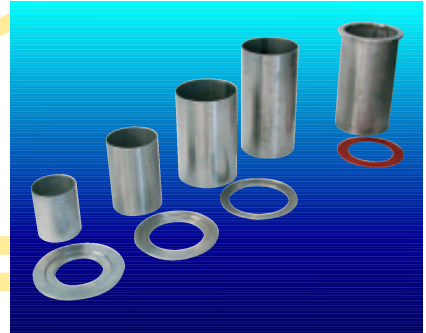




Flanged kit



Perforated kit



Flat kit



CASTING RINGS

Choose the casting ring

We are offering to the customer the opportunity to choose one or more types of casting rings in a range of three: flat, perforated, flanged.

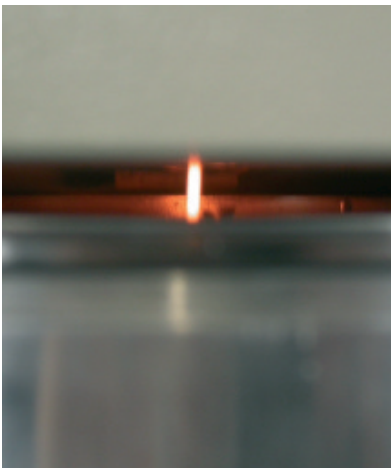
GRANYMAT

allows a regular metal small sized flowing suitable to grant the drops to solidify before reaching the bottom. A water pump supply a pressure flushing calibrated to grant an homogeneous production of grains. GRANYMAT can contain up to 3 full crucibles o liquid metal corresponding to more than 9 kg of gold alloy.

INGOT CASTING

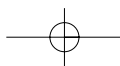
An interesting alternative given by SMARTYCAST is to allow the production of ingots. The ingot mould can be square, rectangular or round shaped .

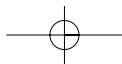
The standard sizes are:
round Ø 10 x 250 mm - rectangular 70 x 10 x 250 mm
maximum height 250 mm
Other sizes are available upon customer's request.



REMOTE CONTROL VIDEO CAMERA

When people are very busy, sometime it is not possible to spend time close to the casting machine to control the melting process. For that reason, it is available a video camera allowing the operator to attend another job while smartycast is melting.





6 Induction centrifugal casting



Since 1957 Manfredi has specialized in the production of induction furnaces and casting machines. Our experience is so deep that we can suggest the proper machine for any particular production.

ONE MACHINE FOR ANY METAL

Thanks to their high flexibility our casting machines allow the melting of any gold, silver, platinum, bronze, brass, stainless steel and stellite alloys.

THREE SIZES

Our casting machines are designed for three levels of capacity : up to 20 cc (**MILLENNIUM** and **SMALLCAST**), up to 40cc (**NEUTOR**) and up to 120cc (**MAGNUM** & **NEUTROMAG**).

CHOICE OF ENVIRONMENT

Neutor and Neutromag centrifugal furnaces can melt and cast in natural, vacuum or neutral atmosphere (Argon gas). Just set the knob and have the most proper environment to avoid any metal oxidation and contamination.

THE CENTRIFUGAL SPIN

To obtain a perfect casting it is necessary to regulate the flowing of the metal into the mould to have a perfect filling with no missed items or breakages in the investment.

Having any alloy a different density and chilling factor, acting on the spin of centrifugal arm it is possible to meet the excellence.

TEMPERATURE CONTROL

Monitoring and stabilizing of melting temperature is granted by a digital display optical pyrometer.

The temperature control allows a constant metal temperature reading, both during its rising and stabilization process.

The highest accuracy is granted between 800° and 2000° C.



PLATINUM AND TITANIUM

Our experience in platinum casting dates back to the sixties of last century. Today we can suggest machines to cast up to 450 gr of Platinum into the casting ring or into a graphite ingot mould while in the side melter it is possible to melt and pour up to 1 kg of platinum.

Titanium casting, that is a new entry in the jewellery, is for us a well known technology since 15 years ago in the dental and medical field.

Up to date it is possible to cast up to 70 gr of titanium corresponding to a volume more than 200 gr of gold alloy.

A LOT OF OPTIONS

Platinum, Titanium, side melter with fix or tilting coil, casting or pouring into the ingot, argon flowing, melting and casting smaller quantities using the suitable accessories, etc. are just examples of how we can adapt our machines to satisfy our customer's need.



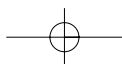
MEMOCAST

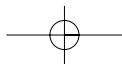
memocast ® is a device which, when connected to the digital temperature control installed on the MANFREDI casting machines, displays, stores and prints the temperature diagram of the casting cycle.

memocast ® is provided with software easily installed on any PC or laptop computer having the required configuration.

PC Configuration

Processor pentium 200 MHz - RAM 16 Mb - Serial port RS-232 9 PIN
Hard Disk 30Mb available - Software Windows 95 - 98 - XP





Small induction casting machines



THE SMALL "BIG" CASTING MACHINES

MILLENNIUM & SMALLCAST are induction casting machines purposely designed for **small sized goldsmith's labs, craftsmen, small shops and prototype labs.** (these machines are not suitable where is usual to make more castings daily).
The power needed is 2,4 kW only so that it can be installed in a shop non electrically supplied as a factory!

SMALLCAST have been designed for the laboratories where the room is a problem or the freight cost should be minimized and has to be set on a suitable stand.

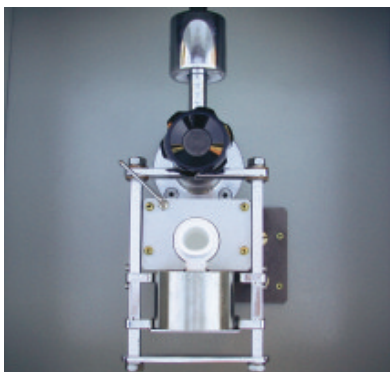
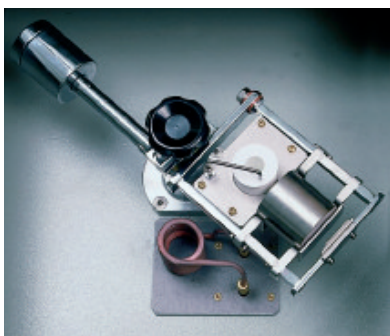
MILLENNIUM & SMALLCAST are available in the **"S"** version (without temperature control) and in the **"R"** version (with temperature control).

FEATURES

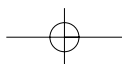
- Self-diagnostics of circuits and safety devices.
- Manual and fully automatic casting cycle.
- Casting power setting feature.
- Instantaneous-reading control and stabilization of the temperature set in the range from 800 to 2000°C (on "R" models).
- Powered movement of the casting coil.
- Manual or automatic centrifugation control.
- Equipped with motor breakaway torque regulator to control the metal flow to the casting ring.

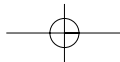
MILLENNIUM & SMALLCAST ARE SUPPLIED WITH:

- **"AU"** version: rigid arm and melting coil for gold casting with KG20 or KGV20 graphite crucibles only up to 200 gr of gold alloy.
- **"PT"** version: double-elbow arm and melting coil for platinum casting with Y15Pt crucible only up to 80 gr of platinum.
- **"MIX"** version: supplied with both "AU" straight and "PT" double elbow arms and 2 melting kits (including 2 coils + 2 crucibles holders + 1 crucible of each).



Features and technical data	MILLENNIUM	SMALLCAST
Max. casting capacity	200 gr of 24k gold melt in 3'25" - 80 gr pf Pt melt in 3'	
Flask (casting ring)	Up to max size ø 80 x 80 mm	
Crucibles	For gold: KG20 / KG20 "XQ" / KGV20 For platinum: Y15Pt	
Power supply	220/240 V Single phase - 2,4 kW - 50 or 60 Hz	
Cooling system	Built-in water cooling system	
Overall dimensions (cm)	Width 64 - Depth 55 - Height 88	Width 64 - Depth 55 - Height 52
Net weight / Gross weight	93,5 kg / 106 kg	78 kg / 92 kg
Argon device	Optional: code D01Y0	
Memocast	Optional: code ACC.MEM	





8 Centrifugal casting



Neutor Digital

MAGNUM

operating in open air only this machine is suggested for productions of non precious metals as bronze or brass, stainless steel, satellite. Giving very good performances with silver and most of the gold alloys too.

NEUTOR DIGITAL & NEUTROMAG DIGITAL

Are respectively suggested for the medium and large producers of precious and non precious alloys. Acting simply on a switch it is possible to choose the most proper atmosphere for the alloy in use: natural, vacuum or inert (argon).

CAST WITH MORE CRUCIBLE SIZES

If it foreseen to use crucibles of more sizes (limited to the sizes and models available on the manfredi catalogue) ask for the suitable kit to meet your need.

STAINLESS STEEL AND STELLITE CASTING



KR114/117

Magnum and Neutromag allow to cast up to 100 cc (700 gr approximately of alloy) of stainless steel and stellite using the kit including coil, crucible holder, 1 crucible KR114 and 1 ceramic container KR117



KR117

KR114

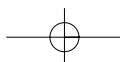
Features and technical data	NEUTOR DIGITAL	MAGNUM DIGITAL	NEUTROMAG DIGITAL
Max casting capacity and melting time	760 gr of 24k gold melt in 3'		2,2 kg of 24k gold melt in 6'
Any casting ring can be fitted up to:	Ø 110 mm Height: 130 mm	Ø 130 mm Height: 200 mm	Ø 130 mm Height: 200 mm
Crucibles		See crucibles table on pages 13 - 14 - 15	
Power supply	3 phase - 220 or 380 V - 7,2 kW - 50 or 60 Hz	3phase - 220 or 380 V - 9,1 kW - 50 or 60 Hz	
Cooling system		Cooling water pump with tank	
Overall dimensions (cm)	Width: 74 cm Depth: 82 cm + 23 cm pump tank Height: 95 cm	Width: 101 cm Depth: 90 cm + 23 cm pump tank Height: 103 cm	Width: 103 cm Depth: 108 cm + 23 cm pump tank Height: 106 cm
Net / Gross weight	294/362 kg	342/387 kg	590/664 kg
Smaller crucible set (optional)	None	For crucibles sizes 35 - 20 - 40	For crucibles sizes 35 - 20 - 40
Steel & stellite casting up to 100 gr	Possible with crucibles C35 & C65	Optional with crucibles C35 & C65	Optional with crucibles C35 & C65
Set for steel & stellite Large casting up to 100 cc (700 gr-) Optional		For crucible KR 114/117	For crucible KR 114/117
Atmosphere	Included: Natural - vacuum - inert	Natural - Optional: Argon flowing device	Included: Natural - vacuum - inert

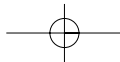


Neutromag Digital



Magnum Digital





Centrifugal with side melter



Neutor Digital 150F

CENTRIFUGAL CASTING MACHINES WITH SIDE MELTER FIX OR TILTABLE COIL

These machines have the same casting performances as the corresponding centrifugal ones.

A side melter has been added to allow static melting up to 150cc of volume (for **NEUTOR 150F**) and 350cc of volume (for **MAGNUM 350F** & **NEUTROMAG 350F**). The temperature control reader can be moved from the centrifugal side to the static one simply with a clip.

FIX COIL "F"

To facilitate the manual pouring of the melted metal, models "F" are supplied with a suitable tong.

TILTING COIL "R"

This efficient crucible tilting system enables a regular and continuous pouring flow, thus avoiding molten metal splashes and granting highly homogeneous alloys.

KIT TO MELT WITH MORE CRUCIBLE SIZES

If it foreseen to use crucibles of more sizes (limited to the sizes and models available on the manfredi catalogue) ask for the suitable kit to meet your need.

For performances and technical feature of centrifugal side, go to page 8

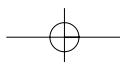
Features and technical data	NEUTOR 150 F/R	MAGNUM 350 F/R	NEUTROMAG 350 F/R
Max melting capacity and melting time	150 cc corresponding to 2,8 kg of gold 24k melt in 8'	350 cc corresponding to 6,5 kg of 24k gold melt in 12'	
Crucibles	See crucibles table on pages ?		
Power supply	3 phase - 220 or 380 V - 7,2 kW - 50 or 60 Hz	3phase - 220 or 380 V - 9,1 kW - 50 or 60 Hz	
Cooling system	Cooling water pump with tank		
Overall dimensions (cm)	Width: 120 cm Depth: 110 cm Height: 110 cm	Width: 130 cm Depth: 110 cm Height: 130 cm	Width: 143 cm Depth: 130 cm Height: 130 cm
Net / Gross weight	294/362 kg	342/387 kg	590/664 kg
Smaller crucible set on static side (optional)	For crucible size: 60	For crucible size: 60 / 150	For crucible size: 60 / 150
Steel & stellite casting up to 100 gr	Possible with crucibles C35 & C65	Optional with crucibles C35 & C65	Optional with crucibles C35 & C65
Set for steel & stellite Large casting	No	For crucible KR 114/117	For crucible KR 114/117
Argon flowing device on centrifugal side	Included: Natural - vacuum - inert	Natural - Optional: Argon flowing device	Included: Natural - vacuum - inert
Argon flowing device on side melter	Included	Optional	Included
Ingot moulds pouring	The kit to pour the metal directly into the graphite ingot mould is available on request respecting, when possible, the sizes indicated by the customer		
Granymat	Pre-arrangement to pour directly into Granymat (only on "R")		

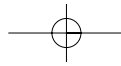


Neutromag Digital 350F



Neutromag Digital 350R





10 Platinum & Titanium casting



Neutor Platinum Ti



PLATINUM

New series of casting machines designed to cast and/or melt platinum. The centrifuges are equipped with a double elbow arm equipped with safety locker. Choose among 6 models the most suitable one for your needs.



The arm is driven by an inverter to calibrate the spin as well as the rpm.



Centrifuge only, natural atmosphere MAGNUM PLATINUM

With crucible Y15Pt: 150 gr Pt melt in 50"
Max casting ring: Ø 120 mm -height 100 mm
With crucible Y35Pt: 250 gr Pt melt in 2'40"
Max casting ring: Ø 120 mm -height 100 mm

Centrifuge only, natural, vacuum or inert gas atmosphere NEUTOR PLATINUM

With crucible Y15Pt: 150 gr Pt melt in 70"
Max casting ring: Ø 100 mm -height 85 mm

NEUTROMAG PLATINUM

With crucible Y15Pt: 150 gr Pt melt in 50"
Max casting ring: Ø 120 mm -height 110 mm
With crucible Y35Pt: 250 gr Pt melt in 2'40"
Max casting ring: Ø 120 mm -height 110 mm

CRUCIBLES

To obtain the best results with platinum, it is essential to use our high quality Pt crucibles.

Y15Pt - Allows the casting up to 150 gr, but our most experienced customers cast up to 200 gr.

Y35Pt - Allows the casting up to 250 gr, but our most experienced customers cast up to 350 gr

Centrifuge with side melter fix or tilting coil, natural atmosphere MAGNUM PLATINUM 100 F - MAGNUM PLATINUM 100 R

With crucible Y15Pt: 150 gr Pt melt in 50"
Max casting ring: Ø 120 mm -height 100 mm
With crucible Y35Pt: 250 gr Pt melt in 2'40"
Max casting ring: Ø 120 mm -height 100 mm
static melting in side melter with crucible Y100Pt: 1 kg Pt melt in 5'

Centrifuge with side melter fix or tilting coil, natural, vacuum or inert gas atmosphere NEUTROMAG PLATINUM 100 F - NEUTROMAG PLATINUM 100 R

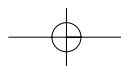
With crucible Y15Pt: 150 gr Pt melt in 50"
Max casting ring: Ø 120 mm -height 110 mm
With crucible Y35Pt: 250 gr Pt melt in 2'40"
Max casting ring: Ø 120 mm -height 110 mm
static melting in side melter with crucible Y100Pt: 1 kg Pt melt in 5'

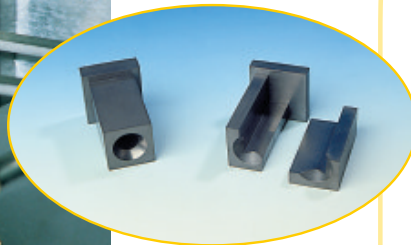
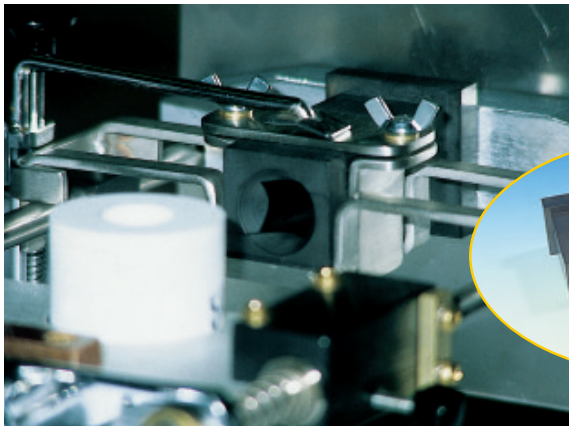
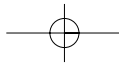


FLASK HOLDERS

Due to the high spin, the flask must be placed on its special cradle: we advise to use the standard flask (80 x 80 mm) supplied with the platinum kit.

Never use the cradles for regular casting rings for platinum but ask for their proper one if the sizes of your flask are not the standard ones (80 x 80 mm).





GRAPHITE INGOT MOULDS FOR PLATINUM

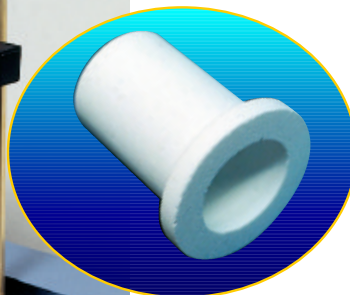
Centrifuging the platinum into graphite moulds, it allows to obtain very compact ingots thus avoiding the hammering of the metal before transforming it with rolling mill. Very helpful to obtain more proper shape to fit platinum into the casting crucible.
 Standard kit includes: 1 round and 1 square ingot mould - 1 cradle - 1 clamp for square mould - 1 mould coating spray bottle.

MELTER ONLY, FIX COIL STATIX HD 100 F

Static melting with crucible Y100Pt: 1 kg Pt melt in 5'

MELTER ONLY, TILTABLE COIL STATIX HD 100 R

for easier pouring.
 Static melting with crucible Y100Pt: 1 kg Pt melt in 5'

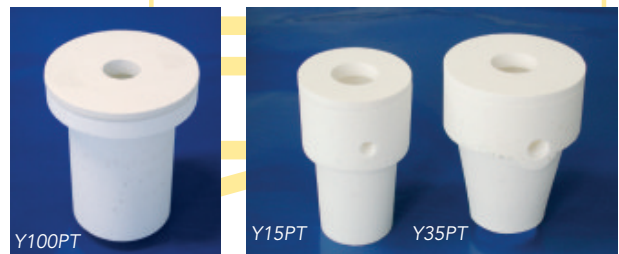


CRUCIBLE FOR STATIC MELTING Y100PT

Designed to melt up to 2 kg platinum; but due to the platinum chilling factor, it can be difficult to pour more than 1200 gr

Y100Pt

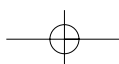
Designed to melt up to 2 kg platinum. Due to the chilling factor, nobody exceed 1200 gr because the platinum risks to cool before filling the mould. With the crucible Y100PT as well as with all platinum crucibles it is suggested to melt always with the cover on the top to avoid dispersion of calories. This way, all mass of platinum will reach a homogeneous temperature granting a perfect filling of the casting ring or of the ingot mould.

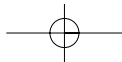


TITANIUM

Thanks to our 15 years experience in titanium casting technology in dental field, we are now ready to supply casting machines for titanium casting for jewelry and industry. Today we can grant casting of 70 gr of TITANIUM corresponding to 200 gr of gold alloy. The model of machine is **NEUTOR PLATINUM TI**. Our technical dept will be glad to answer to all your questions on titanium casting process and availability

Features and technical data	NEUTOR PLATINUM	MAGNUM PLATINUM	NEUTROMAG PLATINUM	MAGNUM 100 F/R	NEUTROMAG 100 F/R	STATIX HD 100 F/R
Melting time	150 GR PT IN 70"	Centrifugal side: 250 gr Pt in 2'40" - Static side: 1 kg Pt in 5'				1 kg Pt in 5'
Any casting ring can be fitted up to	Ø 100 x 80 mm	Ø 120 x 100 mm	Ø 120 x 105 mm	Ø 120 x 100 mm	Ø 120 X 105 mm	No
Power supply	3phase - 220 or 380 7,2 kW - 50 or 60 Hz	3phase - 220 or 380V - 9,1 kW - 50 or 60 Hz				
Crucibles	Y15PT	Y35PT	Y35PT	Y35PT / Y100PT	Y35PT / Y100PT	Y100PT
Kit for Y15PT crucible (optional)	Included	Optional	Optional	Optional	Optional	No
Kit for gold casting (optional)	crucible size: 35-20-40	crucible size: 180-120 crucible size: 35-20-40	crucible size: 180-120 crucible size: 35-20-40	crucible size: 180-120 crucible size: 35-20-40	crucible size: 180-120 crucible size: 35-20-40	No
Including: Rigid arm + coil + 1 crucible each size						
Kit for gold static melting (optional)	No	No	No	For size 150 Fix/Tilting coil For size 350 Fix/Tilting coil		For size 150 Fix/Tilting coil For size 350 Fix Tilting coil For size 600 Fix/Tilting coil
Including: coil + 1 crucible size						
Atmosphere	Natural - vacuum - inert	Natural Optional: Argon flowing device code	Natural - vacuum - inert	Centrifugal side: Natural Optional: Argon flowing device code Static side: Argon flowing device included		Argon flowing device included
Memocast			Optional - Code: ACC.MEM			





12 Static melting



Statix R

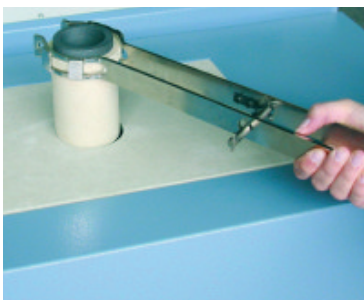
STATIC MELTER FIX OR TILTING COIL

Heavy duty furnaces **Statix Digital HD F** have been created for alloying, chain manufacturers and for factories which often need to re-melt buttons, pins or scraps.

AVAILABLE MODELS WITH FIX COIL: 150F • 350F • 600F

The furnaces **Statix Digital HD R**, are similar to those of the serie F, except for the coil that tilts together with the crucible, thus allowing uniform casting with continuous flow, without metal splashes.

AVAILABLE MODELS WITH TILTING COIL: 150R • 350R • 600R

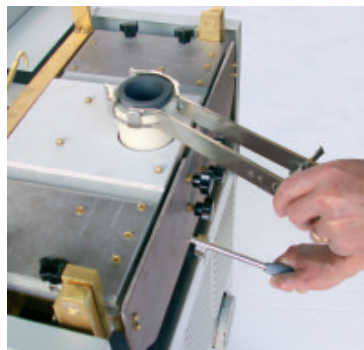


STATIX WITH FIX COIL.

The fix coil is ideal when the quantity of metal to melt is small enough to allow the operator to remove the plenty crucible and to pour easily the alloy.

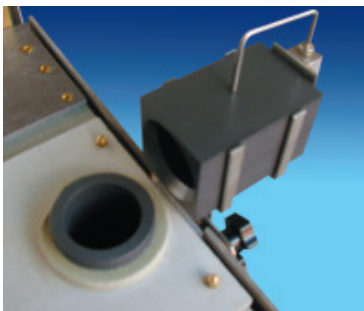


Statix F



STATIX WITH TILTING COIL.

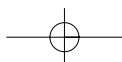
The tilting coil is ideal when the quantity of metal is important and when the pouring must be continuous and uniform. A set of proper tools to remove the hot crucible after the pouring included.

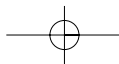


INGOTS MOULDING

With a special set of extra accessories, it is possible to fix the ingot mould on the tilting system, to pour directly from crucible to mould, thus granting a compact and uniform ingot. Standard and customized kits are available to allow the user to pour into graphite mould suitable to satisfy his need.

Features and technical data	STATIX HD 150F/R	STATIX HD 350 F/R	STATIX HD 600 F/R
Max melting capacity and melting time	150 cc i.e. 2.8 kg of gold 24k melt in 8'~	350 cc i.e. 6.5 kg of 24k gold melt in 12'~	600 cc i.e. 11.4 kg of 24k gold melt in 18'~
Power supply		3phase - 220 or 380 V - 9,1 kW - 50 or 60 Hz	
Crucibles		See crucibles table on pages 13 - 14 - 15	
Cooling system		Cooling water pump with tank	
Overall dimensions (cm)	Width: 87 cm (+ 10 cm water pump) - Depth: 78 cm (+ 10 cm water pump) - Height: 110 cm		
Net / Gross weight	F 229/280 kg - R 242/293 kg	F 234/285 kg - R 250/301 kg	F 235/286 kg - R 250/301 kg
Platinum special kit (optional)		Set for Y100Pt crucible - fix/tilting coil	
Smaller crucible set (optional)	Set for CG60s crucible fix/tilting coil	Set for CG60s crucible fix/tilting coil Set fro CG150s crucible fix/tilting coil	Set for CG60s crucible fix/tilting coil Set for CG150s crucible fix/tilting coil Set for CG350s crucible fix/tilting coil
Argon flowing device		Included	
Memocast		Optional - Code: ACC.MEM	





Crucibles

CRUCIBLES FOR JEWELLERY • MAIN FEATURES

CERAMIC The ceramic crucibles are made in shapes and mixtures to ensure no gas pollution on the alloy and to grant a good elasticity and a low adherence of the metal on its surface. Special features are available for platinum and for stainless steel or stellite.

GRAPHITE The graphite crucibles can be chosen among three types of material:
 G = REGULAR - XQ = EXTRA QUALITY - GV = SYNTERG (VITREOUS SINTERED)

REGULAR The regular graphite crucibles are manufactured with bars of pure selected graphite coming from the most serious european factories. Following the procedures required by ISO 9001 (our total quality certification) all lots of crucibles are tested for approval before sale.

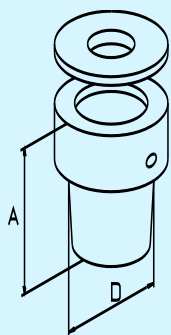
EXTRA QUALITY XQ graphite crucibles are manufactured with very compact isostatic graphite. The compactness of this graphite ensures a longer life of the crucibles and the release of particles of graphite is practically zeroed (especially when the crucible is used in the proper way)

SYNTERG This kind of crucible produced with sinterization technique, has a stiffness similar to glass. It is very fragile and easy to be broken by thermal or mechanical shocks. It is suitable for melting special alloys as the white one with high content of palladium.

SYMBOL		LEGENDA FOR MANFREDI CRUCIBLES	
C	Ceramic	S	Crucibles for Static furnaces
CC	Ceramic crucibles with container	G	Graphite
N	Normal mixture	CG	Ceramic + Graphite
R	Crucibles silicon nitride coated	KG	Ceramic + Graphite for Millennium and Smallcast
Plus	Ceramic extra quality	XQ	Extra quality (isostatic graphite)
15, 20, 35	Crucible theoretic capacity in cc	V	Synterg – synthered glass graphite
Y	Crucibles for Platinum	CGH	for Smartycast – casting
KR	Crucibles for Stainless Steel and stellite	RCGH	For Smartycast – granulating

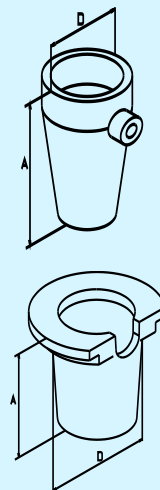
OK= Suitable for the machine • NO = Not suitable for the machine • EX = Suitable for the machine when using extra accessories

CENTRIFUGAL CRUCIBLES FOR PLATINUM



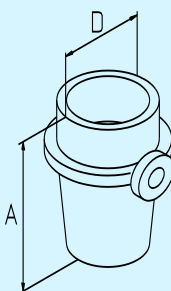
	Y15PT	Y35PT
D mm	37	50
A mm	73	77
CAPACITY cc	15	35
SMALLCAST AU	NO	NO
SMALLCAST PT	OK	NO
SMALLCAST MIX	OK	NO
MILLENNIUM AU	NO	NO
MILLENNIUM PT	OK	NO
MILLENNIUM MIX	OK	NO
AURUM	EX	EX
AURUM PT	OK	NO
NEUTOR	EX	NO
NEUTOR PT	OK	NO
MAGNUM	EX	EX
MAGNUM PT	OK	EX
NEUTROMAG	EX	EX
NEUTROMAG PT	OK	EX
VULCAN	NO	NO

CENTRIFUGAL CRUCIBLES FOR STEEL

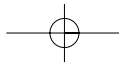


	Y15PT	Y35PT
D mm	62	77
A mm	115	114
CAPACITY cc	100	X
SMALLCAST AU	NO	NO
SMALLCAST PT	NO	NO
SMALLCAST MIX	NO	NO
MILLENNIUM AU	NO	NO
MILLENNIUM PT	NO	NO
MILLENNIUM MIX	NO	NO
AURUM	NO	NO
AURUM PT	NO	NO
NEUTOR	NO	NO
NEUTOR PT	NO	NO
MAGNUM	EX	EX
MAGNUM PT	EX	EX
NEUTROMAG	EX	EX
NEUTROMAG PT	EX	EX
VULCAN	EX	EX

CENTRIFUGAL CERAMIC CRUCIBLES

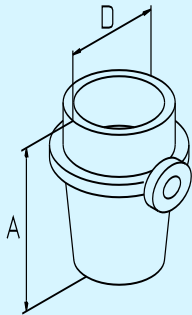


	C35N	C35R	C35PLUS	C65	C180	C400
D mm	50	50	50	50	70	100
A mm	77	77	81	107	148	205
CAPACITY cc	35	42	40	75	180	570
SMALLCAST AU	NO	NO	NO	NO	NO	NO
SMALLCAST PT	NO	NO	NO	NO	NO	NO
SMALLCAST MIX	NO	NO	NO	NO	NO	NO
MILLENNIUM AU	NO	NO	NO	NO	NO	NO
MILLENNIUM PT	NO	NO	NO	NO	NO	NO
MILLENNIUM MIX	NO	NO	NO	NO	NO	NO
AURUM	OK	OK	OK	OK	NO	NO
AURUM PT	EX	EX	EX	EX	NO	NO
NEUTOR	OK	OK	OK	OK	NO	NO
NEUTOR PT	EX	EX	EX	EX	NO	NO
MAGNUM	EX	EX	EX	EX	OK	NO
MAGNUM PT	EX	EX	EX	EX	EX	NO
NEUTROMAG	EX	EX	EX	EX	OK	NO
NEUTROMAG PT	EX	EX	EX	EX	EX	NO
VULCAN	EX	EX	EX	EX	EX	OK



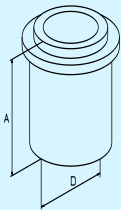
CENTRIFUGAL REGULAR GRAPHITE LINED CRUCIBLES

CENTRIFUGAL XQ GRAPHITE LINED CRUCIBLES



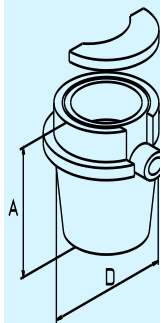
	CG20	KG20	CG40	CG120	CG340	CG20XQ	KG20XQ	CG40XQ	CG120XQ
D mm	50	50	50	70	100	50	50	50	70
A mm	77	77	107	148	205	77	77	107	148
CAPACITY cc	15	15	36	100	340	15	15	36	100
SMALLCAST AU	NO	OK	NO	NO	NO	NO	OK	NO	NO
SMALLCAST PT	NO	NO	NO	NO	NO	NO	OK	NO	NO
SMALLCAST MIX	NO	OK	NO	NO	NO	NO	OK	NO	NO
MILLENNIUM AU	NO	OK	NO	NO	NO	NO	OK	NO	NO
MILLENNIUM PT	NO	NO	NO	NO	NO	NO	NO	NO	NO
MILLENNIUM MIX	NO	OK	NO	NO	NO	NO	OK	NO	NO
AURUM	OK	NO	OK	NO	NO	OK	NO	OK	NO
AURUM PT	EX	NO	EX	NO	NO	EX	NO	EX	NO
NEUTOR	OK	NO	OK	NO	NO	OK	NO	OK	NO
NEUTOR PT	EX	NO	EX	NO	NO	EX	NO	EX	NO
MAGNUM	EX	NO	EX	OK	NO	EX	NO	EX	OK
MAGNUM PT	EX	NO	EX	EX	NO	EX	NO	EX	EX
NEUTROMAG	EX	NO	EX	OK	NO	EX	NO	EX	OK
NEUTROMAG PT	EX	NO	EX	EX	NO	EX	NO	EX	EX
VULCAN	EX	NO	EX	EX	OK	EX	NO	EX	EX

VACUUM XQ ISOSTATIC GRAPHITE LINED CRUCIBLES



	CGH320XQ casting	RCGH310XQ granulation
D mm	90	90
A mm	135	135
CAPACITY cc	256	256
SMARTYCAST PLUS	OK	OK
SMARTYCAST REG.	OK	OK

CENTRIFUGAL GLASS GRAPHITE LINED CRUCIBLES SYNERG



	CGV20	KGV20	CGV120
D mm	50	50	70
A mm	77	77	107
CAPACITY cc	20	20	140
SMALLCAST AU	NO	OK	NO
SMALLCAST PT	NO	NO	NO
SMALLCAST MIX	NO	OK	NO
MILLENNIUM AU	NO	OK	NO
MILLENNIUM PT	NO	NO	NO
MILLENNIUM MIX	NO	OK	NO
AURUM	OK	NO	NO
AURUM PT	EX	NO	NO
NEUTOR	OK	NO	NO
NEUTOR PT	EX	NO	NO
MAGNUM	EX	NO	OK
MAGNUM PT	EX	NO	EX
NEUTROMAG	EX	NO	OK
NEUTROMAG PT	EX	NO	EX
VULCAN	EX	NO	EX

YOUR PRODUCT IS PRECIOUS: TAKE CARE OF IT!

With the temperature increase, the alloy can be polluted by impurities or improper elements included in the crucibles.

The pollution alters the alloy and spoils the casting.

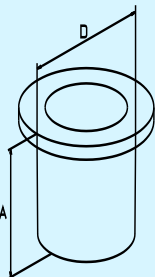
Stop the damage using our top quality crucibles only!

Manfredi crucibles are manufactured only with selected raw materials and bonding substances. Making all the melting and casting cycle in vacuum or inert atmosphere (argon), the pollution and consequently also the graphite consumption are extremely reduced granting a longer life to the crucibles.

Save money improving the quality!

PLATINUM STATIC CRUCIBLE

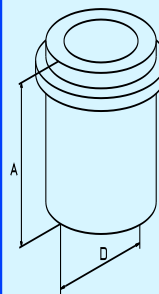
Y100PT



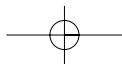
D mm	60
A mm	104
CAPACITY cc	110
AURUM 150 F/R	NO
NEUTOR 150 F/R	NO
MAGNUM 350 F/R	EX
MAGNUM 100 PT F/R	OK
NEUTROMAG 350 F/R	EX
NEUTROMAG 100 PT F/R	OK
VULCAN 5/8	NO
STATIX 150 F/R	EX
STATIX 350 F/R	EX
STATIX 600 F/R	EX
STATIX 100 PT F/R	OK

STATIC CERAMIC CRUCIBLES

C100s CC150s CC350s



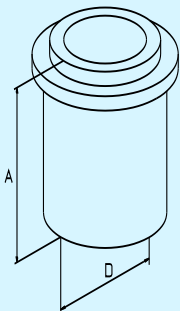
D mm	50	70	88
A mm	120	121	146
CAPACITY cc	120	150	400
AURUM 150 F/R	EX	OK	NO
NEUTOR 150 F/R	EX	OK	NO
MAGNUM 350 F/R	EX	EX	OK
MAGNUM 100 PT F/R	EX	EX	EX
NEUTROMAG 350 F/R	EX	EX	OK
NEUTROMAG 100 PT F/R	EX	EX	EX
VULCAN 5/8	EX	EX	EX
STATIX 150 F/R	EX	OK	EX
STATIX 350 F/R	EX	EX	OK
STATIX 600 F/R	EX	EX	EX
STATIX 100 PT F/R	EX	EX	EX



STATIC REGULAR GRAPHITE LINED CRUCIBLES

CG60s CG150s CG350s CG600s

	CG60s	CG150s	CG350s	CG600s
D mm	50	70	88	107
A mm	119	121	146	166
CAPACITY cc	55	150	300	600
AURUM 150 F/R	EX	OK	NO	NO
NEUTOR 150 F/R	EX	OK	NO	NO
MAGNUM 350 F/R	EX	EX	OK	NO
MAGNUM 100 PT F/R	EX	EX	EX	NO
NEUTROMAG 350 F/R	EX	EX	OK	NO
NEUTROMAG 100 PT F/R	EX	EX	EX	NO
VULCAN 5/8	EX	EX	EX	OK
STATIX 150 F/R	EX	OK	EX	EX
STATIX 350 F/R	EX	EX	OK	EX
STATIX 600 F/R	EX	EX	EX	OK
STATIX 100 PT F/R	EX	EX	EX	EX

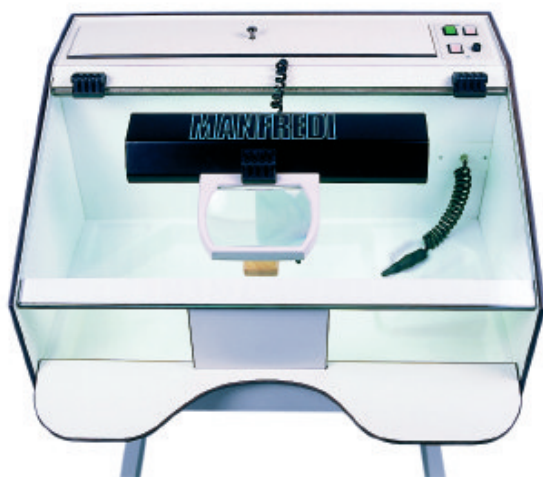


STATIC XQ ISOSTATIC GRAPHITE LINED CRUCIBLES

CG60s XQ CG150s XQ CG350s XQ CG600s XQ

	CG60s XQ	CG150s XQ	CG350s XQ	CG600s XQ
D mm	50	70	88	107
A mm	119	121	146	166
CAPACITY cc	55	150	300	600
AURUM 150 F/R	EX	OK	NO	NO
NEUTOR 150 F/R	EX	OK	NO	NO
MAGNUM 350 F/R	EX	EX	OK	NO
MAGNUM 100 PT F/R	EX	EX	EX	NO
NEUTROMAG 350 F/R	EX	EX	OK	NO
NEUTROMAG 100 PT F/R	EX	EX	EX	NO
VULCAN 5/8	EX	EX	EX	OK
STATIX 150 F/R	EX	OK	EX	EX
STATIX 350 F/R	EX	EX	OK	EX
STATIX 600 F/R	EX	EX	EX	OK
STATIX 100 PT F/R	EX	EX	EX	EX

Jeweller's healthy Box



JHB is a working box specially designed to prevent breathing affections and other diseases widespread between jewellers, silversmiths, and workers using everyday handpieces or micromotors.

The plastic bottom cup has been designed in a proper way to make the operation of cleaning as easy as possible to recover all metal and other heavy particles.

A total, relaxing lighting is granted by a special 15W, 5000°K, ergonomic healthy lamp located on the tempered protection glass.

JHB has two electric taps to plug in the hanging motor or the micromotor and the suction AM28.

Three switches can independently connect lighting, suction and micromotor.

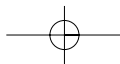
Peg working point with tridimensional regulation. On request a magnifier can be fixed on the glass.

Overall dimensions:
width 80 cm – depth: 70 cm – height: 109 cm – weight: 40 Kg

Have an up-to-date working place: complete JHB with EJC, the ergonomic jeweller rolling chair!

Fumes and lighter dust particles are conveyed to the suction box AM28.





16 Wax Injectors



WAXYJET

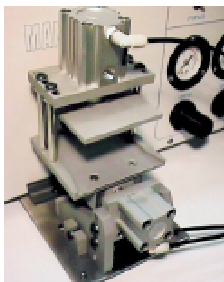
WAXYJET SIMPLE & WAXYJET AUTO are designed to eliminate and avoid air bubbles in your waxes.

WAXYJET SIMPLE will improve the quality in the waxing process. Both pot and nozzle temperatures sets, allow the best control of the wax in the pot and eliminate the problem of nozzle freezing during the operations.
Power supply : 220V, 5A, 50/60Hz

WAXYJET AUTO comes with built-in automatic clamp and holder to speed up your injecting process. Up-to-date design and easy-to-use.



Features and technical data	WAXYJET SIMPLE	WAXYJET AUTO
Width	47 cm	66 cm
Depth	32 cm	36 cm
Height	47 cm	47 cm
Weight	25 kg	37 kg
Wax capacity	2,5 kg	2,5 kg
Power supply	220V, 5A, 50/60 Hz	220V, 5A, 50/60 Hz



Deflasker



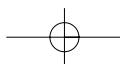
DYNAFLASK

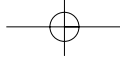
Dynaflask is a hydro-deflasker to remove investment from cylinders making the castings free of any plaster trace. The whole machine is built in stainless steel. A metal filtering system and a perfect water draining allow a complete selection of metal scrapes from plaster. The draining tank is included.

- FEATURES:**
- Insulated halogen lamp on the working room.
 - 70bar water pump
 - Wide working chamber (63 x 46 cm)
 - Water consumption: 8l/min.

Power supply 220v singlephase, 1.7kW

Features and technical data	DYNAFLASK
Max consumption	1,7 kW
Width	70 cm
Depth	55 cm
Height	159 cm
Weight	70 kg





jewellaser laser welding machines for any precious or non-precious alloy, including silver, platinum, titanium - **mini**, 30 joule, suggested for small shops **junior**, 50 joule suggested for light duty production - **50**, 50 joule, suggested for regular duty production - **100**, 100 joule, suggested for heavy-duty work



sablomat automatic sandblaster - revolving basket - long-lasting nozzle up to 500 µ - dehumidifier and pressure gauge included - **minisablomat** same but without built-in filtering system. **smallblast** manual sandblaster - large window easy well lighted working room - use with a suction as **am28**

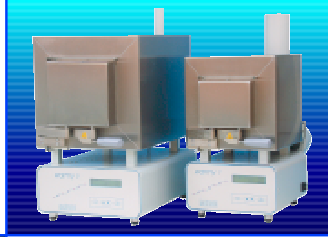


motorcast double elbow arm electric centrifuge with variable spin motor - double lock cover. **tabycast** centrifuge to fit on a table - **bp8** melting multiflame gas/oxygen blowpipe with the easy magnetic holder **ergopipe**. **miniflame** kit for soldering (adapter + 12 needles assorted)



oxyker duet & trio pencil sandblasters use any aluminium oxide or glass pearls - **duet** has 2 and **trio** has 3 modules using abrasive from 50 to 250 µ - pedal control, dehumidifier, air gun, pressure gauge included - use with a suction as **am28**

pre-heating furnaces available in 3 sizes - choice of 4 controls from very simple to the most up-to-date heating cycle - 4 heating plates enlarges the radiant surface with a uniform heat distribution - wax to flowing instead of burning stainless steel casing.



sylox k mobile sandblasting delivery system - can fit to any sandblasting -Ø 1.2 mm nozzle, air-powered pedal, dehumidifier and pressure gauge included suggested for use with the suitable **finybox** use with a suction as **am28**



enamelling furnaces available in 3 sizes the enamelling furnace grant a constant and uniform temperature. Equipped with a set of trays fitting on a proper shelf. Trays and shelf are made in refractory stainless steel



abrasives recyclable brown and white corundum in more sizes available pack 10, 25 & 50 kg **aluminium oxide** sizes 50, 80, 95, 105, 250 µ - pack 5 & 25 kg - **micropearls** glass pearls size 55, 90, 200 µ - pack of 5 & 25 kg

modywax electric modelling tips heater - accurate adjustable temperature 50°C to 350 °C constantly controlled - 4 carving tips on request stainless steel holder for handle and tips.



5S is a high quality vacuum pump, silent and reliable. Fit a suitable dust filter when used with plaster mixers and wax injectors

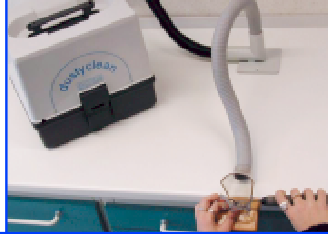


steamclean regular & piccolo steam generators - stainless steel boiler - water level display safety valve - pressure control water failure power cut-out and alarm - stainless steel pipes - capacity and working pressure: **piccolo** 3 lt - 3 bar **regular** 5 lt - 4,5 bar



m2v & aspyclean very silent and sturdy polishing lathe suction unit in stainless steel independent suction gates neon lamp.

dustyclean portable suction to fit on benches, small sandblasters, pencil sandblasters - on request mobile holder with rubber mouth



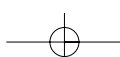
syloplaster 30 kg plaster dispenser - rubber bag sealed prevent humidity - vibrator to ensure to a uniform flowing of the powder destroying stones or blocks of the material.



pulsar 2, pulsar 4, pulsar 6 and pulsar large -vertical vibration from the lowest up to a very strong intensity -continuous vibration control - rubber table removable for cleaning



mixyvac s mixer for investment built-in vacuum pump - digital display timer with time-delay switching of the suction pump and rotation time vacuum gauge mixing bowl capacity 170 cc (option: 560 cc) - **mixyvac t** with built-in double body bowl and vibrator - suggested for platinum mixing



MANFREDI

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