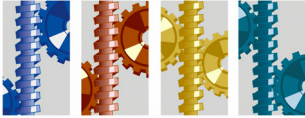




**C.C.JENSEN**

OIL FILTRATION SYSTEMS



INDUSTRY

# Fine Filter for Wind Turbine Gears

## CJC Off-line Filter HDU 15/25 PV

### APPLICATION

The HDU 15/25 PV series of off-line fine filters are especially designed for the filtration of high viscosity lubricants on wind turbine transmissions.

The large by-pass valve ensures a controlled operation of the filter system, even at very low temperatures.

### FUNCTION

The filter pump draws oil from the lowest point of the system, and passes the oil through the filter element. The oil is returned to the top of the transmission box. Lubricating Oil: ISO VG 150 - 320 cSt

### THE SOLUTION

**CJC™ Fine Filter HDU 15/25 PV** with **Filter Insert CJC™** type BG 15/25 it consists of several discs stacked and bonded together. The material is semi-chemical cellulose.

All CJC™ filter inserts have a filtration degree of 3 μm (micron) absolute and 0.8 μm nominal, i.e. 98.7% of all solid particles >3 μm and approx. 50% of all particles > 0.8 μm are retained in one pass.

The water absorption capacity of the cellulose element is up to 50% of the total contaminant holding capacity.

## HDU 15/25 PV



### TECHNICAL DATA

MODEL	HDU 15/25 PV
Pump yield, std.	45 ltr./h
Standard filter element	BG 15/25
Power consumption	0.13 kW
Max. fluid temp. approx.	85 °C
Max. pressure drop	2,5 bar
Max. viscosity, approx.	ISO VG 320 cSt
Dirt holding capacity, approx.	2 ltr.(≈0,5 kg)
Water absorption capacity	1 ltr.
Weight	17 kg



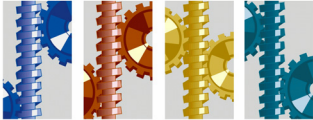
**C.C.JENSEN**

C.C.Jensen A/S \* Løvholmen 13 \* DK-5700 Svendborg \* Denmark  
Phone: +45 63 21 20 14 \* Fax: +45 62 22 46 15  
E-mail: filter@cjc.dk \* Web: www.cjc.dk



**C.C. JENSEN**

OIL FILTRATION SYSTEMS



**INDUSTRY**

Application Study written by  
Thomas Møller Andersen  
C.C. Jensen (DK)

# CJC™ Application Study

## Wind Turbine Transmission

### THE TEST Application

Wind turbine (600 kW).

### Oil

220 liters of TRIBOL 1710  
(ISO VG 320).

### Fine Filter CJC™

HDU 15/25 PV  
(Pump flow: 45 ltr /hour).

### Filter Insert CJC™

BG 15/25.

### Filtration Ratio

3 μm (micron) absolute.

### Testing Period

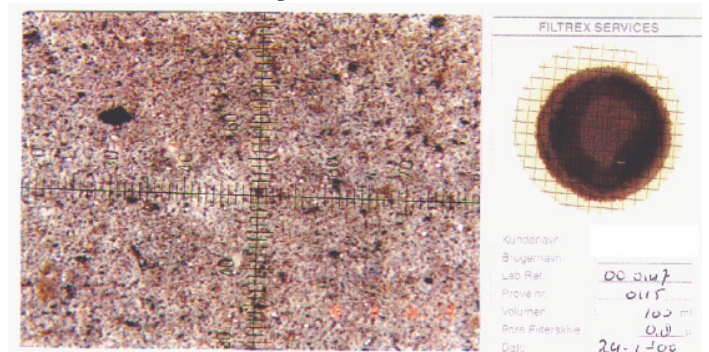
One month.

### Contamination

Solid particles, water and resin  
(oil oxidation residuals).

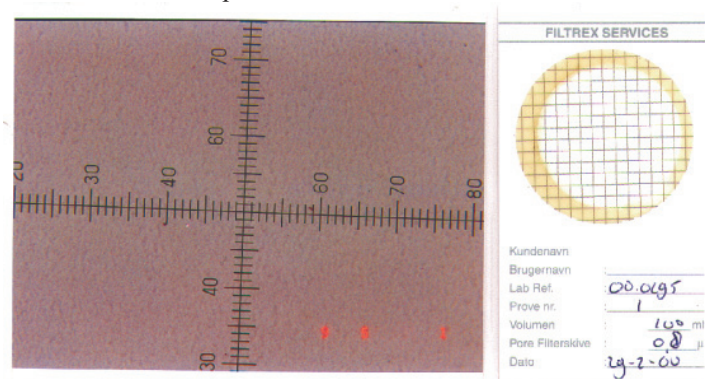
### Wind turbine

Oil sample before filter test start



### Wind turbine

Oil sample after one month of filtration



## RESULTS

Filtration time:	0 hours	48 hours	1 month
Particles 2 μm	1.443,178	29.975	6.774
Particles 5 μm	298.681	14.652	2.204
Particles 15 μm	17.893	1.549	356
ISO 4406 Code	21/19/15	15/14/11	13/12/9
Water content	1.240	109	76
Colour of membrane filter disc	black	light	white



**C.C. JENSEN**

C.C.Jensen A/S \* Løvholmen 13 \* DK-5700 Svendborg \* Denmark  
Phone: +45 63 21 20 14 \* Fax: +45 62 22 46 15  
E-mail: filter@cjcdk \* Web: www.cjcdk