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STN Database Summary Sheet

TEMA (Technology and Management) is a bilingual bibliographic database containing citations from German and international literature in the areas of technology and management. TEMA contains information on R&D, innovations, new products and procedures, as well as developments in business enterprises. Information on technologies that affect each other mutually is also included. Since 1999, Internet addresses of publishers and full text are included, if available.

Records contain bibliographic data, abstracts, and indexing.

TEMA is not accessible to users in Austria, Germany, and Switzerland.

Subject Coverage

- Aerospace
- Automotive Research
- Ceramics and Plastics
- Civil Engineering
- Electrical Engineering and Electronics
- Energy
- Information Technology
- Instrumentation
- Machinery and Plants
- Management and Organization
- Manufacturing
- Materials, Metals, Paints
- Mechanical Engineering
- Medical Engineering
- Mining
- Textile Engineering
- Transportation

Sources

- Reports
- Conferences
- Journals
- Dissertations
- Patents
- Standards
- Translations
- Books

File Data

- 1990 to the present
- More than 1,481,450 records (5/03)
- Updated weekly
- Automatic current-awareness searches (SDIs) are run weekly

User Aids

- Fachordnung Technik (1997), German (available from the producer)
- Thesaurus Technik und Management (Edition 2000), German/English (available from the producer)
- Online Helps (HELP DIRECTORY lists all help messages available)
- STNGUIDE

Database Producer

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TEMA**Search and Display Field Codes**

The field that allows left truncation (/BI) is marked with an asterisk (*).

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index* (contains single words from abstract (AB), controlled term (CT), title (TI), and uncontrolled term (UT) fields) (1)	None (or /BI)	S ORGANISATIONSSTRUKTUREN (L) AUFTRAG? S MAPPING ALGORITHM## S SAFETY REGULATIONS S ?FILTRATION?	AB, CT, TI, UT
Accession Number	/AN	S 20030100009/AN S C90000005UDK/AN	AN
Author	/AU	S MAN C H/AU S HELLER, J?/AU	AU
Controlled Term	/CT	S SAFETY-REGULATIONS/CT	CT
Controlled Word	/CW	S (CIRCULAR (S) KNIT?)/CW	CT
Corporate Source (2)	/CS	S MAN DIESEL AUGSBURG/CS	CS
Document Type (code and text)	/DT	S BOOK/DT	DT
Entry Date (3)	(or /TC) /ED	S B/DT S L1 AND ED>=20030200	ED
International Standard (Document) Number (contains ISSN and ISBN)	(or /UP) /ISN	S 3-00-000421-1/ISN S 1090-8471/ISN	ISN, SO
Journal Title (contains full and abbreviated journal titles)	/JT	S J OF ADHES/JT S JOURNAL OF ADHESION/JT	JT, SO
Language (code and text)	/LA	S L1 AND FRENCH/LA S FR/LA	LA
Note	/NTE	S MERKBLATT DVS/NTE	NTE
Publication Year (3)	/PY	S 1998-1999/PY	PY, SO
Publisher (2)	/PB	S SPRINGER BERLIN/PB	PB, SO
Reference Count	/REC (or /RE.CNT)	S MAIER A/AU AND REC>10	REC, SO
Source (contains journal titles, other higher level titles, serial titles, ISSN, ISBN, publisher, URLs, publication year, collation information (volume, issue, pagination, number of figure, and number of references))	/SO	S (ROENTGENSTRAHLEN AND 2001)/SO S 1438 9029/SO S DAS ECHO/SO S IEEE/SO	SO
Supplementary Term (2)	/ST	S ANLAGENBAU/ST	ST
Title	/TI	S ROUTE PLANNING/TI	TI
Word Count, Title (3)	/WC.T	S CA/DT AND WC.T<10	WC.T

(1) In addition to right truncation, left and simultaneous left and right truncation are available in this field. At least 4 characters need to be used for the length of the stem.

(2) Search with implied (S) proximity is available in this field.

(3) Numeric search field that may be searched using numeric operators or ranges.

DISPLAY and PRINT Formats

Any combination of codes may be used to display or print answers. Multiple codes must be separated by spaces or commas, e.g., D L1 1-5 TI AU. The fields are displayed or printed in the order requested.

Hit-term highlighting is available in all fields. Highlighting must be ON during SEARCH in order to use the HIT, KWIC, and OCC formats.

Format	Content	Examples
AB (1) AN (1) AU CS CT (1) ED (UP) (1,2) DT (TC) (1) ISN (2) JTA JTF LA (1) NTE PB (2) PY (2) REC (1,2) (RE.CNT) SO ST (1) TI (1) UT (1) WC.T (1,2)	Abstract Accession Number Author Corporate Source Controlled Term Entry Date Document Type International Standard (Document) Number (ISBN, ISSN) Journal Title, Abbreviated Journal Title, Full Language Note Publisher Publication Year Reference Count Source Supplementary Term Title Uncontrolled Term Word Count, Title	D AB D AN D AU D CS D CT D ED D DT D ISN D JTA D JTF D LA D NTE D PB D PY D REC D SO D ST D TI 1-10 D UT D WC.T
ABS (1) ALL BIB (STD) DALL JT IALL IBIB IND (1) SCAN (1,3) TRIAL (1) (TRI, SAMPLE, SAM, FREE)	AN, AB AN, TI, AU, CS, SO, DT, LA, NTE, AB, CT, ST, UT AN, TI, AU, CS, SO, DT, LA, NTE (BIB is default) ALL, delimited for post-processing JTA, JTF ALL, indented with text labels BIB, indented with text labels AN, CT, ST, UT TI, CT (random display without answer numbers) AN, TI, CT	D ABS D 1-3 ALL D 8 BIB D DALL D JT D IALL 2 4 D IBIB D IND 1, 3-5 D SCAN D TRIAL TOTAL
HIT KWIC OCC (1)	Fields containing hit terms Hit terms with 20 words on either side (KeyWord-In-Context) Number of occurrences of hit terms and fields in which they occur	D HIT D KWIC D OCC

(1) No online display fee for this format.

(2) Custom display only.

(3) SCAN must be specified on the command line, e.g., D SCAN or DISPLAY SCAN.

TEMA**SELECT, ANALYZE, and SORT Fields**

The SELECT command is used to create E-numbers containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y (2)	N
Accession Number	AN	Y	N
Author	AU	Y	Y
Citation	CIT	Y (3,4)	N
Controlled Term	CT	Y (4)	N
Corporate Source	CS	Y	Y
Document Type	DT	Y	Y
Entry Date	ED	Y	Y
International Standard (Book) Number	ISBN	N	Y
International Standard (Document) Number	ISN	Y (5)	Y
Journal Title, Abbreviated	JTA	Y (6)	Y
Journal Title, Full	JTF	Y (6)	Y
Journal Titles, Abbreviated and Full	JT	Y	Y
Language	LA	Y	Y
Note	NTE	Y	Y
Occurrence Count of Hit Terms	OCC	N	Y
Publisher	PB	Y	Y
Publication Year	PY	Y	Y
Reference Count	REC	Y	Y
Source	RE.CNT	Y (7)	Y
Supplementary Term	SO	Y (8)	Y
Title	ST	Y	Y
Treatment Code	TI	Y (default)	Y
Update Date	TC	Y (9)	N
Uncontrolled Term	UP	Y (10)	Y
Word Count Title	UT	Y (2,4)	Y
	WC.T	Y	Y

- (1) Hit may be used to restrict extracted terms to terms that match the search expression used to create the answer set, e.g., SEL HIT TI.
- (2) Appends /BI to the terms created by SELECT.
- (3) Extracts first author, publication year, volume, and first page with a truncation symbol appended and with /RE appended to the terms created by SELECT.
- (4) SELECT HIT or ANALYZE HIT are not valid with this field.
- (5) Selects or analyzes the ISBN and ISSN and appends /ISN to the terms created by SELECT.
- (6) Appends /JT to the terms created by SELECT.
- (7) Appends /REC to the terms created by SELECT.
- (8) Selects or analyzes the ISBN and ISSN and appends /SO to the terms created by SELECT.
- (9) Appends /DT to the terms created by SELECT.
- (10) Appends /ED to the terms created by SELECT.

Sample Record

DISPLAY IALL

ACCESSION NUMBER: 20030108680 TEMA
TITLE: An integrated CAPP/CAM system for stamping die pattern machining
AUTHOR: Shin Hayong; Olling, G.J.; Chung, Y.C.; Kim, B.H.; Cho, S.K.
CORPORATE SOURCE: Dept. of Ind. Engng., Korea Adv. Inst. of Sci. & Technol., Daejeon, ROK
SOURCE: Computer Aided Design, 2003, v. 35 (2), p203-213, 11pp,15ref.ISSN: 0010-4485
DOCUMENT TYPE: Journal
LANGUAGE: English
ABSTRACT: Since the early 1980s, CAPP has been expected to bridge the gap between CAD and CAM. Though numerous research works on CAPP have been reported, it is not easy to find a commercial CAPP system applicable to complicated objects with freeform shapes such as mold and die. The dependency on the CAM system is holding one leg of CAPP, while the complexity of the solution space in freeform shape machining has a tight grip on the other. This paper exemplifies that these obstacles on the CAPP bridge can be overcome by the integration with CAM and by focusing on a specific application area. Major components of a stamping die for the car body panel are manufactured by machining the raw stock castings, which are usually made by the lost foam casting process. The die pattern is the lost foam pattern made of Styrofoam for the raw stock casting. The industry trend is to build die patterns by CNC machining. In this paper, a highly specialized CAPP/CAM integrated system, called Generative Pattern Machining (GPM), for automatic tool path generation to cut the die pattern from the CAD model of the stamping die is described. The overall structure and the detailed steps of GPM are explained. GPM is being used by DaimlerChrysler pattern shop very successfully.

CONTROLLED TERM: AUTOMOTIVE-INDUSTRY; CAE:COMPUTER-AIDED-ENGINEERING; CASTING; COMPUTER-AIDED-PRODUCTION-PLANNING; ENGINEERING-DRAWINGS; MACHINE-TOOLS; PUNCHING:STAMPING; COMPUTER-AIDED-DESIGN

SUPPLEMENTARY TERM: Automobilindustrie, Rechnerunterstuetztes Engineering
UNCONTROLLED TERM: CNC-BEARBEITUNG

