



free breeze

Remanufactured of second-hand wind turbine Vestas V47 process below:

Refurbishment of hub:

- Replace all bearing and brushing in traverse and crank arms.
- Adjustment and lubrication of anti rotation device
- Repaint if required

Refurbishment of main bearing:

- Replacement of main bearings, with new ones of the highest quality.
- Rework of bearing seats (if required)
- Rework of bearing housing, mounting of bushing at bearing bores.
- New Teflon bussing to guide pitch shaft

Installing of New PLH312-60Hz gearbox.

- New gear oil cooling system
- New gear oil hoses
- Refurbishment of brake system.

Refurbishment of generators:

- Disassembling and cleaning of generator.
- Replacement of bearings with new ones of highest quality.
- Check of VRCC unit.
- Convert to 60hz

Yaw system:

- Mounting of new spring packed.
- Adjustment and lubrication.
- Check of yaw gears



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Hydraulic:

- New hyd. Oil
- New hyd. Filter
- Check /Charge accumulators
- New hydraulic hoses.
- New upgrade pitch cylinder
- Adjustment and lubrication of anti rotation device

HS Coupling:

- Inspect composite disk as per Vestas manual and replace if required

Blades:

- Repair and resurface blades
- Check roots with ultrasound or x-ray
- Check and purge/recharge blade bearings

Controller and Aux motors:

- Convert controller to 60Hz
- New 60hz control transformer and breakers
- Replacement of contacts in contactors
- Convert yaw, hydraulic pump and fan motors to 60hz.
- 110 volt tap on transformer for lights
- VRCC-upgrade to 1700 volts-60hz
- 60Hz service crane

Nacelle cover and Nose cone:

- Repair and repaint fibreglass
- Repair sound dampening material on sidewalls

Main Frame:

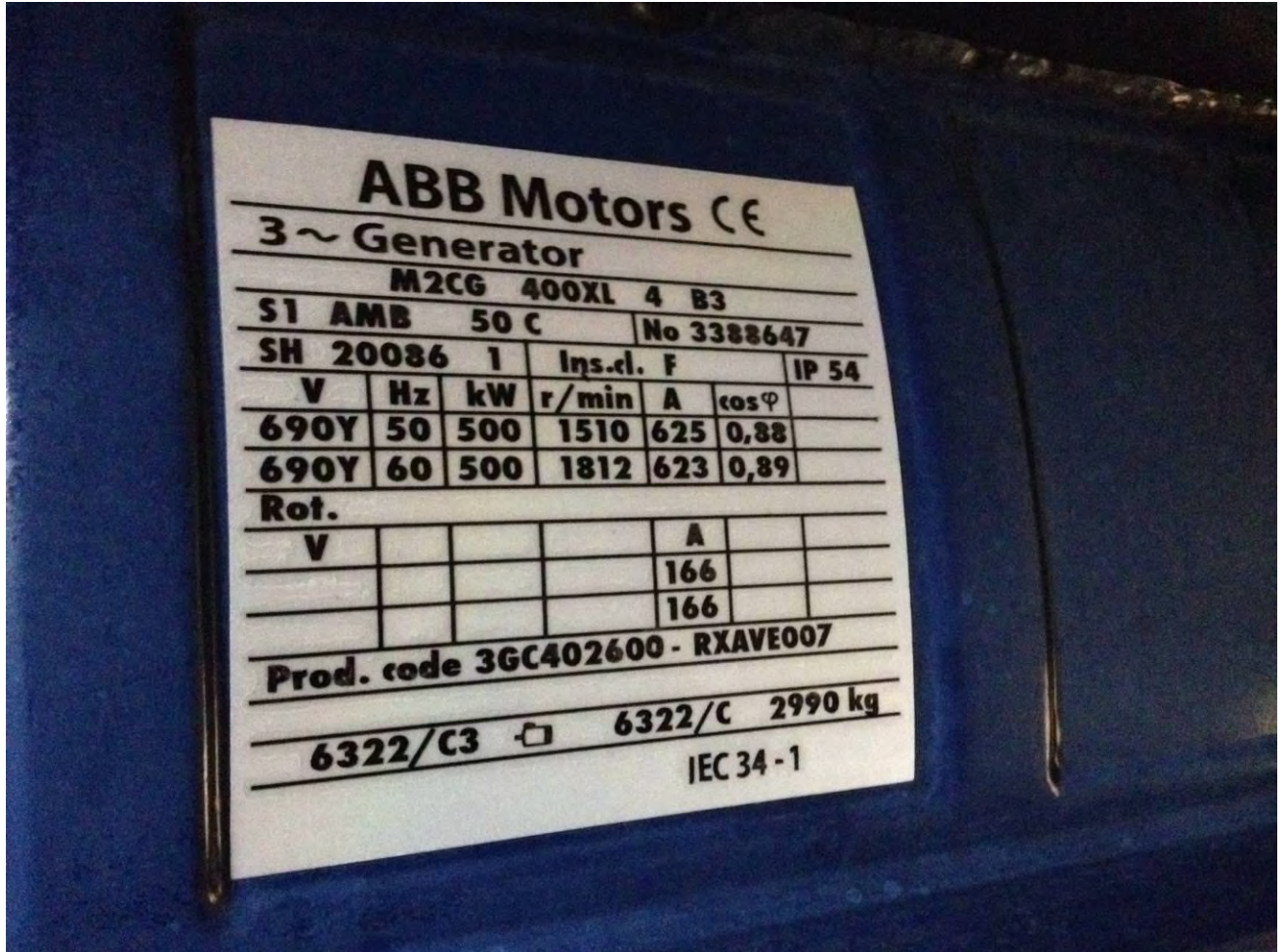
- Strip main frame , Hot water pressure wash
- Check main frame for cracks
- Repaint all corrosion



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Vestas V47.



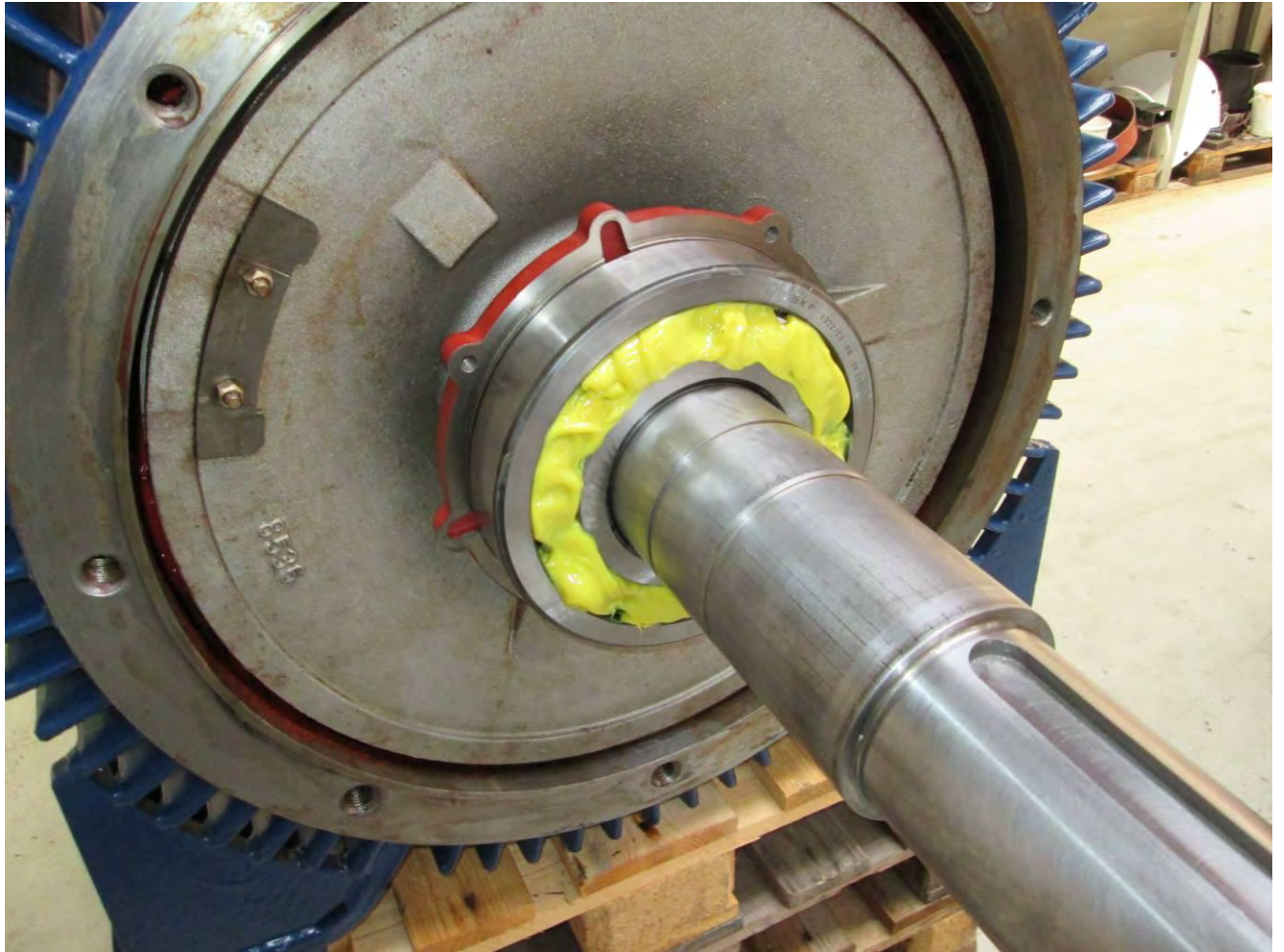
Generator ID plate.



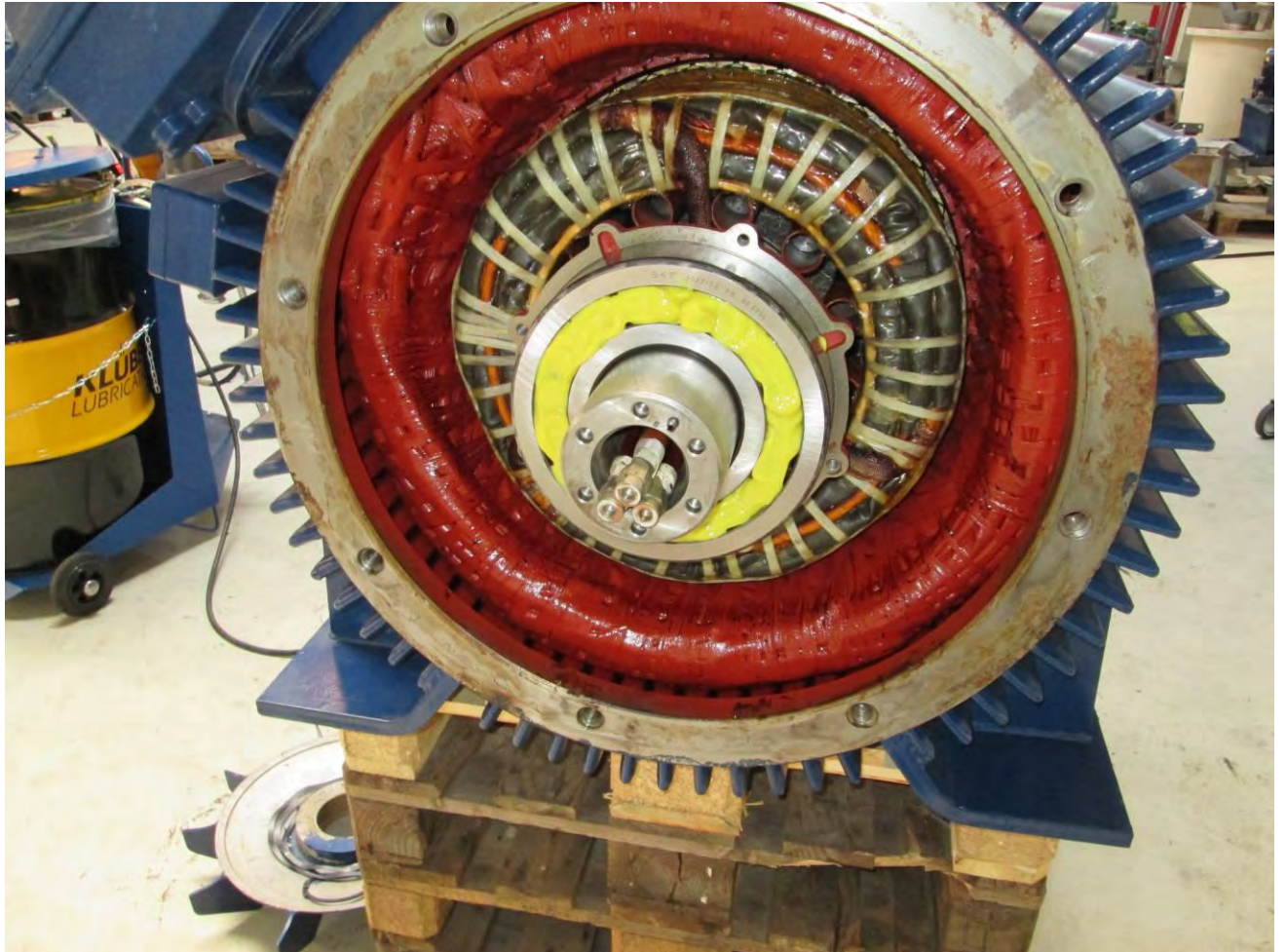
Bearing exchange generator DE



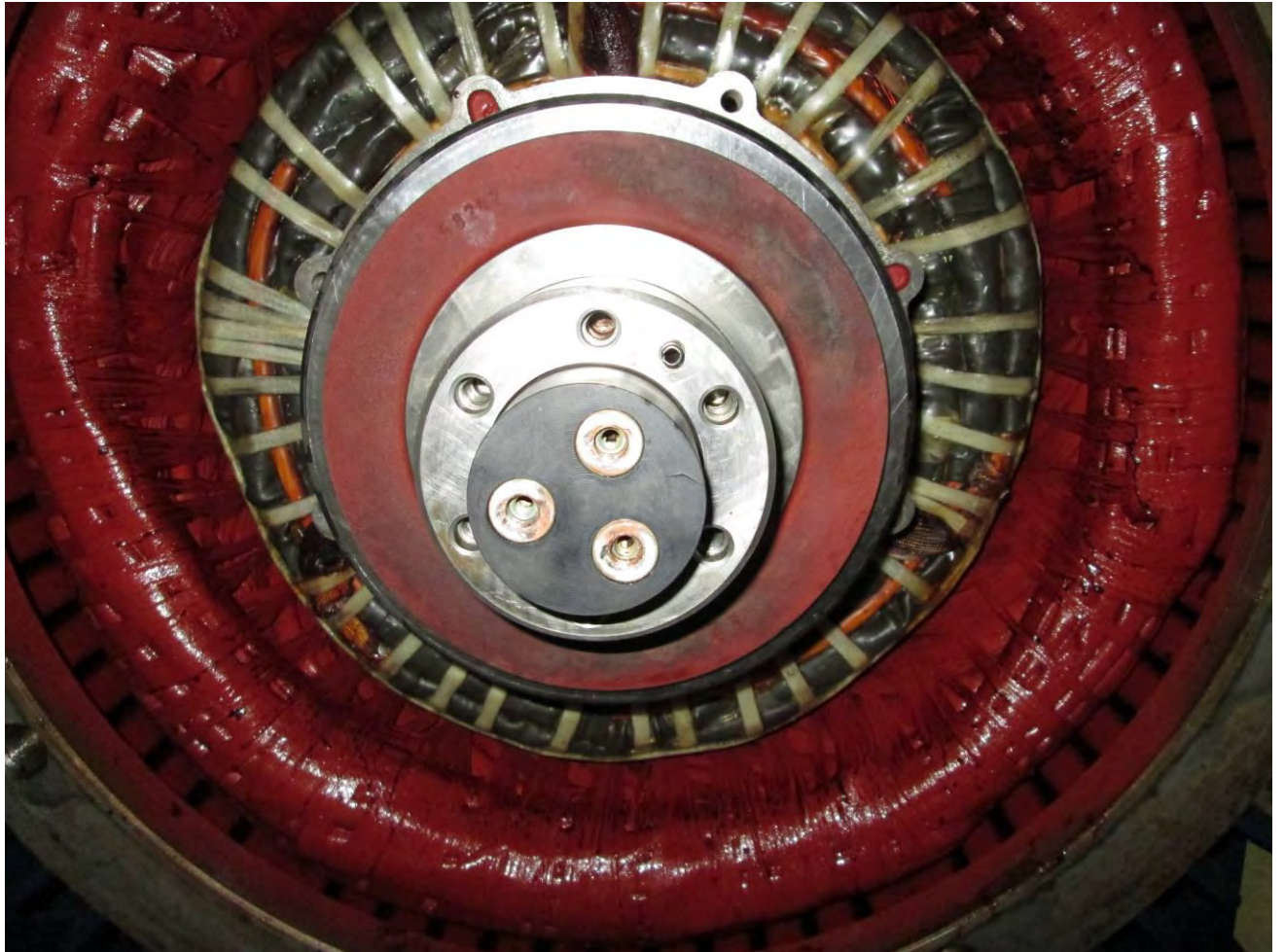
Bearing exchange generator NDE



Bearing exchange generator DE



Bearing exchange generator NDE



Bearing exchange generator NDE



Generator mounted in turbine.



Gearbox id plate.



Gearbox.



Gearbox mounted in the turbine.



Bearing exchange main bearing.



Bearing exchange main bearing.



Bearing exchange main bearing.



Bearing exchange main bearing.



Mount main bearing.



Hyd unit.



Hyd unit.



Nacelle.



Nacelle.



Main contactor.



Main breaker.







