of high voltage region of the transformer, the chances of the generation of partial discharges compared to conventional mild steel core clamp structure with yoke shunt arrangement is reduced to great extent. The obtained result of partial discharge level validates the statement of low partial discharge (reduction of average 27% is obtained) transformers. Hence, Proposed UDEL wood clamping structure method is found suitable in every aspect and sounds encouraging to reduce the total losses of the transmission system by reducing stray losses of the transformers. Also, the proposed method proves cost-effectiveness in comparison to conventional mild steel structure design. At the same time, it offers low partial discharges compared to conventional mild steel and yoke shunt arrangement.

(A)

(B)

Figure 11. Photographs of the transformer active part after full scale dynamic short circuit test

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