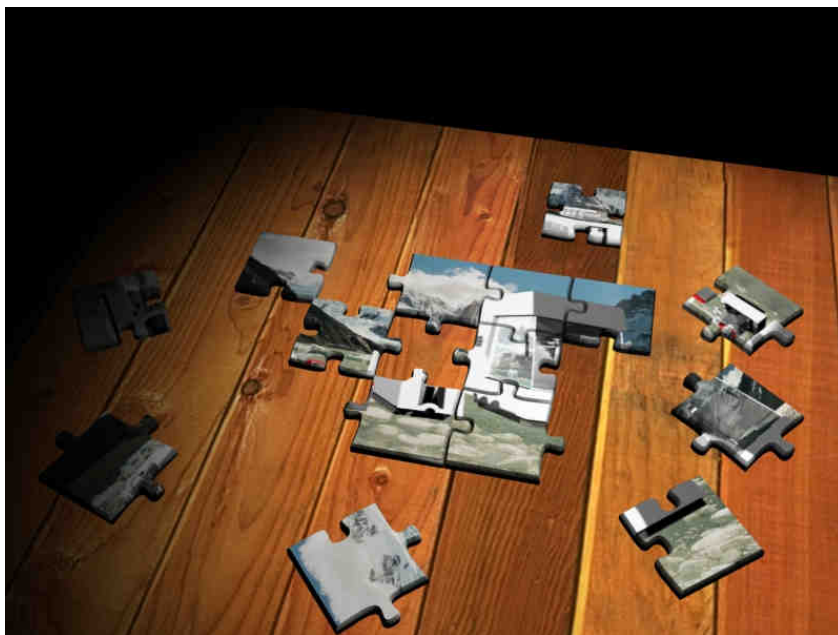


# Consumables and Spare Parts Catalog TN/TS3000 Analyzer

Version: 1.0.0



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# Preface Section

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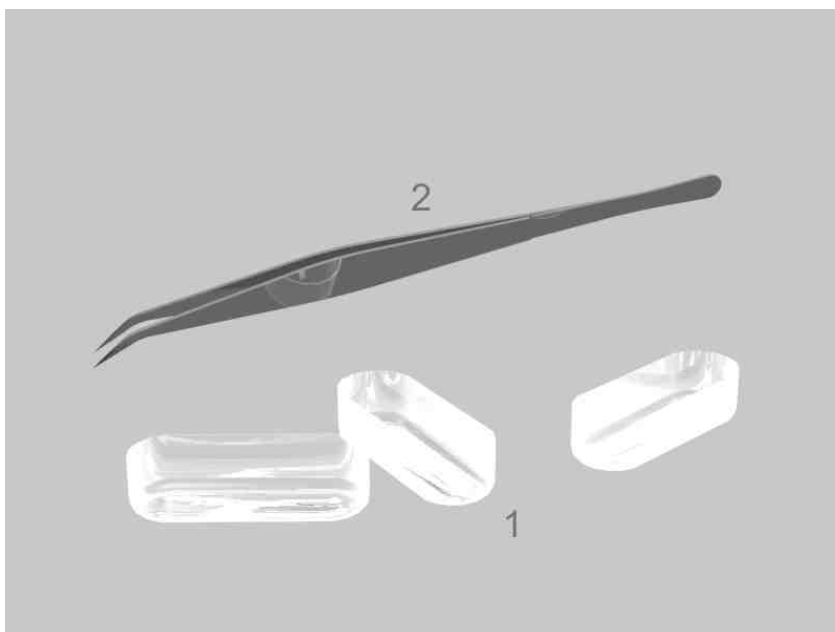
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# Chapter 1

## Consumables and Spare Parts

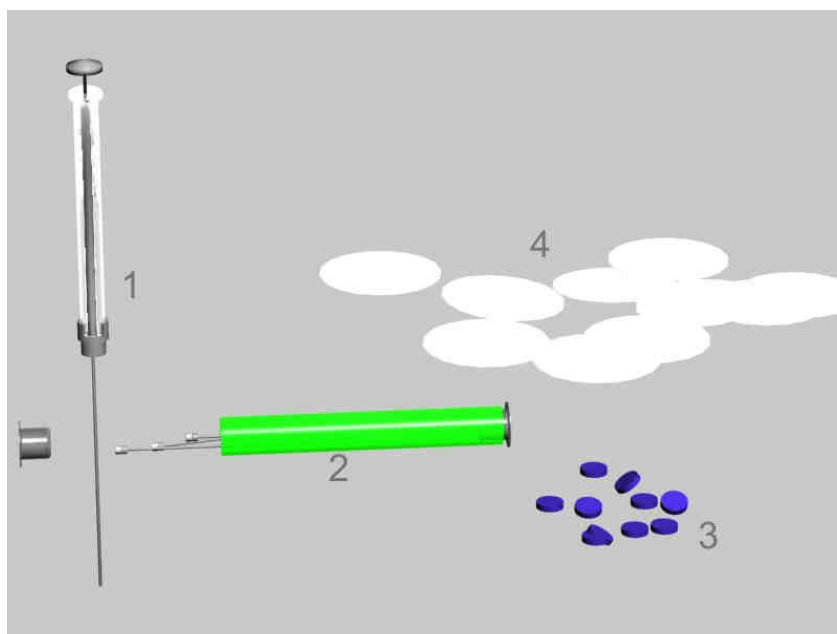
### Solids options



**Figure 1–1.** Consumables and spare parts cool option solids

Refer to:	Description	Qty	P/N	Price (€)
1	Quartz sample cup solids	1	PINJE0012	
2	Pair of tweezers	1	PMECH0013	

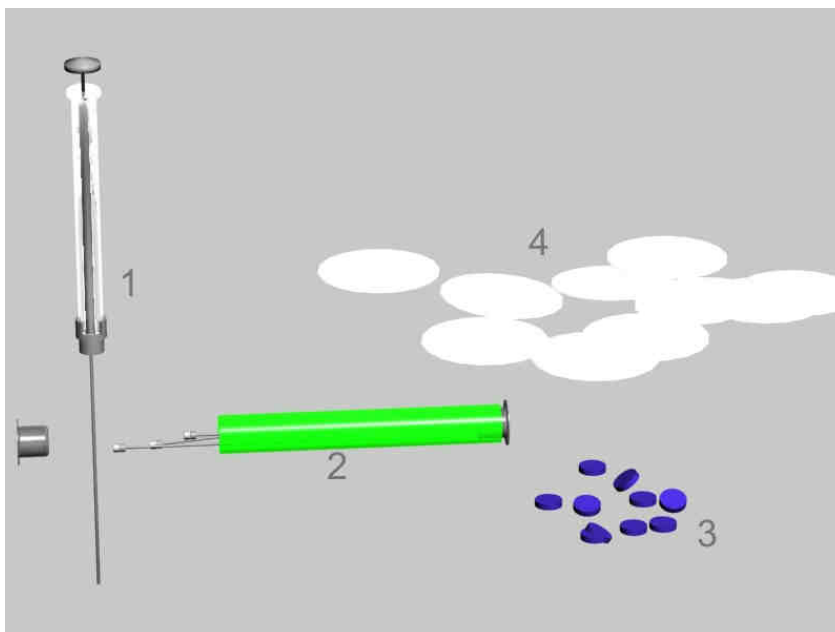
## Liquid option TS3000



**Figure 1-2.** Consumables and spare parts for the liquids applications

Refer to:	Description	Qty	P/N	Price (€)
1	Syringe 100µL 71mm PS5 GA22, EURO2	1	PGENE0002	
2	Needles 71mm PS5 GA22, 3 pieces	1	PGENE0004	
3	Septum diameter 12mm, 10 pieces	1	PANAL0025	
4	Glass-fibre filter TS, 10 pieces	1	PGENE0052	

## Liquid option TN3000



**Figure 1-3.** Consumables and Spare parts Liquids application TN3000

Refer to:	Description	Qty	P/N	Price (€)
1	Syringe 100 $\mu$ L 71mm PS5 GA22, EURO2	1	PGENE0002	
2	Needles 71mm PS5 GA22, 3 pieces	1	PGENE0004	
3	Septum diameter 12mm, 10 pieces	1	PANAL0025	
4	Paper filters TN, 10 pieces	1	PANAL0161	

## Chapter 2 Introduction Modules

### Liquids module

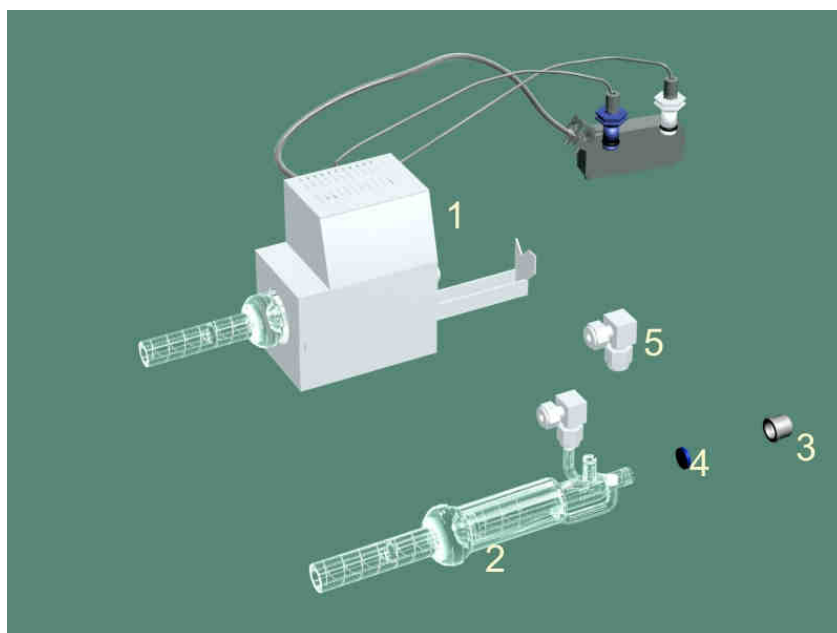
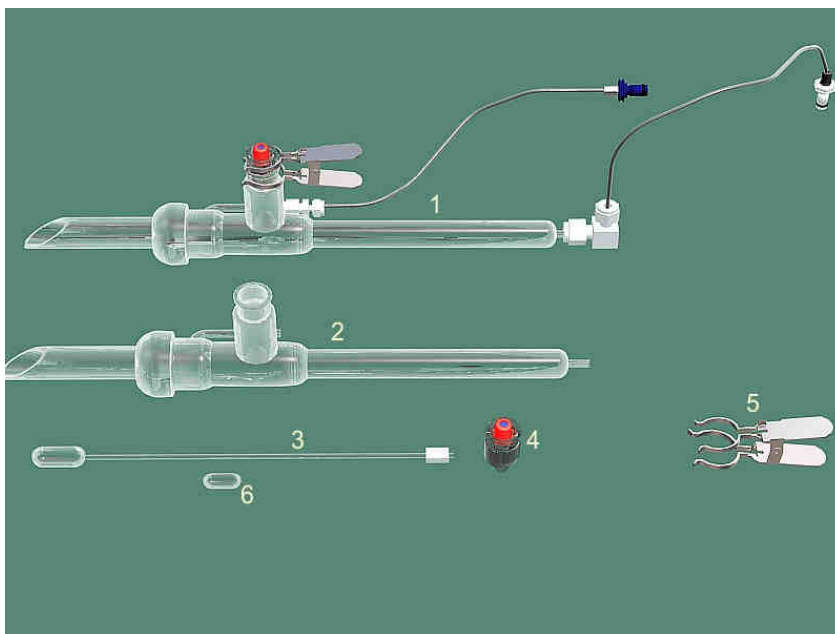


Figure 2–1. Universal liquids module

Refer to:	Description	Qty	P/N	Price (€)
1	Universal Liquids module	1	MODUL0019	
2	Glasspart Liquids module	1	CASSE0012	
3	Screw cap SQ 13/7	1	PMECH0010	
4	Septum diameter 12mm, 10 pieces	1	PANAL0025	
5	Elbow red. union 4mm x 1/4" PTFE	1	PMECH0763	

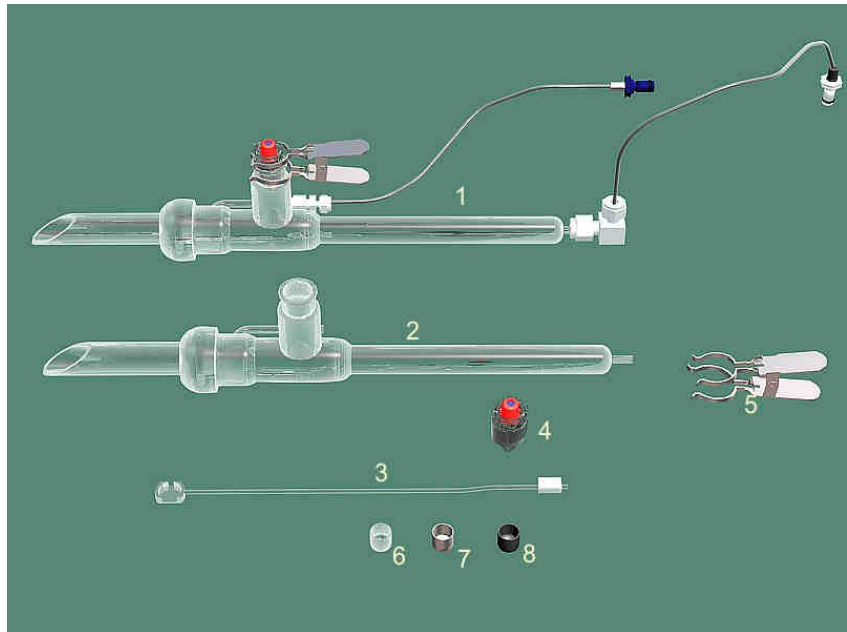
**Solids  
introduction  
module, cool  
option  
MODUL0002**



**Figure 2–2.** MODUL0002 Solids module with solids boat

Refer to:	Description	Qty	P/N	Price (€)
1	Solids module with solids boat	1	MODUL0002	
2	Boatguiding tube solids	1	MODUL0003	
3	Quartz combustion boat	1	MODUL0004	
4	Stopper with septum solids	1	MODUL0006	
5	Clamp (fork) NS-29.2	1	PMECH0040	
6	Quartz sample cup solids	1	PINJE0012	

## MODUL0024

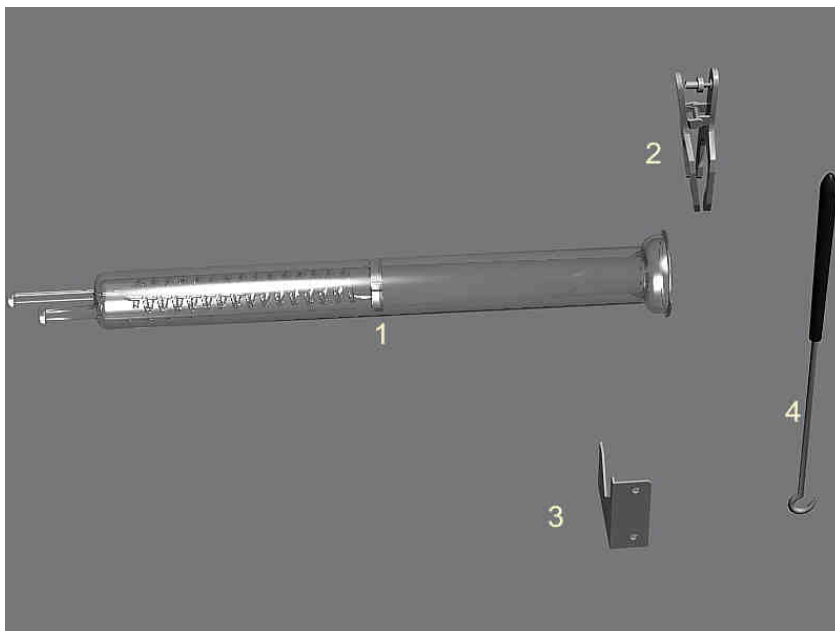


**Figure 2-3.** MODUL0024 Solids module with small boat

Refer to:	Description	Qty	P/N	Price (€)
1	Solids module with small solids boat	1	MODUL0024	
2	Boatguiding tube solids	1	MODUL0003	
3	Boat solids ESA/TN/ECS 3000	1	MODUL0012	
4	Stopper with septum solids	1	MODUL0006	
5	Clamp (fork) NS-29.2	1	PMECH0040	
6	Quartz sample cup ESA	1	ESA200029	
7	Nickel sample cups, 5 pieces	1	PANAL0205	
8	Sample cup hex	1	ESA200046	

## Chapter 3 Combustion

### Furnace tube



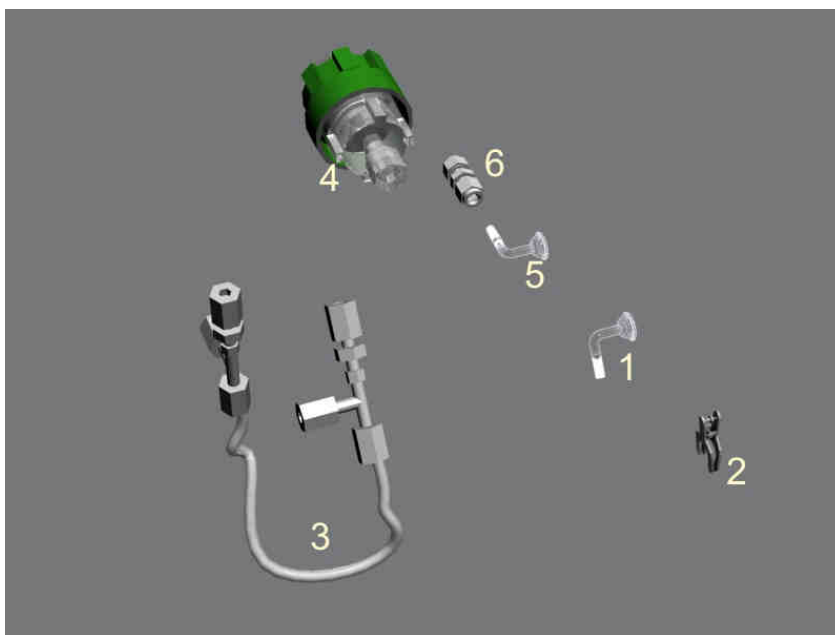
**Figure 3–1.** Quartz furnace tube and furnace accessories

Refer to:	Description	Qty	P/N	Price (€)
1	Quartz turbo furnace tube, model 3000	1	PANAL0126	
2	KS Clamp with screw nr. 35	1	PMECH0279	
3	Centreerplate, new model	1	PMECH0930	
4	Midlock hook TG-4-L	1	PMECH0972	



## Chapter 4 Conditioning

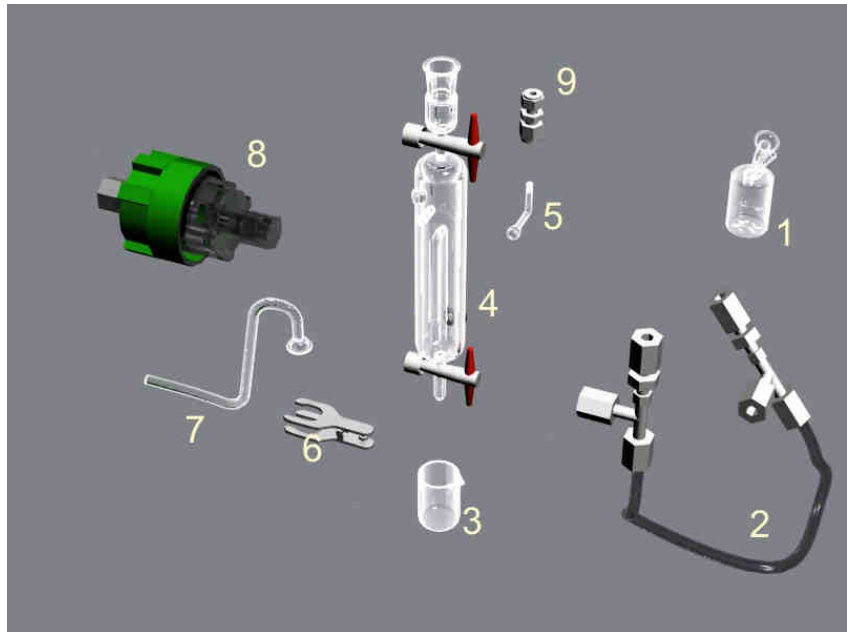
**Without  
sulfuric acid  
scrubber**



**Figure 4–1.** Gas conditioning without sulfuric acid scrubber

Refer to:	Description	Qty	P/N	Price (€)
1	Glass connector ¼” pp scr	1	PANAL0126	
2	KS Clamp with screw nr. 12	1	PMECH0279	
3	Perma pure dryer	1	PMECH0930	
4	Inline filter 211-4	1	PMECH0972	
5	Glass connector ext oxygen ¼”	1	PANAL0069	
6	Red union D1/4 D04 PFA	1	PMECH0368	

## With sulfuric acid scrubber



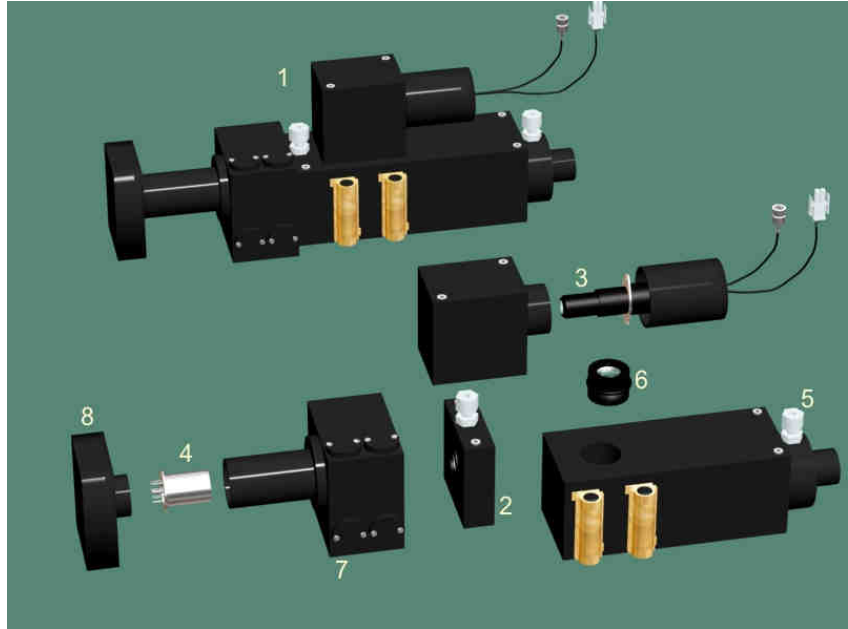
**Figure 4–2.** Conditioning TS3000 with sulfuric acid scrubber

Refer to:	Description	Qty	P/N	Price (€)
1	None return vessel	1	TS3000014	
2	Perma pure dryer	1	TN3000029	
3	Beaker 25 mL	1	PGLAS0292	
4	Sulfuric acid scrubber 3000	1	ECS300006	
5	Connector to gasinlet 3000	1	ECS300010	
6	KS Clamp with screw	1	PMECH0006	
7	Connection scrubber/filter	1	TS3000010	
8	In-line filters 211-4	1	PANAL0134	
9	Union ¼ x ¼ PTFE	1	PMECH0826	

## Chapter 5

# Service parts TS Analyzer

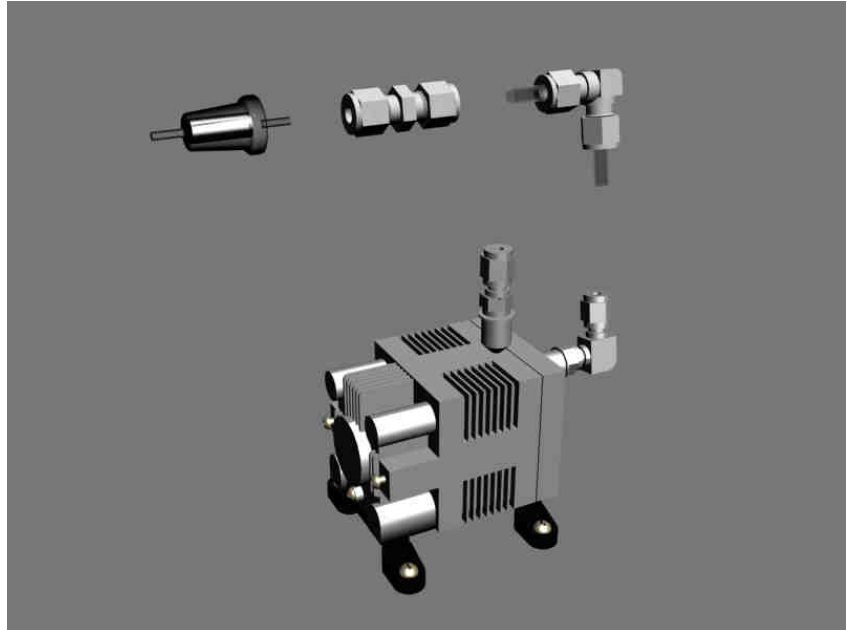
### UV- fluorescence detector



**Figure 5–1.** Total Sulfur UV-fluorescence detector

Refer to:	Description	Qty	P/N
1	TS- UV bench	1	TS3000011
2	Chamber inlet (8211)	1	TS3000013
3	Photomultiplier tube (8391)	1	TS3000007
4	Flash lamp TS (8666)	1	TS3000006
5	Male 1/8 BSP x 1/4 OD	1	PMECH0863
6	Lens mount assembly (8827)	1	TS3000019
7	Mirror block TS-UV detector	1	TS3000022
8	Lampsocket for UV lamp (8392)	1	TS3000016

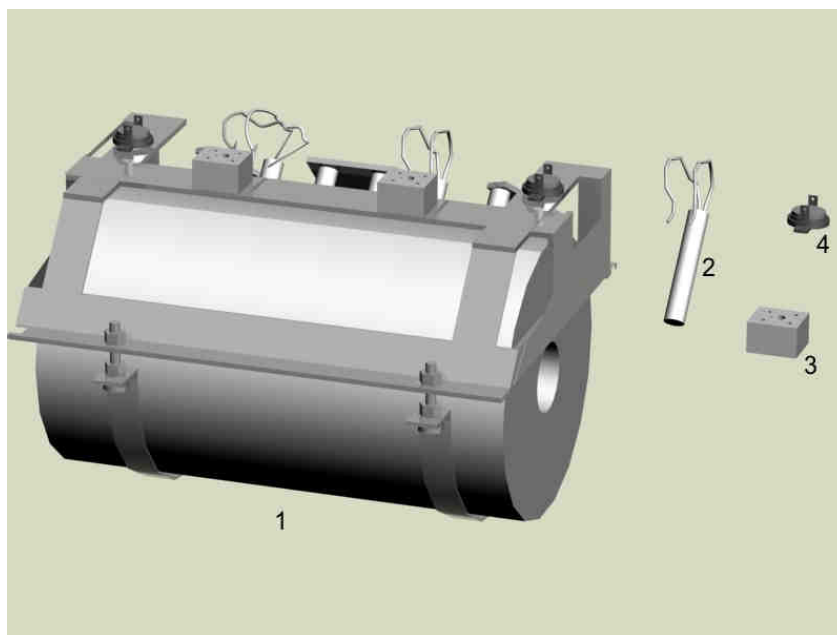
## Vacuum pump



**Figure 5–2.** Vacuumpump

Refer to:	Description	Qty	P/N
1	Vacuumpump	1	TN3000003
2	Connector nylon elbow ¼"x ¼"	1	PMECH0061
3	Union ¼"x ¼" OD Nylon	1	PMECH0060
4	In-line filters	1	TN3000030

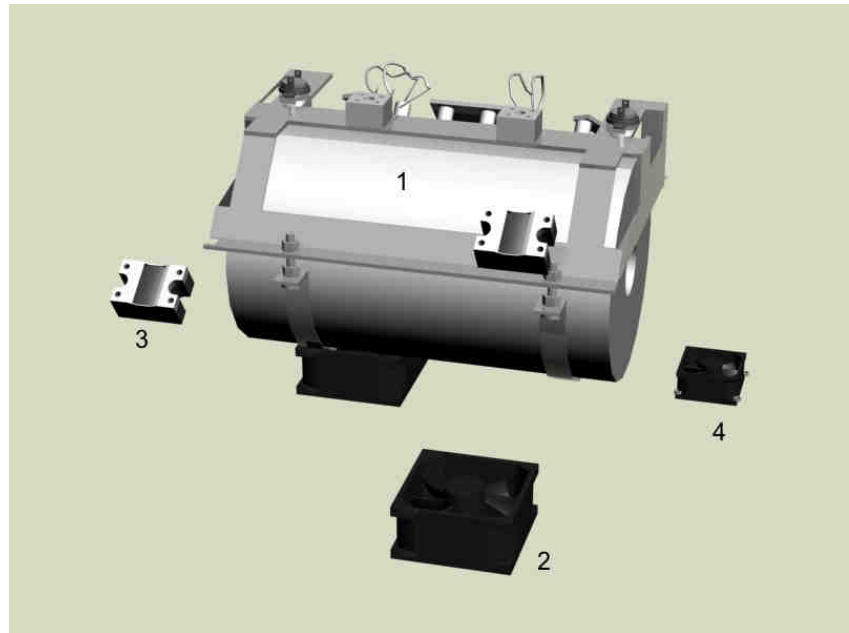
## Furnace



**Figure 5–3.** Furnace 3000 serie

Refer to:	Description	Qty	P/N
1	Oven model 3000, incl frame	1	PMECH0383
2	Thermo couple oven 1200/3000 serie	1	PELEC0132
3	Terminal 2P porcelain for T.C	1	PELEC0133
4	Clixon 1000°C	1	PELEC0143

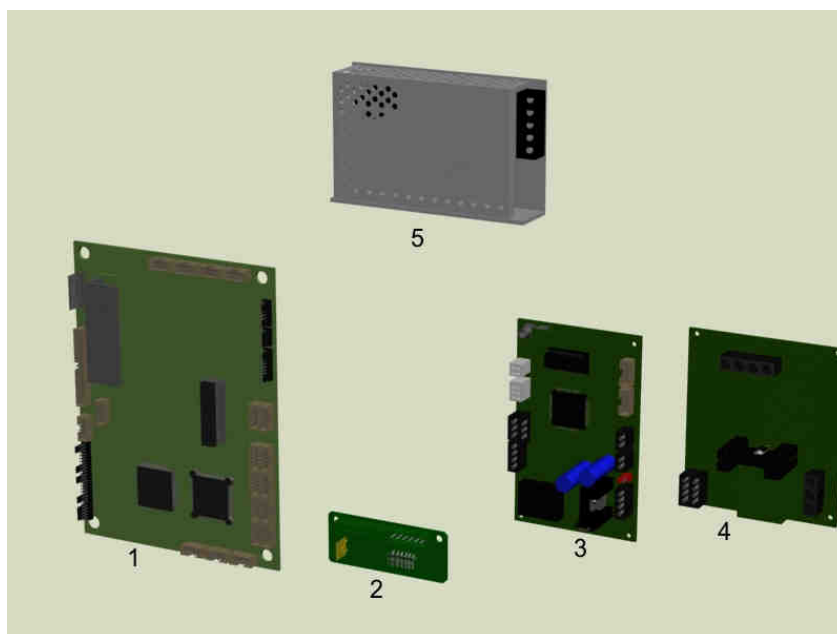
## Furnace compartment



**Figure 5–4.** Furnace compartment and fan for cool option 300

Refer to:	Description	Qty	P/N
1	Oven model 3000, incl frame	1	PMECH0383
2	Fans tiger, 80x80	1	PELEC0061
3	Solid state relais	1	PELEC0031
4	Fan 12VDC 60x60x25	1	PELEC0042

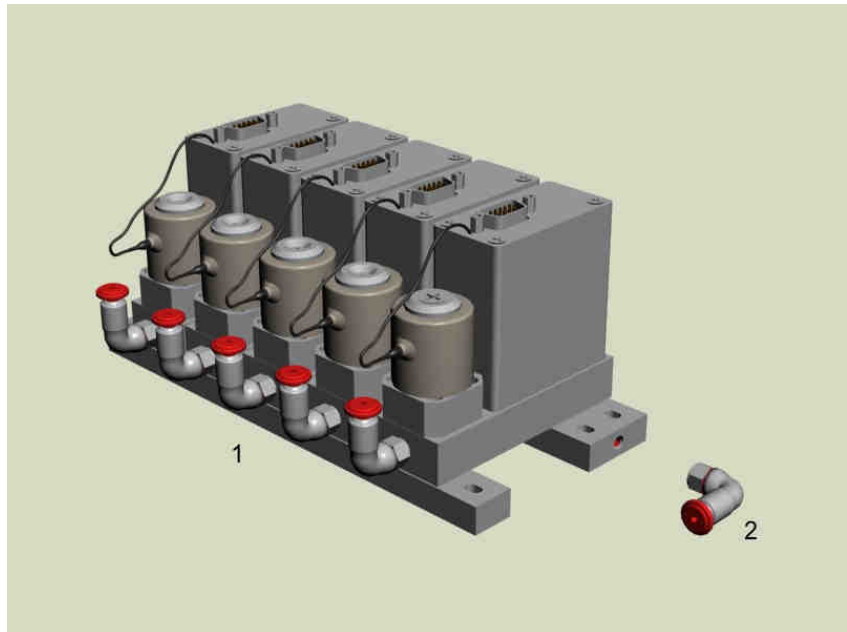
## PCB boards



**Figure 5-5.** Electronic boards

Refer to:	Description	Qty	P/N
1	EDAK 1.6	1	PELEC638
2	PCB-power 3000	1	PELEC0634
3	TS-Slave board	1	PELEC0618
4	PCB Flasher Supply TS	1	TS3000005
5	Power supply 60/15	1	PELEC0616

## Mass Flow controller



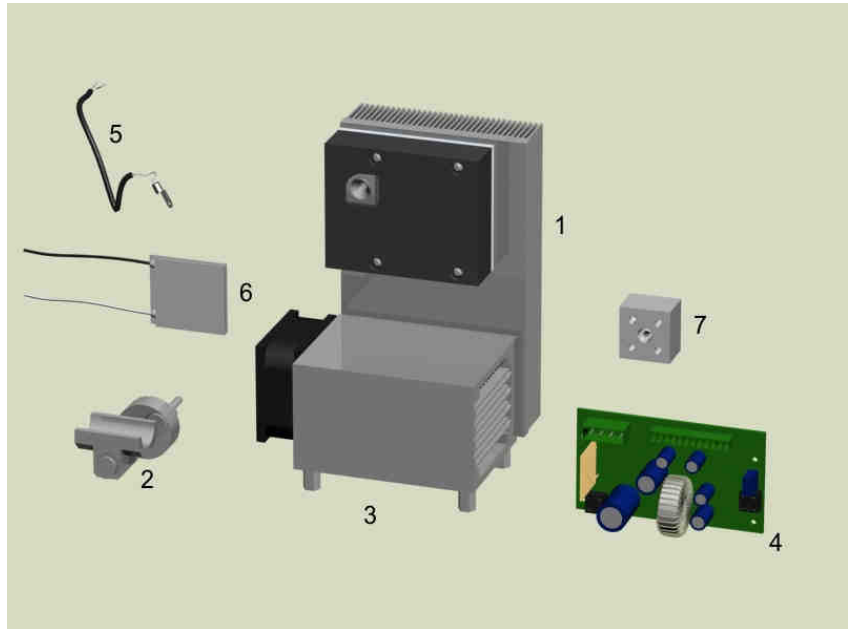
**Figure 5–6.** Mass flow controller, 5 canals

Refer to:	Description	Qty	P/N
1	Mass flow controller, 5 canals	1	PMECH0868
2	Elbow 5 x 4 mm	1	PMECH0882

## Chapter 6

# Cool option solids, 3000

### Cool block



**Figure 6–1.** Cool block and PCB Cool option solids 3000

Refer to:	Description	Qty	P/N
1	Cool option solids, frees	1	PMECH0950
2	Sub-Assy Module support	1	PCAS02001
3	Fan cool unit	1	PELEC0656
4	PCB Cool option solids 3000	1	PELEC0666
5	Temperature sensor cool option solids 3000	1	PELEC0667
6	Peltier element	1	PELEC0281
7	Terminal 2P porcelain for T.C.	1	PELEC0133

