

TABLE AI. (Continued)

Material	Condition	Transition conditions		Technique	Remarks	References
		Stress (GPa)	Compression (%)			
<b>Iron-silicon alloys</b>						
Fe-0.45 wt % Si	AR	12.8	...	E-1	25 mm	Zukas <i>et al.</i> (1963)
Fe-0.95 wt % Si	AR	13.2	...	E-1	25 mm	Zukas <i>et al.</i> (1963)
Fe-1.92 wt % Si	AR	14.0	...	E-1	25 mm, $\psi$	Zukas <i>et al.</i> (1963)
Fe-2.90 wt % Si	AR	14.7	...	E-1	ASTM grain size minus 2, 25 mm	Zukas <i>et al.</i> (1963)
Fe-3.82 wt % Si	AR	15.4	...	E-1	25 mm	Zukas <i>et al.</i> (1963)
Fe-4.60 wt % Si	AR	15.8	...	E-1	25 mm	Zukas <i>et al.</i> (1963)
Fe-6.85 wt % Si	AR	22.5	...	E-1	25 mm	Zukas <i>et al.</i> (1963)
Fe-2.9 wt % Si	[111] crystal, AR	14.5	...	E-1	25 mm	Zukas <i>et al.</i> (1963)
Fe-2.9 wt % Si	[112] crystal, AR	14.9	...	E-1	16 mm	Zukas <i>et al.</i> (1963)
Fe-3.25 wt % Si	Ann	15.0	...	G-15	Shock demagnetization	Graham (1968)
<b>Iron-vanadium alloys</b>						
Fe-2 wt % V	Ann	14.2	7.0	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-4 wt % V	Ann	16.0	7.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-6 wt % V	Ann	18.0	8.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-8 wt % V	Ann	20.7	9.3	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-10 wt % V	Ann	24.5	10.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-11 wt % V	Ann	28.0	12.0	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-20 wt % V	Ann	~50	...	E-16	25 mm	Loree <i>et al.</i> (1966a)
Fe-22 wt % V	Ann	~53	...	E-16	25 mm	Loree <i>et al.</i> (1966a)
Fe-24 wt % V	Ann	~55	...	E-16	25 mm	Loree <i>et al.</i> (1966a)
Fe-26 wt % V	Ann	~57	...	E-16	25 mm	Loree <i>et al.</i> (1966a)
Fe-8 wt % V	Ann	...	...	E-16	6 mm to 25 mm, no overdrive observed	Loree <i>et al.</i> (1966a)
<b>Iron-molybdenum alloys</b>						
Fe-1 wt % Mo	Ann	13.1	6.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-2 wt % Mo	Ann	13.5	6.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-3 wt % Mo	Ann	13.9	6.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-8 wt % Mo	Ann	15.5	7.1	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-12 wt % Mo	Ann	16.2	7.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-15 wt % Mo	Ann	15.4	6.7	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-20 wt % Mo	Ann	15.5	6.5	E-1	Mixed phase composition, 25 mm	Loree <i>et al.</i> (1966a)
Fe-30 wt % Mo	Ann	14.6	6.0	E-1	Mixed phase composition, 25 mm	Loree <i>et al.</i> (1966a)
Fe-40 wt % Mo	Ann	12.9	5.8	E-1	Mixed phase composition, 25 mm	Loree <i>et al.</i> (1966a)
Fe-45 wt % Mo	Ann	13.0	4.4	E-1	Mixed phase composition, 25 mm	Loree <i>et al.</i> (1966a)
Fe-1 wt % Mo, 1-1.5 wt % W	Ann	13.8	...	E-1	25 mm, W contamination	Loree <i>et al.</i> (1966a)
Fe-2 wt % Mo, 1-1.5 wt % W	Ann	14.3	...	E-1	25 mm, W contamination	Loree <i>et al.</i> (1966a)
Fe-3 wt % Mo, 1-1.5 wt % W	Ann	14.5	...	E-1	25 mm, W contamination	Loree <i>et al.</i> (1966a)
Fe-10 wt % Mo, 1-1.5 wt % W	Ann	16.4	...	E-1	25 mm, W contamination	Loree <i>et al.</i> (1966a)
<b>Iron-cobalt alloys</b>						
Fe-2 wt % Co	Ann	13.2	6.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-4 wt % Co	Ann	13.5	7.1	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-8 wt % Co	Ann	14.5	7.1	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-12 wt % Co	Ann	16.5	7.8	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-16 wt % Co	Ann	18.0	8.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-20 wt % Co	Ann	18.7	8.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-25 wt % Co	Ann	21.7	9.6	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-30 wt % Co	Ann	23.0	9.9	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-35 wt % Co	Ann	24.5	10.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-40 wt % Co	Ann	28.0	11.0	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-45 wt % Co	Ann	32.0	12.5	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-50 wt % Co	Ann	36.7	12.4	E-1	25 mm	Loree <i>et al.</i> (1966a)

TABLE AI. (Continued)

Material	Condition	Transition conditions		Technique	Remarks	References
		Stress (GPa)	Compression (%)			
<b>Iron-carbon alloys</b>						
Fe-0.5 wt % C	593 K, 2 h	13.9	6.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-0.5 wt % C	948 K, 2 h	13.1	6.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-0.5 wt % C	Ann	13.0	6.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-1 wt % C	593 K, 2 h	15.0	6.7	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-1 wt % C	948 K, 2 h	13.2	6.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-1 wt % C	Ann	13.1	6.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-15 wt % C	593 K, 2 h	14.8	6.6	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-15 wt % C	948 K, 2 h	13.3	6.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-15 wt % C	Ann	13.4	6.4	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-2 wt % C	593 K, 2 h	15.6	6.6	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-2 wt % C	948 K, 2 h	13.6	6.6	E-1	25 mm	Loree <i>et al.</i> (1966a)
Fe-2 wt % C	Ann	14.7	5.75	E-1	25 mm	Loree <i>et al.</i> (1966a)
<b>Iron-nickel-chromium alloys</b>						
Fe-8.1 wt % Cr, 8.1 wt % Ni	AR	10.0	...	E-1	$\rho_0 = 7.817 \text{ Mg/m}^3$	Fowler <i>et al.</i> (1961)
Fe-17.4 wt % Cr, 8.2 wt % Ni	AR	3.0	...	E-1	$\rho_0 = 7.764 \text{ Mg/m}^3$	Fowler <i>et al.</i> (1961); see also Gust <i>et al.</i> (1970)
Fe-8 wt % Cr, 8 wt % Ni	AR	10.0-9.5	...	E-1	...	Fowler <i>et al.</i> (1961) as reported by Gust <i>et al.</i> (1970)
Fe-12 wt % Cr, 8 wt % Ni	AR	8.0	...	E-1	...	Fowler <i>et al.</i> (1961) as reported by Gust <i>et al.</i> (1970)
Fe-6 wt % Cr, 12 wt % Ni	AR	8.5	...	E-1	...	Fowler <i>et al.</i> (1961) as reported by Gust <i>et al.</i> (1970)
Fe-7 wt % Cr, 12 wt % Ni	AR	8.5	...	E-1	...	Fowler <i>et al.</i> (1961) as reported by Gust <i>et al.</i> (1970)
Fe-5.93 wt % Cr, 8.79 wt % Ni	1303 K, 1 h, water quench	11.0-10.7	5.24-5.13	E-4	$\rho_0 = 7.822 \text{ Mg/m}^3$	Gust <i>et al.</i> (1970)
Fe-12.1 wt % Cr, 7.73 wt % Ni	1303 K, 1 h, water quench	8.7	4.36	E-4	$\rho_0 = 7.778 \text{ Mg/m}^3$	Gust <i>et al.</i> (1970)
Fe-15.9 wt % Cr, 7.8 wt % Ni	1303 K, 1 h, water quench	8.1-7.9	4.19-4.12	E-4	$\rho_0 = 7.760 \text{ Mg/m}^3$	Gust <i>et al.</i> (1970)
Fe-18.1 wt % Cr, 8.22 wt % Ni	1303 K, 1 h, water quench	8.1-7.0	4.65-3.00	E-4	$\rho_0 = 7.827-7.833 \text{ Mg/m}^3, \tau$	Gust <i>et al.</i> (1970)
Fe-6.32 wt % Cr, 12.2 wt % Ni	1303 K, 1 h, water quench	9.8	5.49	E-4	$\rho_0 = 7.852 \text{ Mg/m}^3$	Gust <i>et al.</i> (1970)
Fe-11.7 wt % Cr, 12.1 wt % Ni	1303 K, 1 h, water quench	8.2	4.22	E-4	$\rho_0 = 7.888 \text{ Mg/m}^3$	Gust <i>et al.</i> (1970)
Fe-5.91 wt % Cr, 16.0 wt % Ni	1303 K, 1 h, water quench	7.8	4.14	E-4	$\rho_0 = 7.852 \text{ Mg/m}^3$	Gust <i>et al.</i> (1970)
Fe-20 wt % Cr, 8.5 wt % Ni	168 h, liquid N	7.0	...	G-12	$\rho_0 = 7.79 \text{ Mg/m}^3$	Graham <i>et al.</i> (1968)
<b>B. Elements</b>						
Antimony	AR	11.4-8.6	...	E-1	10 to 25 mm, +	Minshall as reported by McQueen (1964)
Antimony	AR	~9.5	...	E-1	Wedge sample, optical lever	Katz <i>et al.</i> (1959)
Antimony	Cast	10.8-9.1	16.4-13.9	E-1	5 to 49 mm, +, $\tau$	Warnes (1967)
Antimony	Cast	...	...	E-20	Direct observation of transformation times	Breed <i>et al.</i> (1968)