

# CJC® Oil and Fuel Filtration **Rental Solutions** & Services



Constant clean oil and fuel with customised reliable service & solutions

# CJC<sup>®</sup> Oil and Fuel Filtration

Using a rental solution provides a convenient, economical and flexible response

## Why rent a CJC<sup>®</sup> Offline Oil Filter?

Renting a CJC<sup>®</sup> Oil Filter is a very flexible and efficient way to remove large amounts of particles, water, oil degradation by-products and acidity from oil and fuel.

Offering a filtration degree of  $\leq$ 3 µm absolute combined with the industry's highest dirt-holding capacity ensures long intervals between replacement of the CJC<sup>®</sup> Filter Inserts. Furthermore, you get the lowest cost per kg contamination removed from oil and fuel.

All rental CJC<sup>®</sup> Oil Filters are inspected, cleaned and upgraded before rented out to our customers.

You will benefit from solutions that are ready for **plug & play installation**, for which we can offer extended support from our professional service technicians who ensure that you get the most out of CJC<sup>®</sup> Rental solutions.



## **Online Condition Monitoring**



On request, our units include an optional CJC<sup>®</sup> Oil Contamination Monitor, type OCM15, offering continuous online oil condition monitoring of particles, humidity and temperature in the oil.

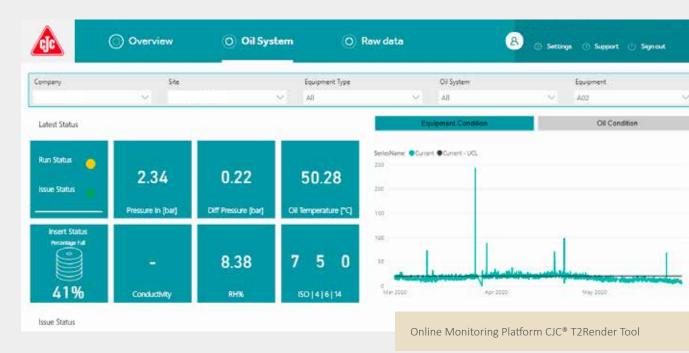
Monitoring the smallest micron particles using the CJC<sup>®</sup> OCM15 gives the earliest possible warning of breakdowns. Major damage can be PREDICTED and PREVENTED by stopping and repairing early in the wear process. Obviously, this will improve PROFIT.

Oil Contamination Monitor CJC® OCM15

### **Translated data - proactive warnings**

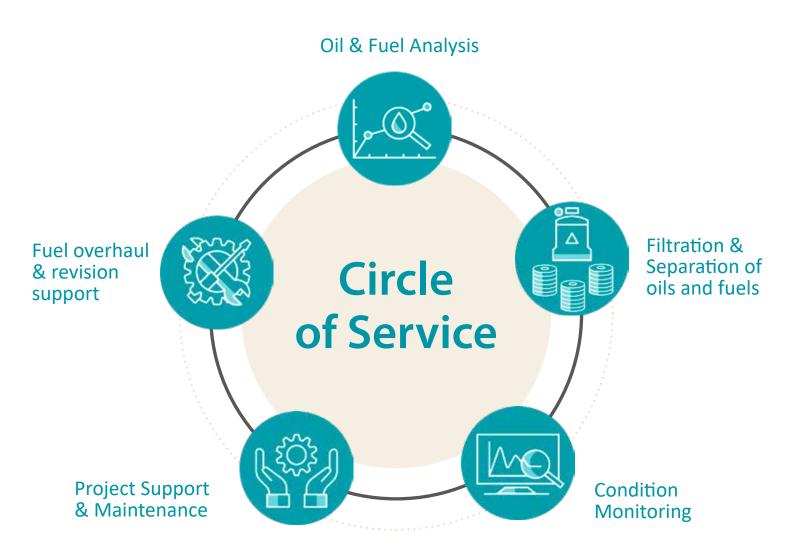
As an option is our surveillance software CJC<sup>®</sup> T<sup>2</sup>render Solutions, Basic or Pro, which translates your data into trends and provide pro-active warnings if abnormal deviations occur or other parameters are detected.

At the end of the rental period, an oil condition report will be provided, documenting the results you've achieved by installing a CJC<sup>®</sup> Oil Filter.



## **About our Service**

We believe in flexible solutions that suit your equipment demands, because your time and your system health is important to us



### Circle of Service

Our service is not just one unit. It is a philosophy and a responsible attitude.

### Plug 'n' play treatment

Our units are transportable and easy to connect. We facilitate complete oil and fuel projects, covering removal of particles, water and oil degradation products.

Our units have various capacities and appropriate hydraulic components to meet your system demands, e.g. hoses, couplings and flanges.

## WorldWide service support:

Support from international CCJ Service Technician Teams.



## What can you expect from our "Circle of Service"?

Oil and Fuel Analysis	• Oil analyses (sampling, analysis, reporting and review of the results)		
Filtration & Separation of oils and fuels	<ul> <li>Removal of particles, water and oil degradation products</li> <li>Inhouse testing or testing at customer location of CJC<sup>®</sup> equipment</li> <li>Oil &amp; Fuel recovery at customer location or at C.C.JENSEN premises</li> <li>Bag filtration of oil and fuel (<i>high flow filtration</i>)</li> </ul>		
Condition Monitoring	• Oil condition monitoring (particle counting, moisture and oxidation measurement)		
Project Support & Maintenance	<ul> <li>Maintenance and service agreements</li> <li>CJC<sup>®</sup> Filter Insert changes</li> <li>Refurbishment of old CJC<sup>®</sup> Oil Filtration and Water Separation units</li> <li>Commissioning of new CJC<sup>®</sup> Oil Filter Units</li> <li>Facilitating of complete oil and fuel projects and systems</li> </ul>		
<ul> <li>System overhaul and revision support</li> <li>Oil &amp; Fuel storage, IBC and container handling'</li> <li>Oil &amp; Fuel tank inspection and cleaning support</li> <li>Oil transfer via high flow pumping</li> <li>Oil &amp; Fuel system/piping flushing (with or without preheating)</li> </ul>			

# **Oil Cleaning or Oil & System Cleaning?**

When cleaning the oil with CJC<sup>®</sup> Oil Filtration units, your oil system is also automatically cleaned

### Impact

The CJC<sup>®</sup> Oil Filters not only remove various types of contamination from the oil. The clean oil will also clean the system acting in a certain way as a cleaning detergent when continuous oil filtration is installed.

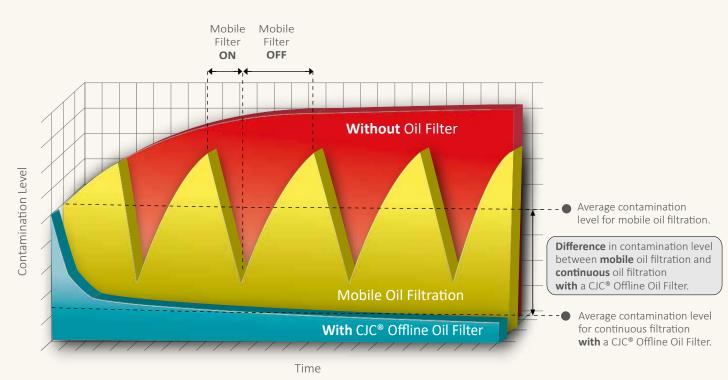
## What is the impact of non-continuous oil filtration?

After disconnecting the CJC<sup>®</sup> Rental Unit from your system, various types of contamination might occur again in your system. In that situation a continuous oil filtration solution is needed.

Our oil analysis service can help to advice you if only a rental solution is recommended or if continuous oil filtration is needed.

### **Oil maintenance options**

Continuous Oil Filtration vs. Mobile Oil Filtration



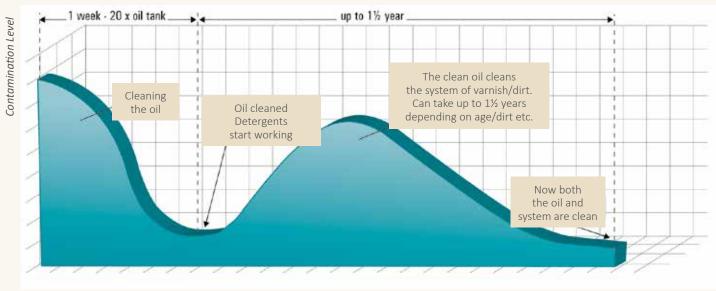
### Outcome

## Your longer Return on Investment with CJC®

It's a fact and has been proven that your long term ROI will increase with CJC<sup>®</sup> Oil and Fuel Filtration. The majority of industrial applications will benefit from lower operational costs once continuous CJC<sup>®</sup> Oil Filtration is applied.

A CJC<sup>®</sup> Rental Filter represents a short-term solution to gain experience of our oil filtration performance for your specific applications.

## Oil maintenance with continuous offline oil filtration



Time

PAY-BACK TIME less than

vear

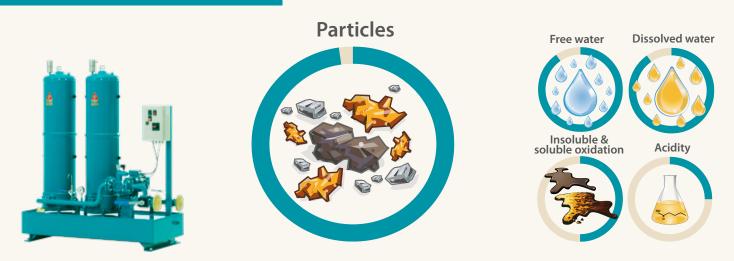
# **Contamination Sources & Solutions**

One solution for removal of critical contamination sources

## Contaminated oil in your oil system?

Contamination sources like particles, water, oxidation and acidity can considerably damage an oil system at different levels. CJC<sup>®</sup> solutions remove critical contaminants in one and the same process.

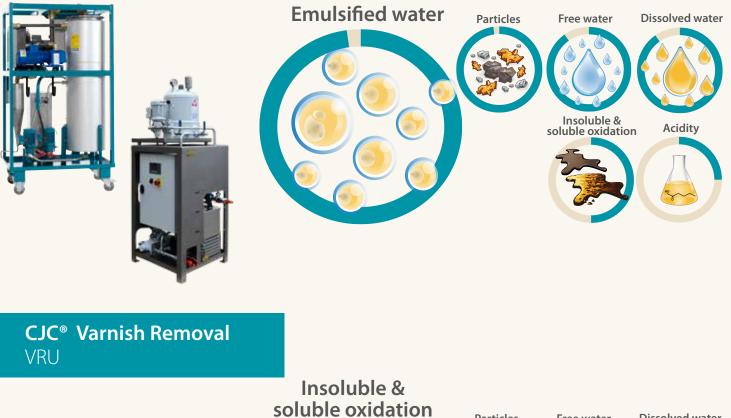
## CJC<sup>®</sup> Fine Filters HDU



## **CJC<sup>®</sup> Filter Separators** PTU



**Desorbers &** Desorber/Filter Combi





# **Flexible Rental Solutions**

We have a huge variety of rental equipment to suit your specific needs. You get direct and no-fuss contact with our specialists, offering quick response and fast installation on-site.



In-house stock of Rental Equipment



**Oil recovery services** 



CJC<sup>®</sup> Filter Insert change services



On-site filtration and storage handling



**On-site commissioning** 



Oil sampling and analysis services

- Commissioned by high skilled C.C.JENSEN technicians
- Crossborder Commitments
- Easy exchange of solutions between our CCJ Service Hubs
- Global CCJ Service Hubs



Filter units including condition monitoring



High flow pump solutions



Flushing services



Oil storage filtration / tank cleaning



Varnish removal solutions



Dewatering solutions (incl. EAL oils)

Below is an overview of the rental CJC® Solutions available to you.

## **CJC<sup>®</sup> Fine Filters**

CJC <sup>®</sup> Units	Contamination Sources	System	Applications
CJC <sup>®</sup> Fine Filter	Dirt holding capacity:	System fit:	Applications:
HDU 15/12	0.75 kg	5 L - 800 L	<ul><li>Hydraulics</li><li>Gears</li></ul>
	Particles,	Pump range:	Turbines
	<3 micron absolute <ul> <li>Water</li> </ul>	20 L/h - 120 L/h	<ul><li>Compressors</li><li>Engines</li></ul>
	<ul> <li>Water</li> <li>Oxidation by-products</li> </ul>	Power supply:	<ul> <li>Engines</li> <li>Diesel fuel</li> </ul>
A CONTRACTOR OF	<ul> <li>Sludge</li> </ul>	3x 400 - 440V	
and the second s	Varnish	50 - 60 Hz	
CJC <sup>®</sup> Fine Filter	Dirt holding capacity:	System fit:	Applications:
HDU 15/25	1.5 kg	5 L - 2,000 L	<ul> <li>Hydraulics</li> </ul>
			• Gears
	<ul> <li>Particles,</li> <li>&lt;3 micron absolute</li> </ul>	<b>Pump range:</b> 30 L/h - 250 L/h	<ul> <li>Turbines and compressor</li> <li>Engines</li> </ul>
	Water	50 L/11 - 250 L/11	<ul><li>Engines</li><li>Diesel fuel</li></ul>
	Oxidation by-products	Power supply:	Dieserraei
	<ul> <li>Sludge</li> </ul>	3x 400 - 440V	
	• Varnish	50 - 60 Hz	
CJC <sup>®</sup> Fine Filter	Dirt holding capacity:	System fit:	Applications:
HDU 27/27-54-108	Up to 16 kg	20 L - 10,000 L	Hydraulics
	Particles,	Pump range:	<ul> <li>Gears</li> <li>Steam and gas turbings</li> </ul>
111	<ul> <li>Particles,</li> <li>&lt;3 micron absolute</li> </ul>	30 L/h - 2,000 L/h	<ul> <li>Steam and gas turbines and compressors</li> </ul>
a contraction of the second	Water Oxidation	50 L/ II 2,000 L/ II	<ul> <li>Engines</li> </ul>
	by-products	Power supply:	Diesel fuel
	Sludge	3x 400 - 440V	
	Varnish	50 - 60 Hz	
		Options:	
		NAME IN THE STATE	

With or without Preheaters and Particle Counter

## **CJC<sup>®</sup>** Fine Filters

CJC <sup>®</sup> Units	Contamination Sources	System	Applications
CJC <sup>®</sup> Fine Filter/ Flushing unit,	<b>Dirt holding capacity:</b> 32 or 64 kg	<b>System fit:</b> Up to 40,000 L	Applications: • Hydraulic
HDU 427/54-108			Gears
	<ul> <li>Particles,</li> <li>&lt;3 micron absolute</li> <li>Water</li> </ul>	<b>Pump range:</b> 660 L/h - 11,500 L/h	<ul> <li>Steam and gas turbines and compressors</li> <li>Engines</li> </ul>
-	<ul> <li>Oxidation by-products</li> </ul>	Power supply:	<ul><li>Diesel fuel</li></ul>
	Sludge	3x 400 - 440V	Lubrication systems
	Varnish	50 - 60 Hz	
		Options:	
a series		With or without	
		Particle Counter	
CJC <sup>®</sup> Varnish	Dirt holding capacity:	System fit:	Applications:
Removal Unit, VRU 27/108	Up to 16 kg	200 - 40,000 L	<ul><li> Hydraulics</li><li> Steam and gas turbines</li></ul>
VKO 27/108	• Particles,	Pump range:	and compressors
💼 👜	<3 micron absolute	45 L/h	
	<ul> <li>Oxidation by-products</li> </ul>	Power supply:	
<b>3 . .</b>	both insolubles and	3x 400 - 440V	
	solubles	50 - 60 Hz	
CJC <sup>®</sup> Filter Separ	ators		
CJC <sup>®</sup> Filter Separator	Dirt holding capacity:	System fit:	Applications:
PTU 15/12	0.75 kg	20 L - 800 L	<ul><li> Hydraulics</li><li> Turbines and compresso</li></ul>
	Particles,	Pump range:	Gears

- Particles,
   < 3 micron absolute</li>
- Free water separation
- Oxidation by-products

**Pump range:** 20 L/h - 120 L/h

**Power supply:** 3x 400 - 440V 50 - 60 Hz

- Gears
- Diesel fuel

## **CJC® Filter Separators**

CJC <sup>®</sup> Units	Contamination Sources	System	Applications
CJC <sup>®</sup> Filter Separator PTU 15/25	<b>Dirt holding capacity:</b> 1.5 kg	<b>System fit:</b> 20 L - 2,000 L	<ul><li>Applications:</li><li>Hydraulics</li><li>Turbines and compressors</li></ul>
	<ul> <li>Particles,</li> <li>&lt;3 micron absolute</li> <li>Free water separation</li> </ul>	<b>Pump range:</b> 45 L/h - 120 L/h	<ul><li>Gears</li><li>Diesel fuels</li></ul>
	Oxidation by-products	<b>Power supply:</b> 3x 400 - 440V 50 - 60 Hz	
CJC <sup>®</sup> Filter Separator PTU1 27/54-108	<b>Dirt holding capacity:</b> 8 kg	<b>System fit:</b> Upon request	Applications: <ul> <li>Diesel fuel</li> </ul>
	<ul> <li>Particles,</li> <li>&lt;3 micron absolute</li> <li>Water</li> </ul>	<b>Pump range:</b> Up to 1,680 L/h	
	<ul> <li>Large amounts of free of free water</li> <li>Oxidation by-products</li> </ul>	<b>Power supply:</b> 3x 400 - 440V 50 - 60 Hz	

CJC<sup>®</sup> Filter Separator PTU2 27/27



**Dirt holding capacity:** 2 kg

- Particles,
   <3 micron absolute</li>
- Free water separation
- Oxidation by-products

**System fit:** 200 L - 2,000 L

**Pump range:** 90 L/h – 200 L/h

**Power supply:** 3x 400 - 440V 50 - 60 Hz

#### **Applications:**

- Hydraulics
- Turbines and compressors

## CJC<sup>®</sup> Filter Separators

CJC <sup>®</sup> Units	Contamination Sources	System	Applications
CJC® Filter Separator PTU3 27/-	Dirt holding capacity: Up to 16 kg • Particles, <3 micron absolute • Free water separation • Oxidation by-products	System fit: 1,000 L - 20,000 L Pump range: 480 L/h - 1,680 L/h Power supply: 3x 400 - 440V 50 - 60 Hz <= ISO VG 220) Options: With or without Preheater and	<ul> <li>Applications:</li> <li>Hydraulics</li> <li>Gears</li> <li>Steam and gas turbines and compressors</li> <li>Engines</li> <li>Diesel fuel</li> </ul>
CJC <sup>®</sup> Desorbers		Particle Counter	
CJC <sup>®</sup> Desorber/Filter Combi Unit, D5	Dirt holding capacity: 1.5 kg	<b>System fit:</b> <1,200 L (*)	<ul> <li>Applications:</li> <li>Hydraulics, lubrication</li> </ul>
	Water removal: Nominal up to 1 L p/24 h (**) • Particles, <3 micron absolute • Water • Oxidation by-products • Salt	Pump range:           30 L/h           Power supply:           3x 400 - 440V           50 - 60 Hz           Viscosity range:           ISO VG46-150	and cooling oils <ul> <li>Stern tubes</li> <li>CPPs</li> <li>Thrusters</li> </ul> <li>Applications where (salt) water ingress is (dis-)continuous standard and biodegradable fluids</li>
CJC <sup>®</sup> Desorber D10	Dirt holding capacity: 4 kg Water removal: Nominal up to 0.75 L p/h (**) • Water • Salt	System fit: < = 2,000 L (*) Pump range: 45 L/h Power supply: 3x 400 - 440V 50 - 60 Hz 1x 230V 50 - 60 Hz	<ul> <li>Applications:</li> <li>Hydraulics, lubrication and cooling oils</li> <li>Steam and gas turbines</li> <li>Gears</li> <li>Stern turbines</li> <li>CPPs</li> <li>Thrusters</li> </ul>

Viscosity range: ISO VG32-150 Applications where (salt) water ingress is (dis-)continuous standard and biodegradable fluids

## **CJC®** Desorbers

CJC <sup>®</sup> Units	Contamination Sources	System	Applications
CJC <sup>®</sup> Desorber D30	Water removal rate:	System fit:	Applications:
	Nominal up to 2 L p/h (**)	< 5,000 L	<ul> <li>Hydraulics, lubrication and cooling oils</li> </ul>
	• Water	Pump range: 150 L/h	<ul><li>Steam and gas turbines</li><li>Gears</li></ul>
11/07			• CPPs
		<b>Power supply:</b> 3x 400 - 440V	Thrusters
		50 - 60 Hz	
		Viscosity range:	
CJC <sup>®</sup> Key Filter		ISO VG32-320	
ese keyrinter			
CJC <sup>®</sup> Key Filter	Dirt holding capacity:	System fit:	Applications:
	2 kg	Upon request	<ul><li>Hydraulics</li><li>Lubrication</li></ul>
the second se	Particles,	Pump range:	Gears
	<3 micron absolute <ul> <li>Water</li> </ul>	45 L/h - 120 L/h	
	Oxidation by-products	Power supply:	
		3x 400 - 440V 50 - 60 Hz	
CJC <sup>®</sup> Heat Trans	ter Oil Filter		
CJC <sup>®</sup> Heat Transfer	Dirt holding capacity:	System fit:	Applications:
Oil Filter, HTO HP	32 kg	200 L up to 20,000 L	<ul><li>Heat transfer oil systems</li><li>Lubrication systems</li></ul>
			Lubricution Systems



- Particles, <3 micron absolute
- Water
- Oxidation by-products

Pump range: 1400 L/h

**Power supply:** 3x 400 - 440V 50 - 60 Hz

## CJC<sup>®</sup> Pump Unit

CJC <sup>®</sup> Units	Contamination Sources	System	Applications
CJC <sup>®</sup> High Flow Pump Unit / Flushing unit	Dirt holding capacity: Upon request	<b>System fit:</b> Upon request	<ul><li>Applications:</li><li>Hydraulics</li></ul>
e. 11 :	As from 2 micron     nominal	Pump range: 60 L/h - 600 L/min.	<ul> <li>Gears</li> <li>Steam and gas turbines and compressors</li> </ul>
		<b>Power supply:</b> 3x 400 - 440V 50 - 60 Hz	<ul><li>Diesel fuel</li><li>Lubrication oil</li><li>Base oil</li></ul>

## Particle removal with CJC® Bag-Filtration

#### **CJC®** Bag-Filtration



Dirt holding capacity: Upon request

#### Particles and sludge:

- 2 micron nominal
- 5 micron nominal
- 50 -100 -200 micron nominal

**System fit:** 5 L - 2,000 L

#### Pump range:

1900 L/h - 6,300 L/h

## Power supply:

3x 400 - 440V 50 - 60 Hz

#### **Applications:**

- Hydraulics
- Gears
- Steam and gas turbines and compressors
- Engines
- Diesel fuel
- Lubrication oil
- Base oil

CJC<sup>®</sup> Bag-Pre-Conditioner Filter



Dirt holding capacity: Upon request

#### Particles and sludge:

- 2 micron nominal
- 5 micron nominal
- 50 -100 -200 micron nominal

**System fit:** Upon request

#### Pump range: Upon request

### Power supply:

3x 400 - 440V 50 - 60 Hz

### Applications:

- Hydraulics
- Gears
- Steam and gas turbines and compressors
- Engines
- Diesel fuel
- Lubrication oil
- Base oil

### CJC<sup>®</sup> Misc. Solution

CJC <sup>®</sup> Units	Contamination Sources	System	Applications
IBC	-	Storage facilities with filtration handling	<ul> <li>Applications:</li> <li>Hydraulics, lubrication</li> <li>and cooling oils</li> <li>Steam and gas turbines</li> <li>Gears</li> <li>CPPs</li> <li>Thrusters</li> </ul>

#### Pump bracket



## Pumping/transfer of oil and fuel

#### **Applications:**

- Hydraulics, lubrication
- and cooling oils
- Steam and gas turbines
- Gears
- CPPs
- Thrusters

- Note (\*) Larger oil volumes can be managed by the Desorber depending on hydraulic system layout and available connections for extracting contaminated oil.
- Note (\*\*) The water discharge performance depends on the water contamination level, oil type, ambient temperature and air humidity.

At high water levels (above the oil saturation level) the amount of discharge water can exceed the given nominal values.

In case of questions on the demulsibility of the oil or oil condition, please consult C.C.JENSEN in advance.

## Inspiration

### We care for you

### A story from one of our CCJ Service Technicians:

A shipowner had a whole host of issues with their thrusters and upon examining the heavily contaminated oil samples, which also contained a large amount of free water, they turned to C.C.JENSEN for a solution. According to Service Agreements we have with this customer, CCJ Service Technicians quickly installed a CJC<sup>®</sup> Thruster Unit on-site.

After a very short time in operation, the oil was cleaned to an acceptable level. Their thrusters now operate without any issues, and it also resulted in a long-term agreement.





Service Technician, C.C.JENSEN A/S

### We support you in becoming more Green

For many years, C.C.JENSEN has focused on sustainability not only in terms of our CJC<sup>®</sup> Oil Filters, but also specially from a company perspective. As a result, we have reduced our  $CO_2$  by 80% from 2008 and until now. Our sources include our own wind turbines, solar cells, heat pumps, optimisation of drying ovens, LED lighting, electric vehicles, etc.

Also our customers benefit from having clean oil, as the oil is cleaned and recycled, contributing positively to the customers'  $CO_2$  account and saving the environment many litres of waste oil. Recent initiatives are the installation of new IE3 motors in our oil filter solutions as well as our "Flow Drive", a frequency converter that contributes to energy savings.

The technology behind our CJC<sup>®</sup> Filter Inserts makes it possible to achieve oil filtration rates as low as <3  $\mu$ m, which includes removal of even the smallest and very harmful particles - the life of the oil is extended and the environment is protected. Our CJC<sup>®</sup> Filter Inserts, which absorb the contamination sources, are produced from 100 percent natural cellulose fibres exclusively from sustainable raw materials. In other words, we don't use metal, plastic or chemicals.

C.C.JENSEN A/S is a family-owned company that was founded in 1953. Today, the company has about 300 employees, with 200 at our head office and production in Svendborg and about 100 in our 14 subsidiaries worldwide. In addition, our CJC<sup>®</sup> Oil Filters are traded through more than 40 distributors globally.



## C.C.JENSEN

# Contact us today



## C.C.JENSEN Service Hubs

#### **Benelux**

C.C.JENSEN Benelux B.V. Tel.: +31 182 37 90 29 info.nl@cjc.dk www.ccjensen.nl

#### Spain

C.C.JENSEN Ibérica, S.L. Tel.: +34 93 590 63 31 ccjensen.es@cjc.dk www.cjc.dk

#### Chile

C.C.JENSEN S.L. Limitada Tel.: +56 2 739 2910 ccjensen.cl@cjc.dk www.ccjensen.cl

**United Kingdom** 

Tel.: +44 1 388 420 721

filtration@cjcuk.co.uk

www.ccjensen.co.uk

C.C.JENSEN Ltd.

#### USA

Denmark

C.C.JENSEN A/S

sales@cjc.dk

www.cjc.dk

Tel.: +45 6321 2014

C.C.JENSEN Inc. Tel.: +1 770 692 6001 ccjensen@ccjensen.com www.ccjensen.com

#### Poland

Your local C.C.JENSEN Distributor

C.C.JENSEN Polska Sp. z o.o. Tel.: +48 22 648 83 43 ccjensen@ccjensen.com.pl www.ccjensen.com.pl

## Manufacturing & headquarters

#### Denmark

C.C.JENSEN A/S Løvholmen 13 DK - 5700 Svendborg Denmark

Tel. +45 6321 2014 sales@cjc.dk www.cjc.dk



Scan the QR code and find your nearest distributors at www.cjc.dk/contact