

**Fast, safe and complete removal of
plastic and other organic contaminations
from metal parts and tools**



Indirectly
Electric Heated

SYSTEM INNOVACLEAN

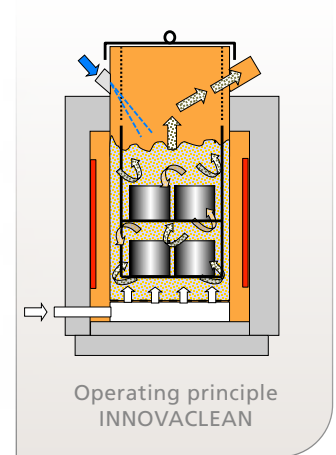
Operating Principle

INNOVACLEAN removes all organic contamination including halogenated polymers from heat resistant metal parts by thermal decomposition in a fluidized bed.

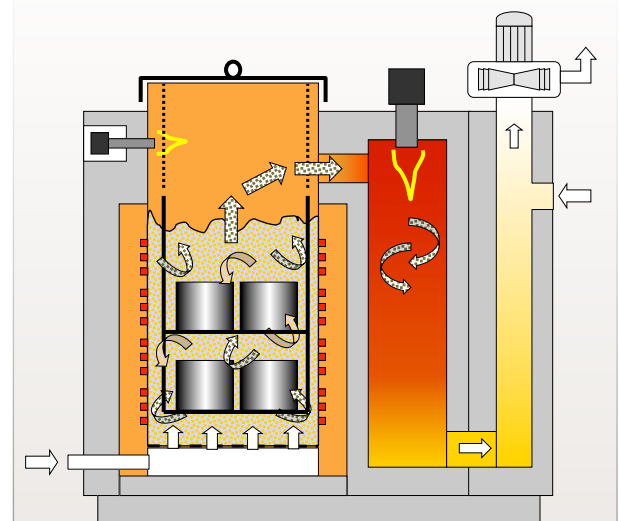
Cleaning time: 1 – 4 h



INNOVACLEAN ECO1



INNOVACLEAN
2448-INB



Operating principle: INNOVACLEAN INB
with integrated afterburner system

Fluidized Bed Cleaning Process



Loading in
hot system

**DECOMPOSING
of contamination
and CLEANING**

Unloading

Post
treatment

Applications

The most common pieces for cleaning are dies and parts out of the plastics and fiber industry:

- Synthetic fiber and nonwovens
- Polymer production
- Masterbatch production
- Injection Moulding
- Extrusion

Advantages

- Very short cleaning time
- Suitable for all organic resins and polymers (incl. PVC, PTFE, PEEK...)
- Outstanding flexibility
- Perfect cleaning results even inside assembled dies or parts that are highly complex
- Free from carbon residues
- Precise temperature control
- No risk of overheating or distortion
- Perfect off-gas cleaning by optional thermal afterburner and scrubber for halogens
- No organic disposals



Typical Components

Fluidized bed systems are especially recommended for:

- Spinnerets, assembled spin packs
- Special profile dies
- Pelletizing dies
- Breaker plates
- Hot runners
- Extruder screws, screw elements
- Static mixers
- Starters, alternators, pumps, engines

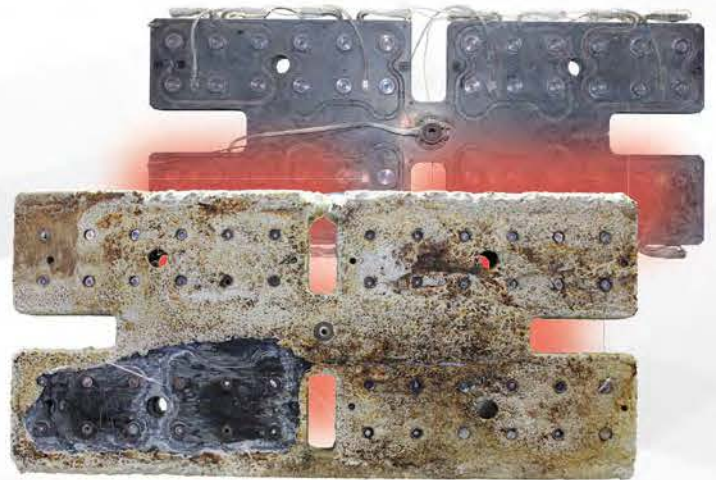


Fast, Safe, Effective and Green



Typical Polymers

- Halogenated Polymers: PVC, PTFE
- Polysulfides and Polysulfones: PPS, PSU
- Polyetherketones: PAE, PEK, PEEK
- Polyamides: PA6, PA6.6, PA12, PPA
- Polyesters: PET, PBT, PC, PTT, PEN
- Polyolefins: PE, HDPE, PP, PB, EVA, EVOH
- Polyacrylates: PAN, PBA, PMA, PMMA
- Polystyrenes: PS, ABS, SB, SBS, SAN
- Biopolymers: PLA, PEA, PVAL, PPOX
- Polyimides: PI, PBI, PEI, PBO, PMI
- Polyurethanes: PUR, TPA, TPO, TPU
- Other polymers on request



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SCHWING
TECHNOLOGIES

Accessories

Depending on the cleaning application a variety of customized accessories and post treatment systems are optionally offered:



Thermal
afterburner
systems & scrubbers



Loading baskets, tables
and racks



Ultrasonic &
rinse units



Shot blasting systems



High pressure
cleaning
equipment



Quality inspection
systems

Model	Loading basket (inner dimensions)	Maximum loading	Organic load ¹⁾	Rated Power 50/60 Hz	Utility consumption					Total dimensions
					Current 50/60 Hz	Gas		Compr. Air	Water	
	L x W/D x H [mm]	[kg]	[kg/h]	[kW]	[A]	[m³/h]	[kW/h]	[m³/h]	[l/h]	L x W x H [mm]
ECO 1	190 x 190 x 300	16	0 - 2.5	6/7	9/11	–	–	14	4	890 x 800 x 950
ECO 3	680 x 190 x 300	49	0 - 2.5	11/12	16/18	–	–	40	11	1420 x 890 x 950
1540	Ø 310 x 850	87	0 - 2.5	14/16	25/23	–	–	27	7	1180 x 1020 x 1690
2040	Ø 380 x 850	134	0 - 2.5	20/23	30/33	–	–	42	11	1180 x 1020 x 1620
2448	Ø 480 x 1050	225	0 - 7	43/49	62/72	–	–	60	16	1440 x 1350 x 1950
3248	Ø 670 x 1050	403	0 - 11	53/61	100/88	–	–	109	89 ²⁾	1630 x 1700 x 2100
3648	Ø 750 x 1050	505	0 - 11	64/74	125/106	–	–	137	111 ²⁾	1900 x 1900 x 2100
... with integrated thermal afterburner										
ECO 3-INB	680 x 190 x 300	49	0 - 2.5	12/14	17/21	3.7	37	40	11	1545 x 1680 x 1610
1540-INB	Ø 310 x 850	87	0 - 2.5	11/13	16/18	3.5	35	80	–	2385 x 2300 x 2435
2040-INB	Ø 380 x 850	134	0 - 2.5	20/23	32/33	3.5	35	94	–	2385 x 2300 x 2435
2448-INB	Ø 480 x 1050	225	0 - 7	28/32	50/47	3.9	39	113	–	2305 x 2385 x 2665
3248-INB	Ø 670 x 1050	403	0 - 11	72/83	125/120	12	120	290	–	2100 x 4175 x 2765
3648-INB	Ø 750 x 1050	505	0 - 11	72/83	125/120	12	120	317	–	2040 x 4265 x 2760

¹⁾ Depending on capacity of thermal afterburner and type of organic / plastic contamination.

²⁾ [kg/h] – INNOVACLEAN 3248 and 3648 operate with steam inertization.

The data and illustrations in this brochure refer to the date of printing. All data are approximate. SCHWING reserves the right to make any necessary changes at any time and without special notice.

**German Art of Engineering
since 1969**



SCHWING Technologies GmbH
Oderstrasse 7
47506 Neukirchen-Vluyn · Germany

Phone: +49 (0) 2845 930-0

E-mail: info@schwing-tech.com

www.thermal-cleaning.com

Visit us on: [f](#) [X](#) [in](#)

