

# Price List 2017



New:  
**Elementrac  
ONH-p**



NEW

## ELTRA® ELEMENTRAC® Series

The analyzers of ELTRA's new ELEMENTRAC series are a combination of high functionality, elegant design and innovative features. The user-friendly operation, robust construction and precision of the instruments are further indicators of the high product quality.

The ELEMENTRAC ONH series is used to analyze oxygen, nitrogen and hydrogen concentrations in inorganic sample materials reliably, accurately and safely by inert gas fusion.

- Optimized sensitivity thanks to closed gas system
- Use of cost-efficient argon as carrier gas possible
- Water-cooled sample port system
- Improved oxygen analysis due to optimized catalyst furnace
- ELEMENTS software with integrated leakage test and comprehensive diagnosis tools



Carbon      Sulfur      Hydrogen      Nitrogen      Oxygen      H<sub>2</sub>O      Analyzer

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- | **Inorganic materials**
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**REMARKS** We reserve the right to effect technical changes as well as price adjustments due to technical progress

n or increases in raw material prices.

All listings in our price list are based on our General Terms for Delivery and Payment.

n This price list covers only the current versions of instruments and accessories.

Please indicate the type of instrument and serial number when ordering spare parts.

n Further measuring range combinations are available upon request.

n Measuring ranges may vary depending on sample weight and sample material

n Detailed information about composition of calibration standards at [www.eltra.com/consumables](http://www.eltra.com/consumables)

n The images may show accessories which are not part of the standard delivery scope.

n Our warranty period is two years from the date of purchase.

n All prices are ex works, excluding packaging and insurance.

n ELTRA price list 99000-2017/E, valid as of 1st January 2017.



**CS-800** Rychlé simultánní stanovení uhlíku a síry v litinách, ocelích, mědi, slitinách, cementu, keramických a skleněných materiálech, karbidech, minerálech, písčích atd.

- čtyři infračervené komory s polovodičovými detektory
- bez potřeby lapače halogenů
- automatické čistění spalovací pícky
- řízení datastanicí
- elektronická kontrola a řízení průtoku plynů
- možnost automatizace provozu

#### Scope of supply

- n RF induction furnace with automatic cleaning mechanism, pneumatic lift, and air cooling system
- n Gas flow system complete with electronic flow control, flow meters, pressure gauge, solenoid valves, gas cleaning equipment and catalyst furnace
- n High-tech infrared cells with solid-state infrared detectors, interference filters and auto-zero and range adjustment
- n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
- n Ultrasonic cleaner
- n Set of accessories and calibration material

**Please order PC, monitor, balance and consumables (starter-kit, anhydride, sodium hydroxide, copper oxide) separately.**

Please refer to page 20  
for the complete list of consumables.

Item No.	Item
<a href="http://www.eltra.com/cs800">www.eltra.com/cs800</a>	<b>ELTRA CS-800</b> (Please order PC, monitor, balance and consumables (starter-kit, anhydride, sodium hydroxide, copper oxide) separately)
	<b>CS-800 for the use without Autoloader</b>
	Measuring ranges at 500 mg sample weight <small>3)</small>
DE 88100-1001	CS-800 1xC 0.1 - 7% C
DE 88100-1003	CS-800 1xS 0.015 - 0.9% S
DE 88100-1002	CS-800 2xC 0.0001 - 0.1% C   0.1% - 7% C
DE 88100-1004	CS-800 2xS 0.0001 - 0.3% S   0.3% - 4.5% S
DE 88100-1005	CS-800 1xC 0.1 - 7% C + 1xS 0.0001 - 0.3% S
DE 88100-1007	CS-800 1xC 0.1 - 7% C + 2xS 0.0001 - 0.3% S   0.3% - 4.5% S
DE 88100-1006	CS-800 2xC 0.0001 - 0.1% C   0.1% - 7% C + 1xS 0.0001 - 0.3% S
DE 88100-1008	CS-800 2xC 0.0001 - 0.1% C   0.1 - 7% C + 2xS 0.0001 - 0.3% S   0.3% - 4.5% S
	Further measuring range combinations on request
	<b>CS-800 for the use with Autoloader</b>
	Measuring ranges at 500 mg sample weight <small>3)</small>
DE 88110-1001	CS-800 1xC 0.1 - 7% C
DE 88110-1003	CS-800 1xS 0.0015 - 0.9% S
DE 88110-1002	CS-800 2xC 0.0001 - 0.1% C   0.1% - 7% C
DE 88110-1004	CS-800 2xS 0.0001 - 0.3% S   0.3% - 4.5% S
DE 88110-1005	CS-800 1xC 0.1 - 7% C + 1xS 0.0001 - 0.3% S
DE 88110-1007	CS-800 1xC 0.1 - 7% C + 2xS 0.0001 - 0.3% S   0.3% - 4.5% S
DE 88110-1006	CS-800 2xC 0.0001 - 0.1% C   0.1% - 7% C + 1xS 0.0001 - 0.3% S
DE 88110-1008	CS-800 2xC 0.0001 - 0.1% C   0.1 - 7% C + 2xS 0.0001 - 0.3% S   0.3% - 4.5% S
	Further measuring range combinations on request
	<b>Autoloader</b>
DE 14532	Autoloader for 36 crucibles
DE 14530	Autoloader for 130 crucibles
	<b>PC, Monitor, Balance</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
	<b>Accessories</b>
DE 36999	HTF-540 crucible pre-heating furnace
DE 11009-2001	Halogen trap, without filling (integrated in analyzer, please order filling separately)
DE 72070	Oxygen regulator
DE 21000	Carrier gas purification furnace, without filling (integrated in analyzer, please order filling and quartz wool separately)
DE 71090	Voltage Stabilizer 5 KVA
DE 88600-0015	Crucible holder

Item No.	Item
<b>Consumables</b>	
<b>Required consumables</b>	
DC 88500-0001	Starter-kit for 1,000 analyses (1,000 crucibles, 2,500 g tungsten, 908 g pure iron accelerator, 50 g glass wool, 50 g cellulose, 50 g quartz wool)
DC 90200	Anhydrene (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
DC 90290	Copper oxide, 100 g (required for analyzers with 1xC <sup>1)</sup> or 2xC)
DC 90234	Filling for halogen trap, potassiumiodide, 225 g <sup>1)</sup>
DC 90235	Filling for halogen trap, antimony, 200 g <sup>1)</sup>
DC 88400-0122	Filling for carrier gas purification furnace <sup>1)</sup>
<b>Optional consumables</b>	
DC 90149	Ceramic crucibles, premium, Ø 1", foil-wrapped, 1,000 pieces
DC 88600-0014	Ceramic lids, 250 pieces
DC 90220	Tungsten, premium, 2,500 g
DC 90331	Glass wool, 454 g
DC 90340	Cellulose, 100 g
DC 90341	Cellulose, 50 g
DC 90330	Quartz wool, 50 g
DC 90260	Iron accelerator, premium, 908 g
DC 88600-0013	Iron accelerator, high purity, 454 g
DC 88600-0010	Tungsten-tin accelerator, 750 g
DC 92400-3010	Steel, chips, 100 g <0.001% C <sup>2)</sup>
DC 92610	Tube of high vacuum grease
<b>Spare and Wear Parts</b>	
DW 11105	Metal dust filter
DW 11180	Dust filter cartridge
DW 11185	Paper filters, 10 pieces
DW 13067	Combustion coil
DW 14045	Cleaning brush for combustion tube
DW 14130	Combustion tube
DW 77210	Oscillator tube
DW 11062	Reagent tubes 160x16 mm, 2 pieces
DW 11064	Reagent tubes 280x16 mm, 2 pieces
DW 14072	Ceramic heat shield for brush
DW 14168	Pedestal
DW 20040	Catalyst tube
DW 70030	O-rings for CS-800, 1 set
DW 77032	Circuit breaker 20A
DW 71036	Cleaning brush for metal dust filter
DW 71031	Metal brush
DW 71010	Brush

1) Hazardous material

Further calibration standards and compositions on page 21.

Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

3) Measuring ranges may vary depending on sample weight and sample material





Analyzator pro rychlé simultánní stanovení obsahů uhlíku a síry v ocelích, litinách, mědi, slitinách, půdách, cementech, keramických a skleněných materiálech, uhlí, koksu, popelech, olejích, katalyzátorech, vápně, sádře, půdách, gumách, listech, sazích, tabáku, sedimentech, písčích atd.

### Scope of supply

- n Analyzer with RF induction furnace with automatic cleaning mechanism, pneumatic lift, and air cooling system
  - n High temperature furnace up to 1550°C with 200 mm hot zone and a resolution of 1°C
  - n Gas flow system complete with electronic flow control, flow meters, pressure gauge, solenoid valves, gas cleaning equipment and catalyst furnace
  - n High-tech infrared cells with solid-state infrared detectors, interference filters and auto-zero and range adjustment
  - n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
  - n Ultrasonic cleaner
  - n Set of accessories and calibration
  - indukční a odporová pícka v jednom systému
  - čtyři infračervené komory s polovodičovými detektory
  - pozlacené vnitřní stěny infračervených komor
  - bez potřeby lapače halogenů
  - stanovení anorganických i organických vzorků
  - frakční analýza volného a vázaného uhlíku a síry
  - možnost separace inorganického a organického uhlíku
  - separace sulfidů a sulfátů
  - řízení datastaničí
  - elektronická kontrola a řízení průtoku plynů
  - modulární koncepce
- Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, copper oxide) separately.**

Please refer to page 20  
for the complete list of consumables.

Item No.	Item
<a href="http://www.eltra.com/cs2000">www.eltra.com/cs2000</a>	<b>ELTRA CS-2000</b> (Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, copper oxide) separately)
	<b>CS-2000 for the use without Autoloader</b> Measuring ranges at 500 mg sample weight induction furnace    resistance furnace
DE 88100-1009	CS-2000 1xC 0.1 – 12% C    0.3 – 40% C
DE 88100-1010	CS-2000 1xS 0.001 – 0.3% S    0.005 – 2% S
DE 88100-1011	CS-2000 2xC 0.0002 – 0.1% C    0.005 – 0.3% C 0.1 – 12% C    0.3 – 40% C
DE 88100-1012	CS-2000 2xS 0.001 – 0.3% S    0.005 – 2% S 0.3 – 6% S    0.3 – 13% S
DE 88100-1013	CS-2000 1xC 0.1 – 12% C    0.3 – 40% C + 1xS 0.001 – 0.3% S    0.005 – 2% S
DE 88100-1014	CS-2000 1xC 0.1 – 12% C    0.3 – 40% C + 2xS 0.001 – 0.3% S    0.005 – 2% S 0.3 – 6% S    0.3 – 13% S
DE 88100-1015	CS-2000 2xC 0.0002 – 0.1% C    0.005 – 0.3% C 0.1 – 12% C    0.3 – 40% C + 1xS 0.001 – 0.3% S    0.005 – 2% S
DE 88100-1016	CS-2000 2xC 0.0002 – 0.1% C    0.005 – 0.3% C 0.1 – 12% C    0.3 – 40% C + 2xS 0.001 – 0.3% S    0.005 – 2% S 0.3 – 6% S    0.3 – 13% S
	<b>Further measuring range combinations on request</b>
	<b>CS-2000 for the use with Autoloader</b> Measuring ranges at 500 mg sample weight induction furnace    resistance furnace
DE 88110-1009	CS-2000 1xC 0.1 – 12% C    0.3 – 40% C
DE 88110-1010	CS-2000 1xS 0.001 – 0.3% S    0.005 – 2% S
DE 88110-1011	CS-2000 2xC 0.0002 – 0.1% C    0.005 – 0.3% C 0.1 – 12% C    0.3 – 40% C
DE 88110-1012	CS-2000 2xS 0.001 – 0.3% S    0.005 – 2% S 0.3 – 6% S    0.3 – 13% S
DE 88110-1013	CS-2000 1xC 0.1 – 12% C    0.3 – 40% C + 1xS 0.001 – 0.3% S    0.005 – 2% S
DE 88110-1014	CS-2000 1xC 0.1 – 12% C    0.3 – 40% C + 2xS 0.001 – 0.3% S    0.005 – 2% S 0.3 – 6% S    0.3 – 13% S
DE 88110-1015	CS-2000 2xC 0.0002 – 0.1% C    0.005 – 0.3% C 0.1 – 12% C    0.3 – 40% C + 1xS 0.001 – 0.3% S    0.005 – 2% S
DE 88110-1016	CS-2000 2xC 0.0002 – 0.1% C    0.005 – 0.3% C 0.1 – 12% C    0.3 – 40% C + 2xS 0.001 – 0.3% S    0.005 – 2% S 0.3 – 6% S    0.3 – 13% S
	<b>Further measuring range combinations on request</b>
	<b>Autoloader</b>
DE 14532	Autoloader for 36 crucibles
DE 14530	Autoloader for 130 crucibles
	<b>PC, Monitor, Balance</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer

1) Hazardous material

2) Further calibration standards and compositions on page 21.

3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

Item No.	Item
<b>Accessories</b>	
DE 38001	TIC-Module
DE 36999	HTF-540 crucible pre-heating furnace
DE 11009-2001	Halogen trap, without filling (integrated in analyzer, please order filling separately)
DE 14844	Accelerator dispenser (double version)
DE 14845	Accelerator dispenser (single version)
DE 14870	Manual dispenser
DE 72070	Oxygen regulator
DE 21000	Carrier gas purification furnace, without filling (integrated in analyzer, please order filling and quartz wool separately)
DE 71090	Voltage Stabilizer 5 KVA
DE 88600-0015	Crucible holder
<b>Consumables</b>	
<b>Required consumables</b>	
DC 88500-0002	Starter-kit for 1,000 analyses (500 crucibles, 2,500 g tungsten, 908 g pure iron accelerator, 50 g glass wool, 50 g cellulose, 50 g quartz wool, 50 re-usable boats, 500 disposable porcelain boats, 100 g Combsolid)
DC 90200	Anhydride (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
DC 90290	Copper oxide, 100 g (required for analyzers with 1xC <sup>1)</sup> or 2xC)
DC 90235	Filling for halogen trap <sup>1)</sup>
DC 88400-0122	Filling for carrier gas purification furnace <sup>1)</sup>
<b>Optional consumables</b>	
DC 90149	Ceramic crucibles, premium, Ø 1", foil-wrapped, 1,000 pieces
DC 90160	Disposable porcelain boats 86x13x10 mm, 1,000 pieces
DC 90153	Re-usable ceramic boats, premium, 58x22x14 mm, 500 pieces
DC 90220	Tungsten, premium, 2,500 g
DC 90331	Glass wool, 454 g
DC 90340	Cellulose, 100 g
DC 90341	Cellulose, 50 g
DC 90330	Quartz wool, 50 g
DC 88600-0008	Combsolid, 100 g
DC 90240	Copper accelerator, 1,362 g
DC 90260	Iron accelerator, premium, 908 g
DC 92400-3010	Steel, chips, 100 g <0.001% C <sup>2)</sup>
DC 92610	Tube of high vacuum grease
DC 92511-3020	Calibration standard - Coal, 50 g 0.5 - 1.0% S <sup>2)</sup>
DC 90810	Calcium carbonate, 100 g
<b>Spare and Wear Parts</b>	
DW 11105	Metal dust filter
DW 11180	Dust filter cartridge
DW 11185	Paper filters, 10 pieces
DW 13067	Combustion coil
DW 14045	Cleaning brush for combustion tube
DW 14130	Combustion tube
DW 36101	Boat stop
DW 75140	Safety ring A36x1.75 DIN 471
DW 77501	Heating elements, 1 set (4 pieces)
DW 90162	Combustion tube
DW 71036	Cleaning brush for metal dust filter
DW 77210	Oscillator tube
DW 11062	Reagent tubes 160x16 mm, 2 pieces
DW 11064	Reagent tubes 280x16 mm, 2 pieces
DW 11115	Plastic tube, 75 mm
DW 14072	Ceramic heat shield for brush
DW 14168	Pedestal
DW 20040	Catalyst tube
DW 09090	Reagent tubes 32x280 mm, 1 piece
DW 36914	Thermocouple
DW 77330	Capacitor 500pF
DW 71031	Metal brush
DW 71010	Brush

<sup>1)</sup> Hazardous material

Further calibration standards and compositions on page 21.

Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)<sup>3)</sup> Measuring ranges may vary depending on sample weight and sample material



Analyzátor pro rychlé simultánní stanovení uhlíku a síry v uhlí, koksu, olejích, popelech, katalyzátorech, vápně, sádře, půdách, gumách, listech, sazích, tabáku, odpadech, písčích, skle apod.

### Scope of supply

- n Analyzer with high temperature furnace up to 1550°C with a 200 mm long hot zone and a resolution of 1°C
- n Gas flow system complete with electronic flow control, flow displays, pressure gauge, pump, gas cleaning traps
- n High-tech infrared cells with solid-state infrared detectors, interference filters and auto-zero and auto-range adjustment
- n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
- n Set of accessories and calibration material

- čtyři polovodičové infračervené komory
- pozlacené vnitřní stěny komor
- bez potřeby halogenového lapače
- frakční analýza volného a vážaného uhlíku a síry
- možnost separace inorganického a organického uhlíku
- separace sulfidu a sulfátu
- odporová spalovací pícka do 1.550 °C
- elektronická kontrola a řízení průtoku plynu
- řízení datastanicí

Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide) separately.

Please refer to page 20  
for the complete list of consumables.

Item No.	Item
<a href="http://www.eltra.com/cs580">www.eltra.com/cs580</a>	<b>ELTRA CS-580</b>
	(Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide) separately)
Measuring ranges at 500 mg sample weight <sup>3)</sup>	
DE 88100-4001	CS-580 1xC 0.05 – 100% C
DE 88100-4002	CS-580 1xS 0.005 – 2% S
DE 88100-4003	CS-580 2xC 0.005 – 12% C   12 – 100% C
DE 88100-4004	CS-580 2xS 0.005 – 2% S   2 – 20% S
DE 88100-4005	CS-580 1xC 0.05 – 100% C + 1xS 0.005 – 2% S
DE 88100-4006	CS-580 1xC 0.05 – 100% C + 2xS 0.005 – 2% S   2 – 20% S
DE 88100-4007	CS-580 2xC 0.005 – 12% C   12 – 100% C + 1xS 0.005 – 2% S
DE 88100-4008	CS-580 2xC 0.005 – 12% C   12 – 100% C + 2xS 0.005 – 2% S   2 – 20% S
Further measuring range combinations on request	
<b>PC, Monitor, Balance</b>	
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
<b>Accessories</b>	
DE 38001	TIC-Module
DE 72070	Oxygen regulator
DE 71090	Voltage Stabilizer 5 KVA
DE 36400	Support for low carbon measurement
<b>Consumables</b>	
<b>Required consumables</b>	
DC 88500-0003	Starter-kit for 500 analyses (500 disposable porcelain boats, 50 g glass wool, 50 re-usable boats, 100 g Combsolid)
DC 90200	Anhydrene (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
<b>Optional consumables</b>	
DC 90160	Disposable porcelain boats 86x13x10 mm, 1,000 pieces
DC 90153	Re-usable ceramic boats, premium, 58x22x14 mm, 500 pieces
DC 90331	Glass wool, 454 g
DC 90332	Glass wool, 50 g
DC 88600-0008	Combsolid, 100 g
DC 92511-3020	Calibration standard – Coal, 50 g 0.5 – 1.0% S <sup>2)</sup>
DC 90710-3010	EDTA, 50 g
DC 91000-1005	Copper, flakes, 25 g
DC 90800	Graphite, 50 g
DC 90810	Calcium carbonate, 100 g
DC 92610	Tube of high vacuum grease
<b>Spare and Wear Parts</b>	
DW 36101	Boat stop
DW 75140	Safety ring A36x1.75 DIN 471
DW 77501	Heating elements, 1 set (4 pieces)
DW 90162	Combustion tube
DW 09090	Reagent tubes 32x280 mm, 1 piece
DW 70320	O-ring 20x5
DW 70330	O-ring 21x2
DW 70380	O-ring 35x5
DW 70410	O-ring 48x3
DW 70255	O-ring 10x1.5
DW 36914	Thermocouple

1) Hazardous material

2) Further calibration standards and compositions on page 21.

3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

3) Measuring ranges may vary depending on sample weight and sample material

Item No.	Item
<a href="http://www.eltra.com/cs580a">www.eltra.com/cs580a</a>	<b>ELTRA CS-580A "Helios"</b> (Please order PC, monitor, balance, Autoloader and consumables (starter-kit, anhydrene, sodium hydroxide) separately)
	<b>Measuring ranges at 500 mg sample weight</b> <sup>3)</sup>
DE 88100-4015	CS-580A 1xC 0.05 – 100% C
DE 88100-4016	CS-580A 1xS 0.005 – 2% S
DE 88100-4017	CS-580A 2xC 0.005 – 12% C   12 – 100% C
DE 88100-4018	CS-580A 2xS 0.005 – 2% S   2 – 20% S
DE 88100-4019	CS-580A 1xC + 1xS 0.05 – 100% C 0.005 – 2% S
DE 88100-4020	CS-580A 1xC + 2xS 0.05 – 100% C 0.005 – 2% S   2 – 20% S
DE 88100-4021	CS-580A 2xC + 1xS 0.005 – 12% C   12 – 100% C 0.005 – 2% S
DE 88100-4022	CS-580A 2xC + 2xS 0.005 – 12% C   12 – 100% C 0.005 – 2% S   2 – 20% S
	<b>Further measuring range combinations on request</b>
	<b>Autoloader</b>
DE 14535	Autoloader for 36 crucibles
DE 14533	Autoloader for 130 crucibles
DE 14533-1001	Autoloader for 130 crucibles, acid resistant
	<b>PC, Monitor, Balance</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
	<b>Accessories</b>
DE 38001	TIC-Module
DE 72070	Oxygen regulator
DE 71090	Voltage Stabilizer 5 KVA
DE 88600-0015	Crucible holder
	<b>Consumables</b>
	<b>Required consumables</b>
DC 88500-0005	Starter-kit for 500 analyses (500 crucibles, 50 g glass wool, 100 g Combsolid)
DC 90200	Anhydrene (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
	<b>Optional consumables</b>
DC 90149	Ceramic crucibles, premium, Ø 1", foil-wrapped, 1,000 pieces
DC 90331	Glass wool, 454 g
DC 88600-0008	Combsolid, 100 g
DC 92511-3020	Calibration standard – Coal, 50 g    0.5 – 1.0% S <sup>2)</sup>
DC 90710-3010	EDTA, 50 g
DC 91000-1005	Copper, flakes, 25 g
DC 90800	Graphite, 50 g
DC 90810	Calcium carbonate, 100 g
DC 92610	Tube of high vacuum grease
	<b>Spare and Wear Parts</b>
DW 77501	Heating elements, 1 set (4 pieces)
DW 35540	Combustion tube 50x40x525 mm
DW 35541	Lance
DW 35542	Pedestal
DW 11170	Balston-filter
DW 09092	Reagent tube 54x36x280
DW 35516	O-ring
DW 70150	O-ring 6x2.5
DW 70320	O-ring 20x5
DW 70330	O-ring 21x2
DW 70255	O-ring 10x1.5
DW 70427	O-ring 49x5
DW 70428	O-ring 49x7
DW 36914	Thermocouple
DW 77032	Circuit breaker 20A

<sup>1)</sup> Hazardous material<sup>2)</sup> Further calibration standards and compositions on page 21.Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)<sup>3)</sup> Measuring ranges may vary depending on sample weight and sample material

## CS-580A "Helios"



Analyzer with resistance furnace for carbon and sulfur in coal, coke, oil, ashes, catalysts, lime, gypsum, soils, rubber, waste and other solid materials.

### Scope of supply

- n Analyzer with high temperature furnace up to 1550°C with 200 mm hot zone and a resolution of 1°C
- n Gas flow system complete with electronic flow control, flow displays, pressure gauge, pump, gas cleaning traps
- n High-tech infrared cells with solid-state infrared detectors, interference filters and auto-zero and auto-range adjustment
- n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
- n Set of accessories and calibration material

Please order PC, monitor, balance, Autoloader and consumables (starter-kit, anhydrene, sodium hydroxide) separately.

Please refer to page 20  
for the complete list of consumables.



Item No.	Item
<a href="http://www.eltra.com/chs580">www.eltra.com/chs580</a>	<b>ELTRA CHS-580</b>
	(Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide) separately)
Measuring ranges at 500 mg sample weight <sup>3)</sup>	
DE 88100-4014	CHS-580 1xH 0.01 – 15% H
DE 88100-4012	CHS-580 1xC + 1xH 0.01 – 100% C 0.01 – 15% H
DE 88100-4013	CHS-580 1xS + 1xH 0.005 – 2% S 0.01 – 15% H
DE 88100-4010	CHS-580 2xC + 1xH 0.001 – 5% C   5% – 100% C 0.01% – 15% H
DE 88100-4011	CHS-580 2xS + 1xH 0.005 – 2% S   2 – 20% S 0.01 – 15% H
DE 88100-4009	CHS-580 1xC + 1xH 0.01 – 100% C 0.01 – 15% H + 1xS 0.005 – 2% S
Further measuring range combinations on request	
<b>PC, Monitor, Balance</b>	
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
<b>Accessories</b>	
DE 38001	TIC-Module
DE 72070	Oxygen regulator
DE 10375	Ceramic filter for afterburning, 4 pieces
DE 71090	Voltage Stabilizer 5 KVA
<b>Consumables</b>	
<b>Required consumables</b>	
DC 88500-0004	Starter-kit for 500 analyses (500 disposable porcelain boats, 50 g glass wool, 50 re-usable boats, 100 g Combsolid)
DC 90200	Anhydrene (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
<b>Optional consumables</b>	
DC 90153	Re-usable ceramic boats, premium, 58x22x14 mm, 500 pieces
DC 90160	Disposable porcelain boats 86x13x10 mm, 1,000 pieces
DC 90331	Glass wool, 454 g
DC 90332	Glass wool, 50 g
DC 88600-0008	Combsolid, 100 g
DC 92511-3020	Calibration standard – Coal, 50 g <sup>2)</sup> 0.5 – 1.0% S
DC 90710-3010	EDTA, 50 g
DC 91000-1005	Copper, flakes, 25 g
DC 90800	Graphite, 50 g
DC 90810	Calcium carbonate, 100 g
DC 92610	Tube of high vacuum grease
DC 90824	Sulfanilic acid, 50 g
DC 82130	Filter element (pressed micro fibre)
<b>Spare and Wear Parts</b>	
DW 36101	Boat stop
DW 75140	Safety ring A36x1.75 DIN 471
DW 77501	Heating elements, 1 set (4 pieces)
DW 90162	Combustion tube
DW 09090	Reagent tubes 32x280 mm, 1 piece
DW 70150	O-ring 6x2.5
DW 70270	O-ring 16x5
DW 70280	O-ring 18x2
DW 70320	O-ring 20x5
DW 70330	O-ring 21x2
DW 70380	O-ring 35x5
DW 70410	O-ring 48x3
DW 77425	Thermocouple
DW 77032	Circuit breaker 20A

1) Hazardous material

2) Further calibration standards and compositions on page 21.

3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

3) Measuring ranges may vary depending on sample weight and sample material

Item No.	Item
<a href="http://www.eltra.com/chs580a">www.eltra.com/chs580a</a>	<b>ELTRA CHS-580A "Helios"</b> (Please order PC, monitor, balance, Autoloader and consumables (starter-kit, anhydrene, sodium hydroxide) separately)
	<b>Measuring ranges at 500 mg sample weight</b> <sup>3)</sup>
DE 88100-4028	CHS-580A 1xH 0.01 – 15% H
DE 88100-4026	CHS-580A 1xC 0.01 – 100% C + 1xH 0.01 – 15% H
DE 88100-4027	CHS-580A 1xS 0.005 – 2% S + 1xH 0.01 – 15% H
DE 88100-4024	CHS-580A 2xC 0.001 – 5% C   5% – 100% C + 1xH 0.01% – 15% H
DE 88100-4025	CHS-580A 2xS 0.005 – 2% S   2 – 20% S + 1xH 0.01 – 15% H
DE 88100-4023	CHS-580A 1xC 0.01 – 100% C + 1xH 0.01 – 15% H + 1xS 0.005 – 2% S
	<b>Further measuring range combinations on request</b>
	<b>Autoloader</b>
DE 14535	Autoloader for 36 crucibles
DE 14533	Autoloader for 130 crucibles
	<b>PC, Monitor, Balance</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
	<b>Accessories</b>
DE 38001	TIC-Module
DE 72070	Oxygen regulator
DE 71090	Voltage Stabilizer 5 KVA
DE 88600-0015	Crucible holder
	<b>Consumables</b>
	<b>Required consumables</b>
DC 88500-0006	Starter-kit for 500 analyses (500 crucibles, 50 g glass wool, 100 g Combsolid)
DC 90200	Anhydrene (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
DC	
DC 90149	<b>Optional consumables</b> Ceramic crucibles, premium, Ø 1", foil-wrapped, 1,000 pieces
DC 90331	Glass wool, 454 g
DC 88600-0008	Combsolid, 100 g
DC 92511-3020	Calibration standard – Coal, 50 g 0.5 – 1.0% S <sup>2)</sup>
DC 90710-3010	EDTA, 50 g
DC 91000-1005	Copper, flakes, 25 g
DC 90800	Graphite, 50 g
DC 90810	Calcium carbonate, 100 g
DC 90824	Sulfanilic acid, 50 g
DC 92610	Tube of high vacuum grease
	<b>Spare and Wear Parts</b>
DW 82130	Filter element (pressed micro fibre)
DW 77501	Heating elements, 1 set (4 pieces)
DW 35540	Combustion tube 50x40x525 mm
DW 35541	Lance
DW 70428	O-ring 49x7
DW 70427	O-ring 49x5
DW 70150	O-ring 6x2.5
DW 35542	Pedestal

<sup>1)</sup> Hazardous material

Further calibration standards and compositions on page 21.

Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)<sup>3)</sup> Measuring ranges may vary depending on sample weight and sample material

## CHS-580A "Helios"



Analyzer with resistance furnace for carbon, hydrogen and sulfur in coal, coke, oil, ashes, catalysts, lime, gypsum, soils, rubber, waste and other solid materials.

### Scope of supply

- n Analyzer with high temperature furnace up to 1550°C with 200 mm hot zone and a resolution of 1°C
- n Gas flow system complete with electronic flow control, flow displays, pressure gauge, pump, gas cleaning traps
- n High-tech infrared cells with solid-state infrared detectors, interference filters and auto-range adjustment
- n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
- n Set of accessories and calibration material

Please order PC, monitor, balance, Autoloader and consumables (starter-kit, anhydrene, sodium hydroxide) separately.

Please refer to page 20  
for the complete list of consumables.



Analyzer with electrode impulse furnace for oxygen and nitrogen determination in steel, cast iron, alloys, copper, refractories, ceramics and other inorganic materials.

#### Scope of supply

- n NEW Analyzer with closed gas management and optimized gas circulation for sensitive ON determination
- n NEW Use of cost-efficient argon as carrier gas possible
- n NEW Powerful catalyst furnace for precise oxygen measurements
- n NEW Gas flow system with electronic flow control and new leakage test
- n High tech infrared cells with solid state infrared detectors, interference filters and auto zero adjustment (depends on configuration)
- n Thermal conductivity cell for nitrogen analysis (depending on configuration)
- n NEW Analysis software (requires Windows® 7 or higher) supporting linear regression or single point calibration, user friendly diagnosis screen, maintenance counters, comment fields and many more
- n NEW Different cooling opportunities:
  - Heat exchanger included
  - Option to use tap water
  - Option: Chiller (has to be ordered separately)
- n Set of accessories

**Please order PC, monitor, balance and consumables (starter kit, anhydrene, sodium hydroxide, copper II oxide) separately.**

Please refer to page 20  
for the complete list of consumables.

Item No.	Item
<a href="http://www.eltra.com/on-p">www.eltra.com/on-p</a>	<b>ELEMENTRAC® ON-<i>p</i></b> (Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, copper II oxide) separately)
	<b>Measuring ranges at 1,000 mg sample weight</b>
DE 88200-2001	ON- <i>p</i> 1xO 0.1 – 200 ppm O
DE 88200-2002	ON- <i>p</i> 2xN 0.1 – 200 ppm N   10 ppm – 2 % N
DE 88200-2003	ON- <i>p</i> 2xO 0.1 – 200 ppm O   10 ppm – 0.7 % O
DE 88200-2004	ON- <i>p</i> 1xO 0.1 – 200 ppm O + 2xN 0.1 – 200 ppm N   10 ppm – 2 % N
DE 88200-2005	ON- <i>p</i> 2xO 0.1 – 200 ppm O   10 ppm – 0.7 % O + 2xN 0.1 – 200 ppm N   10 ppm – 2 % N
	<b>Further measuring range combinations on request</b>
	<b>PC, Monitor, Balance</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
	<b>Accessories</b>
DE 27000-2021	Gas calibration unit ELEMENTRAC series
DE 21000	Carrier gas purification furnace, without filling (integrated in analyzer, please order filling and quartz wool separately)
DE 72081	Pressure regulator
DE 88400-0467	Chiller
	<b>Consumables</b>
DC 88500-0007	Required consumables Starter-kit for 500 analyses (400 graphite crucibles, 50 outer graphite crucibles, 200 inner graphite crucibles, 50 g glass wool, 50 g quartz wool)
DC 90200	Anhydrene (magnesium perchlorate), 454 g
DC 90210	Sodium hydroxide, 500 g
DC 90289	Copper II oxide, 100 g
DC 90426-1001	Filling for carrier gas purification furnace
	<b>Optional consumables</b>
DC 90190	Graphite crucibles, 400 pieces
DC 90180	Inner graphite crucibles, 100 pieces
DC 90185	Outer graphite crucibles, 50 pieces
DC 90331	Glass wool, 454 g
DC 90330	Quartz wool, 50 g
DC 91000-1001	Calibration standard – Copper, 100 pins, 1 g each ~500 ppm O
DC 91100-1001	Calibration standard – Steel, 100 pins, 1 g each 25-40 ppm N
DC 91205-1001	Calibration standard – Titanium, 100 pins, 0.1 g each 10-35 ppm H
DC 92610	Tube of high vacuum grease
DC 90870	Cooling agent, 0.5 l
	<b>Spare and Wear Parts</b>
DW 27590	Upper electrode
DW 31360	Graphite tip
DW 31365	Graphite tip holder
DW 71010	Brush
DW 71035	Cleaning brush / furnace brush
DW 11064-3001	Reagent tube 120x20 mm
DW 88400-0006	Reagent tube 280x20 mm
DW 88400-0422	Reagent tube 240x20 mm
DW 88400-0452	Quartz tube catalyst furnace, curved

1) Hazardous material

2) Further calibration standards and compositions on page 21.

3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

Item No.	Item
<a href="http://www.eltra.com/oh-p">www.eltra.com/oh-p</a>	<b>ELEMENTRAC® OH-p</b> (Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, schuetze reagent) separately)
	<b>Measuring ranges at 1,000 mg sample weight</b> <sup>3)</sup>
DE 88200-2006	OH-p 1xO 0.1 – 200 ppm O
DE 88200-2007	OH-p 2xH 0.01 – 50 ppm H   20 – 1,000 ppm H
DE 88200-2008	OH-p 2xO 0.1 – 200 ppm O   10 ppm – 0.7 % O
DE 88200-2009	OH-p 1xO 0.1 – 200 ppm O + 2xH 0.01 – 50 ppm H   20 – 1,000 ppm H
DE 88200-2010	OH-p 2xO 0.1 – 200 ppm O   10 ppm – 0.7 % O + 2xH 0.01 – 50 ppm H   20 – 1,000 ppm H
	<b>Further measuring range combinations on request</b>
	<b>PC, Monitor, Balance</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
	<b>Accessories</b>
DE 27000-2021	Gas calibration unit ELEMENTRAC series
DE 21000	Carrier gas purification furnace, without filling (integrated in analyzer, please order filling and quartz wool separately)
DE 72080	Nitrogen regulator
DE 88400-0467	Chiller
	<b>Consumables</b>
	<b>Required consumables</b>
DC 88500-0008	Starter-kit for 500 analyses (400 graphite crucibles, 50 outer graphite crucibles, 200 inner graphite crucibles, 50 g glass wool, 50 g quartz wool)
DC 90200	Anhydrene (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
DC 90270	Schuetze reagent, 100 g <sup>1)</sup>
DC 90426-1001	Filling for carrier gas purification furnace <sup>1)</sup>
	<b>Optional consumables</b>
DC 90190	Graphite crucibles, 400 pieces
DC 90180	Inner graphite crucibles, 100 pieces
DC 90185	Outer graphite crucibles, 50 pieces
DC 90331	Glass wool, 454 g
DC 90330	Quartz wool, 50 g
DC 91000-1001	Calibration standard – Copper, 100 pins, 1 g each <sup>2)</sup> ~500 ppm O
DC 91100-1001	Calibration standard – Steel, 100 pins, 1 g each <sup>2)</sup> 25-40 ppm N
DC 91205-1001	Calibration standard – Titanium, 100 pins, 0.1 g each <sup>2)</sup> 10-35 ppm H
DC 91400-1001	Calibration standard – Steel, 100 pins, 1 g each <sup>2)</sup> 0.5 – 1 ppm H
DC 92610	Tube of high vacuum grease
DC 90870	Cooling agent, 0.5 l
	<b>Spare and Wear Parts</b>
DW 27590	Upper electrode
DW 31360	Graphite tip
DW 31365	Graphite tip holder
DW 71010	Brush
DW 71035	Cleaning brush / furnace brush
DW 11064-3001	Reagent tube 120x20 mm
DW 88400-0006	Reagent tube 280x20 mm

<sup>1)</sup> Hazardous material

Further calibration standards and compositions on page 21.

Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)<sup>3)</sup> Measuring ranges may vary depending on sample weight and sample material

## ELEMENTRAC® OH-p



Analyzer with electrode impulse furnace for oxygen and hydrogen determination in steel, cast iron, alloys, copper, refractories, ceramics and other inorganic materials.

## Scope of supply

- n NEW Analyzer with closed gas management and optimized gas circulation for sensitive OH determination
- n NEW Enlarged Schuetze reagent tube for precise oxygen measurements
- n NEW Gas flow system with electronic flow control and new leakage test
- n High tech infrared cells with solid state infrared detectors, interference filters and auto zero adjustment (depends on configuration)
- n Thermal conductivity cell for hydrogen analysis (depending on configuration)
- n NEW Analysis software (requires Windows® 7 or higher) supports linear regression or single point calibration, user friendly diagnosis screen, maintenance counters, comment fields and many more
- n NEW Different cooling opportunities:
  - Heat exchanger included
  - Option to use tap water
  - Option: Chiller (has to be ordered separately)
- n Set of accessories

Please order PC, monitor, balance and consumables (starter kit, anhydrene, sodium hydroxide, Schuetze reagent) separately.

Please refer to page 20  
for the complete list of consumables.



Analyzer with electrode impulse furnace for oxygen, nitrogen and hydrogen determination in steel, cast iron, alloys, copper, refractories, ceramics and other inorganic materials.

#### Scope of supply

- n NEW Analyzer with closed gas management and optimized gas circulation for sensitive ONH determination
- n NEW Cost efficient argon as carrier gas possible
- n NEW Powerful catalyst furnace for precise oxygen measurements
- n NEW Gas flow system with electronic flow control and new leakage test
- n High tech infrared cells with solid state infrared detectors, interference filters and auto zero adjustment (depends on configuration)
- n Thermal conductivity cell for nitrogen and hydrogen analysis (depending on configuration)
- n NEW Analysis software (requires Windows® 7 or higher) supports linear regression or single point calibration, user friendly diagnosis screen, maintenance counters, comment fields and many more
- n NEW Different cooling opportunities:
  - Heat exchanger included
  - Option to use tap water
  - Option: Chiller (has to be ordered separately)
- n Set of accessories

**Please order PC, monitor, balance and consumables (starter kit, anhydrene, sodium hydroxide, copper II oxide and Schuetze reagent) separately.**

Please refer to page 20  
for the complete list of consumables.

Item No.	Item		
<a href="http://www.eltra.com/onh-p">www.eltra.com/onh-p</a>	<b>ELEMENTRAC® ONH-p</b>		
	(Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, schuetze reagent, copper II oxide) separately)		
	<b>Measuring ranges at 1,000 mg sample weight</b>		
DE 88200-2011	ONH- p	1xO	0.1 – 200 ppm O
DE 88200-2012	ONH- p	2xN	0.1 – 200 ppm N   10 ppm – 2 % N + 2xH 0.01 – 50 ppm H   20 – 1,000 ppm H
DE 88200-2013	ONH- p	2xO	0.1 – 200 ppm O   10 ppm – 0.7 % O
DE 88200-2014	ONH- p	1xO	0.1 – 200 ppm O + 2xN 0.1 – 200 ppm N   10 ppm – 2 % N + 2xH 0.01 – 50 ppm H   20 – 1,000 ppm H
DE 88200-2015	ONH- p	2xO	0.1 – 200 ppm O   10 ppm – 0.7 % O + 2xN 0.1 – 200 ppm N   10 ppm – 2 % N + 2xH 0.01 – 50 ppm H   20 – 1,000 ppm H
	<b>Further measuring range combinations on request</b>		
	<b>PC, Monitor, Balance</b>		
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse		
DE 71016	Monitor, TFT		
DE 88600-0002	Balance (resolution 0.0001 g)		
DE 71002	Printer		
	<b>Accessories</b>		
DE 27000-2021	Gas calibration unit ELEMENTRAC series		
DE 21000	Carrier gas purification furnace, without filling (integrated in analyzer, please order filling and quartz wool separately)		
DE 72080	Nitrogen regulator		
DE 88400-0467	Chiller		
	<b>Consumables</b>		
DC 88500-0009	<b>Required consumables</b>		
	Starter-kit for 500 analyses (400 graphite crucibles, 50 outer graphite crucibles, 200 inner graphite crucibles, 50 g glass wool, 50 g quartz wool)		
DC 90200	Anhydrene (magnesium perchlorate), 454 g		
DC 90210	Sodium hydroxide, 500 g		
DC 90270	Schuetze reagent, 100 g		
DC 90289	Copper II oxide, 100 g		
DC 90426-1001	Filling for carrier gas purification furnace		
	<b>Optional consumables</b>		
DC 90190	Graphite crucibles, 400 pieces		
DC 90180	Inner graphite crucibles, 100 pieces		
DC 90185	Outer graphite crucibles, 50 pieces		
DC 90331	Glass wool, 454 g		
DC 90330	Quartz wool, 50 g		
DC 91000-1001	Calibration standard – Copper, 100 pins, 1 g each ~500 ppm O		
DC 91100-1001	Calibration standard – Steel, 100 pins, 1 g each 25-40 ppm N		
DC 91205-1001	Calibration standard – Titanium, 100 pins, 0.1 g each 10-35 ppm H		
DC 91400-1001	Calibration standard – Steel, 100 pins, 1 g each 0.5 – 1 ppm H		
DC 92610	Tube of high vacuum grease		
DC 90870	Cooling agent, 0.5 l		
	<b>Spare and Wear Parts</b>		
DW 27590	Upper electrode		
DW 31360	Graphite tip		
DW 31365	Graphite tip holder		
DW 71010	Brush		
DW 71035	Cleaning brush / furnace brush		
DW 11064-3001	Reagent tube 120x20 mm		
DW 88400-0006	Reagent tube 280x20 mm		
DW 88400-0422	Reagent tube 240x20 mm		
DW 88400-0452	Quartz tube catalyst furnace, curved		

1) Hazardous material

2) Further calibration standards and compositions on page 21.

3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

Item No.	Item
<a href="http://www.eltra.com/h500">www.eltra.com/h500</a>	<b>ELTRA H-500</b>
	(Please order PC, monitor, balance and consumables (starter-kit, anhydron, sodium hydroxide, schuetze reagent) separately)
	Measuring ranges at 1,000 mg sample weight <sup>3)</sup>
DE 88100-2016	H-500 0.01 – 50 ppm H   20 – 1,000 ppm H
	<b>PC, Monitor, Balance</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
	<b>Accessories</b>
DE 71090	Voltage Stabilizer 5 KVA
	<b>Consumables</b>
	<b>Required consumables</b>
DC 88500-0012	Starter-kit (2 quartz boats, 50 g glass wool)
DC 90200	Anhydron (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
DC 90270	Schuetze reagent, 100 g <sup>1)</sup>
	<b>Optional consumables</b>
DC 90331	Glass wool, 454 g
DC 90332	Glass wool, 50 g
DC 91110	Calibration standard – Steel, 100 balls gold plated, 1 g each 1.9 ppm H <sup>2)</sup>
DC 92610	Tube of high vacuum grease
	<b>Spare and Wear Parts</b>
DW 11064	Reagent tubes 280x16 mm, 2 pieces
DW 47470	Combustion tube

## H-500



Analyzátor pro rychlé a přesné stanovení vodíku v ocelích a ocelových slitinách

- stanovení zbytkového vodíku
- řízení datastanicí
- duální tepelně vodivostní detektory
- elektronická kontrola a řízení průtoku plynů

### Scope of supply

- n Gas flow system complete with electronic flow control, flow displays, pressure gauge, pump and gas cleaning traps
- n Thermal conductivity cell for hydrogen analysis
- n Gas dosing device
- n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
- n Set of accessories

Please order PC, monitor, balance and consumables (starter-kit, anhydron, sodium hydroxide, schuetze reagent) separately.

Please refer to page 20 for the complete list of consumables.

1) Hazardous material  
2) Further calibration standards and compositions on page 21.  
3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)  
3) Measuring ranges may vary depending on sample weight and sample material



Analyzátor pro rychlé simultánní stanovení obsahů CO<sub>2</sub> a H<sub>2</sub>O ve vápně, cementech, sádře, rudách, minerálech apod.

- infračervené komory s polovodičovými detektory
- bez potřeby lapače halogenů
- bez vlivu vody na výsledky stanovení CO<sub>2</sub>
- řízení datastanicí
- elektronická kontrola a řízení průtoku plynů
- teplota spalovací pásky až 1.000 oC

#### Scope of supply

- n Furnace up to 1,000°C with a resolution of 1°C (constant temperature)
- n Gas flow system complete with electronic flow control, flow displays, pressure gauge, pump and gas cleaning traps
- n High-tech infrared cells with solid-state infrared detectors, interference filters and auto-zero and auto-range adjustment
- n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
- n Set of accessories

**Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide) separately.**

Please refer to page 20  
for the complete list of consumables.

Item No.		Item				
<a href="http://www.eltra.com/cw800m">www.eltra.com/cw800m</a>		<b>ELTRA CW-800</b>				
		(Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide) separately)				
		Measuring ranges at 200 mg sample weight				
DE	88100-4029	CW-800	H <sub>2</sub> O	0 – 20 % H <sub>2</sub> O		
DE	88100-4030	CW-800	1x CO <sub>2</sub> + H <sub>2</sub> O	0 – 70 % CO <sub>2</sub>   0 – 20 % H <sub>2</sub> O		
<b>PC, Monitor, Balance</b>						
DE	71015		Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse			
DE	71016		Monitor, TFT			
DE	88600-0002		Balance (resolution 0.0001 g)			
DE	71002		Printer			
<b>Accessories</b>						
DE	38001		TIC-Module			
DE	72080		Nitrogen regulator			
DE	71090		Voltage Stabilizer 5 KVA			
<b>Consumables</b>						
<b>Required consumables</b>						
DC	88500-0010		Starter-kit for 1,000 analyses (1,000 disposable porcelain boats, 3 quartz boats, 50 g glass wool)			
DC	90200		Anhydrene (magnesium perchlorate), 454 g			
DC	90210		Sodium hydroxide, 500 g			
<b>Optional consumables</b>						
DC	36120		Quartz boat 75x16x7.5 mm, 1 piece			
DC	90160		Disposable porcelain boats 86x13x10 mm, 1,000 pieces			
DC	90332		Glass wool, 50 g			
DC	90810		Calcium carbonate, 100 g			
DC	90700-1040		Calcium oxalate, 50 g			
DC	92610		Tube of high vacuum grease			
<b>Spare and Wear Parts</b>						
DW	82130		Filter element (pressed micro fibre)			
DW	48750		Combustion tube			
DW	09090		Reagent tubes 32x280 mm, 1 piece			
DW	70150		O-ring 6x2.5			
DW	70320		O-ring 20x5			
DW	70330		O-ring 21x2			
DW	70280		O-ring 18x2			
DW	70380		O-ring 35x5			
DW	70410		O-ring 48x3			
DW	48767		Thermocouple			

1) Hazardous material

2) Further calibration standards and compositions on page 21.

3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

3) Measuring ranges may vary depending on sample weight and sample material

Item No.	Item
<a href="http://www.eltra.com/cw800m">www.eltra.com/cw800m</a>	<b>ELTRA CW-800M "Multiphase"</b> (Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, copper oxide) separately)
	<b>Measuring ranges at 200 mg sample weight</b>
DE 88100-4042	CW-800M H <sub>2</sub> O 0 - 20 % H <sub>2</sub> O
DE 88100-4041	CW-800M 1x CO <sub>2</sub> 0 - 70 % CO <sub>2</sub>   + H <sub>2</sub> O 0 - 20 % H <sub>2</sub> O
DE 88100-4055	CW-800M 1x CO <sub>2</sub> 0 - 1 % CO <sub>2</sub>   + 1x CO <sub>2</sub> 1 - 70 % CO <sub>2</sub>
	3)
	<b>PC, Monitor, Balance</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 88600-0002	Balance (resolution 0.0001 g)
DE 71002	Printer
	<b>Accessories</b>
DE 38001	TIC-Module
DE 72070	Oxygen regulator
DE 72080	Nitrogen regulator
DE 71090	Voltage Stabilizer 5 KVA
	<b>Consumables</b>
DC 88500-0014	Required consumables Starter-kit for 1,000 analyses (1,000 disposable porcelain boats, 3 quartz boats, 50 g glass wool, 50 g quartz wool)
DC 90200	Anhydrene (magnesium perchlorate), 454 g
DC 90210	Sodium hydroxide, 500 g
DC 90290	Copper oxide, 100 g
	<b>Optional consumables</b>
DC 36120	Quartz boat 75x16x7.5 mm, 1 piece
DC 90160	Disposable porcelain boats 86x13x10 mm, 1,000 pieces
DC 90332	Glass wool, 50 g
DC 90330	Quartz wool, 50 g
DC 90810	Calcium carbonate, 100 g
DC 90700-1040	Calcium oxalate, 50 g
DC 92610	Tube of high vacuum grease
	<b>Spare and Wear Parts</b>
DW 77503	Heating element
DW 48750	Combustion tube
DW 71035	Cleaning brush / furnace brush
DW 11170	Balston filter, 1 piece
DW 77510	Heating element for filter holder
DW 70320	O-ring 20x5, 1 piece
DW 70340	O-ring 27x5, 1 piece
DW 70287	O-ring 19x5, 1 piece
DW 70210	O-ring 8x3.5, 1 piece
DW 70150	O-ring 6x2.5, 1 piece
DW 70180	O-ring 8x1.5, 1 piece
DW 70230	O-ring 9x3, 1 piece
DW 70132	O-ring 5x2.5, 1 piece

<sup>1)</sup> Hazardous material

Further calibration standards and compositions on page 21.

Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)<sup>3)</sup> Measuring ranges may vary depending on sample weight and sample material

## CW-800M "Multiphase"



Analyzer with resistance furnace for CO<sub>2</sub> and H<sub>2</sub>O in materials like lime, cement, gypsum, ores, minerals, slags and in other materials of the building and mining industries.

### Scope of supply

- n Furnace up to 1,000°C with a resolution of 1°C (with ramping)
- n Gas flow system complete with electronic flow control, flow displays, pressure gauge, pump and gas cleaning traps
- n High-tech infrared cells with solid-state infrared detectors, interference filters and auto-range adjustment
- n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
- n Set of accessories

**Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, copper oxide) separately.**

Please refer to page 20  
for the complete list of consumables.



Analyzer for determination of surface carbon on copper, steel and other metals and alloys.

#### Scope of supply

- n High temperature furnace up to 1,000°C with a resolution of 1°C
- n Gas flow system complete with electronic flow control, flow displays, pressure gauge, pump, gas cleaning traps
- n High-tech infrared cells with solid-state infrared detectors, interference filters and auto-range adjustment
- n Analysis software for Windows with multipoint calibration, automatic linearity correction, applications memory, export to Excel and with universal LIMS export
- n Set of accessories

**Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, copper oxide) separately.**

Please refer to page 20  
for the complete list of consumables.

Item No.		Item
<a href="http://www.eltra.com/sc800">www.eltra.com/sc800</a>		<b>ELTRA SurfaceC-800</b>
		(Please order PC, monitor, balance and consumables (starter-kit, anhydrene, sodium hydroxide, copper oxide) separately)
DE	88100-4031	SurfaceC-800 1xC 0.1 – 100 µg/cm <sup>2</sup>
DE	88100-4032	SurfaceC-800 2xC 0.1 – 100 µg/cm <sup>2</sup>   1 – 1,000 µg/cm <sup>2</sup>
DE	88100-4045	SurfaceC-800 1xC 10 – 1,000 µg/cm <sup>2</sup>
		<b>PC, Monitor, Balance</b>
DE	71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE	71016	Monitor, TFT
DE	88600-0002	Balance (resolution 0.0001 g)
DE	71002	Printer
		<b>Accessories</b>
DE	72070	Oxygen regulator
DE	71090	Voltage Stabilizer 5 KVA
		<b>Consumables</b>
		<b>Required consumables</b>
DC	88500-0011	Starter-kit (3 quartz boats, 50 g glass wool)
DC	90200	Anhydrene (magnesium perchlorate), 454 g
DC	90210	Sodium hydroxide, 500 g
DC	90290	Copper oxide, 100 g
		<b>Optional consumables</b>
DC	46160	Quartz boat 30x150 mm, 1 piece
DC	90332	Glass wool, 50 g
DC	92610	Tube of high vacuum grease
		<b>Spare and Wear Parts</b>
DW	46156	Combustion tube for SurfaceC-800
DW	46157	Boat holder
DW	46160	Combustion boat
DW	46162	Tube mouth cover

- 1) Hazardous material  
 2) Further calibration standards and compositions on page 21.  
 3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)  
 3) Measuring ranges may vary depending on sample weight and sample material

Item No.	Item
<a href="http://www.eltra.com/tga">www.eltra.com/tga</a>	<b>ELTRA TGA Thermostep</b> <b>(Please order PC, monitor separately)</b>
DE 88100-3001	TGA Thermostep with 2 carousels, 20 ceramic crucibles and 20 lids
	<b>PC, Monitor</b>
DE 71015	Computer with dual core processor, 300 GB HDD, 2 GB RAM, Windows operating system, DVD-ROM, keyboard, mouse
DE 71016	Monitor, TFT
DE 71002	Printer
	<b>Accessories</b>
DC 26063	Ceramic crucible
DC 26053	Ceramic lid
DE 26085	External weighing station
DE 26102	External weighing station with balance
DE 72070	Oxygen regulator
DE 72080	Nitrogen regulator
DE 71090	Voltage Stabilizer 5 KVA
DE 11830	Compressed air tube 5 m, 4x1
DE 71010	Brush
DE 23111	Spatula
	<b>Spare and Wear Parts</b>
DW 26276	Crucible tray
DW 26285	Balance pedestal
DW 26288	Wind shield for balance
	<b>Consumables</b>
DC 90700-1040	Calcium oxalate, 50 g



Thermostep Termogravimetrický analyzátor pro organické, anorganické a syntetické materiály

- průběžné měření a záznam změn hmotnosti vzorku v průběhu změn teploty
- pícka pro 19 vzorků s teplotním rozsahem 50 - 1.000 °C s rozlišením po 1 °C
- 2 karusely, 20 kelímků a 20 víček pro kelímky
- 2 termočlánky pro přesné řízení teploty
- řízení datastanicí

#### Scope of supply

- n Furnace 50 - 1,000°C with 1°C resolution for 19 samples, PC controlled
- n Balance with 0.0001 gram sensitivity, adapted for high temperatures
- n 2 carousels for 20 crucibles and 20 lids
- n 20 ceramic crucibles, 20 lids
- n External blower
- n Cables and accessories

**Please order PC, monitor separately.**

1) Hazardous material  
2) Further calibration standards and compositions on page 21.  
3) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)  
3) Measuring ranges may vary depending on sample weight and sample material

# Consumables



90149  
Ceramic crucibles



90148  
Ceramic crucibles



90153  
Re-usable ceramic boats



90160  
Disposable porcelain boats



90270  
Schuetze reagent



90280  
Tin accelerator



90220  
Tungsten



90331  
Glass wool

# PRICE LIST 2017

**ELTRA®**

Item No.	Item
<a href="http://www.eltra.com">www.eltra.com</a>	<b>ELTRA Consumables</b>
<b>General Consumables</b>	
DC 90200	Anhydronate (magnesium perchlorate), 454 g <sup>1)</sup>
DC 90210	Sodium hydroxide, 500 g <sup>1)</sup>
DC 90330	Quartz wool, 50 g
DC 90331	Glass wool, 454 g
DC 90332	Glass wool, 50 g
DC 92610	Tube of high vacuum grease
DC 11170	Balston filter
<b>CS 800 / CS 2000 Consumables</b>	
DC 90149	Ceramic crucibles, premium, Ø 1", foil-wrapped, 1,000 pieces
DC 90148	Ceramic crucibles, premium, Ø 1", bagged, 1,000 pieces
DC 88600-0014	Ceramic lids, 250 pieces
DC 88400-0176	Ceramic filtering crucibles, 100 pieces
DC 90220	Tungsten, premium, 2,500 g
DC 90260	Iron accelerator, premium, 908 g
DC 88600-0013	Iron accelerator, high purity, 454 g
DC 88600-0010	Tungsten-tin accelerator, 750 g
DC 90280	Tin accelerator, 908 g
DC 90240	Copper accelerator, 1392 g
DC 90290	Copper oxide, 100 g
DC 90341	Cellulose, 50 g <sup>1)</sup>
<b>C(H)S 580 / CS 2000 Consumables</b>	
DC 90153	Re-usable ceramic boats, premium, 58x22x14 mm, 500 pieces
DC 90160	Disposable porcelain boats, 86x13x10 mm, 1,000 pieces
DC 88600-0011	Re-usable ceramic boats, 95x13x10 mm, 500 pieces
DC 90840	Quartz sand, 100 g
DC 91000-1005	Copper, flakes, 25 g
DC 88600-0008	Combsolid, 100 g
<b>ONH Series Consumables</b>	
DC 90190	Graphite crucibles, 12.7x24.3 mm, 400 pieces
DC 90180	Inner graphite crucibles, 12.6x15.7 mm, 100 pieces
DC 90185	Outer graphite crucibles, 14.8x24.3 mm, 50 pieces
DC 90250	Nickel baskets, 100 pieces, 1 g each
DC 88600-0012	Nickel baskets, high purity (low oxygen), 100 pieces, 1 g each
DC 90257	Nickel capsules, 3.2x7 mm, 100 pieces
DC 90256	Nickel capsules, 4.5x10 mm, 250 pieces
DC 90251	Tin pellets, 454 g
DC 90252	Tin capsules, 100 pieces
DC 90270	Schuetze reagent, 100 g <sup>1)</sup>
DC 90289	Copper II oxide, 100 g <sup>1)</sup>
DC 90870	Cooling agent, 0.5 l
<b>Further Analyzers Consumables</b>	
DC 36120	Quartz boat 75x16x7.5 mm, 1 piece
DC 46160	Quartz boat 30x150 mm, 1 piece
DC 26063	Ceramic crucible, 35x35 mm (for TGA Thermostep)
DC 26053	Ceramic lid (for TGA Thermostep)

## Remark

We reserve the right to effect price adjustments due to increases in raw material prices.

1) Hazardous material

2) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

3) Measuring ranges may vary depending on sample weight and sample material

Item No.	Item	
<b>Calibration Standards</b>		
<b>Coal, premium</b>		
DC 92550-3020	Coal, premium, 50 g	<1.0% S
DC 92550-3040	Coal, premium, 50 g	1.0 – 3.0% S
DC 92550-3060	Coal, premium, 50 g	>3.0% S
<b>Coal</b>		
DC 92511-3010	Coal, 50 g	0.1 – 0.5% S
DC 92511-3020	Coal, 50 g	0.5 – 1.0% S
DC 92511-3030	Coal, 50 g	1.0 – 1.5% S
DC 92511-3040	Coal, 50 g	1.5 – 2.0% S
DC 92511-3050	Coal, 50 g	2.0 – 3.0% S
DC 92511-3060	Coal, 50 g	3.0 – 4.0% S
DC 92511-3070	Coal, 50 g	4.0 – 5.0% S
DC 92511-3080	Coal, 50 g	>5.0% S
<b>Coke, premium</b>		
DC 92560-3010	Coke, premium, 50 g	
<b>Steel / Cast Iron (chips/powder), 100/150 g</b>		
DC 92400-3010	Steel,	<0.001% C
DC 92400-3020	Steel,	0.001 – 0.01% C
DC 92400-3030	Steel,	0.01 – 0.05% C
DC 92400-3040	Steel,	0.05 – 0.1% C
DC 92400-3050	Steel,	0.1 – 0.2% C
DC 92400-3060	Steel,	0.2 – 0.5% C
DC 92400-3070	Steel,	0.5 – 1.0% C
DC 92400-3090	Cast Iron,	2.0 – 3.0% C
DC 92400-3100	Cast Iron,	3.0 – 5.0% C
<b>Steel, pins (N)</b>		
DC 91100-1001	Steel, 100 pins, 1 g each	25 – 40 ppm N
DC 91100-1002	Steel, 100 pins, 1 g each	30 – 70 ppm N
DC 91100-1003	Steel, 100 pins, 1 g each	150 – 250 ppm N
DC 91100-1004	Steel, 100 pins, 1 g each	50 – 80 ppm N
DC 91100-1005	Steel, 100 pins, 1 g each	300 – 600 ppm N
DC 91100-1006	Steel, 100 pins, 1 g each	80 – 150 ppm N
<b>Steel, pins (H), for ONH Series</b>		
DC 91400-1001	Steel, 100 pins, 1 g each	0.5 – 1 ppm H
DC 91400-1002	Steel, 100 pins, 1 g each	1.5 – 4 ppm H
DC 91400-1003	Steel, 100 pins, 1 g each	>5 ppm H
<b>Steel, balls (H), for H-500</b>		
DC 91110	Steel, 100 balls gold plated, 1 g each	1.9 ppm H
<b>Copper, pins</b>		
DC 91000-1001	Copper, 100 pins, 1 g each	~500 ppm O
DC 91000-1002	Copper, 100 pins, 1 g each	~300 ppm O
<b>Titanium, pins</b>		
DC 91205-1001	Titanium, 100 pins, 0.1 g each	10-35 ppm H
DC 91205-1002	Titanium, 100 pins, 0.1 g each	20-70 ppm H
DC 91205-1003	Titanium, 100 pins, 0.1 g each	30-90 ppm H
DC 91205-1004	Titanium, 100 pins, 0.1 g each	60-120 ppm H
DC 91205-1005	Titanium, 100 pins, 0.1 g each	150-250 ppm H
<b>Calibration Materials / Additives</b>		
DC 90710-3010	EDTA, 50 g	
DC 90816-3001	Tungsten carbide, 100 g	
DC 90800	Graphite, 50 g	
DC 90700-1040	Calcium oxalate, 50 g	
DC 90810	Calcium carbonate, 100 g	
DC 90821	Barium sulphate, 50 g	
DC 90824	Sulfanilic acid, 50 g	
DC 92530	Oil, 100 ml	0.97% S
DC 90860	Glycerine, 100 g	
DC 90812-3001	Limestone, 25 g	0.04% S
DC 90812-3002	Limestone, 25 g	0.004% S
DC 91900-1001	Ore, 30 g	~ 1.4% S
DC 91900-1002	Ore, 30 g	~ 4.2% S

1) Hazardous material

2) Detailed information about compositions at [www.eltra.com/consumables](http://www.eltra.com/consumables)

3) Measuring ranges may vary depending on sample weight and sample material

## Consumables



92511-30XX  
Calibration  
standard – Coal



92400-3XXX  
Calibration  
standard – Steel,  
chips



91100-10XX  
Calibration  
standard – Steel,  
pins



91000-10XX  
Calibration  
standard – Copper,  
pins

## Remark

We reserve the right to effect price  
adjustments due to increases in raw  
material prices.

# ELTRA PRODUCT RANGE

Analysis of Carbon and Sulfur



CS-800



CS-2000

**ELTRA** is synonymous for high quality, customer-oriented solutions and efficient products. Thousands of satisfied customers worldwide are proof of the reliability of **ELTRA** analyzers.

Analysis of Carbon and Sulfur



CS-580



CS-580A "Helios"

Analysis of Carbon, Hydrogen and Sulfur



CHS-580



CHS-580A "Helios"

Analysis of Oxygen, Nitrogen and Hydrogen



NEW



NEW



NEW



H-500

Analyzers for special applications



CW-800



CW-800M "Multiphase"



SurfaceC-800



TGA Thermostep