

Introduction to Pro/ENGINEER[®] Wildfire 2.0[™]

Louis Gary Lamit
with James Gee

De Anza College

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SDC

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Preface

Pro/ENGINEER® is one of the most widely used CAD/CAM software programs in the world today. Any aspiring engineer will benefit from the knowledge contained herein, while in school or upon graduation as a newly employed engineer.

The text involves creating a new part, an assembly, or a drawing, using a set of Pro/E commands that walk you through the process systematically. Instructors will find the text short enough for a one-term Engineering Graphics class at the university level and comprehensive enough for a full in-depth class on Pro/ENGINEER at a technical school or community college.

Projects are not included in the text to keep the length and cost to the user down. For instructors and students wanting more material, compressive supplemental lessons (Sweeps, Blends, Patterns, Shells, Sheetmetal, NC, Expert Machinist, and Surfaces) can be downloaded at www.cad-resources.com.

If you wish to contact the author concerning orders, questions, changes, additions, suggestions, comments, or to get on our email list, please send an email to one of the following:

- **CAD-Resources.com** (Louis Gary Lamit and Associates)
- Web Site: www.cad-resources.com
- Email: cad@cad-resources.com

For a small handling and shipping fee (10.00 US), a CD (with Pro/E files) is available from the author for **instructors** (not individuals) who adopt this text. The Pro/E files will open only on Academic and Commercial versions (*not SE or TE Editions*) of Pro/ENGINEER software. *CD's will only be sent to instructors at their college or school department.*

CADTRAIN's **COAch for Pro/ENGINEER** www.cadtrain.com is a computer-based training (CBT) product designed to provide a comprehensive training program for Pro/ENGINEER users in their actual CAD environment. COAch for Pro/ENGINEER®, has been referenced in the book's figures with the authorized use of illustrations. COAch is one of the best ways available for expanding your knowledge of Pro/E software. *A free sampler CD can be requested from CADTRAIN, or downloaded from their website.*

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Dedication

This book is dedicated to my first grandchild, Madison Elizabeth Champagne (MEC)

Om Mani Padme Hum

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Mr. Lamit has worked as a drafter, designer, numerical control (NC) programmer, technical illustrator, and engineer in the automotive, aircraft, and piping industries. A majority of his work experience is in the area of mechanical and piping design. He started as a drafter in Detroit (as a job shopper) in the automobile industry, doing tooling, dies, jigs and fixture layout, and detailing at Koltanbar Engineering, Tool Engineering, Time Engineering, and Premier Engineering for Chrysler, Ford, AMC, and Fisher Body. Mr. Lamit has worked at Remington Arms and Pratt & Whitney Aircraft as a designer, and at Boeing Aircraft and Kollmorgan Optics as an NC programmer and aircraft engineer. He also owns and operates his own consulting firm (CAD-Resources.com- Lamit and Associates), and has been involved with advertising, and patent illustration. He is the author of over 30 textbooks, workbooks, tutorials, and handbooks.

Mr. Lamit received a BS degree from Western Michigan University in 1970 and did Masters' work at Wayne State University and Michigan State University. He has also done graduate work at the University of California at Berkeley and holds an NC programming certificate from Boeing Aircraft.

Since leaving industry, Mr. Lamit has taught at all levels (Melby Junior High School, Warren, Mi.; Carroll County Vocational Technical School, Carrollton, Ga.; Heald Engineering College, San Francisco, Ca.; Cogswell Polytechnical College, San Francisco and Cupertino, Ca.; Mission College, Santa Clara, Ca.; Santa Rosa Junior College, Santa Rosa, Ca.; Northern Kentucky University, Highland Heights, Ky.; and De Anza College, Cupertino, Ca.). His textbooks include:

- ***Industrial Model Building***, with Engineering Model Associates, Inc. (1981),
- ***Piping Drafting and Design*** (1981),
- ***Piping Drafting and Design Workbook*** (1981),
- ***Descriptive Geometry*** (1983),
- ***Descriptive Geometry Workbook*** (1983), and
- ***Pipe Fitting and Piping Handbook*** (1984), published by Prentice-Hall.
- ***Drafting for Electronics*** (3rd edition, 1998),
- ***Drafting for Electronics Workbook*** (2nd edition 1992), and
- ***CADD*** (1987), published by Charles Merrill (Macmillan-Prentice-Hall Publishing).
- ***Technical Drawing and Design*** (1994),
- ***Technical Drawing and Design Worksheets and Problem Sheets*** (1994),
- ***Principles of Engineering Drawing*** (1994),
- ***Fundamentals of Engineering Graphics and Design*** (1997),
- ***Engineering Graphics and Design with Graphical Analysis*** (1997), and
- ***Engineering Graphics and Design Worksheets and Problem Sheets*** (1997), published by West Publishing (ITP/Delmar).

James Gee is currently a part time instructor at De Anza College in Cupertino, Ca., where he teaches Pro/ENGINEER, and Pro/MECHANICA. Mr. Gee graduated from the University of Nevada- Reno with a BSME. He has worked in the Aerospace industry for Lockheed Missiles and Space Company, Sunnyvale, Ca. and Space Systems/Loral in Palo Alto, Ca. Mr. Gee has assisted in checking and writing a number of articles and textbooks with Mr. Lamit including:

- ***Basic Pro/ENGINEER in 20 Lessons*** (1998) (Revision 18) and
- ***Basic Pro/ENGINEER (with references to PT/Modeler)*** (1999) (Revision 19 and PT/Modeler), published by PWS Publishing (ITP).
- ***Pro/ENGINEER 2000i*** (1999) (Revision 2000i), and
- ***Pro/E 2000i² (includes Pro/NC and Pro/SHEETMETAL)*** (2000) (Revision 2000i²), published by Brooks/Cole Publishing (ITP).
- ***Pro/ENGINEER Wildfire*** (2003) (Revision Wildfire) published by Brooks/Cole Publishing (ITP).

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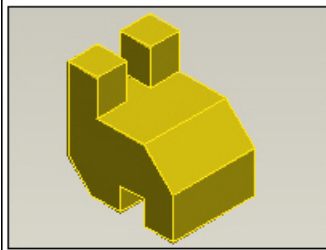
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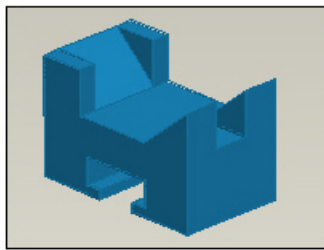
- Part, Assembly, and Drawing Projects
- Extra Lessons
- Pro/E Files
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The image is a screenshot of the CAD-Resources.com website. On the left side, there is a vertical navigation menu with the following links: [CAD-Resources.com](#), [About CAD-Resources](#), [Resources](#), [Downloads](#), [Pro/ENGINEER Wildfire book](#), [Textbooks](#), [Introduction to Pro/ENGINEER Wildfire 2.0 book](#), [Job Board](#), [ImpactXoft](#), [De Anza College](#), and [Join Email List](#). The main content area features a technical drawing of a mechanical part. At the top, there is a small detail view labeled 'DETAIL A' with a scale of 0.070. Below it, a larger section view labeled 'SECTION B-B' is shown. The drawing includes various dimensions: a total width of 120.00, a distance of 7.000 from the centerline to the edge of a hole, a hole diameter of 4.00, a distance of 125 from the centerline to the start of a fillet, a fillet radius of R60.00, a vertical distance of 45.00, a 45-degree angle, a fillet radius of R150, a distance of 4.00 from the centerline to the start of a rib, a rib width of 2.00, and a hole diameter of 2X. The website logo 'CAD-Resources.com' and the name 'Lamit and Associates' are also visible in the main content area.

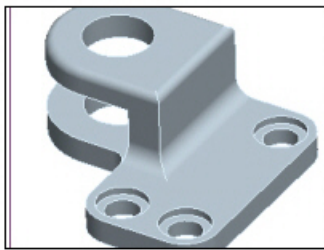
Projects from Website



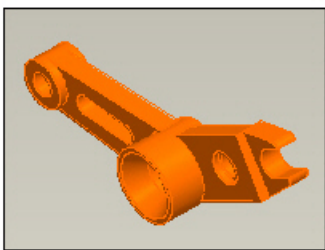
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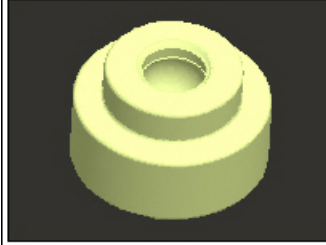
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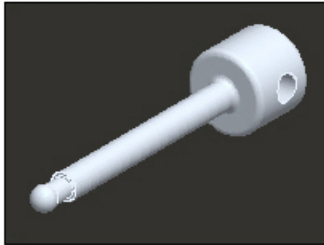
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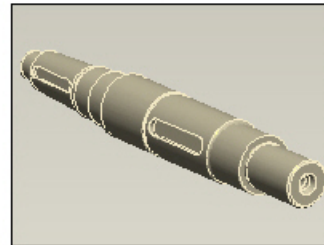
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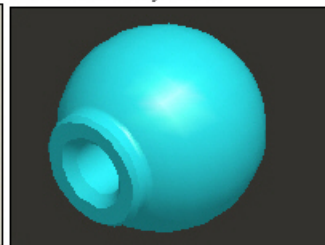
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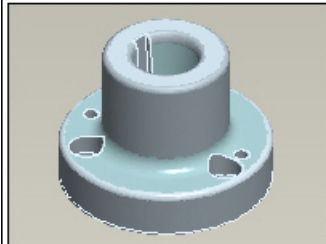
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Lesson Seven Project WF



Lesson Seven Project WF
Lesson Five WF 2.0



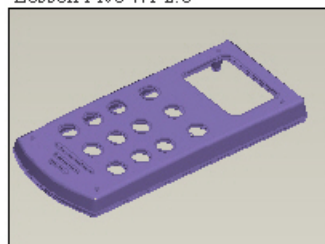
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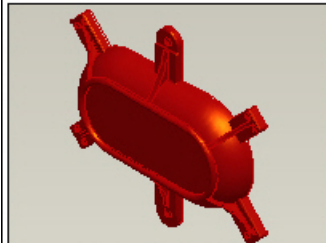
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Lesson Six WF 2



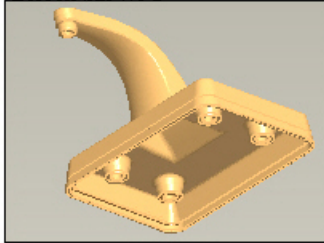
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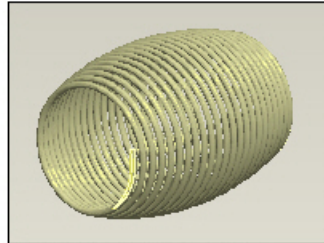
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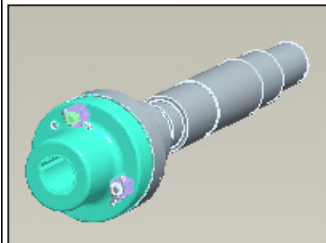
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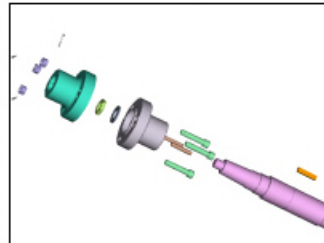
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Lesson Fourteen Project WF

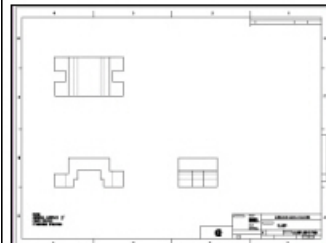


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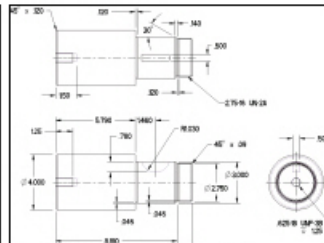


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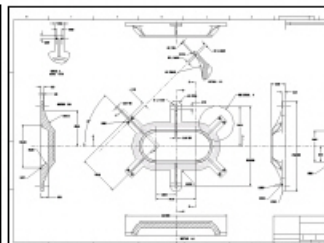
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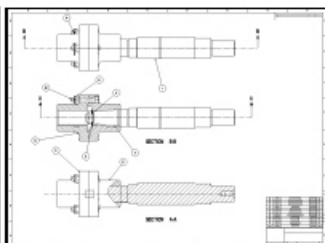
Lesson Seventeen Project WF



Lesson Eighteen Project WF



Lesson Nineteen Project WF



Lesson Twenty Project WF