CHEMICAL LEASING IN PRACTICE: 
THE BUSINESS CASE OF SAFECHEM

Steffen Saecker, Business Director SAFECHEM,
UNIDO Webinar on Chemical Leasing, November 12, 2020
CUSTOMERS VALUE OUR APPLICATION KNOW-HOW

SURFACE CLEANING
- High precision cleaning of metal components
- Companies of different sizes in a wide range of demanding industries

TEXTILE CLEANING
- Premium textile cleaning of garments and other textiles
- Modern textile cleaning shops

ASPHALT ANALYTICS
- Extraction of bitumen for quality analysis
- Testing laboratories of asphalt producers and authorised independent laboratories
CUSTOMERS VALUE OUR APPLICATION KNOW-HOW

SURFACE CLEANING
- High precision cleaning of metal components
- Companies of different sizes in a wide range of demanding industries

TEXTILE CLEANING
- Premium textile cleaning of garments and other textiles
- Modern textile cleaning shops

ASPHALT ANALYTICS
- Extraction of bitumen for quality analysis
- Testing laboratories of asphalt producers and authorised independent laboratories
CUSTOMERS VALUE OUR APPLICATION KNOW-HOW

SURFACE CLEANING
- High precision cleaning of metal components
- Companies of different sizes in a wide range of demanding industries

TEXTILE CLEANING
- Premium textile cleaning of garments and other textiles
- Modern textile cleaning shops

ASPHALT ANALYTICS
- Extraction of bitumen for quality analysis
- Testing laboratories of asphalt producers and authorised independent laboratories
WE ARE SAFECHEM

HOUSE OF CLEANING SOLUTIONS

SUSTAINABLE CLEANING SOLUTIONS

FULL SERVICE
- COMPLEASE™ Chemical Leasing

KNOWLEDGE SHARING FOR BEST PRACTICE
- CHEMAWARE™ Information Platform, Training, Advanced Lab Services, Consultancy

SERVICE FOR PROCESS OPTIMISATION
- Waste take-back, Recycling, MAXISTAB™, MAXIBOOST™, MAXICHECK™

SYSTEM FOR RISK MANAGEMENT
- SAFE-TAINER™ System and Accessories, my.webservice@SAFECHEM

CHEMICAL PRODUCT
- DOWPER™*, NEU-TRI™*, HI-TRI™, MECTHENE™*, ISOFORM™*, DOWCLENE™*, SENSEN™

Surface Cleaning, Textile Cleaning, Asphalt Analysis

™Trademark of SAFECHEM
™Trademark of The Dow Chemical Company
™Trademark of Blue Cube LLC
SAFECHEM IS SUSTAINABLE

THE CLOSED LOOP SOLUTION

SAFE-TAINER™ FOR FRESH SOLVENT
Reduce risks: safe supply

SAFE-TAINER™ FOR USED SOLVENT
Reduce risks: safe take-back

CLOSED CLEANING MACHINE

Optimise use:
- Monitoring
- Stabilising
- Educating

Extend reuse:
- Internal distillation/recycling

EXTERNAL RECYCLING

Trademark of SAFECHEM
SAFECHEM IS SUSTAINABLE

A NEW PARADIGM FOR MORE SUSTAINABILITY

Sales

SUSTAINABLE SOLUTIONS

CHEMICAL PRODUCT

Time

SUSTAINABILITY

Volume-oriented Performance-oriented
SAFECHEM IS SUSTAINABLE

SOLVENT EFFICIENCY INCREASE BY SUSTAINABLE SOLUTIONS

AMOUNTS PER 100 KG OIL REMOVED

<table>
<thead>
<tr>
<th>Method</th>
<th>Solvent (kg)</th>
<th>Air Emissions (kg)</th>
<th>Waste (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPEN MACHINE</td>
<td>754</td>
<td>520</td>
<td>233</td>
</tr>
<tr>
<td>CLOSED MACHINE</td>
<td>160</td>
<td>10</td>
<td>150</td>
</tr>
<tr>
<td>CLOSED MACHINE &amp; CPS</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>COMPLEASE™</td>
<td>4</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

-99.5% decrease in solvent usage

Chemical Product Services in the European Union, European Commission (2006);
COMPLEASE™ figures based on SAFECHEM analyses

™Trademark of SAFECHEM
SAFECHEM IS SUSTAINABLE

FIRST PILOT PROJECT IN AUSTRIA STARTED 2005

Chemical Solution Provider

OEM

Innovative Services

Pero

-71,7%

Solvent

-76,9%

Stabilizer

-51,1%

Energy

-66,4%

Maintenance cost
SAFECHEM IS SUSTAINABLE

COMPLEASE™ CHEMICAL LEASING

BIZNESS AS USUAL

VOLUME & PRICE

SUPPLIER VS BUYER

<table>
<thead>
<tr>
<th>Wants Increase</th>
<th>Wants Decrease</th>
</tr>
</thead>
</table>

COMPLEASE™ CHEMICAL LEASING

PERFORMANCE & EFFICIENCY

SUPPLIER WITH BUYER

<table>
<thead>
<tr>
<th>Wants Increase</th>
<th>Wants Increase</th>
</tr>
</thead>
</table>

COMPLEASE™ Video:

https://www.youtube.com/watch?v=Z2LwPVasgMA

TM Marke von SAFECHEM
SAFECHEM IS SUSTAINABLE

FIRST PROJECT IN SERBIA STARTED 2010

Chemical Solution Provider
Local distributor

-80% Solvent
-10% Minimum Saving

-90% Waste

FKL®
### Opportunities

- Increased customer intimacy
- Intensified Product Stewardship
- Implementation of best practices
- Differentiation

### Challenges

- Trust vs. contract
- Ownership of chemicals
- Appropriate unit of payment
- ERP systems and monitoring

---

New paradigm requires dedicated resources to enable scale-up
“The process life cycle has become extremely reliable and efficient.”

Stephen Ingham,
Aircelle Ltd, a member of the SAFRAN Group
“This is extremely pleasing, from both a financial perspective but just as importantly also from an environmental one.”

Anthony Brown, Leonardo Helicopters
SAFECHEM IS SUSTAINABLE

RECOGNISED AS BEST PRACTICE MODEL

2010
UNIDO – Chemical Leasing, Global Award

2011
WWF – Green Game-changers

2013
BMU/BDI – Green Economy in der Praxis, Best Practice

2014
VDI ZRE – Studies about resource efficiency potentials

2015
UNEP – The Business Case For Eco-Innovation

2016
Cefic – European Responsible Care® Award

2017
VCI/Deloitte – Chemistry 4.0, Growth through Innovation

2019
Accenture – Growth opportunities in a circular economy