

# Weldasearch®

## FILE DESCRIPTION

Weldasearch® is a database of short abstracts of articles on welding, joining, and allied technologies. The database aims to be a comprehensive record of appropriate worldwide literature published since 1966. Every aspect of welding and allied processes is covered including design, materials science, fatigue and fracture mechanics, equipment for joining and cutting processes, corrosion, surfacing, microjoining, metallurgy and materials science, quality control, inspection, non-destructive testing, health and safety, commercial applications, market statistics, and news of the industry.

Weldasearch® has comprehensive coverage of all key industry sectors including aerospace, automotive, electronics, shipbuilding, fabrication of bridges, pipelines, offshore structures and pressure vessels, fabrication of power generation, nuclear and process plant, robotics and automation, repair and maintenance. Processes of welding, brazing and soldering, microjoining, diffusion bonding, thermal cutting, surfacing and hardfacing, thermal spraying are covered.

For indexing the database uses Descriptors which are taken from the International Welding Thesaurus.

## SUBJECT COVERAGE

- Brazing and Corrosion
- Commercial applications of welding and allied processes
- Diffusion bonding
- Equipment for joining and cutting processes
- Fatigue and fracture mechanics
- Hardfacing and Microjoining
- Market statistics
- News of the welding industry
- Non-destructive testing
- Quality control
- Safety and health
- Soldering and Surfacing
- Thermal cutting
- Thermal spraying
- Welding

## SOURCES

Chief literature sources for Weldasearch® are journals, conference proceedings, patents, standards, books, reports, theses (dissertations). Patents currently covered are European, British, US, and PCT World Patent Applications.

## TIPS

### USE FILE 25

to find the global literature on the welding and allied processes.

Consider British spelling variation.

### USE /CO OR CO=

to search for company names:

S CO=META TECHNOLOGY

### USE DESCRIPTORS

to check and select the thesaurus terms:

S LIGHT METALS/DE

### USE RANK

to find additional descriptors:

SELECT INDUSTRIAL GASES  
RANK DE

### USE /ENG LIMIT

to limit a search to articles in English:

SELECT S3/ENG

## DIALOG FILE DATA

Inclusive Dates: 1966 to the present

Update Frequency: Monthly

File Size: 180,531 records as of November 2003

## CONTACT

Weldasearch is produced by TWI. Questions concerning database content should be directed to:

TWI

Peter Adams

Granta Park

Great Abington, Cambridge CB1 6AL

United Kingdom

Phone: +44 0 1223 891162 ext. 2380

Fax: +44 0 1223 892588

E-Mail: weldasearch@twi.co.uk

## SAMPLE RECORD

DIALOG(R)File 25: Weldasearch 1966 - 2001/Dec  
TWI. All rts. reserv.

**AA=** 00221071 200614  
**/TI** Five-fold branched Si [silicon] particles in laser clad AlSi [aluminium alloy] functionally graded materials.  
**AU=** PEI Y T; HOSSON J T M de  
**CS=** UNIVERSITY OF GRONINGEN  
**JN=,SO=** Acta Materialia, vol.49, no.4. 23 Feb.2001. pp.561-571. 9 fig., 2 tab., 19 ref.  
**PD=,DT=** ACTA MATERIALIA  
**LA=,RT=** PUBLICATION DATE: 20010000 DOCUMENT TYPE: Journal  
LANGUAGE: English RECORD TYPE: Abstract

**/AB** The results of microstructural investigations on the five-fold twinning and growth features of large Si particles, in Al-40%Si functionally graded materials produced by a Nd:YAG laser surfacing process on cast Al alloy substrate (Al, 6.3%Si, 4%Cu), are presented. They were obtained from orientation imaging microscopy, TEM and SEM. A model of the groove nucleation followed by the flow of the growth steps over the five ridges for the rapid elongation of the five-fold Si particles is presented. [See also Weldasearch 196829]

**FS=** FILE SEGMENT: Technical  
**TC=** TREATMENT CODE: Experimental  
**CN=** COUNTRY: NETHERLANDS  
**AV=** TWI AVAILABILITY: Yes  
**XR=** CROSS REFERENCES: 196829  
**/DE** DESCRIPTORS: ALUMINIUM ALLOYS; CASTINGS; LASER SURFACING; DEPOSITED METAL; MICROSTRUCTURE; PARTICLES; REFERENCE LISTS; SILICON; LIGHT METALS; SURFACING; CRYSTAL STRUCTURE

**/ID** IDENTIFIERS: GRADED MATERIALS  
**/SH,SH=** SECTION HEADING: WELDABILITY AND METALLURGY; ENERGY BEAM PROCESSES; SURFACING

DIALOG(R)File 25: Weldasearch 1966 - 2001/Dec  
TWI. All rts. reserv.

**AA=** 00221468 201011  
**/TI** Air Liquide will run newly acquired gas firm as Air Liquide Austria GmbH (Air Liquide wird neu ubernommene Gasefirma als Air Liquide Austria GmbH fuhren).  
**JN=,SO=** SCHWEISS- UND PRUFTECHNIK  
Schweiss- und Pruftechnik, no.2. 2001. p.28.  
SCHWEISS- UND PRUFTECHNIK  
**PD=,DT=** PUBLICATION DATE: 20010000 DOCUMENT TYPE: Journal  
**LA=,RT=** LANGUAGE: German RECORD TYPE: Abstract

**/AB** The international group Air Liquide has taken over the Austrian interests of the AGA company (including air separation and acetylene plants) from the German firm Linde AG, and will operate them under the name Air Liquide Austria GmbH. The share structure, customer and staff numbers, CEO, value and products of the new operation are noted.

**FS=** FILE SEGMENT: Business  
**TC=** TREATMENT CODE: News items  
**AV=** TWI AVAILABILITY: Yes  
**CO=** COMPANY NAMES: AIR LIQUIDE AUSTRIA GMBH  
**/DE** DESCRIPTORS: MERGERS AND ACQUISITIONS; AUSTRIA; INDUSTRIAL GASES; COMPANIES; GASES

**/SH,SH=** SECTION HEADING: WELDING INDUSTRY

## SEARCH OPTIONS

## BASIC INDEX

SEARCH SUFFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
—	—	All Basic Index Fields	Word	S GRADE(W)MATERIAL?
/AB	AB	Abstract	Word	S LASER(W)SURFACING/AB
/CO	CO	Company Name <sup>3</sup>	Word	S AIR(W)LIQUIDE(W)GROUP/CO
/DE	DE	Descriptor <sup>1</sup>	Word & Phrase	S CRYSTAL(W)STRUCTURE/DE S ALUMINIUM ALLOYS/DE
/ID	ID	Identifier <sup>2</sup>	Word & Phrase	S GRADED(W)MATERIAL?/ID S GRADED MATERIALS/ID
/NT	NT	Note	Word	S RESEARCH(W)REPORTS/NT
/SH	SH	Section Headings <sup>3</sup>	Word	S ENERGY(W)BEAM(W)PROCESS?/SH
/TI	TI	Title	Word	S SILICON(W)PARTICLES/TI

<sup>1</sup> Also /DF.<sup>3</sup> Searchable in the Basic Index and in the Additional Indexes.<sup>2</sup> Also /IF.

## ADDITIONAL INDEXES

SEARCH PREFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
AA=	AA	IP Accession Number	Phrase	S AA=200614
AD=	AD	Patent Application Date	Phrase	S AD=19990517
AD=	AD	Patent Priority Application Date	Phrase	S AD=19990511
AN=	AN	Patent Priority Application Number	Phrase	S AN=BE 827245
AU=	AU	Author	Phrase	S AU=PEI Y T
AV=	AV	Availability (of photocopy) <sup>4</sup>	Phrase	S AV=YES
—	AZ	DIALOG Accession Number		
BN=	BN	International Standard Book Number (ISBN)	Phrase	S BN=0-02-949350-1 S BN=0029493501
CN=	CN	Country <sup>5</sup>	Phrase	S CN=NETHERLANDS
CO=	CO	Company Name <sup>3</sup>	Phrase	S CO=META TECHNOLOGY
CS=	CS	Corporate Source	Word & Phrase	S CS=(UNIVERSITY(1W)GRONINGEN) S CS=UNIVERSITY OF GRONINGEN
DT=	DT	Document Type	Phrase	S DT=JOURNAL
FS=	FS	File Segment	Phrase	S FS=TECHNICAL
JN=	JN	Journal Name	Phrase	S JN=ACTA MATERIALIA
LA=	LA	Language	Phrase	S LA=ENGLISH
PA=	PA	Patent Assignee	Phrase	S PA=ACCESS PLANT?
PC=	PC	Patent Country	Phrase	S PC=EP
PD=	PD	Publication Date <sup>6</sup>	Phrase	S PD=2001?
PN=	PN	Patent Number	Phrase	S PN=EP 167689
PY=	PY	Publication Year	Phrase	S PY=2001
RT=	RT	Record Type	Phrase	S RT=ABSTRACT
SH=	SH	Section Headings <sup>3</sup>	Phrase	S SH=WELDING INDUSTRY
SO=	SO	Source Information <sup>7</sup>	Word	S SO=(ACTA(W)MATERIALIA AND VOL(W)49)
TC=	TC	Treatment Code	Phrase	S TC=EXPERIMENTAL
UD=	—	Update	Phrase	S UD=9999
XR=	XR	Cross-reference <sup>8</sup>	Phrase	S XR=196829

<sup>4</sup> To obtain a photocopy of an article use contact information on the first page or e-mail address library@twi.co.uk<sup>7</sup> Search and Display depend on a document type.<sup>5</sup> Data in the Country field corresponds to the data in the Corporate Source field and designates the country where the work was done.<sup>8</sup> Data corresponds with the data in the AA= field. To see the referenced record select the cross-reference number in AA= field.<sup>6</sup> Use format PD=YYYY? where YYYY is the year for the best retrieval.

**SPECIAL FEATURES**

For command descriptions, enter HELP LIMIT, HELP SORT, HELP RANK, HELP MAP, HELP DUP, HELP CURRENT online.

<b>LIMIT</b>	/ABS -- Abstract Present /ENG -- English Language /NOABS -- No Abstracts Present /NONENG -- Non-English Language /YYYY -- Publication Year	S S1/ABS S S2/ENG S S5/NOABS S S4/NONENG S S9/2001
<b>SORT</b>	AU, CS, JN, PD, PN, PY, TI	SORT S3/ALL/JN SORT S5/ALL/PY/D
<b>RANK</b>	All phrase- and numeric-indexed fields in the Additional Indexes can be ranked. Other RANK codes include: DE, ID	RANK DE RANK AU S4
<b>MAP</b>	PN	MAP PN TEMP S1
<b>RD, ID</b>	Remove duplicates (RD) or identify duplicates (ID,IDO).	RD S5
<b>CURRENT</b>	Search only the most recent year plus one (CURRENT1) to five (CURRENT5) years.	B 25 CURRENT2

**PREDEFINED FORMAT OPTIONS**

NO.	DIALOGWEB FORMAT	RECORD CONTENT
1	--	DIALOG Accession Number
2	--	Full Record except Abstract
3	Medium	Bibliographic Citation
4	--	Full Record with Tagged Fields
5	--	Full Record
6	Short	Title and Publication Year
7	Long	Full Record except Indexing
8	Free	Title, Indexing, and Publication Year
9	Full	Full Record
K	--	KWIC (Key Word In Context) displays a window of text; may be used alone or with other formats

**OTHER OUTPUT OPTIONS**

For an explanation, enter HELP TYPE, HELP UDF, HELP TAG online.

<b>USER DEFINED FORMATS</b>	Display codes listed in the Search Options tables can be used to customize output.	TYPE S3/AU,TI,SO/1-5 PRINT S2/TI, CS, PY/ALL
<b>TAG</b>	Output can be displayed with tags identifying each display field.	TYPE S3/3/1-5 TAG PRINT S2/9/ALL TAG
<b>DIRECT RECORD ACCESS</b>	If the accession number of a specific record is known, it can be used to display the record directly.	TYPE 221795/5 DISPLAY 220326/AU,TI PRINT 220796/9

**FOR ONLINE HELP:**

See HELP FIELDS 25 for searchable fields; HELP FORMAT 25 for output formats; HELP LIMIT 25 for limits; HELP RATES 25 for cost information; HELP SORT 25 for sorts.