

## Appendix C

### Cross-section macrographs from the bead-on-plate wet welds

	Page
C.1 Initial bead-on-plate wet welds	C.1
C.2 Bead-on-plate wet welds	C.3
C.2.1 BOP welds on A36 Steel	C.3
C.2.2 BOP welds on A572 Gr. 50 Steel	C.4
C.2.3 BOP welds on API 5L Gr. B steel	C.5

### List of Figures

Figure C.1. Cross-section macrographs of the initial bead-on-plate wet welds deposited with three electrode types at 50 m using electrode positive.....	C.1
Figure C.2. Cross-section macrographs of the initial bead-on-plate wet welds deposited with the three electrode types at 100 m using electrode positive. ....	C.2
Figure C. 3. Cross-section macrographs from the center of the BOP wet welds deposited with the E6013, E7018 and E7024 electrodes using electrode positive at 50 and 100m.	C.3
Figure C.4. Cross-section macrographs from the center of the BOP wet welds deposited with the E6013, E7018 and E7024 electrodes using electrode negative at 50 and 100m. .....	C.3
Figure C.5. Cross-section macrographs from the center of the BOP wet welds deposited using electrode positive with the E6013, E7018 and E7024 electrodes at 50 and 100m.	C.4
Figure C.6. Cross-section macrographs from the center of the BOP wet welds deposited using electrode negative with the E6013, E7018 and E7024 electrodes at 50 and 100m. .....	C.4
Figure C.7. Cross-section macrographs from the center of the BOP wet welds deposited using electrode positive with the E6013, E7018 and E7024 electrodes at 50 and 100m.	C.5
Figure C.8. Cross-section macrographs from the center of the BOP wet welds deposited using electrode negative with the E6013, E7018 and E7024 electrodes at 50 and 100m. .....	C.5

### C.1 Initial bead-on-plate wet welds

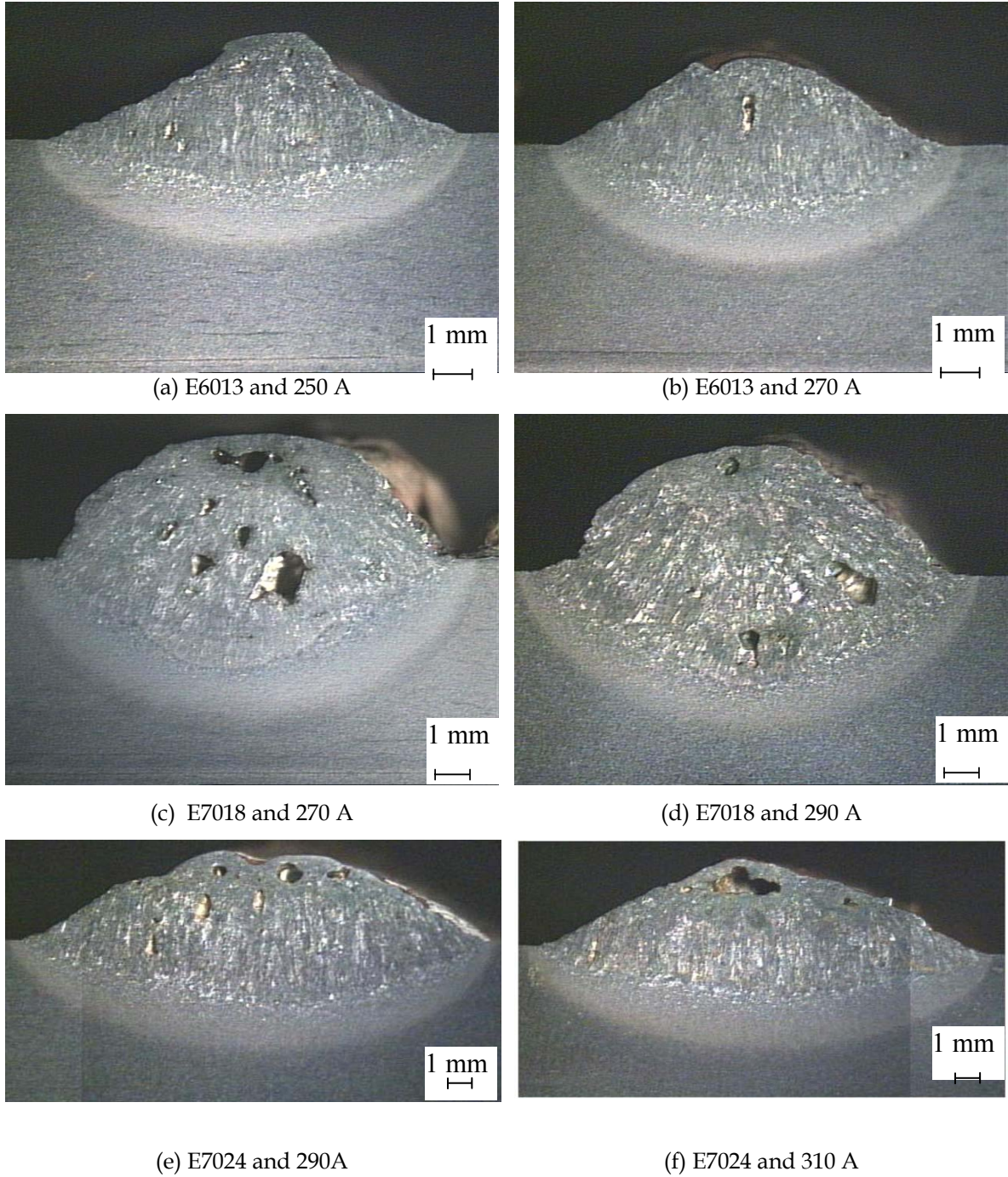
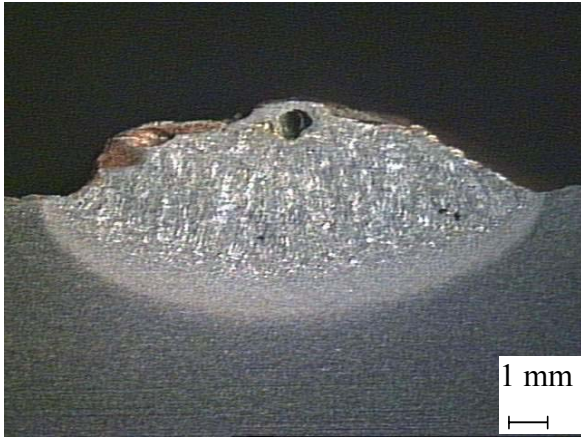


Figure C.1. Cross-section macrographs of the initial bead-on-plate wet welds deposited with three electrodes types at 50 m using electrode positive.

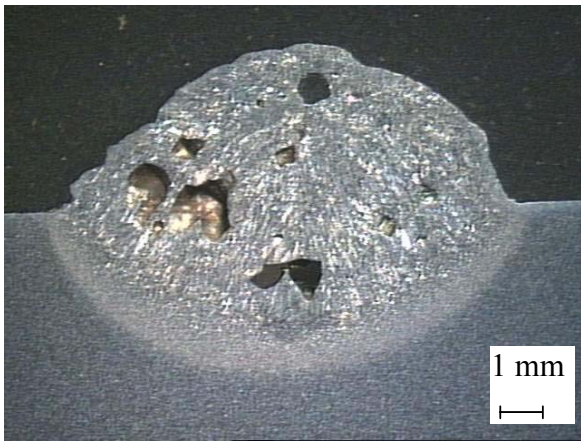




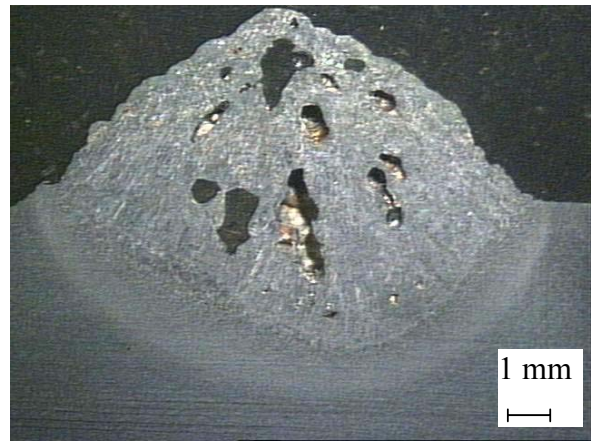
(a) E6013 and 270 A



(b) E6013 and 290 A



(c) E7018 and 270 A



(d) E 7018 and 290 A



(e) E7024 and 310 A



(f) E7024 and 330 A

Figure C.2. Cross-section macrographs of the initial bead-on-plate wet welds deposited with the three electrode types at 100 m using electrode positive.

## C.2 Bead-on-plate wet welds

### C.2.1 BOP welds on A36 Steel

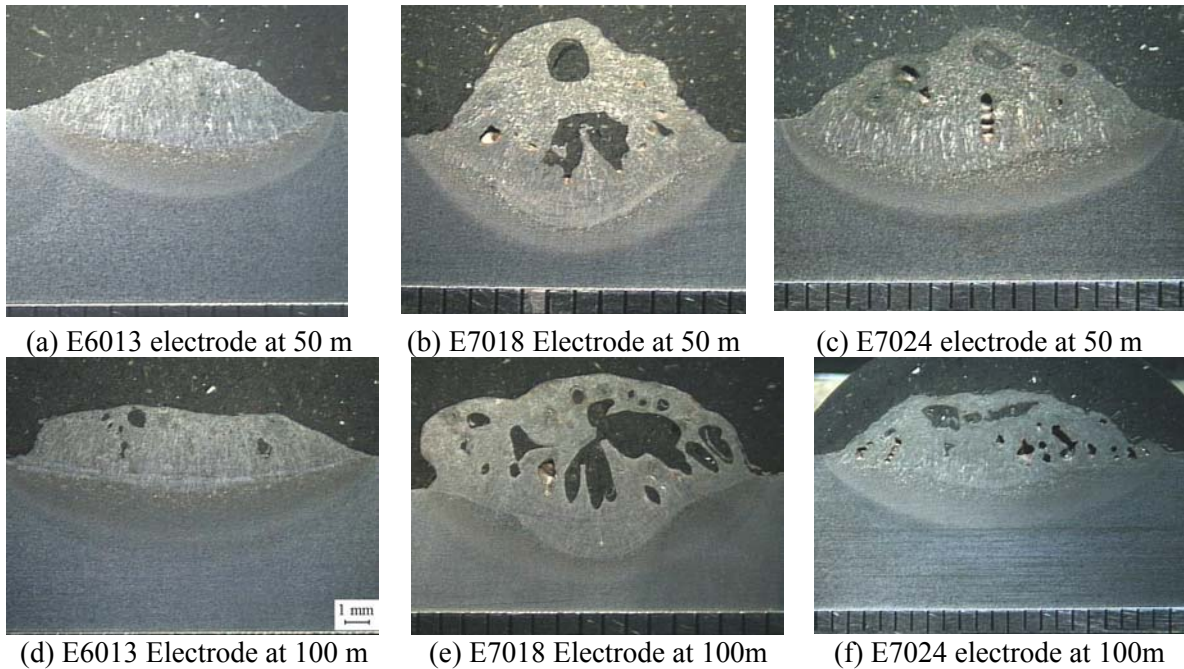


Figure C. 3. Cross-section macrographs from the center of the BOP wet welds deposited with the E6013, E7018 and E7024 electrodes using electrode positive at 50 and 100m.

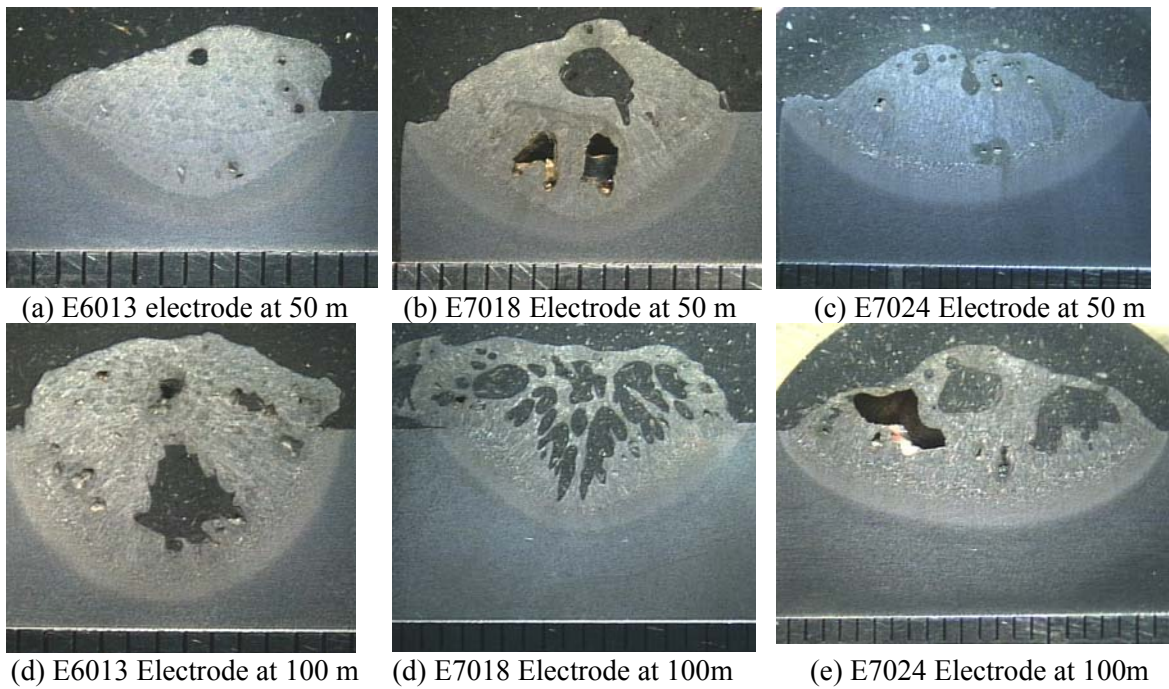


Figure C.4. Cross-section macrographs from the center of the BOP wet welds deposited with the E6013, E7018 and E7024 electrodes using electrode negative at 50 and 100m.



### C.2.2 BOP welds on A572 Gr. 50 Steel

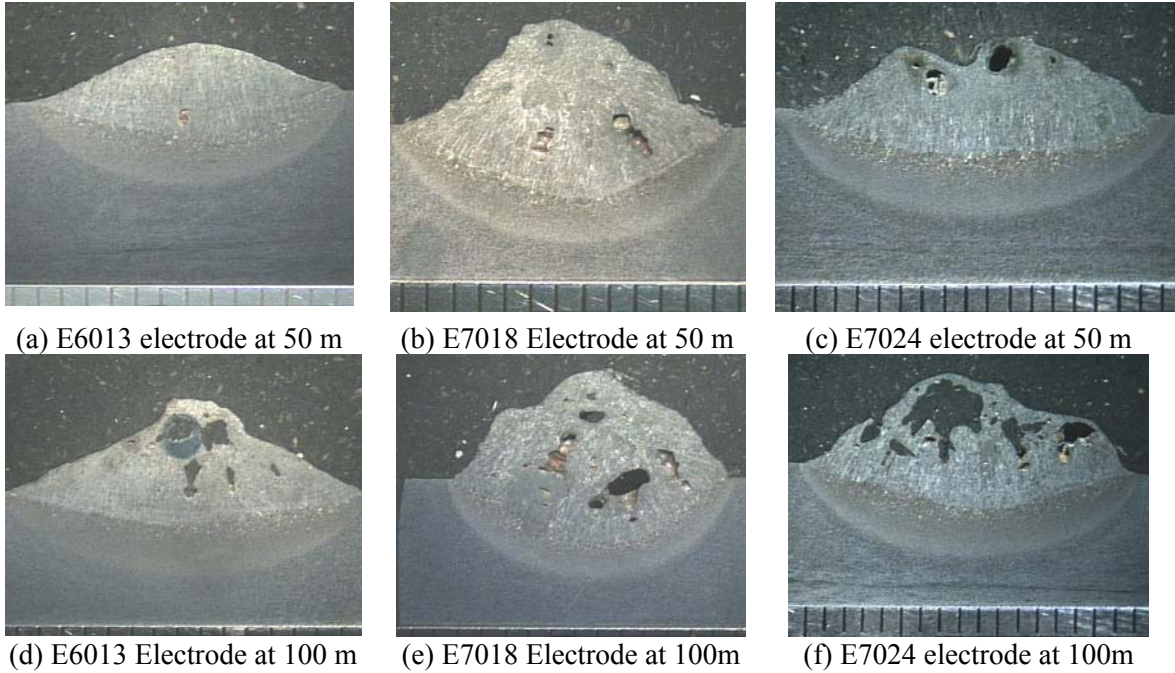


Figure C.5. Cross-section macrographs from the center of the BOP wet welds deposited using electrode positive with the E6013, E7018 and E7024 electrodes at 50 and 100m.

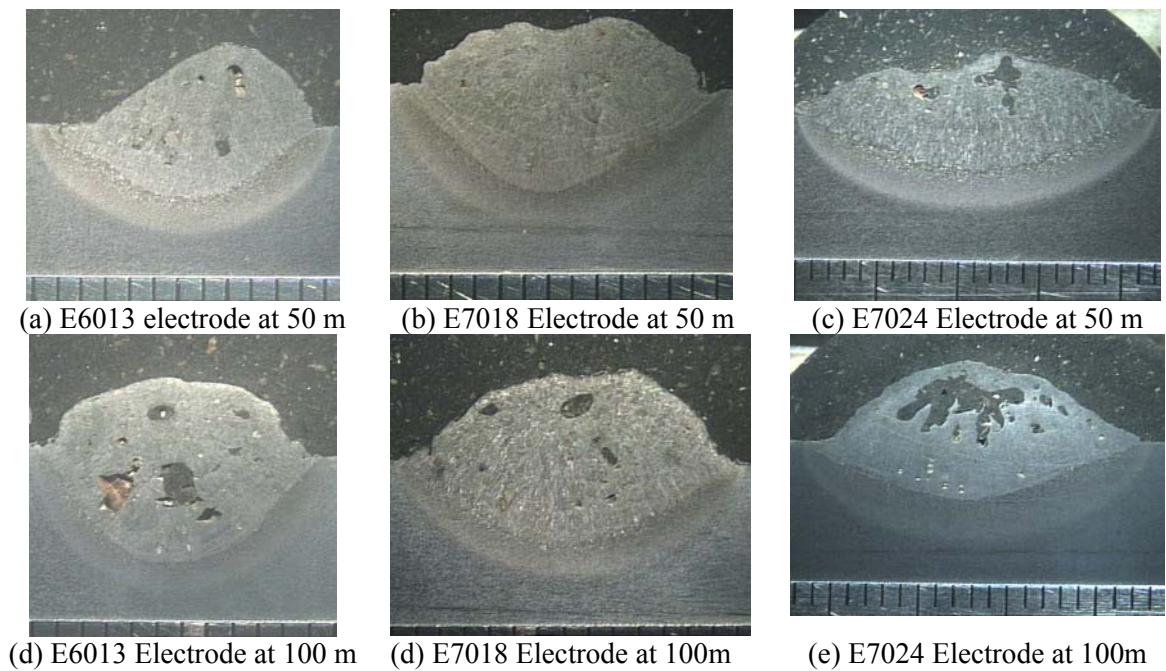


Figure C.6. Cross-section macrographs from the center of the BOP wet welds deposited using electrode negative with the E6013, E7018 and E7024 electrodes at 50 and 100m.

### C.2.3 BOP welds on API 5L Gr. B

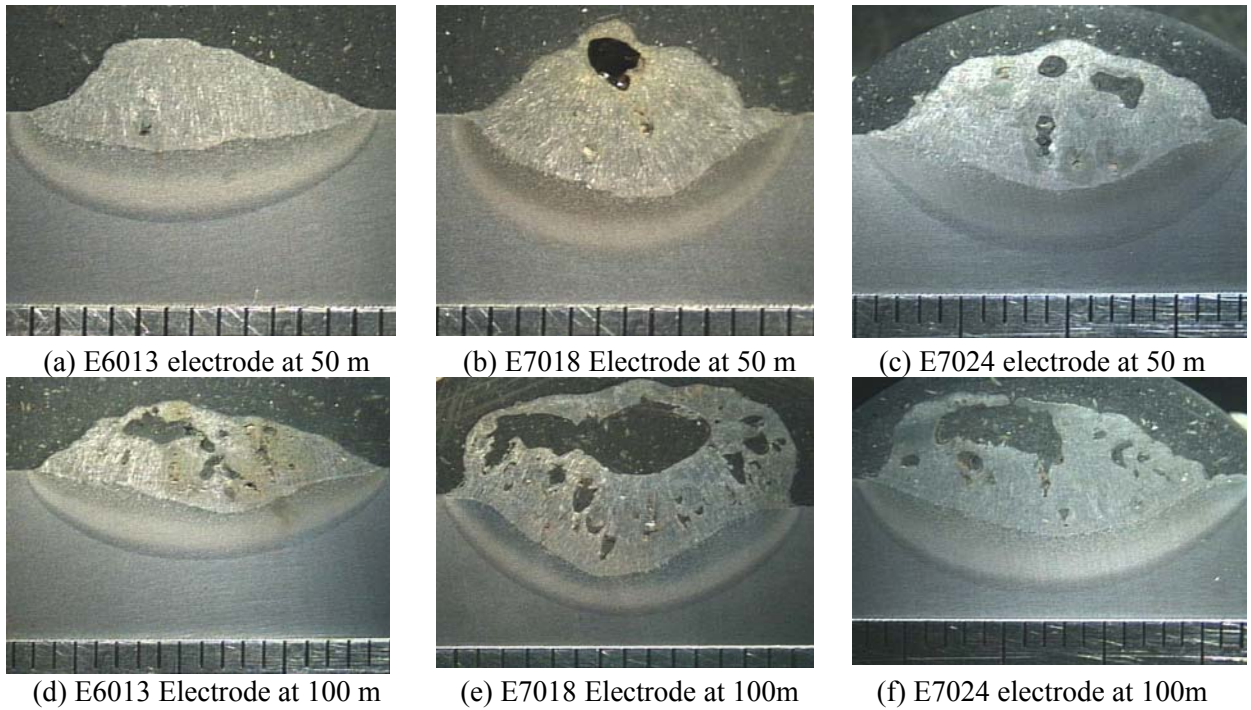


Figure C.7. Cross-section macrographs from the center of the BOP wet welds deposited using electrode positive with the E6013, E7018 and E7024 electrodes at 50 and 100m.

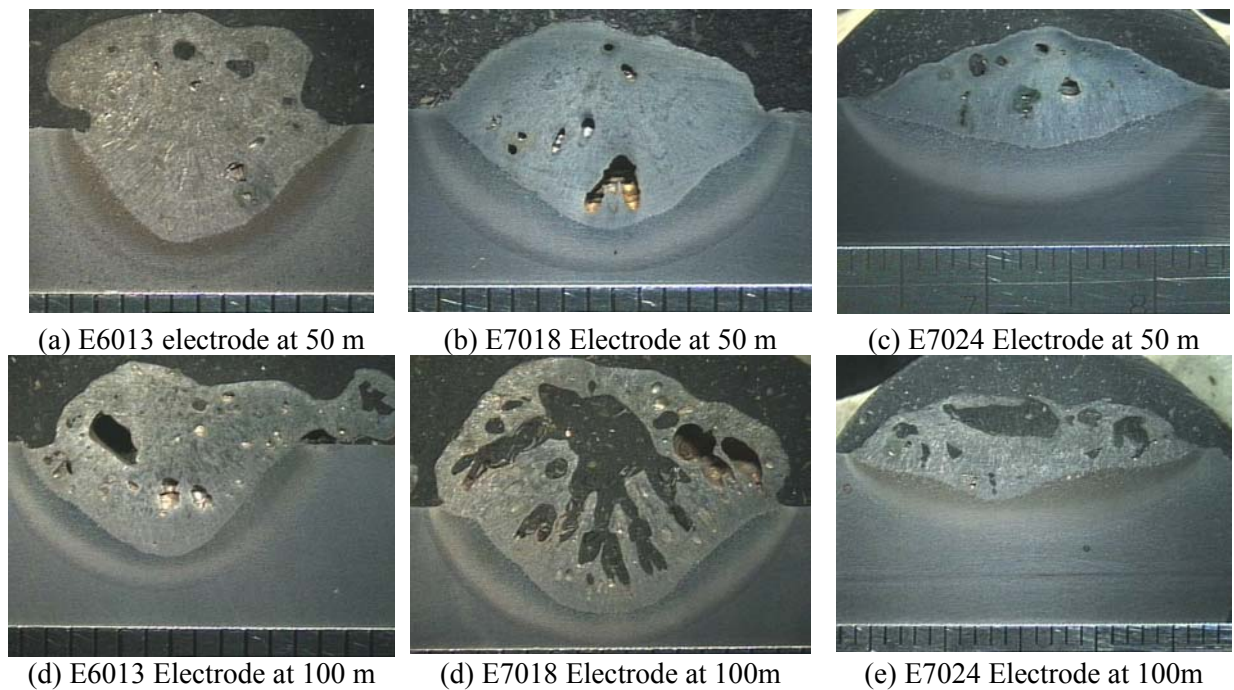


Figure C.8. Cross-section macrographs from the center of the BOP wet welds deposited using electrode negative with the E6013, E7018 and E7024 electrodes at 50 and 100m.