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Advanced Joining 2 - Mechanical-/welded connections -- Pull-Over of Washer-Head Screws in Moderately Thin Aluminum -- Experimental Research on pinned Connections in Aluminium Truss Girders -- Finite Element Analysis of Friction Stir Welding Affected by Heat Conduction through the Welding Jig -- Estimation of Transient Temperature Distribution in Friction Welding Process of Aluminum Alloys -- Architecture -- Architecture 1 -- The CAD-tool 2.0 morphological Scheme of non-orthogonal High-rises -- Aluminium and Double Skin Facades -- Effective Section Calculating of Aluminium Plate Assembly under uniform Compression considering Interactive Local Buckling -- Experimental and numerical Analyses of Aluminium Frames exposed to Fire Conditions -- Architecture 2 -- The Sound of Silence, Aluminium Noise-reducing Devices, a revolutionary high-tech Solution along the A2 near Eindhoven (Holland).

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Sommario/riassunto

The Proceedings of the 2010 INALCO conference New Frontiers in Light Metals is the eleventh in a series of INALCO conferences, held every three years since 1979. For the first time, the scope of the conference has been extended to include magnesium technology. The presentations emphasize the many challenges facing the light metals industry today as well as the innovative and creative solutions developed by industry and research institutes as they strive to remain competitive in an increasingly global light metals market. The keynote and invited lectures and conference papers, presented during two plenary sessions and twelve parallel sessions, cover the following areas: advanced joining, materials technology, surface, architecture, structural design and transport and automotive. The Proceedings are a timely document of the current state of light metals technology for structural applications. This book includes a CD with a PDF of the proceedings.

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