

## VHT 20 N – VHT 56 N

With the types VHT 20 N and 56 N we offer two solutions for cleaning tasks in laboratories. The small autoclaves are optimized for gentle cleaning of few parts on small space and with low energy consumption.



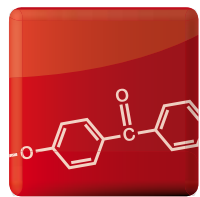
## VHT 250 L – VHT 1000 L



For very large and heavy parts we offer vacuum pyrolysis ovens for vertical loading. These units can be loaded with a crane through the open top lid.

## VHT 3080 N – VHT 140-140

Our wide range of standard types for horizontal loading can offer the optimum solution for the majority of cleaning tasks in industrial scale. This includes large quantities of parts like multiple spin packs as well as large single parts like filter candles.



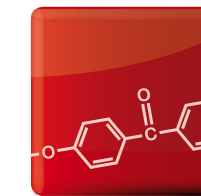
*Innovations  
in Polymer  
Plant Design*

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## 50 years of Innovation

Fourné Polymertechnik can rely on 50 years of experience in design and manufacturing of plants and systems for the fiber and polymer industries. As a highly innovative, family owned

company our strengths are an own design department and a flexible production process. Small single units we can offer as well as a batch of cleaning ovens for a production plant.

## Vacuum Pyrolysis Cleaning

Equipment for cleaning  
of parts from polymer residues



### Production plants for high tech fibers

- Solution spinning plants for hollow and special fibers
- Spinning plants for medical fibers
- High temperature melt spinning plants
- Melt spin testers for spandex yarns

### Componets for production plants

- Cleaning equipment
- Vacuum dryers
- Coagulation and washing baths
- Quench air chambers
- Injection extruders
- Hot air and drum dryers

### Laboratory and pilot plants

- Polycondensation
- Polymerization
- Biconical vacuum dryers
- Solid state polycondensation
- Melt spinning of mono- and multi-component fibers
- Solution spinning (also for Spandex)
- Dry and wet spinning plants
- Electrospinning plants
- Piston spinning units
- Carbon fiber lines
- Draw twisting units
- Draw texturing units
- After treatment lines



Your application was not mentioned?  
You have questions?  
Please call +49 228 64804-0



### Vacuum pyrolysis cleaning process

- ③ For cleaning of melt pipes, spinnerets, filters, pumps, spin packs, film blowing dies, injection molding tools, and other metallic parts
- ③ Suitable for different thermoplastic polymers, e.g. PET, PA, PP, TPE, PB, PBT, PC, PMMA, ABS, etc.
- ③ Economical because of short cleaning cycles (from 4 to 8 hours) and low energy consumption
- ③ Smooth cleaning process
- ③ Ecological because no solvents or detergents are necessary
- ③ Low emissions according to environmental protection laws
- ③ Easy and safe operation
- ③ Optional accessories, e.g. special loading baskets for optimum usage of machine space or loading devices for larger units

### Cleaning Results



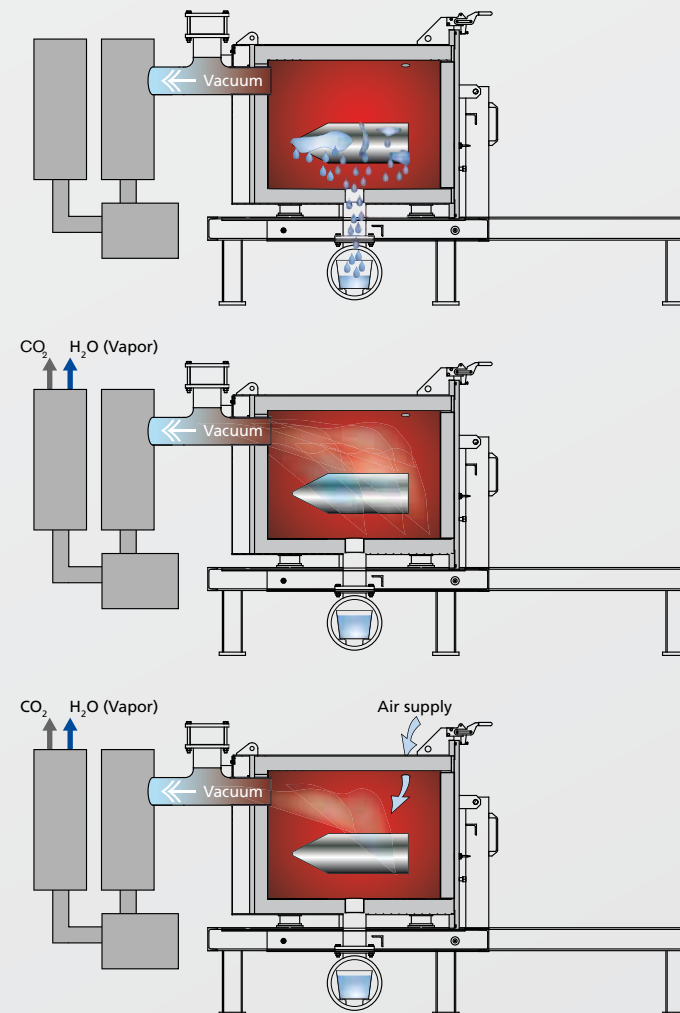
### Customer specific vacuum pyrolysis cleaning units

Some special cleaning demands will not be covered by the wide range of standard VHT types. For these cases we can offer special vessels for your individual part size. The biggest unit delivered until now was the VHT 92750 M with a loading space longer than 7 meters.



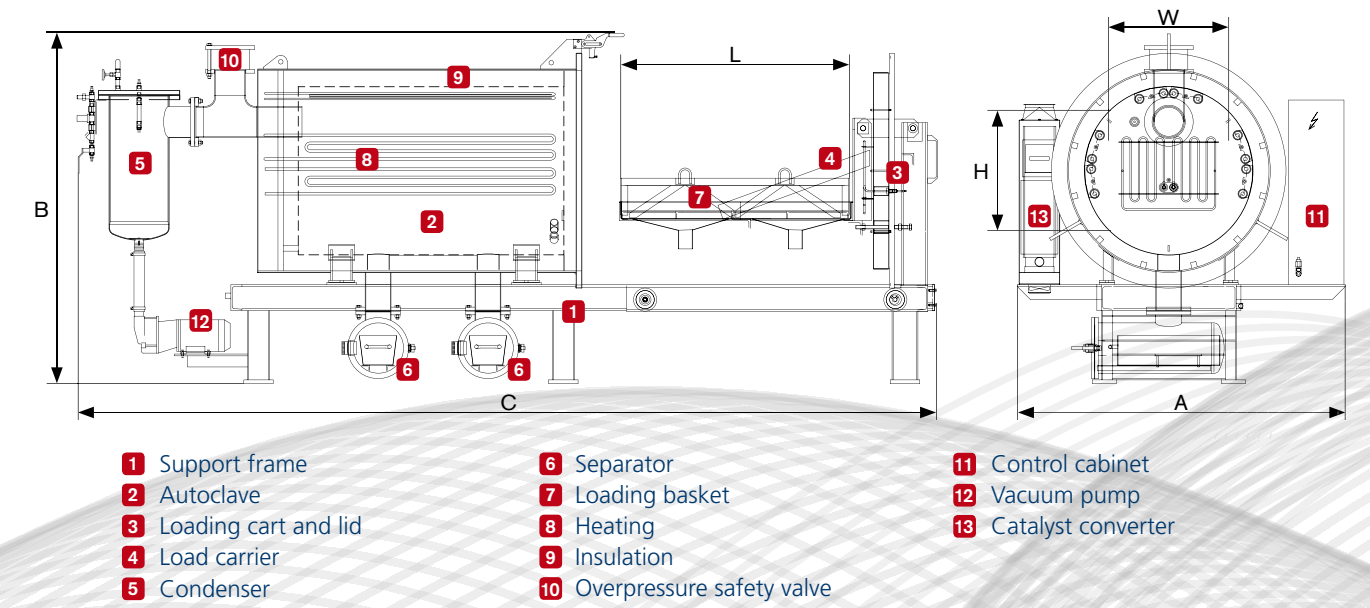
**VHT 92350**

### Cleaning process overview



- 1** Melt phase: After heating up the cleanable parts under vacuum most of the polymer drips off into the separator.
- 2** Pyrolysis phase: Polymer that did not drip off during the first phase will be pyrolyzed under vacuum. The resulting gases are converted to carbon dioxide and water vapor in the catalyst converter.
- 3** Oxidation phase: Polymer residues that still exist after the pyrolysis phase will be burnt by controlled air supply. During this phase the exhaust gases also are converted in the catalyst.

### Overview of dimensions and utilities



### Standard types overview

#### VHT types – horizontal loading

Technical Data	Loading Volume			Overall dimensions			Loading weight kg	Power consumption kW	Water consumption m³/h
	W mm	H mm	L mm	A mm	B mm	C mm			
VHT 20 N	250	200	280	805	690	770	30	2,3	0,12
VHT 56 N	320	380	610	1200	1460	1490	2 x 60	11	0,18
VHT 3080 N	300	230	800	1060	1700	3200	200	17	0,18
VHT 6380 N	520	450	800	1700	1800	3700	450	34	0,30
VHT 63125 N	520	450	1250	1700	1800	4500	650	40	0,48
VHT 92125 N	600	550	1250	1800	1900	4500	900	57	0,48
VHT 92140 N	600	550	1400	1800	1900	4900	1000	57	0,48
VHT 92180 N	600	550	1800	1800	1900	5700	1000	68	0,60
VHT 140-140 N	680	600	1400	1850	1900	3060	2000	58	0,60
VHT 140-180 N	680	600	1800	1850	1900	3460	2000	86	0,60

#### VHT types – vertical loading

Technical Data	Loading Volume		Overall dimensions			Loading weight kg	Power consumption kW	Water consumption m³/h
	Ø mm	H mm	A mm	B mm	C mm			
VHT 250 L	800	390	1840	900	1800	300	26	0,18
VHT 1000 L	1600	500	2200	2300	2800	1100	92	0,60