

Grade comparison of wear plates

WearPro	Caterpillar	SSAB	Thickness range (mm)	Hardness (HB)
WearPro400	1E1839	Hardox400	5-150	400 ± 30
WearPro450	1E4187	Hardox450	5-120	450 ± 30
WearPro500		Hardox500	6-100	500 ± 30
WearPro550		Hardox550	6-50	550 ± 30

How to deal with inclusion in steel making process of WearPro?

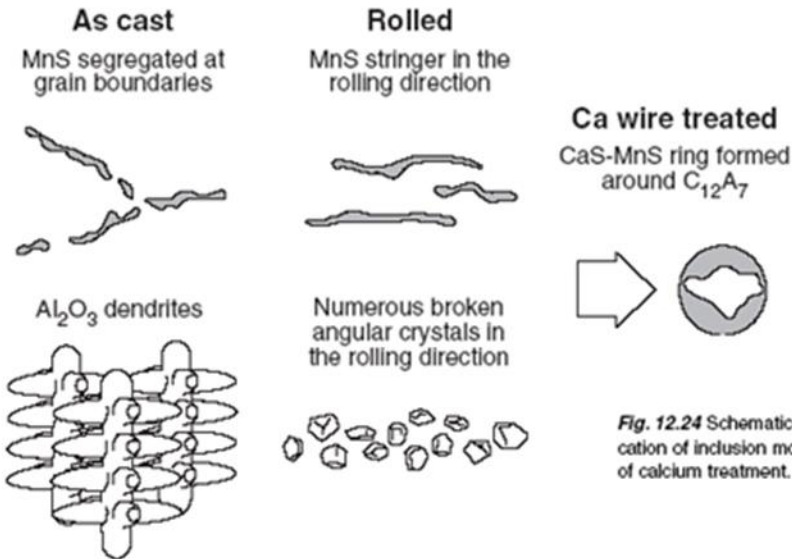
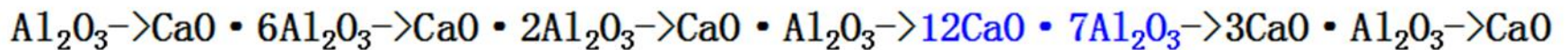
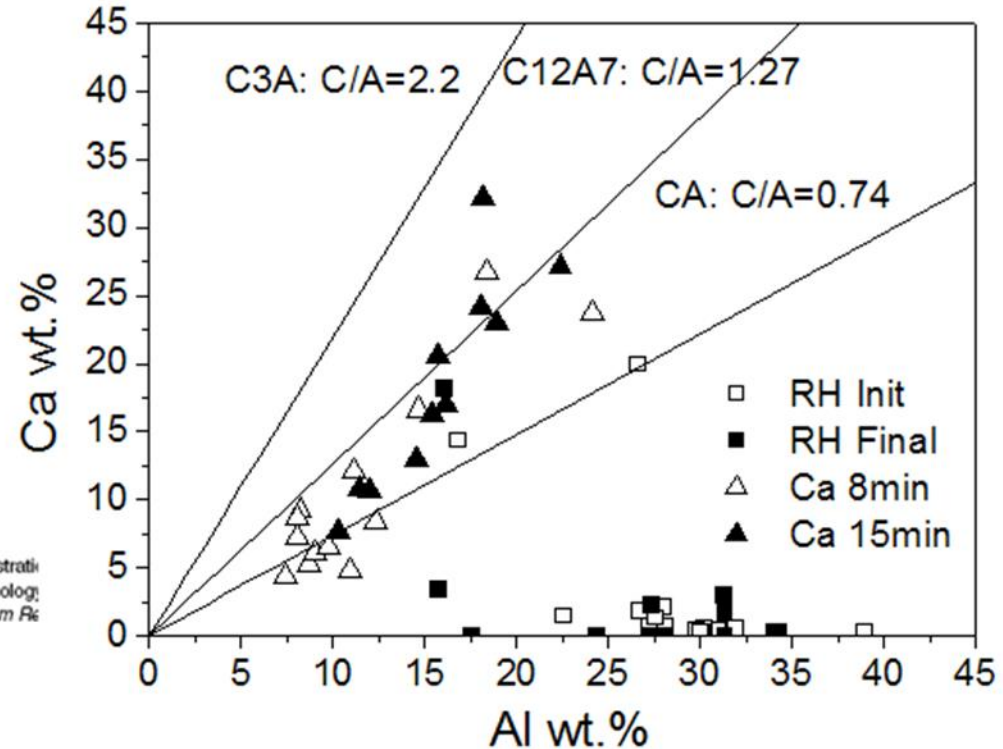
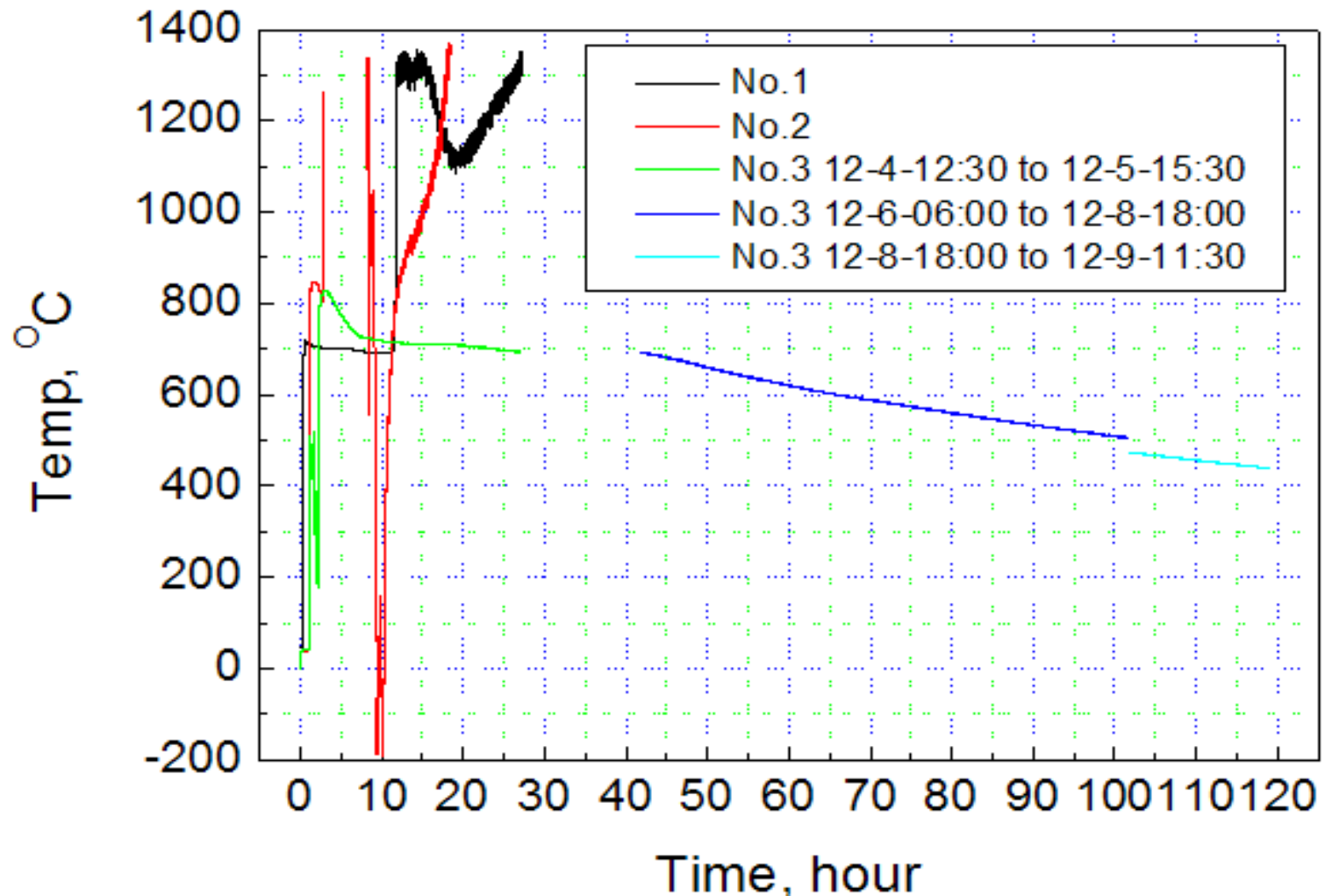


Fig. 12.24 Schematic illustration of inclusion morphology of calcium treatment. From *Re*



- Ca treatment
- Stirring

How to avoid Hydrogen Induced Cracking (HIC)?



How we compare with Hardox in chemistry?

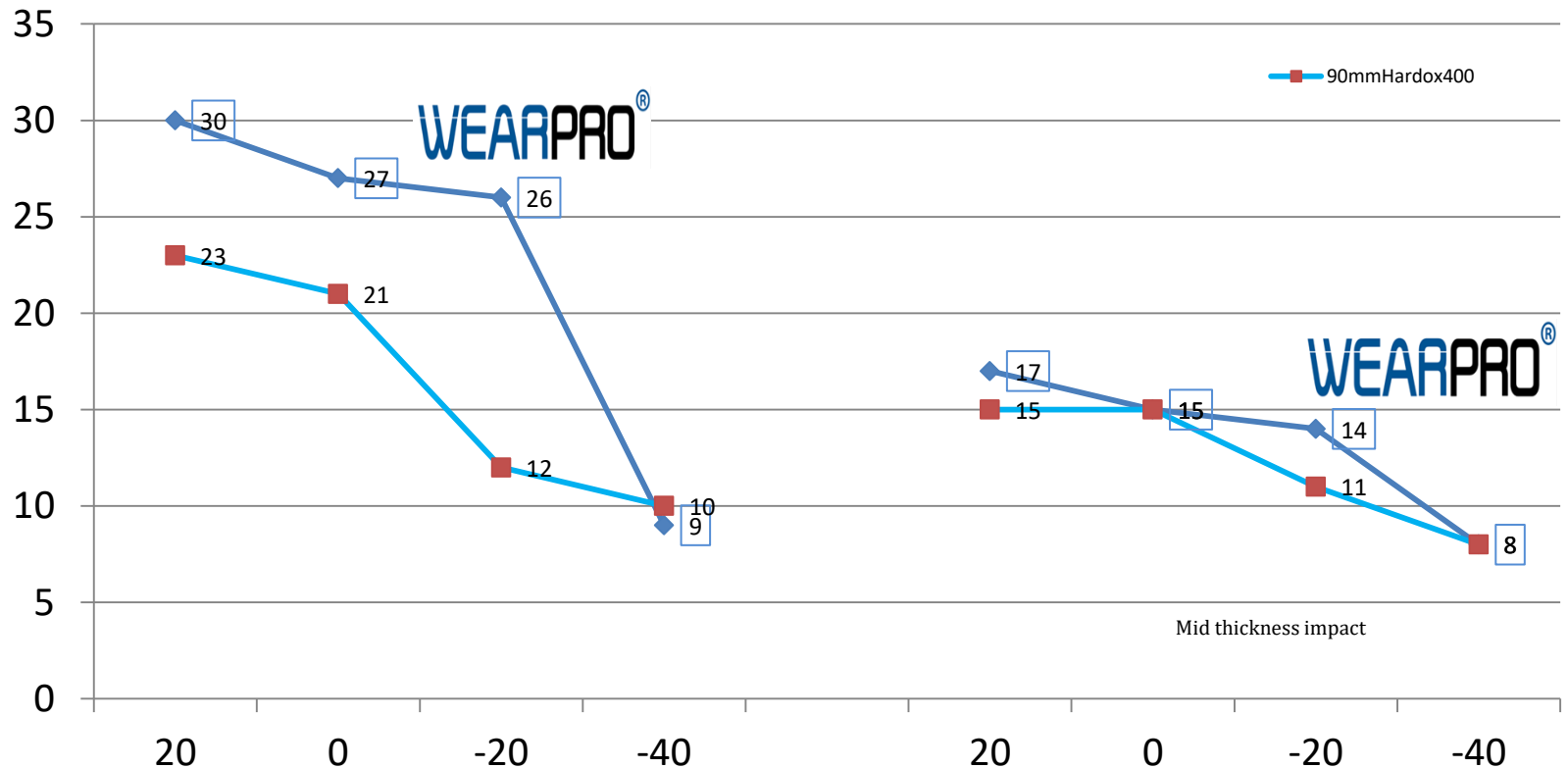
Grade	Thickness	C	Si	Mn	P	S	Cu	Cr	Ni	Mo	Nb	Ti	V	CEQ
Hardox400	90 mm	0.3	0.26	0.82	0.008	0.001	0.01	<2.0			<0.05		0.72	
WearPro400	100 mm	0.28	0.27	0.84	0.013	0.0014	0.02	<2.0			<0.05		0.7	



How we compare with Hardox in inclusion?

Grade	Thickness/mm	Ductility		Brittleness		Spot		Ds
		A		B		D		
		small	big	small	big	small	big	
WearPro400	14	0.5	0	0.5	0	0.5	0.5	0
WearPro400	100	0.5	0	0.5	0	0.5	0.5	0
WearPro500	16	0.5	0	0.5	0	0.5	0.5	0
Grade	Thickness/mm	Ductility		Brittleness		Spot		Ds
		A		B		D		
		small	big	small	big	small	big	
Hardox400	12	0.5	0	0.5	0	0.5	0.5	0
Hardox400	90	0.5	0	0.5	0	0.5	0.5	0.5
Hardox500	16	0.5	0	1	0	0.5	0.5	0

Impact comparison with Hardox

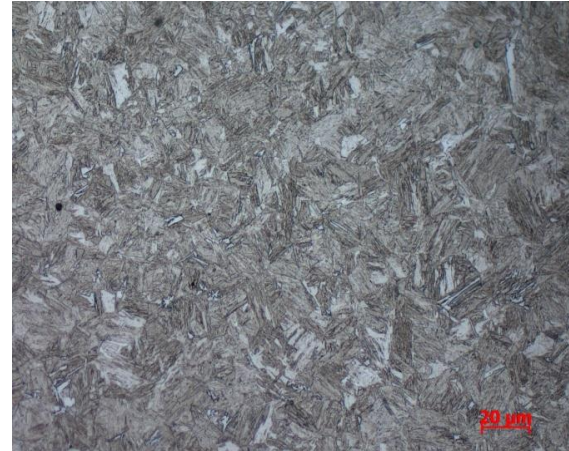


Micro structure

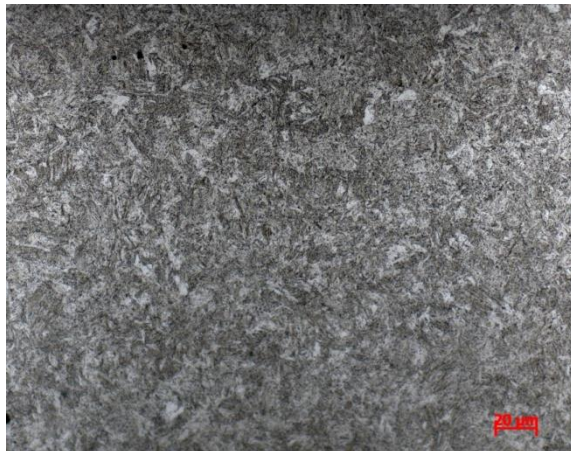
14mm (WearPro400)



12mm (Hardox400)



100mm (WearPro400)



90mm (Hardox400)

