

The KUD1 is a small mobile CO₂-filling unit to fill CO₂ directly on the spot. For Filling CO₂-bottles from 150 g up to 45 kg in combination with a Digital Floor Scale (not included-optional). It is especially appropriate for service offices and service vehicles to fill CO₂ directly on-site.

The unit is equipped with:

- » 1 compressed-air driven pump
- » 2 pcs. CO₂-hose (160 bar)
- » Pressure reducer
- » Compressed-air hose



TECHNICAL DATA

KUD1 (No. 201 000)

Construction:	aluminium construction
Motor:	compressed-air-driven 8-10 bar
Capacity:	3.5 kg/min
Colour:	hammer finish painted blue

The KU3 is a compact, mobile CO₂-filling unit. It is especially appropriate for service offices and service vehicles to fill CO₂ directly on-site.

The unit is equipped with:

- » 2 pcs. CO₂-hose (160 bar)
- » Pressure gauge (160 bar)
- » Electric cable 230 V



TECHNICAL DATA

KU3 (No. 251 000)

Construction:	steel construction with sheet casing
Pump:	3-piston-pump
Motor:	230 V, 16 A
Weight:	approx. 34 kg
Capacity:	max. 3.5 kg/min
Dimensions (l x w x h):	approx. 550 x 400 x 340 mm
Colour:	hammer finish painted blue or silvergrey



TECHNICAL DATA

KUD3 (air compressed) (No. 203 000)

Construction:	aluminium
Motor:	Compressed-air driven 8 – 10 bar
Weight:	approx. 25 kg
Capacity:	max. 3.5 kg/min
Dimensions (l x w x h):	approx. 550 x 400 x 340 mm
Colour:	hammer finish painted blue or silvergrey

TECHNICAL DATA

KUS3 (No. 231 000)

Construction:	aluminium
Pump:	3-piston-pump
Motor:	380 V, 12 A
Weight:	approx. 36 kg
Capacity:	max. 3.5 kg/min
Dimensions (l x w x h):	approx. 550 x 400 x 340 mm
Colour:	hammer finish painted blue or silvergrey

CO₂-filling unit, model KUD4 for filling CO₂-bottles from 150 g up to 45 kg.

Unit consists of:

- » Steel casing
- » Compressed-air driven pump
- » Electrical switchboard
- » Safety valve
- » Wiring
- » CO₂-filter

Control panel consists of:

- » CO₂-inlet pressure gauge
- » CO₂-outlet pressure gauge
- » Relief ball valve
- » CO₂-filling ball valve
- » Control buttons





TECHNICAL DATA

KU4 (No. 203 000)

Capacity:	max. 4.5 kg/min
Motor:	230 V, 50 Hz
Dimensions (l x w x h):	approx. 500 x 700 x 1000 mm
Colour:	hammer finish painted blue or silvergrey
Weight:	approx. 59 kg

TECHNICAL DATA

KUD4 (No. 205 000)

Capacity:	max. 4.5 kg/min
Motor:	compressed-air driven 8 – 10 bar
Dimensions (l x w x h):	approx. 500 x 700 x 1000 mm
Colour:	hammer finish painted blue or silvergrey
Weight:	approx. 45 kg

TECHNICAL DATA

KUS4 (No. 233 000)

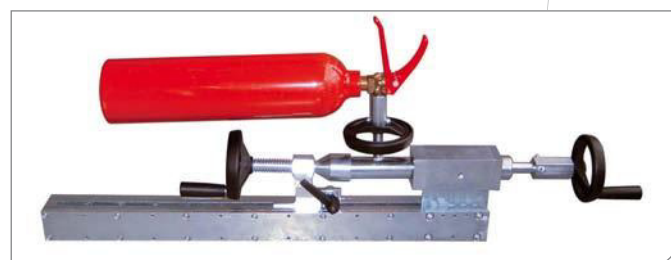
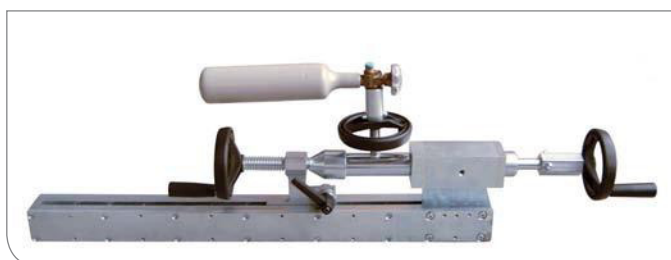
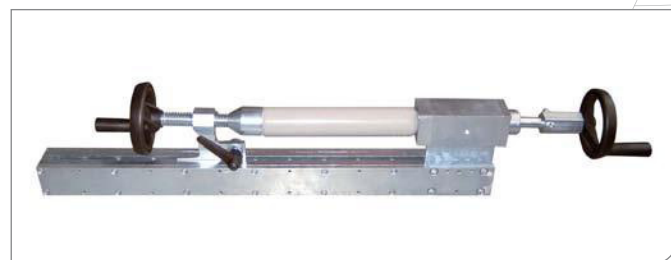
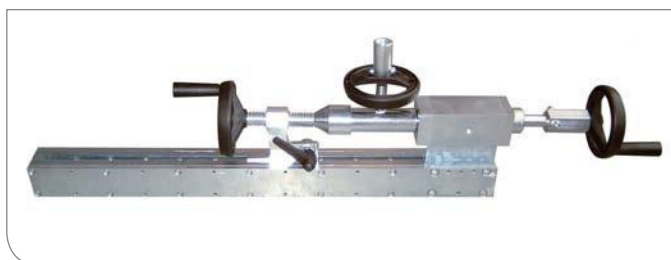
Capacity:	max. 4.5 kg/min
Motor:	3 phase, 400V, 50 Hz
Dimensions (l x w x h):	approx. 500 x 700 x 1000 mm
Colour:	hammer finish painted blue or silvergrey
Weight:	approx. 65 kg

CO₂-filling unit KUD5Di suitable to fill any size, shape or make of CO₂-cartridges (from 20 g) and CO₂-bottles (up to 6 kg) with the universal filling head.



KUS5-LW

(No. 235 100)



The unit is equipped with:

- » Compressed-air driven CO₂-pump
- » Integrated digital scale up to 30 kg weighing range with automatic cut-off feature. Resolution 10 g or optional
- » Filling of large bottles more than 6 kg has to be carried out on a separate floor scale with automatic cut-off feature (optional accessory)

Optional available at extra charge:

- » Equipped with mechanical sliding weight scale
- » Electric supply with 230/380 V, 60 Hz
- » Equipped with label printer

TECHNICAL DATA**KU5-DI (No. 255 000)**

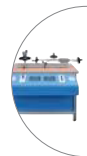
Motor:	230 V, 50 Hz
Dimensions (l x w x h):	approx. 900 x 700 x 600 mm
Colour:	hammer finish painted blue or silvergrey
Standard accessories:	<ul style="list-style-type: none"> » 3 adaptors for filling of CO₂ cartridges, 18 mm, 25 mm and 32 mm diameter » 1 CO₂ high-pressure hose, 2 m » 1 rotary filling valve "DF 1" to fill CO₂-bottles » 1 height adjustable support, KS-6 » 1 metal box incl. hexagonal sockets and tools, 10 – 32 mm » 1 set of sealings for filling adaptors » CO₂ steel filter

TECHNICAL DATA**KUD5-DI (No. 207 000)**

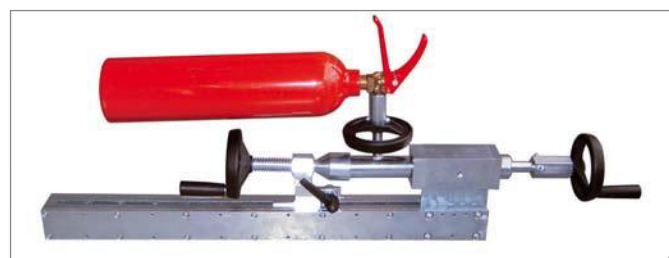
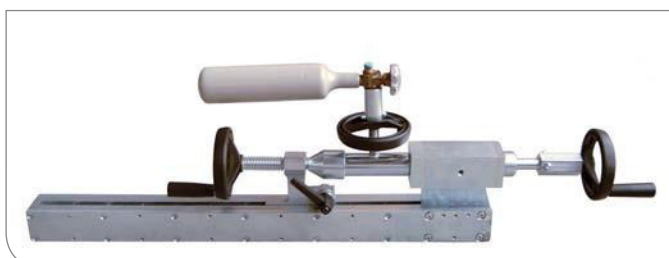
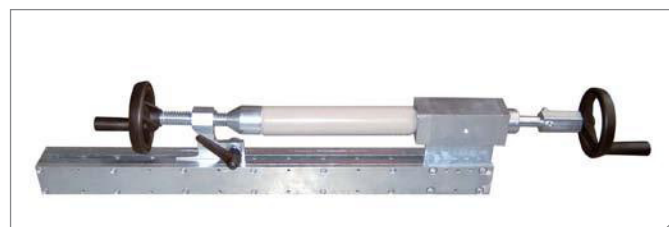
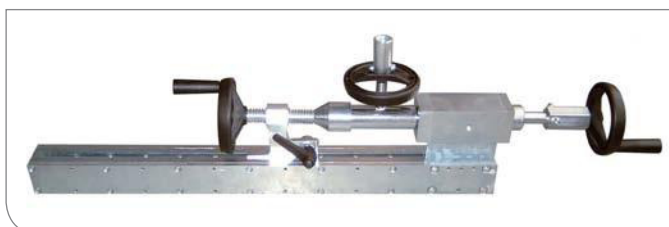
Motor:	compressed-air from 8 bar 800 ltr. air/min
Dimensions (l x w x h):	approx. 900 x 700 x 600 mm
Colour:	hammer finish painted blue or silvergrey
Standard accessories:	<ul style="list-style-type: none"> » 3 adaptors for filling of CO₂-cartridges, 18 mm, 25 mm and 32 mm diameter » 1 CO₂ high-pressure hose, 2 m » 1 rotary filling valve "DF 1" to fill CO₂-bottles » 1 height adjustable support, KS-5 » 1 metal box incl. hexagonal sockets and tools, 10 – 32 mm » 1 set of sealings for filling adaptors » CO₂-steel filter

TECHNICAL DATA**KUS5-DI (No. 235 000)**

Motor:	380 V, 50 Hz
Dimensions (LxBxH):	ca. 900 x 700 x 600 mm
Colour:	hammer finish painted blue or silvergrey
Standard accessories:	<ul style="list-style-type: none"> » 3 adaptors for filling of CO₂-cartridges, 18 mm, 25 mm and 32 mm diameter » 1 CO₂ high-pressure hose, 2 m » 1 rotary filling valve "DF 1" to fill CO₂-bottles » 1 height adjustable support, KS-5 » 1 metal box incl. hexagonal sockets and tools, 10 – 32 mm » 1 set of sealings for filling adaptors » CO₂-steel filter



CO₂-filling unit KU6 suitable to fill any size, shape or make of CO₂-cartridges (from 20 g) and CO₂-bottles (up to 6 kg) with the universal filling head. CO₂-unit with integrated digital scale 30 kg in table form with 40 mm thick wooden board.



The unit is equipped with:

- » Silent directly flashed CO₂-pump
- » Filling speed control for slow filling of cartridges and fast filling of large bottles
- » Fine regulation for small cartridges
- » Fast filling for large cylinders
- » Digital scale (30 kg weighing range) with automatic cutoff feature – resolution 5 g or 10 g optional
- » Operation by electrovalves
- » Filling of large bottles more than 6 kg has to be carried out on a separate floor scale with automatic cut-off feature (scale not included)
- » No pre-cooling system for CO₂ source bottle required
- » Emptying of CO₂ master bottle up to 95%

Optional available at extra charge:

- » Digital scale (30 kg weighing range) with automatic cut-off feature: resolution: 2 g or 5 g
- » Electric supply with 230/380 V, 60 Hz
- » Equipped with label printer

**TECHNICAL DATA****KU6-DI (No. 256 000)**

Capacity:	max. 5 kg/min
Operating pressure:	max. 130 bar
Safety valve:	130 bar
Motor:	AC 230 V, 50 Hz
Dimensions (l x w x h):	approx. 1000 x 750 x 850 mm
Colour:	hammer finish painted blue or silvergrey
Standard accessories:	<ul style="list-style-type: none"> » 3 adaptors for filling of CO₂-cartridges, Ø 18 mm, 25 mm and 32 mm » 1 CO₂ high-pressure hose, 2 m » 1 rotary filling valve "DF 1" to fill CO₂-bottles » 1 height adjustable support, KS-6 » 1 metal box incl. hexagonal sockets and tools, 10 – 32 mm » 1 set of sealings for filling adaptors » CO₂-steel filter

TECHNICAL DATA**KUD6-DI (No. 209 000)**

Capacity:	max. 5 kg/min
Operating pressure:	max. 130 bar
Safety valve:	130 bar
Motor:	AC 230 V, 50 Hz
Air pressure:	8-10 bar 800 l/Air/min
Dimensions (l x w x h):	ca. 1000 x 750 x 850 mm
Colour:	hammer finish painted blue or silvergrey
Standard accessories:	<ul style="list-style-type: none"> » 3 adaptors for filling of CO₂-cartridges, Ø 18 mm, 25 mm and 32 mm » 1 CO₂ high-pressure hose, 2 m » 1 rotary filling valve "DF 1" to fill CO₂-bottles » 1 height adjustable support, KS-6 » 1 metal box incl. hexagonal sockets and tools, 10 – 32 mm » 1 set of sealings for filling adaptors » CO₂-steel filter

TECHNICAL DATA**KUS6-DI (No. 237 000)**

Capacity:	max. 5 kg/min
Operating pressure:	max. 130 bar
Safety valve:	130 bar
Motor:	3 phase 400 V, 50 Hz
Dimensions (l x w x h):	ca. 1000 x 750 x 850 mm
Colour:	hammer finish painted blue or silvergrey
Standard accessories:	<ul style="list-style-type: none"> » 3 adaptors for filling of CO₂-cartridges, Ø 18 mm, 25 mm and 32 mm » 1 CO₂ high-pressure hose, 2 m » 1 rotary filling valve "DF 1" to fill CO₂-bottles » 1 height adjustable support, KS-6 » 1 metal box incl. hexagonal sockets and tools, 10 – 32 mm » 1 set of sealings for filling adaptors » CO₂-steel filter

Combined filling unit for Carbon Dioxide (CO₂) and Nitrogen (N₂) for small cartridges fire extinguishers and cylinders of all makes and sizes with the FRITZ EMDE universal filling rail.

The unit is equipped with:

- » digital scale (resolution 5 g) with automatic cut-off
- » Compressed-air driven CO₂-pump
- » Compressed-air driven N₂-pump
- » Filling speed regulator
- » Electrically relief valve
- » Universal FRITZ EMDE filling rail
- » CO₂-filter
- » Safety valve (130 bar)

Standard accessory:

- » 3 adaptors for CO₂-cartridges: 18 mm, 25 mm und 32 mm
- » 1 CO₂-High-Pressure hose 2 m
- » 1 DF1-adaptor for filling of CO₂-cylinders
- » 1 KS 5 support
- » 1 set of socket wrenchs, 10 – 32 mm
- » 1 CO₂-steel filter



KUD6-DI-N₂ PROTECT (No. 263 000)



TECHNICAL DATA

Filling capacity CO ₂ :	max. 5 kg/min
Working pressure:	max. 130 bar
Safety valve:	130 bar
Motor:	230 V, 10 A, 50 Hz
Dimension (l x w x h):	approx. 1300 x 750 x 1250 mm
Working height:	850mm
Colour:	hammer finish painted blue

Accessories available at extra charge:

- » Floor scale with automatic cut-off 200 kg, 20 g resolution display integrated in filling unit scale platform approx. 600 x 400 mm incl. cylinder bracket
- » CO₂-QUICK fast filling adaptor
- » Raisable safety guard for filling rail
- » Label printer

Combined filling unit, model KU6/HF505RS to fill any size and type of CO₂, Halon 1211 (BCF) and Halon 1301 (BTM-cartridges, -extinguishers and big bottles with the universal filling rail).

The unit is equipped with:

- » Silent 3-piston dosing pump for CO₂
- » Self-sucking Halon 1301 (BTM) fluid pump with an emptying capacity up to 85%
- » Digital scale (30 kg with 10 g resolution) with automatic cut-off feature

- » Filling of large bottles more than 6 kg has to be carried out on a separate floor scale with automatic cut-off feature (scale not included)
- » No pre-cooling system for CO₂ source bottle required



TECHNICAL DATA

Capacity CO ₂ :	max. 4.2 kg/min
Operating pressure CO ₂ :	130 bar
Capacity Halon:	max. 20 kg/min
Operating pressure Halon:	40 bar
Motor:	AC 230 V, 16 A, 50 Hz
Dimensions (l x w x h):	approx. 1600 x 750 x 850 mm
Colour:	hammer finish painted blue or silvergrey

Accessories available at extra charge:

- » Halon 1301 (BTM) gas pump for emptying capacity up to 98%
- » Pneumatic screwer
- » Digital scale with 5 g resolution
- » Digital floor scale, 150 kg, 50 g resolution

The CO₂-control station, model CO₂-BS-2W is designed for quick, precise und economic filling of CO₂-cylinders out of a tank with cryogenic Carbon Dioxide.

The alternating use allows the user to fill the effective filling time of the cylinder with preparation and post-processing work. Therefore there are no unit down-times during the filling process. The control of the filling valves works automatically. The control station has to be used in combination with the CO₂-transfer pump EM-130 and the cryogenic Carbon Dioxide tank.

The unit is equipped with:

- » 2 pcs. digital floor scales, 200 kg, 50 g resolution with automatic cut-off feature
- » 2 pcs. pneumatic clamping devices for steel cylinders
- » 2 pcs. isolated CO₂-filling hose, lenght 2000 mm
- » 2 pcs. EMDE-CO₂-QUICK adaptors
- » 1 pc. safety valve 103 bar
- » 2 pcs. pressure gauges

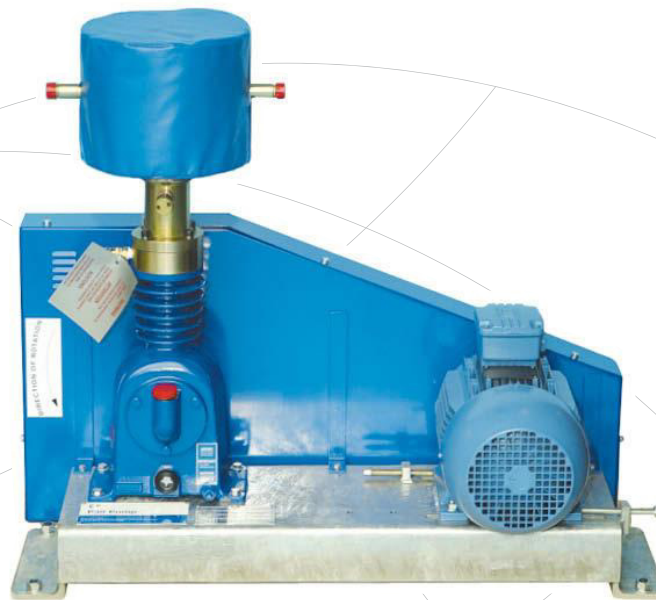


TECHNICAL DATA

Dimension (l x w x h):	approx. 3000 x 600 x 1200 mm
Compressed-air:	6 bar
Motor:	230 V, 50 Hz, 5 A
Colour:	hammer finish painted blue

The EM130 is a CO₂-plunger pump designed to fill small and medium scale cylinder from bulk liquid CO₂ storage vessels or to transfer liquid CO₂ from one cylinder to another. Where a bulk liquid CO₂-tank is used as a supply source, refrigeration is required in the tank. It may also be used where a High-Pressure source of liquid CO₂ is required for a particular process.

The EM130 pump is CE marked to comply with European Unity Directive 98/37/EC and low Voltage Directive 73/23/EC. Recharging Units comply with Pressure Equipment Directive 97/23/EC.



TECHNICAL DATA

CO ₂ transfer capacity:	{fluid at -17°C} 300 kg/hr
Max. pressure:	103,5 bar
Suction connection:	R½
Pump speed:	400 rpm
Electric motor:	2.2 kW
Motor speed:	1420 rev/min
Electricity supply:	400 V AC 50 Hz 3 phase
Weight:	Net 91 kg / Gross 105 kg
Dimensions (l x w x h):	970 x 490 x 850 mm

The Kyoto Protocol of the United Nations Framework Convention on Climate Change is an amendment to the international treaty on climate change, assigning mandatory emission limitations for the reduction of greenhouse gas emissions to the signatory nations.

The reduction of greenhouse gas, particularly CO₂ will play a decisive role in the future. You have the chance to make a contribution to our climate, by utilize the FRITZ EMDE CO₂-Recycling Unit, KR04 to reduce the greenhouse effect.



TECHNICAL DATA

Motor:	230 V, 50 Hz, 10 A
Filling capacity:	CO ₂ fluid: approx. 15 l/min CO ₂ gaseous: approx. 6 l/min
Compressed-air:	6 – 8 bar
Weight:	approx. 70 kg
Safety valve:	130 bar
Evacuation:	up to 7 bar
Dimension (l x w x h):	approx. 1000 x 500 x 1000 mm (without floor scale)
Colour:	hammer finish painted blue

The unit is equipped with:

- » safety valve 130 bar
- » CO₂-filter
- » floor scale 200 kg with digital display
- » manual ball valve for relief
- » inlet and filling gauge
- » CO₂-hoses 2 m each

Accessories available at extra charge:

- » CO₂-QUICK adaptor
- » CO₂-cartridge device for the emptying of cartridges

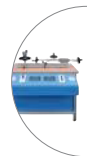
When discharging of the cylinder 99% of the carbon dioxide is recaptured. Germany is precursor in the climate protection with the climate protection technology of FRITZ EMDE products.

„Made in Germany“

The CO₂-Recycling Unit, KR04 is used for the total discharging of CO₂ extinguisher, – cartridges and – cylinders up to a residual pressure under 7 bar. Therefore it is consequently guaranteed that no CO₂ disappears in the environment.

The CO₂-Recycling Unit, KR04 is used for refilling of extinguisher and cylinders along with a digital floor scale.

By achievement of the programming weight the KR04 cuts off automatically.



Digital floor scale, model 36K 10 (No. 100 550)

Without automatic cut-off. Weighing board made from high quality steel.



TECHNICAL DATA

Weighing range: 36 kg
 Resolution: 10 g
 Dimensions: 315 x 305 mm

Digital floor scale, model 60K 20L (No. 100 540)

TECHNICAL DATA

Weighing range: 60 kg
 Resolution: 20 g
 Dimensions: 522 x 403 mm

Digital floor scale, model 150K 50 (No. 100 510)

TECHNICAL DATA

Weighing range: 150 kg
 Resolution: 50 g
 Dimensions: 315 x 305 mm

Digital floor scale model 150K 50XL (No. 100 515)

TECHNICAL DATA

Weighing range: 150 kg
 Resolution: 50 g
 Dimensions: 650 x 500 mm

Digital floor scale, model BW150 20XL (No. 100 520)

With integrated cylinder support without automatic cut-off.

Accessories available at extra charge:

- » Tool box
- » CO₂-hose 2 m
- » CO₂-QUICK Adaptor



TECHNICAL DATA

Weighing range:	150 kg
Resolution:	20 g
Dimensions:	565 x 450 mm

Digital floor scale, model BW200 50XL (No. 100 530)

With integrated cylinder support and automatic cut-off.

Accessories against surcharge:

- » Tool box
- » CO₂-hose 2 m
- » CO₂-QUICK Adaptor



TECHNICAL DATA

Weighing range:	200 kg
Resolution:	50 g
Dimensions:	600 x 400 mm

Digital floor scale, model BW60 5NL-F (No. 100 560)

With integrated universal filling rail for the filling of cartridges and extinguishers.



Accessories available at extra charge:

- » Tool box
- » CO₂-hose 2 m
- » CO₂-QUICK Adaptor

TECHNICAL DATA

Weighing range:	60 kg
Resolution:	5 g
Dimensions:	510 x 405 mm

Digital floor scale, model DFW-0A (No. 100 570)

With integrated universal filling rail for the filling of cartridges and extinguishers.



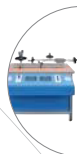
Accessories available at extra charge:

- » Tool box
- » CO₂-hose 2 m
- » CO₂-QUICK Adaptor



TECHNICAL DATA

Weighing range:	100 kg
Resolution:	10 g
Dimensions:	600 x 410 mm

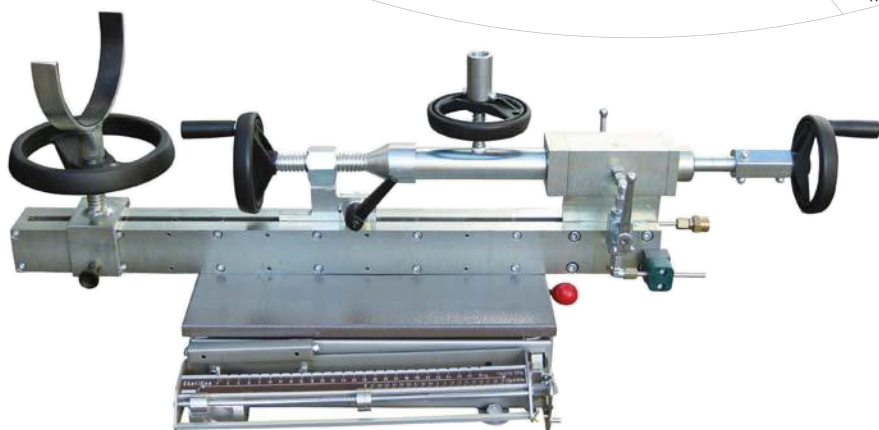


Sliding weight scale, model LW52

(No. 100 590)

Accessories available at extra charge:

- » Tool box
- » CO₂-hose 2 m
- » CO₂-QUICK Adaptor



TECHNICAL DATA

Weighing range:	52 kg
Resolution:	2 g
Dimensions:	425 x 300 mm
Weight:	35 kg

The CO₂-filling connection with isolating and relief valve is for the filling of CO₂-fire extinguishers and CO₂-cylinders with a male thread (W 21,8 x 1/14")

The EMDE CO₂-filling connection guarantees a fast and economic CO₂-filling procedure. Less than 10 g CO₂ must be discharged, to depressurize the adaptor.

The unit is equipped with:

- » Isolating ball valve
- » CO₂-threaded connection with handwheel



TECHNICAL DATA

Operating pressure:	max. 130 bar
Version:	» corrosion-resistant » sealings are CO ₂ -resistant » protection shell and relief outlet
Dimensions (lxw):	approx. 180 x 180 mm

ADAPTOR · SPECIAL TOOL BOX

ANSUL Adaptor

(No. 200 201)



FAC Adaptor

(No. 200 205)

Wrench size 5 or 6 mm



GLORIA Adaptor

(No. 200 209)



Special tool box

for closing of CO₂-cartridges

(No. 200 200)



The master bottle refrigerator is necessary by higher ambient temperature by more than 30°C. It is prepared to connect on master bottle and to storage up to 8 additionally master bottles with the maximum size of:

Max. height: approx. 1700 mm
Max. diameter: approx. 250 mm

The CO₂-cylinder cooling system is equipped with:

- » CO₂-connection hose
- » wall holder for two CO₂-cylinder
- » lockable doors

Accessories available at extra charge:

- » ramp
- » additional wall holder
- » additional CO₂-connection hose



TECHNICAL DATA

Dimension (l x w x h):	approx. 1000 x 1000 x 2200 mm
Material:	aluminium
Motor:	230 V, 50 Hz, 10 A
Colour:	aluminium

