

Kommission XII Documents 2004

Number	Title	Country	IIW Number
XIIA – Metallurgy and Filler Metals			
XII-1818-04	State-of-the-art welding consumables for offshore structures	JAPAN	
XIIB – Arc welding Processes			
XII-1798-04	Contributions to the classification of the metal transfer in arc welding	ROMANIA	
XII-1808-04	Enhanced prospects for tandem-MIG/MAG welding	SWEDEN	
XII-1811-04	Development of narrow gap tandem GMAW process	JAPAN	
XII-1817-04	Development of welding technology scene in the postage stamps	JAPAN	
XII-1820-04	Hybrid laser-MAG welding of galvanized steel sheets	JAPAN	
XII-1822-04	Fillet welding process with high frequency oscillation arc in MAG welding	JAPAN	
XII-1829-04	Study on arc-ultrasonic TIG Ti alloy	P.R. CHINA	
XII-1830-04	Investigation on activated fluxes plasma arc welding of stainless steel	P.R. CHINA	
XII-1833-04	Real-time vision based control of weld pool size	UK	
XII-1834-04	Welding Processes for New Materials	UKRAINE	
XIIC – Production Systems			
XII-1810-04	Development of ultra-narrow gap hot wire GTA welding process	JAPAN	
XII-1812-04	Development of laser-arc hybrid welding process for power-generation components	JAPAN	
XII-1814-04	Development of GTAW robot system for aluminium frame	JAPAN	
XII-1815-04	Control of back bead by visual robot in V-groove welding without backing plate	JAPAN	
XII-1819-04	Development of the two-joint synchronized robotic arc welding system for architectural steel structure box columns	JAPAN	
XII-1828-04	A PC based solution for integrated robot welding cell control	AUSTRALIA	
XII-1832-04	Innovative welding strategies for the manufacture of large aircraft	GERMANY	
XIID – Environmental, Health and safety			
XII-1799-04	Energy efficiency in welding process	SWEDEN	SC-ENV-47-04
XII-1807-04	Electromagnetic fields and welding	SWEDEN	
XIIE – Quality Assurance in Arc Welding			
XII-1805-04	Application of signature image monitoring for improved reliability in welding processes	AUSTRALIA	
XII-1806-04	A review of welding applications based on soft computing methods	SLOVENIA	

XII-1813-04	Development of welder's training support system with visual sensors	JAPAN	
XII-1816-04	Study on the temperature distribution in the thick plate fillet welding based on the heat conduction theory	JAPAN	
XII-1831-04	Using space technic solution to design intelligent visual systems of industrial robots	POLAND	

Joint Workshop – Improving Productivity and Reliability in Welding Processes

XII-1823-04	Trend and perspective on welding consumables in Japan	JAPAN	
XII-1824-04	Trend and perspective of welding power source in Japan	JAPAN	
XII-1825-04	Trend and perspective of sensing and monitoring systems	JAPAN	
XII-1826-04	Trend and perspective of CAD/CAM and systematization technology	JAPAN	
XII-1827-04	Trend and perspective in "Increasing efficiency of welding processes"	JAPAN	
III-1290-04	Properties of Low Carbon Steel Joint by Low Heat Input Friction welding Method	JAPAN	
III-1291-04	New High-Productivity welding Techniques for Advanced Automobile Structures	USA	
III-1293-04	FSW Process Variants and Mechanical Properties	UK	
III-1294-04	Fast Ultrasonic Evaluation of Spot Welds with Line Probe	JAPAN	
IV-861-04	Improvement of Productivity and Reliability in Heavy Industry by Laser welding Process	JAPAN	
IV-862-04	Reduced Pressure Electron Beam welding for High Productivity in Thick section Materials	UK	
IV-871-04	Laser Technology for New Materials - Application Highlights	GERMANY	

Joint Workshop – Mechanism of the A-TIG Process and its Application in Industry

XII-1796-04	Application of GTA welding with activating flux to nuclear power plant	JAPAN	SG-212-1058-04
XII-1797-04	Effect of activate flux on anode reaction	JAPAN	SG-212-1059-04
XII-1800-04	Insulation effects of flux layer in producing greater weld depth	AUSTRALIA	SG-212-1053-04
XII-1801-04	Effects of welding parameters on the weld shape in Ar-O ₂ and Ar-CO ₂ shielded GTA welding	JAPAN	SG-212-1054-04
XII-1802-04	Basic understanding of A-TIG welding process	JAPAN	SG-212-1055-04
XII-1803-04	Application of A-TIG process to repair welding in power plants	JAPAN	SG-212-1056-04
XII-1804-04	Enhancing GTAW performance through flux coatings. Theoretical background and industrial applications	FRANCE	SG-212-1057-04
XII-1809-04	Optimisation of flux coatings on ATIG welding performance; case study of silica on stainless steels	JAPAN	SG-212-1066-04

XII - Intermediate Meeting in Cambridge February 2004			
XII-1784-04	Advanced manufacturing using low stress no distortion (LSND) techniques	UK	
XII-1785-04	All-positional welding of large steel fabrications using autonomous robots	UK	
XII-1786-04	Recent developments in high productivity pipeline welding	UK	
XII-1787-04	The possibilities of using space technology in welding	POLAND	
XII-1788-04	Recent developments in thermal spraying	UK	
XII-1789-04	Welding Research at Cranfield University	UK	
XII-1790-04	Advances in sensor technology for controlling arc welding processes	UK	
XII-1791-04	Development of laser-arc hybrid welding robot system	JAPAN	
XII-1792-04	Development of hybrid laser/MAG welding of structural steel components with high power, fibre delivered Nd:YAG lasers	UK	
XII-1793-04	Effect of power source characteristics on CO2 short circuiting arc welding	JAPAN	
XII-1794-04	Real-time control of GMA girth welding based on image processing of molten pool	JAPAN	
XII-1795-04	Electrical characterization of atmospheric pressure arc plasmas	UK	