



## CAF G5 - PEC PRE TESTOVANIE TAVITEĽNOSTI UHOL'NÉHO POPOLA

**The CAF G5 is a furnace designed to test ash fusibility, and optionally, the increasingly popular determination of biomass or solid recovered fuels testing.**

The coal ash fusibility test furnace conforms to the Standards ISO 540:2008; ASTM D 1857 / D1857M – 18; DIN 51730:2007-09; DD CEN/TS 15370-1:2006 and PD CEN/TR 15404:2010 (solid recovered fuels (SRF)).

The CAF G5's automatic and continuous recording of digital images allows laboratory technicians to carry out other tasks while the test is in progress, reviewing results later. The new CAF G5 greatly enhances the quality of the recorded images and test results increasing efficiency in laboratories.

The maximum temperature of 1600 °C enables both biomass and coal testing. An optional work tube integrated lighting system is also available when testing low 'initial deformation' temperature of SRF or biomass samples.

## ŠTANDARDNÁ VÝBAVA

- | Analysis software which can be used in fully automatic or manual modes for coal ash samples and manual only for biomass and SRF samples.
- | Software zoom function to enable accurate post-test analysis of individual samples with improved resolution
- | One configurable grid assigned to each test piece
- | Temperature controller program set up within the software
- | Space saving embedded computer with Windows IoT Enterprise software runs future proof firmware
- | Default software settings and individual analysis form for coal ash, biomass and SRF
- | An optional work tube integrated lighting system when testing low initial deformation temperature of biomass or SRF samples
- | Lightweight insulation allows quick cooling permitting multiple tests to be completed during the day
- | Automated digital image capture of samples. The frequency of images recorded is set by customer preference, from every 1 °C increment to every 20 °C. The maximum interval for auto analysis is 5°C.

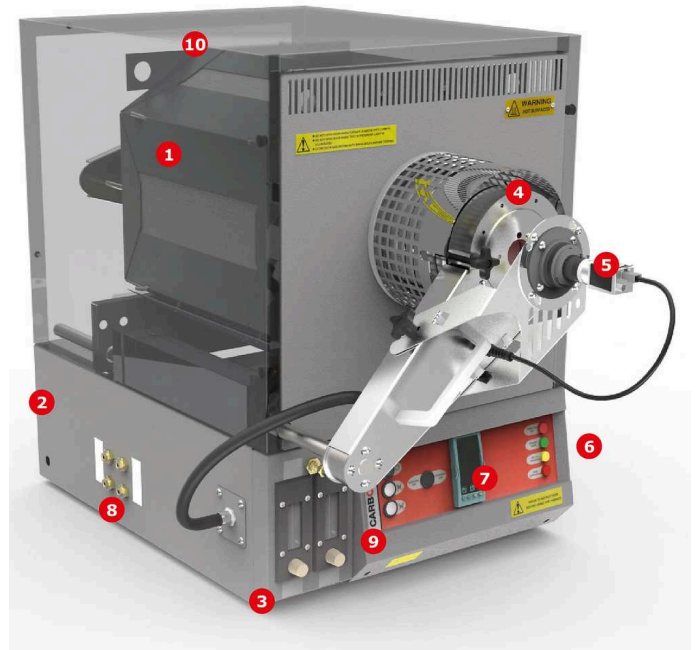
CAF G5 - PEC PRE TESTOVANIE TAVITELNOSTI UHOLNÉHO POPOLA

## TECHNICKÉ ÚDAJE

### View inside

1. 1600 °C tube furnace with integral SiC elements
2. External link to embedded PC & software
3. Flow meters for oxidising, reducing gas flow

- (dependant on the requirements of the standards)
4. 79 mm inner diameter work tube allows more than 6 samples
  5. Digital camera for fast and accurate image recording
  6. Gas tight seal for efficient use of gases & safety of operator
  7. Automatic temperature programmer with multiple PID control
  8. Gas inlets for reducing, oxidising & purge gasses
  9. Oxidising or reducing gas selection switch
  10. Work tube integrated light for use when testing low 'initial deformation' temperature of biomass and SRF samples (optional)



View inside of CAF G5

Výhrady k technickému riešeniu a nedostatkom

## TECHNICKÉ ÚDAJE (MODELY)

## CAF G5

<b>Rozsah teplôt</b>	až do 1600 °C (1600 °C je potrebné pre niektoré vzorky biomasy)
<b>Presnosť teploty</b>	± 3 °C nad 800 °C
<b>Miera vzrastu teploty</b>	7 °C za minútu
<b>Regulácia teploty</b>	Digitálny viacnásobný PID regulátor s programátorom a multi offset parametre
<b>Zobrazenie teploty</b>	°C
<b>Rozmery pracovnej rúrky</b>	Vnútorý priemer 79 mm
<b>Materiál pracovnej rúrky</b>	Mullit
<b>Vykurovacie elementy</b>	Karbid kremíka x 6
<b>Maximum Sample Load, Manual Analysis</b>	8
<b>Maximum Sample Load, Automatic Analysis</b>	6
<b>Vyhovuje normám</b>	BS ISO 540:2008; ASTM D 1857 / D1857M -18); DIN 51730:2007-09; DD CEN/TS 15370-1:2006; PD CEN/TR 15404:2010
<b>Ash Fusibility Determination</b>	Automatické alebo manuálne (uhlíe a koks: DT, ST, H, FT) Len manuálne (biomasa / SRF: IST, DT, HT, FT)
<b>Analýza času</b>	3 behy za pracovný deň (vrátane chladenia)
<b>Robenie snímok</b>	digitálne - až 1 snímok s nárastom teploty o 1 ° C
<b>Rozlíšenie</b>	1280 x 1024 pixelov
<b>Požiadavky na plyn: Čistiací</b>	N <sub>2</sub> alebo CO <sub>2</sub>
<b>Požiadavky na plyn: Oxidačný</b>	CO <sub>2</sub> or Air
<b>Požiadavky na plyn: Redukčný</b>	CO + CO <sub>2</sub> alebo H <sub>2</sub> + CO <sub>2</sub>
<b>Odvetrávanie</b>	Odvětrávání ventilátorom
<b>Výfukové potrubie</b>	Výfuková trubica musí ústiť do samostatnej digestora
<b>Zabezpečenie</b>	Súčasťou dodávky je ochrana proti zlyhaniu plynového systému a CO alarm
<b>Rozmery (mm)</b>	790 (h) x 505 (š) x 765 (hĺbka krytu) x 970 (celková hĺbka)
<b>Váha (kg) (pec)</b>	84
<b>Napájanie</b>	380 - 415 V, 50/60 Hz dvě fáze 25 A/fáze alebo 220 - 240 V, 50/60 Hz jedna fáze 50 A

<b>Spínací výkon</b>	Relé
<b>Maximálny príkon (kW)</b>	7
<b>Podmienky prostredia - Prevádzkové podmienky</b>	5 °C - 40 °C
<b>Podmienky prostredia - Relatívna vlhkosť</b>	maximálne 80% až do 31 °C klesajúce lineárne na 50% pri 40 °C
<b>Ochrana proti prehriatiu</b>	Digitálne s jedným relé a silným alarmom

[www.carbolite.com/cafg5](http://www.carbolite.com/cafg5)