

Polyethylene Pipe Fusion, Mid-Range Diameter

Course Outline

Course Description

This 1 day course prepares the participants to work in mid-range diameter applications from 2" IPS to 20" DIPS (63mm to 500mm) using MMI McElroy hydraulic fusion machines.

Course Pre-requisites

There are no specific pre-requisites for this course. However, Grade 12 (or equivalent) math skills are an asset. Math upgrades are available –contact us.

Continuing Education Units (CEUs)

0.6 CEUs

Course Duration

- 1 day
- 8:30 am to 4:00 pm
- 1 hour lunch break
- morning and afternoon break (15 minutes each)

Course Topics and Learning Outcomes

Upon successful completion of the course, the students will be able to:

- Introduction to Polyethylene
- Fusion Theory
 - understand the theory of fusion
- ASTM Standards
- Proper Fusion Techniques
 - properly hydraulically fuse mid-range diameter pipes and fittings
- Application Tips
 - obtain a minimum level of operator proficiency in order to competently operate hydraulic MMI McElroy butt fusion equipment (see “Equipment covered”)
 - use the DataLogger[®] to quickly analyze and check each fusion joint made (optional)
- Equipment Design & General Maintenance
- Troubleshooting Resources

Equipment covered:

Rolling 28	Rolling 250
Rolling 412	Rolling 618
TracStar® 28	TracStar® 250
TracStar® 412	TracStar® 618
TracStar® 500	
Data Logger® (optional)	

Delivery Method/Format

Instructional Method	Percentage of Class Time
Hands-on/Q&A	80%
Examples/Case Study	
Presentation/Lecture/Slides	15%
Demonstration	5%
Video/DVD	
Tutoring	

Material/Handouts (supplied)

- Student Binder: AH McElroy, 2017. Polyethylene Pipe Fusion, Mid-Range Diameter. Edmonton, Alberta.
- EOCP Course Completion and Evaluation Form.
 - every student needs to complete and return this form for any CEU allocation
- Calculators are provided but students are welcome to use their own.
 - please return

Course Requirements

Attendance and participation in class are required. CEUs will be allocated based on attendance and course completion; Yukon University records will show a pass or fail result. If the participant doesn't attend the class, Yukon University records will show a "no show" result and no CEUs will be allocated.

Evaluation

There will be a quantifiable evaluation at the end of this course with a passing mark of 70%. If anyone fails this evaluation, arrangements can be made for a re-assessment. Please note that this evaluation is for self-assessment purpose only.

Academic and Student Conduct

Information on academic standing and student rights and responsibilities can be found in the current Academic Regulations that are posted on the Student Services/Admissions & Registrations web page.

Plagiarism

Plagiarism is a serious academic offence. Plagiarism occurs when students present the words of someone else as their own. Plagiarism can be the deliberate use of a whole piece of another person’s writing, but more frequently it occurs when students fail to acknowledge and document sources from which they have taken material. Whenever the words, research or ideas of others are directly quoted or paraphrased, they must be documented according to an accepted manuscript style (e.g., APA, CSE, MLA, etc.). Resubmitting a paper which has previously received credit is also considered plagiarism. Students who plagiarize material for assignments will receive a mark of zero (F) on the assignment and may fail the course. Plagiarism may also result in dismissal from a program of study or the University.

Accessibility Services

Reasonable accommodations are available for **all** students, including Community Campuses (Zoom meeting option for community campus students). Yukon University is committed to creating an accessible learning environment open to all students by ensuring equal access to academic facilities, learning environments and educational programs. We know every student is unique and has different needs. Accessibility Services works collaboratively with students with disabilities to provide a supportive learning environment that enhances academic and personal development. Students are responsible for self-identifying and requesting academic accommodations from Accessibility Services each new semester. All services are confidential. Contact Accessibility Services at (867) 668-8780 or access@yukonu.ca.

Class Outline

Topic	Time Allocation
Principles of Heat Fusion	.5
Fusion Presentation — No. 28 and No.412	2
Fusion Presentation — No.618 and T500	1
DataLogger® Presentation (optional)	3
Hands-On Training	1
Written and Practical Testing	1