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Fig.1
École Polytechnique de Montréal: POLY
Assistant Prof. Myriam Brochu



Fig.1 Exterior of POLY.

60%

Fig.2
GMAW(= Gas Metal Arc Welding)
FCAW(= Flux Core Arc Welding) 2

((a)
((b)
CO₂

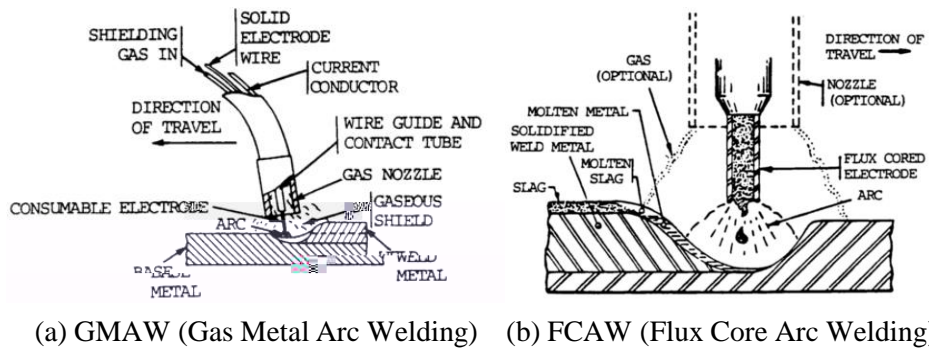


Fig.2 Welding method using in this study.

Table 1

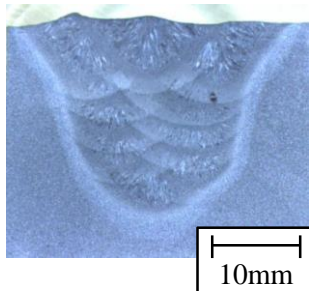
	3		CA6NM
	100% Ar	GMAW	410NiMo
85% Ar + 15% CO ₂			GMAW-0%CO ₂
GMAW-15%CO ₂		GMAW	
		75% Ar + 25% CO ₂	FCAW
	FCAW-25%CO ₂		

Table 1 Chemical composition (weight%)

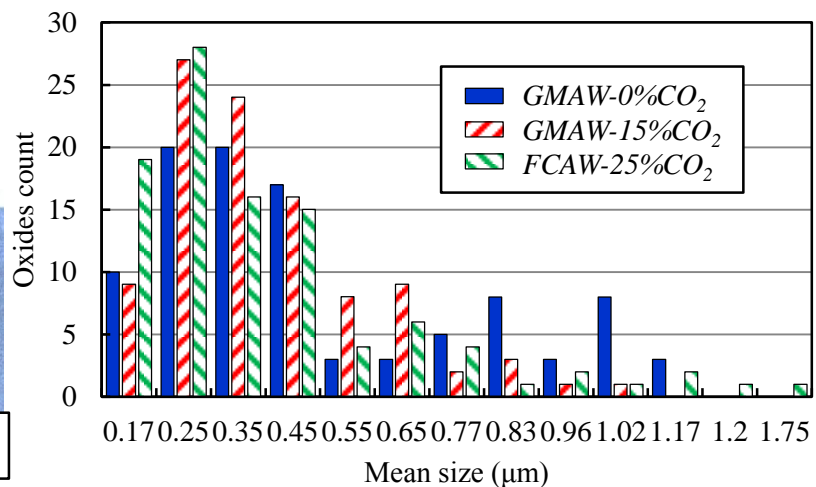
Material	C	Mn	Si	S	P	Cr	Ni	Mo
CA6NM	0.02	0.66	0.59	0.008	0.031	13.04	4.07	0.53

(a) SEM EDS Table 3 (b) 100mm² CO₂ GMAW-0%CO₂

GMAW-0%CO₂



(a) Measuring area



(b) Oxides distribution

Fig.3 Oxides distribution normalized to 100 oxides per weld.



250HV Fig.4 400HV

65%

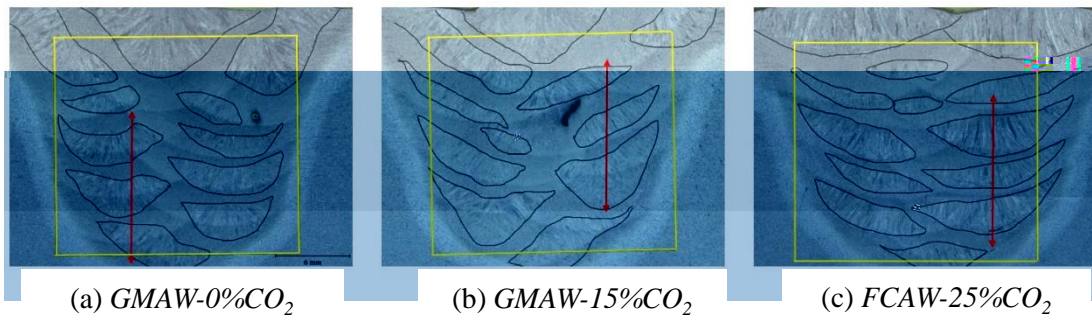


Fig.4 Macrographs of the welds with the chosen position of the notch.