

- Automatic casting for consistent, reproducible results every single time
- Casting point recognition ensures that the cast objects are filled at the temperature recommended by the alloy manufacturer
- High-performance induction heating guarantees short melting cycles, minimises oxidation and thus facilitates subsequent finishing
- Proven quality assurance: Nautilus® CC plus saves up to 1,000 casting logs
- Large colour touch display with intuitive menu navigation for convenient and easy operation
- Integrated power cooling enables more than 50 casts in a row, even if ambient temperatures are high
- Integrated cooling saves water and helps to protect the environment
- Suitable for all commercially available precious-metal and non-precious alloys (excluding titanium)
- Eco mode switches off all unnecessary components in idle mode and reduces operating costs



# Combination of high-frequency melting and vacuum pressure casting

Nautilus® CC plus combines the advantages of high-frequency melting with those of vacuum pressure casting: the alloy is melted in the area around the crucible opening. Using a highly efficient vacuum pump, the oxygen level in the entire casting chamber is greatly reduced within a very short space of time and the alloy is melted by means of a high-frequency magnetic field. The melt then flows directly under vacuum from the hot area into the mould without temperature loss. Within fractions of a second, the still molten alloy is then pressed into the finest crevices of the object.

#### The advantages for you:

- Efficient use of the alloy as, generally, a casting cone does not have to be used
- Short melting cycles in the vacuum minimise oxidation of the objects and facilitate subsequent finishing
- For the casting of precious-metal alloys, a graphite or glass carbon ingot is additionally used which binds the remaining oxygen during melting and thus actively further reduces oxide formation

# User-friendly operation via the 5.7 inch colour touch display

The Nautilus® CC plus is operated and controlled via a 5.7 inch colour touch display which offers quick response times and simple menu navigation accompanied by recommendations on what to do. The large active area of the touch display and the simple menu navigation present a real improvement in terms of operation compared to more conventional concepts. Acoustic signals are an additional aid to ensure safe processing. It couldn't be simpler: All of the casting programs for BEGO alloys are already stored in the Nautilus® CC plus. "Non-BEGO alloys" and their parameters can be simply and easily saved with alloy names.

#### The advantages for you:

- Convenient, intuitive operation; direct and quick access to all necessary parameters
- Orientation and control at all times!









Colour touch display with intuitive menu navigation

# Large storage and simple transfer

The new Nautilus® CC plus boasts a large internal memory: up to 1,000 casting logs can be saved and transferred to a PC via a USB data interface.

#### The advantages for you:

- Quality assurance: Casting data can be simply transferred, casting logs simply archived and individual diagnosis logs can be sent by e-mail to the BEGO hotline for careful analysis and rapid troubleshooting
- Updates: Thanks to software and alloy database updates via a USB interface, this high-tech casting unit always represents the state of the art



## Integrated power cooling system

The Nautilus® CC plus boasts integrated power cooling.

#### The advantages for you:

- More than 50 casts in a row are possible with moulds made from phosphate-bonded investment material, even if ambient temperatures are high
- Does not require a water supply or outlet can be used immediately anywhere
- No water consumption, no water damage and no reliance on local water quality
- Furthermore, the costs of installing an expensive water system are saved
- Since the unit does not require a water supply, condensation forming on the crucible coil in the winter months is no longer a concern; "explosions", mould cracks and the resulting flawed casts are a thing of the past



Except for pure titanium, all precious metal and non-precious alloys can be cast with casting temperatures of between 700 °C and 1,550 °C and always with the lowest possible casting temperature. Casting time recognition is fully automatic with a multi-channel temperature control. Material-specific fluctuations of the hot melt due to reflection and emission are recorded in short time sequences in the range of milliseconds and automatically compensated for by the system.

### The advantages for you:

- The melt cannot overheat
- Measuring accuracy well in excess of 99 %!

## Eco mode

The unit switches off all unnecessary components in idle mode. The unit can be restarted in less than 1 second at any time. Consumption in Eco mode (10 W) is extremely efficient compared to consumption in the operating mode (3600 W).

#### The advantages for you:

- Active reduction of operating costs
- Environmentally friendly

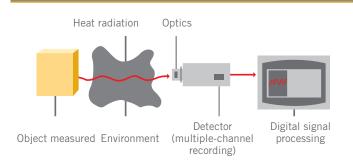


Operation 3600 W

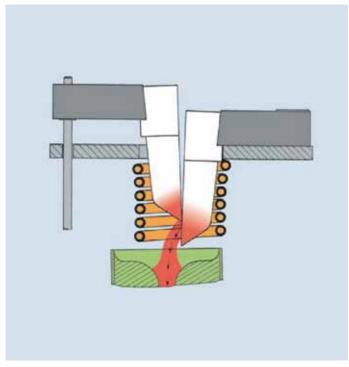
Eco mode 10 W



## Measuring system – functional principle



The optics of the measuring system route the measured data to the digital signal processing unit



BEGO vacuum pressure casting concept: The molten mass flows from the hot zone of the crucible directly into the casting mould

# **Compressed air tank**

In case of unreliable compressed air conditions or a laboratory compressor unit that is possibly too small, the BEGO compressed air tank system can be installed as a precaution.

#### The advantages for you:

- Active support of the compressor unit
- Safer casting process



Compressed air tank – ideal for insufficient compressed air conditions

Nautilus® CC plus	
Technical data	
Height	420 mm
Height with optical waveguide	670 mm
• Width	600 mm
• Depth	670 mm
Rated voltage	230 VAC, 50/60 Hz
Power at rated voltage 230 V	16 A
Compressed air connection (connection thread 1/4")	at least 5 bar [0.5 MPa]
Air consumption	approx. 100 l/min
• Weight	64 kg

Nautilus® CC plus	-				
Scope of delivery		Unit	Qty	REF	
• Nautilus® CC plus 2	30 V, 50/60 Hz			26415	
Ceramic crucible		1 pack	4 cru- cibles, each made of 2 halves	52488	
Plastic handles for contact the second	ceramic crucibles	1 pack	2	52436	
Ceramic handles for crucibles	ceramic	1 pack	2	52467	
Graphite ingot		1 pack	6	52468	
Glass carbon ingot			1		
• Forceps			1	30002	
Mould holder plate, ceramic			1	30259	
Mould holder (ceramic) for sizes 1 and 9				12257	
Mould holder (ceramic) for sizes 3 and 6			1	13362	
Mould holder grid for partial denture (25 mm high)			1	37618	
• Mould holder grid fo (15 mm high)		1	10073		
Base socket mould former, sizes 3, 6 and 9			1 each		
Partial denture funnel former			1		
Accessories					
Compressed air tank with wall bracket			1	16260	
• Mould tongs, 55 cm	long		1	39754	
Glass carbon ingot		1 pack	4	52473	
Base socket mould former	size 3 size 6 size 9	1 set 1 set 1 set	4 4 4	52627 52628 52629	
Partial denture funnel former		1 pack	10	52066	
Auromelt HF melting powder		Powder dispenser, 65 g	1	52525	

Subject to modifications in design, scope of delivery and composition. Our instructions for use and recommendations are based on our own experience and trials and can only be regarded as guidelines. Date of issue: February 2015.

Tin, 80 g

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• Wiromelt melting power

(non-precious)

52526