

Polytec Electrofusion Training Agenda

PE Pipe Materials

- Introduction to PE compound types.
- Physical properties of PE compounds
- Material compatibility

PE Standards

- Introduction to Standards AS/NZS 4130 and AS/NZS 4129-
- Explanation of PE80 and PE100 ratings
- Test methods and requirements
- Pressure classifications and design factors

Electrofusion Processes

- Principles of electrofusion
- Fusion cycle of PE
- Heat affected zones
- Relationship of clearance/heating/cooling
- Crystal structure in welded materials
- Environmental controls
- Pipe oxidation

Control Units

- Principles of operation
- Power sources
- Manual and automatic controls
- Fitting recognition systems

Fusion Conditions

- Fitting identification
- Role of ambient temperature
- Input of fusion conditions
- PE material conditions
- Identification of critical elements

Quality Elements

- Fitting storage
- Pipe end conditioning
- Cleanliness
- Alignment
- Holding
- Controller operation
- Condition monitoring/recording

Practical Fusion

- Individual system operation
- Controller operation
- Pipe end preparation
- Alignment
- Environment control
- Fusion procedure

Quality Assurance

- Review of world specifications
- Visual evaluation
- Discussion of physical tests
- Peel testing
- Decohesion testing
- Impact testing
- Ductile/brittle behaviour
- Pressure testing
- Pipe wall thickness
- Role of QA throughout the process

Competency Evaluation

- Theory questionnaire
- Oral discussions
- Testing of samples

Course contact time 8 hours



Polytec Electrofusion

- Combines theory with practical fusion procedures
- Provides the latest international information
- Hard copy reference manual supplied
- Course contact duration 8 hours
- Fully accredited program
- Applicants who successfully complete all competency evaluation requirements are issued with security coded accreditation cards

Polytec Electrofusion

- The POLYTEC® ELECTROFUSION Training Program is Nationally available, and is delivered by LeHunt and Associates in partnership with licensed Registered Training Organisations.
- This provides an internationally expert system together with localised support facilities.
- The POLYTEC® ELECTROFUSION Training Program can also be provided in house with specific clients to meet individual organisation requirements.
- Participants who successfully complete all the theoretical and practical evaluation requirements are issued with security coded accreditation documents.

POLYTEC® ELECTROFUSION
is available from

The POLYTEC® ELECTROFUSION training program is an engineering based, expert system for electrofusion jointing PE pipes.

This covers the latest developments in polymer improvements Internationally, and in Australia and New Zealand, and includes the more stringent requirements in the PE Pipe and Fittings Standards AS/NZS 4130 and AS/NZS 4129.

As PE pipe systems are used in larger diameters, higher pressure classes, and thicker wall sections, the requirements for high quality joints become more important in practical applications.

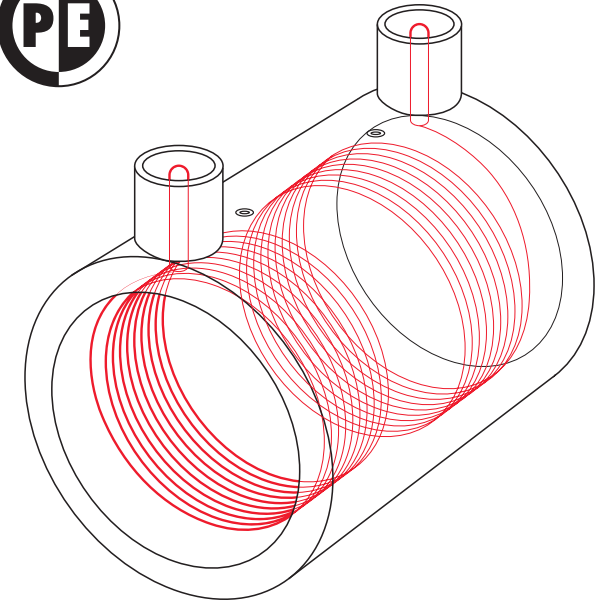
LEHUNT AND ASSOCIATES have developed the POLYTEC® system of pipeline training and accreditation programs drawing on some 25 years of experience in pipeline technology, including design, manufacturing, product development, research and development in materials, field technical services, and specification development.

We have drawn on our local research programs, together with our UK, European co-operative research programs, and technical liaison to develop world's best practice systems to meet industry needs in PE pipe ELECTROFUSION jointing.



Technology Transfer – Project Management

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Polytec Electrofusion Training Program

