

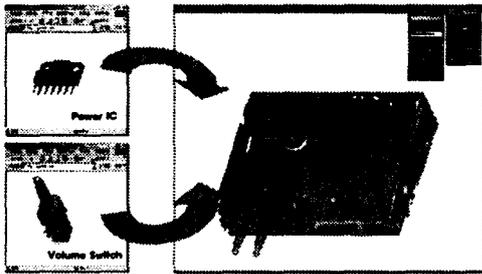
매크로 파라메트릭 방법을 이용한 DEX (Data Exchange Center)의 구축

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- 매크로 파라메트릭
- DEX(Data Exchange Center)의 구축
- 결론

편집 설계



모형 다운로드

부품을 원하는 위치에 삽입

DEX (Data Exchange Center)

What is DEX?

- ✓ Data Exchange Center
- ✓ Design Exchange Center (?)
- ✓ Translation of CAD files from one CAD/CAM system file format to another
- ✓ Repair and Healing

기존의 DEX

- ✓ Theorem의 Cadverter.com
- ✓ ITI의 DEXcenter.com
- ✓ TTI의 translationtech.com

매크로 파라메트릭의 아이디어

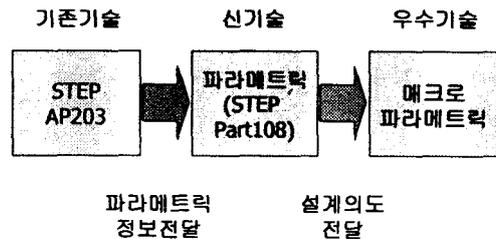
Transaction log 파일을 이용한 데이터베이스 복구
에서 힌트

- ✓ SQL (structured query language)
- ✓ MQL (modeling query language)

명령어의 이력을 갖고 있는 매크로 파일을 이용한 설
계 의도의 전달

- ✓ Macro file: History of user commands

기술의 우수성



파라메트릭 기술

Constraint based Parametric (Explicit)

- ✓ STEP Part108: Parameterization and constraints for explicit product model

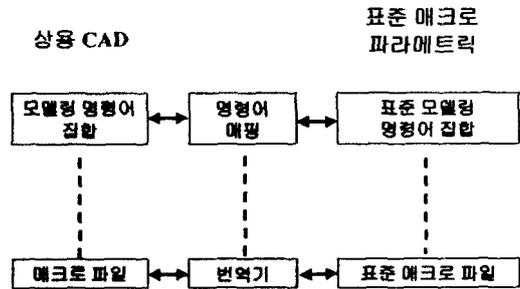
History based Parametric

- ✓ SMCII (Solid Model Construction [history])
- ✓ Macro Parametrics

PartDB.com



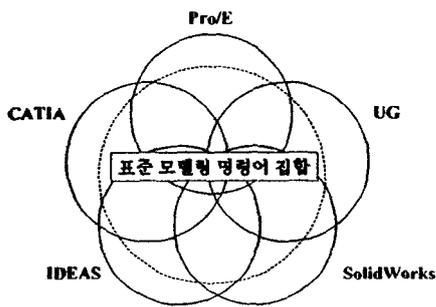
매크로 파라메트릭의 구조



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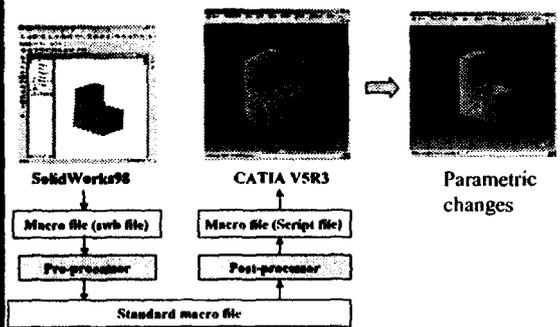
표준 모델링 명령어 집합



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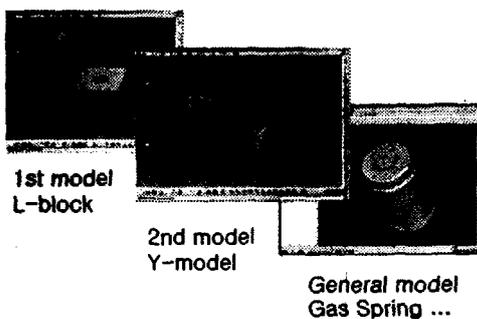
매크로 파라메트릭 변환기



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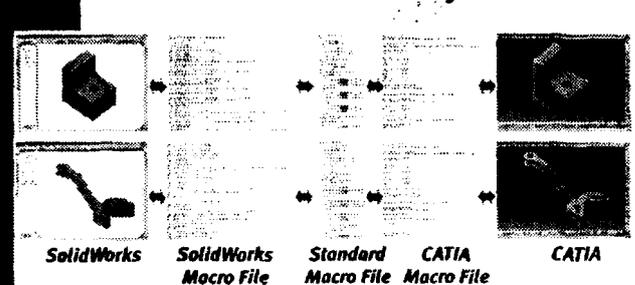
실험 모델



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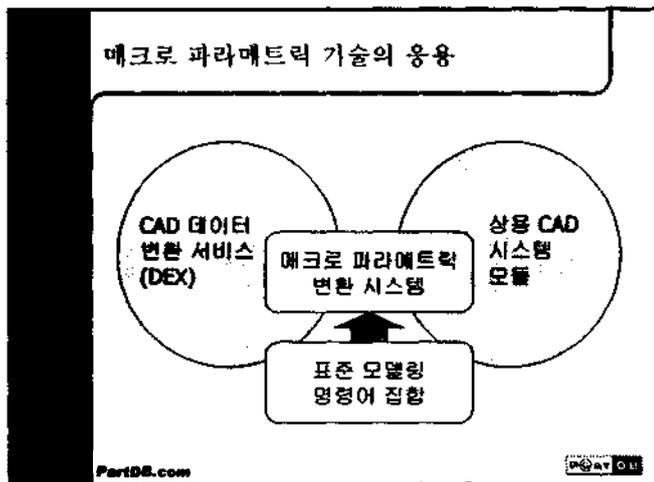
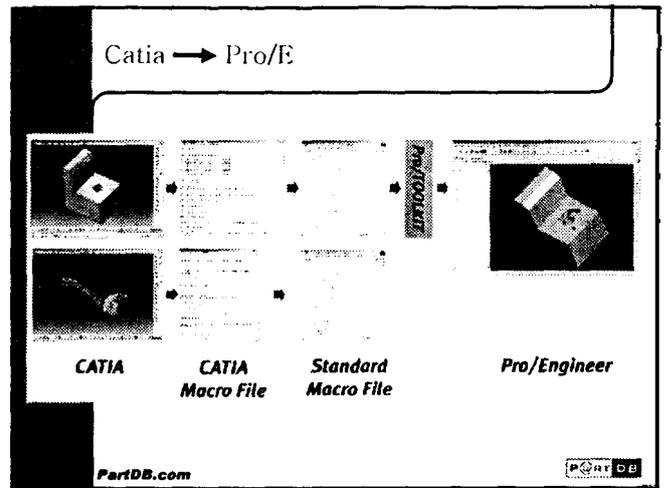
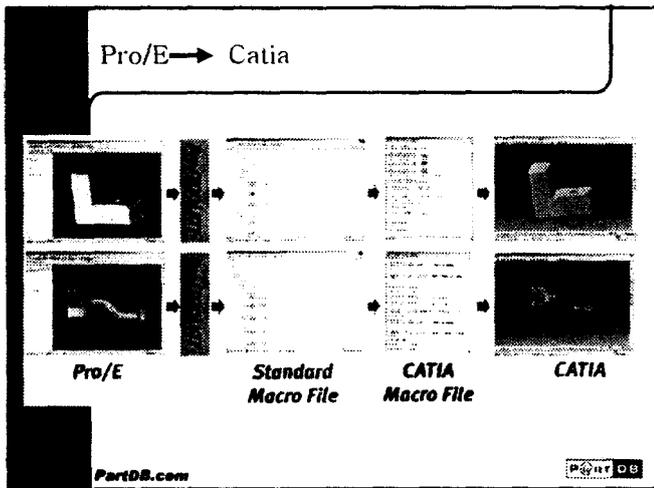


SolidWorks ↔ Catia



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Theorem Cadverter

[cadverter.com](http://www.cadverter.com)

- ✓ <http://www.cadverter.com>
- ✓ Data Conversion
- ✓ Data Analysis
- ✓ Data Repair

Supported Systems

- ✓ STEP Certified

Price

- ✓ Minimum \$50 to convert, increasing on size or complexity
- ✓ the standard analysis is charged at \$150
- ✓ the minimum charge being \$150, charged on a Time and Materials basis

Product READWRITE Capability

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ITI DEXcenter

DEX CENTER.COM

- ✓ <http://www.dexcenter.com>
- ✓ CAD File Translation, Repair and Healing

Supported Systems

- ✓ I-DEAS Version 7 and 8
- ✓ Unigraphics Version 15 and 16
- ✓ Pro/ENGINEER Version 20, 2000i, 2000i2
- ✓ CATIA Version 4.22
- ✓ IGES, STEP, STL

Price

- ✓ 15 to 30 min : \$175 with up to two hours of repair by an ITI Application Engineer

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TTI (Translation Tech., Inc.)

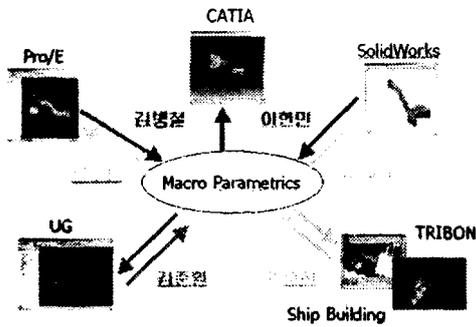
- ✓ <http://www.translationtech.com>
- ✓ Typical part (100 features) files are processed for \$140.00 in single quantities.

Acc-U-Trans Interoperability Engine

Unigraphics Pro/Engineer I-DEAS CATIA

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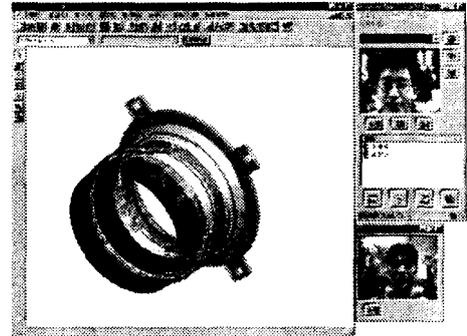
PartDB DEX



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협력 설계



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매크로 파라메트릭 개발 일정

세부내용	2000		2001				2002				
	3/4	4/4	1/4	2/4	3/4	4/4	1/4	2/4	3/4	4/4	
개발 마무 (2000/07/24)											
최종 사양을 포함한 최종 WDO 개발 (10/7)											
WDO 개발 (344 Commands)											
WDF 개발 (161 Commands)											
WED version 1 (185 Commands)											
학술회의 Intensive Implementation Future STEP Meeting (OEMO)											
Pro/E/CATIA, CATIA2/Pro/E SolidWorks/CATIA, CATIA2/SolidWorks Pro/E2/SolidWorks UG, 유진											

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결론

세계 최초의 매크로 파라메트릭 번역기술 개발

국제 표준화와 동시 진행

매크로 파라메트릭을 이용한 DEX(Data Exchange Center)의 구축

- ✓ 파라메트릭 설계변경이 가능
- ✓ 설계의도를 전달
- ✓ 가격경쟁력
- ✓ 파일 사이즈가 작아 인터넷 환경에 적합

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