KÄRCHER TANK INTERIOR CLEANING
– WE ARE YOUR PARTNER
WE ARE SURE YOU KNOW KÄRCHER ...
FAMILY OWNED COMPANY
MILESTONES

1935: Foundation of company by Alfred Kärcher.

1950: Development of the first European hot-water high-pressure cleaner.

1959: Irene Kärcher takes over the management of the company after her husband's death.

1960s: Strategy of diversification: new range of products such as heaters, steam generators, building cladding and hollow plastic vessels.

1974: Strategy of concentration on the core business of high-pressure cleaning. Colour changed from blue to yellow.

Start of international orientation and first subsidiaries.
MILESTONES

1980
Strategy of concentration on cleaning.

1984
Entry into the consumer market with the first portable high-pressure cleaner.

1987
Development of the first own scrubber drier.

1989
Death of Irene Kärcher.

1993
Development of the first own sweeper.
MILESTONES

2001
Development of the business unit “Water Treatment”.

2007
Expansion into garden products.

2011
Strengthening of market position in the fields of municipal and industrial products.

2013
Change of colour of all products for professional users to anthracite.
PEOPLE MAKE OUR COMPANY

1974: 598
1980: 1,466
1985: 2,393
1990: 3,793
1995: 4,604
2000: 5,346
2005: 5,872
2010: 7,452
2015: 11,333
2018: 13,027
WE ARE THE INNOVATION LEADER IN CLEANING TECHNOLOGY

More than 1,000 employees working in R&D.

- Patents and registered designs.
- Active patents.

<table>
<thead>
<tr>
<th>Year</th>
<th>Patents</th>
<th>Registered Designs</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>1975</td>
<td>15</td>
<td>72</td>
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</tr>
<tr>
<td>1980</td>
<td>13</td>
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<td>1985</td>
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<td>1990</td>
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<td>360</td>
</tr>
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<td>1995</td>
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<td>1171</td>
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<tr>
<td>2010</td>
<td>381</td>
<td>1,205</td>
<td>1586</td>
</tr>
<tr>
<td>2015</td>
<td>552</td>
<td>1,618</td>
<td>2170</td>
</tr>
<tr>
<td>2018</td>
<td>632</td>
<td>1,823</td>
<td>2455</td>
</tr>
</tbody>
</table>
WE ARE SURE YOU KNOW KÄRCHER …

… BUT WE CAN DO SO MUCH MORE!!
WIDE RANGE OF PROFESSIONAL PRODUCTS
THE SOLUTION ALWAYS STARTS AT YOU

<table>
<thead>
<tr>
<th>Container type / size</th>
<th>Contamination / product inside</th>
<th>Kärcher solution</th>
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### Kärcher Solution Table

<table>
<thead>
<tr>
<th>High-pressure pumps</th>
<th>Interior cleaning heads</th>
<th>Hot water generators</th>
<th>Detergents / cleaning agents</th>
<th>Accessories</th>
<th>Controls</th>
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<tbody>
<tr>
<td>HD/HDS</td>
<td>ICH 80/16 Ps</td>
<td>HWE</td>
<td>RM 870</td>
<td>Drying</td>
<td>In combination with HDC</td>
</tr>
<tr>
<td>HDI</td>
<td>ICH 140/4 Ps F2</td>
<td></td>
<td>RM 875</td>
<td>Drying with heat exchanger</td>
<td>Without electrical cabinet</td>
</tr>
<tr>
<td>HDC</td>
<td>HKF 200</td>
<td>warm water generator and plate heat exchanger</td>
<td>RM 880</td>
<td>Water softener</td>
<td>1: remote control without display</td>
</tr>
<tr>
<td>HDCI</td>
<td>HKF 50</td>
<td></td>
<td>RM 885</td>
<td>Balancer</td>
<td>2: remote control with display</td>
</tr>
<tr>
<td>Woma</td>
<td></td>
<td></td>
<td></td>
<td>Ball valves high-pressure / steam</td>
<td>3: PC for operation and visualisation</td>
</tr>
</tbody>
</table>
ISO - CONTAINER
“The cleaning circle by Sinner shows which factors play in cleaning together to achieve a perfect finish!”
KÄRCHER = CUSTOM SOLUTION FROM MODULAR COMPONENTS

- Pressure (50 – 1500 bar)
- Flow Rate (no limits!)
- Clean Objects per hour
- Hot Water / Steam
- Cleaning Agents / Dosing
- Ex proof / ATEX
- Drying / Evacuation
- Recycling / Circulation
- Energy Recovery
- Waste Water Management
- Control Systems
- Manual / Automatic
- Monitoring / Data Exchange
- Certificates
- Piping / Installation
- Commissioning / Start up
- Rebuild / Service
- …
TO FIT YOUR CLEANING REQUIREMENT

Tank cleaning

- < 0.02m³
- 0.06m³
- 0.2m³
- 0.5m³
- 3m³
- 12m³
- 45m³

Container- / Reactor cleaning

- 0.4m³
- 1m³
- 100m³
- 300m³
## OUR IN-HOUSE DEVELOPED COMPONENTS

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*Transport Logistic | Munich 2017*
ARE COMBINED INTO YOUR SOLUTION

Technical details:
- Maximum throughput: 25,000/hr
- Maximum working pressure: 120bar (12MPa)
- Steam properties: 5–10bar (abs)
- Maximum dry air amount: 4,000m³/h (73°C)
- Maximum power supply: 120kW (400V, 3~, 50Hz)
- Wash temperature: max. 95°C

Available as turn-key solution
Option: container solution
WITHOUT PEOPLE ENTERING THE TANK TO CLEAN
RELIABILITY = EXCELLENT RESULTS EVERY TIME
**RELIABILITY = SOLUTIONS WITH OUR COMPONENTS**

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THEREFORE WE NOT ONLY ENGINEER SOLUTIONS
WE DEVELOP COMPONENTS & SOLUTIONS

Old HKS100

New ICHPS
WE DEVELOP COMPONENTS & SOLUTIONS

- G1" connection
- inlet filter
- state-of-the-art single-stage internal gearbox
- configurable for big or small tanks by selection of gears
- sealings configurable for different fluids
- New ICHPS
- same speed even for different flow rates by configurable internals
- driven by water impulse (instead of pressure)
- 2 - 4 nozzles configurable for adjustment to working pressure
Due to design and calculation of internal gear ratios the cleaning result of our cleaning head is different:

**Competition:**
- free areas
- some double / triple impact
- not homogenous

= longer cleaning time required

**Kärcher:**
- nearly 100% covered
- homogenous

= short / effective cleaning
WE DEVELOP COMPONENTS & SOLUTIONS BASED ON YOUR NEEDS

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Water softener
1: remote control without display
WHAT IS A SOLUTION?

fits your needs: clean the tank in the most economic way
SOLUTION = GET IT DONE WITH AS LITTLE PARTS AS NECESSARY
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water softener
(pump (HDI 60/14)
heater (HWE 4000)
cleaning head (ICH 80/16 Ps)
remote panel
KÄRCHER IS THE SERVICE PROVIDER WORLD-WIDE

- 70 countries with
- > 120 subsidiaries
- > 400 locations
- > 40,000 distributors
- > 50,000 service points
- 85% Sales abroad
- 95% of world GDP covered
PROVEN BY MORE THAN 250 TANK CLEANING PROJECTS WORLD-WIDE

Global Customer benefit:
- Professional support
- Reliable cleaning result
- Effective operation
- High degree of safety at work
KÄRCHER = YOUR GLOBAL PARTNER, ASK FOR MORE!

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