

Figure 1: Data Provided by Customer

Test no.: 136 / IMT R 711
 Item description: Plate with butt weld T=20 mm.
 Material type and grade: S355J2+N

Figure 2: Summary of SENB Results

Sample Preparation	ID	15481-W1	15481-W2	15481-W3
	Location	WCL	WCL	WCL
	B	17.25 mm	17.24 mm	17.24 mm
	W	34.40 mm	34.38 mm	34.41 mm
	a_0	16.77 mm	16.81 mm	16.64 mm
	a_0/W	0.487	0.489	0.484
	Final Pre-crack load (Ff)	10.00 kN	10.00 kN	10.00 kN
	R-Ratio	0.10	0.10	0.10
	Achieved Maximum Load	Yes	Yes	Yes
	Pre-crack Validity	Valid	Valid	Valid
Material Properties	UTS at ambient temp.	619 MPa	619 MPa	619 MPa
	0.2% YS at ambient temp.	578 MPa	578 MPa	578 MPa
	0.2% YS at test temp.	609 MPa	609 MPa	609 MPa
	Young's Modulus (E)	210 GPa	210 GPa	210 GPa
	Poissons Ratio	0.3	0.3	0.3
Test details & post-test analysis	Test Temperature (T)	-20.0 °C	-20.0 °C	-20.0 °C
	Span (S)	143.0 mm	143.0 mm	143.0 mm
	Knife edge thickness (z)	0.00 mm	0.00 mm	0.00 mm
	Elastic K Rate	1.21 MPa√m/s	1.18 MPa√m/s	1.15 MPa√m/s
	Max Load (F_m)	31.05 kN	32.06 kN	31.86 kN
	$V_{plastic}$	0.64 mm	0.94 mm	0.93 mm
	$A_{plastic}$	18.00 kN.mm	27.78 kN.mm	27.52 kN.mm
	CTOD (δ)	0.23 mm	0.32 mm	0.32 mm
	Result type	m	m	m