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upper chord were removed and the assembly was moved 3 mm. After welding the upper ortho plate, the same procedure is repeated for the lower ortho plate.

4. QUALITY ASSURANCE

Geometrical deviations are measured during fabrication and erection. Figs.4a and 4b show deviations of longitudinal stiffeners and transversal beams in the upper orthotropic plate for assembly No 38 during pre-erection.

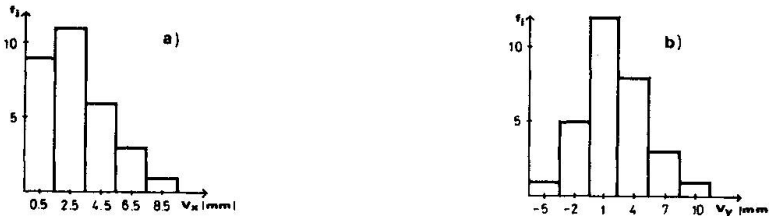


Fig.4 Deviations of transversal beams and longitudinal stiffeners

Quality assurance was done in all stages of construction for welding in installation of high strength bolts, etc. Special attention was paid to non-destructive determination of mechanical properties of welded joints by measuring their hardness. Fig.5 and 6 present the results of hardness of shop and site welds.

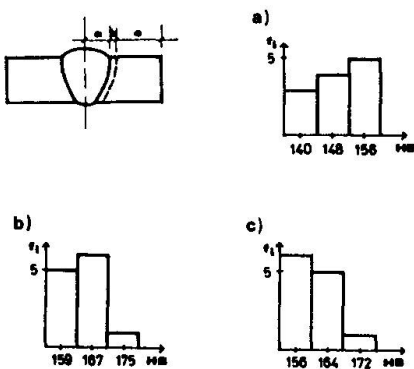


Fig.5 Shop weld

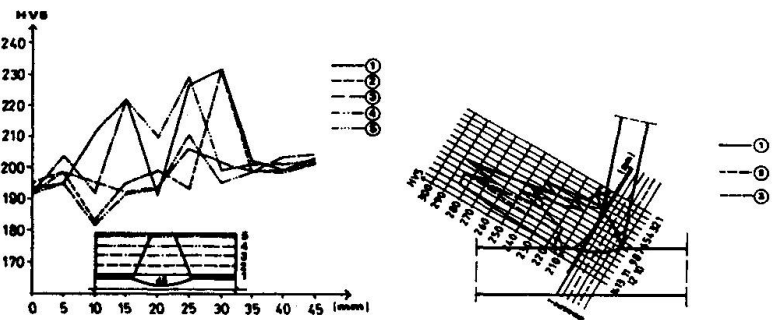


Fig.6 Site welds

The arrangement of hardness intensities are important for the assessment of the welds mechanical properties.

5. FATIGUE ASSESSMENT

Fatigue in an orthotropic plate is analyzed by estimation of traffic, by selecting details of higher fatigue strength and by assessing the location of longitudinal rib splice. Average daily passage of equivalent vehicles is $n=1200$.

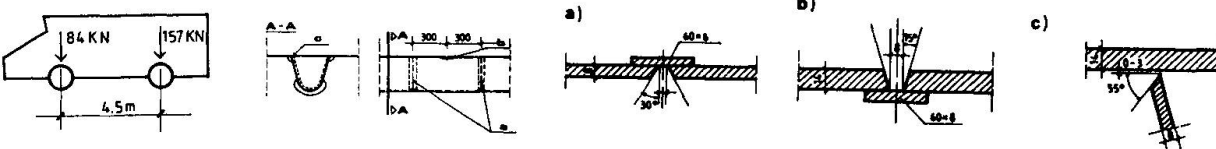


Fig.7 Fatigue assessment

6. CONCLUSION

Bearing in mind the interdependence of design, fabrication and erection of the presented orthotropic plate, together with adequate quality assurance, an effective interaction of design and construction technology has been achieved.