

Table 1 (Continued)

TITANIUM BASE									
EXTRUSION PARAMETERS FOR MAXIMUM YIELD APPLICATIONS									
Extrusion Number	Agency	Alloy	Temp. Of	Red. Ratio	Billet Lube	Die Angle	Pt (ksi)	Ve _x (ips)	Surface
7586	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo	1900	6.8:1	0010	90°	65	2.5	Excellent
7587	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo	1900	6.6:1	0010	90°	68	2.4	Excellent
7588	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo	1900	6.6:1	0010	90°	62	2.4	Excellent
7589	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo	1900	6.6:1	0010	90°	54	2.5	Excellent
7590	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo	1900	6.1:1	0010	90°	58	2.4	Excellent
7648	SRL	Ti-5Al-2.5Sn- 5Zr	1600	6:1	Poly	60°	97	1.5	Good
7741	AFWAL/MLLS	SAME AS 7742							
7742	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo- 0.1Si	1900	6:1	0010	90°	59	2.3	Good
7743	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo- 0.1Si	1675	6:1	0010	90°	135	1.8	Good
7744	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo- 0.1Si	1675	6:1	0010	90°	137	2.0	Good

Table 1 (Continued)

TITANIUM BASE									
EXTRUSION PARAMETERS FOR MAXIMUM YIELD APPLICATIONS									
<u>Extrusion Number</u>	<u>Agency</u>	<u>Alloy</u>	<u>Temp. °F</u>	<u>Red. Ratio</u>	<u>Billet Lube</u>	<u>Die Angle</u>	<u>P_t (ksi)</u>	<u>V_{ex} (ips)</u>	<u>Surface</u>
7745	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo- 0.1Si	1675	6:1	0010	90°	132	2.0	Good
7746	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo- 0.1Si	1675	6:1	0010	90°	140	2.0	Good
7747	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo- 0.1Si	1675	6:1	0010	90°	143	1.8	Good
7748	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo- 0.1Si	1675	6:1	0010	90°	140	1.9	Good
7749	AFWAL/MLLS	Ti-6Al-2Sn- 4Zr-2Mo- 0.1Si	1675	6:1	0010	90°	154	1.9	Good

Table 1 (Continued)

IRON BASE									
EXTRUSION PARAMETERS FOR MAXIMUM YIELD APPLICATIONS									
Extrusion Number	Agency	Alloy	Temp. °F	Red. Ratio	Billet Lube	Die Angle	Pt (ksi)	V _{ex} (ips)	Surface
7106	Pratt & Whitney	Fe+()-2.6B+Al 2.2Ti-0.6C	1600	7.8:1	0010	90°	162	.9	Good
7107	Pratt & Whitney	Fe+()-2.6B+Al 2.2Ti-0.6C	1600	7.8:1	0010	90°	159	1.5	Good
7108	Pratt & Whitney	Fe+()-2.6B+Al 2.2Ti-0.6C	1600	7.8:1	0010	90°	156	1.4	Good
7109	Pratt & Whitney	Fe+()-2.6B+Al 2.2Ti-0.6C	1600	7.8:1	0010	90°	173	1.0	Good
7110	Pratt & Whitney	Fe+()-2.6B+Al- 2.2Ti-0.6C	1600	7.8:1	0010	90°	167	1.4	Good
7111	Pratt & Whitney	Fe+()-2.6B+Al 2.2Ti-0.6C	1600	7.8:1	0010	90°	170	1.4	Good
7214	Pratt & Whitney	Fe-Mn-2Mo- .26C	1550	10:1	7052	60°	178	1.0	Good
7364	AFWAL/MLLM	Fe-80%-Al-20%	1500	5.1:1	8871	60°	108	1.5	Good
7365	AFWAL/MLLM	Fe-75%-Al-25%	1500	5.1:1	8871	60°	97	1.5	Good
7366	AFWAL/MLLM	Fe-72%-Al-28%	1500	5.1:1	8871	60°	104	1.5	Good
7367	AFWAL/MLLM	Fe-68%-Al-32%	1500	5.1:1	8871	60°	97	1.5	Good

Table 1 (Continued)

IRON BASE									
EXTRUSION PARAMETERS FOR MAXIMUM YIELD APPLICATIONS									
Extrusion Number	Agency	Alloy	Temp. °F	Red. Ratio	Billet Lube	Die Angle	Pt (ksi)	Vex (ips)	Surface
7368	AFWAL/MLLM	Fe-64%-Al-36%	1500	5.1:1	8871	60°	100	1.5	Good
7369	AFWAL/MLLM	Fe-58%-Al-42%	1500	5.1:1	8871	60°	97	1.5	Good
7370	AFWAL/MLLM	Fe-50%-Al-50%	1500	5.1:1	8871	60°	81	1.2	Good
7463	Pratt & Whitney	Fe-0.95C-9.0 Cr-2.0Mo-1.0V 0.15Si-0.20Mn	1650	15.5:1	0010	60°	186	.7	Good
7464	Pratt & Whitney	Fe-0.80C-4.0 Cr-2.0Mo-1.0V 0.15Si-0.20Mn	1650	15.5:1	0010	60°	181	.8	Good
7465	Pratt & Whitney	Fe-0.80C-4.10 Cr-2.25Mo-1.0V 0.15Si-0.20Mn	1650	15.5:1	0010	60°	181	.8	Good
7469	Pratt & Whitney	Fe-0.81C-4.0 Cr-4.25Mo-1.0V 0.15Si-0.25Mn	1750	15.5:1	0010	60°	181	.8	Good
7470	Pratt & Whitney	Fe-1.15C-14.75 Cr-4.0Mo-1.2V- 0.30Si-0.45Mn	1750	15.5:1	0010	60°	176	.7	Good
7471	Pratt & Whitney	Fe-0.80C-4.0 Cr-2.0Mo-1.0V 0.15Si-0.20Mn	1750	15.5:1	0010	60°	167	.8	Good

Table 1 (Continued)

IRON BASE									
EXTRUSION PARAMETERS FOR MAXIMUM YIELD APPLICATIONS									
Extrusion Number	Agency	Alloy	Temp. Of	Red. Ratio	Billet Lube	Die Angle	P _t (ksi)	V _{ex} (ips)	Surface
7472	Pratt & Whitney	Fe-0.95C-9.0 Cr-2.0Mo-1.0V 0.15Si-0.20Mn	1750	15.5:1	0010	60°	173	.7	Good
7519	AFWAL/MLLM	Fe-32Al	1800	10:1	Poly	90°	97	1.8	Good
7520	AFWAL/MLLM	Fe-15.82Al	1800	10:1	Poly	90°	105	1.3	Good
7522	AFWAL/MLLM	Fe-3Al	1740	16:1	Poly	60°	116	1.7	Good
7608	AFWAL/MLLM	Fe ₃ Al	1740	16:1	Poly	90°	126	1.1	Good

Table 1 (Continued)

ALUMINUM BASE									
EXTRUSION PARAMETERS FOR MAXIMUM YIELD APPLICATIONS									
Extrusion Number	Agency	Alloy	Temp. °F	Red. Ratio	Billet Lube	Die Angle	P _t (ksi)	V _{ex} (ips)	Surface
7352	Pratt & Whitney	7075Al	700	15.6:1	C-300	60°	73	1.1	Excellent
7352	Pratt & Whitney	7075Al	750	15.6:1	C-300	60°	58	1.2	Good
7466		Al-8.4Zn-2.5 Mg-1.0Cu-3.2Co	700	15.5:1	C-300	60°	76	.4	Excellent
7467	Pratt & Whitney	Al-9.8Zn-2.5 Mg-1.0Cu-.08Co	700	15.5:1	C-300	60°	70	1.0	Excellent
7468	Pratt & Whitney	Al-9.8Zn-2.5 Mg-1.0Cu-2.4Co	700	15.5:1	C-300	60°	62	.4	Excellent
7550	Pratt & Whitney	Al-9.8Zn-2.5 Mg-1Cu-.8C	650	12:1	C-300	60°	84	1.0	Good
7551	Pratt & Whitney	Al-5.6Zn-2.5 Mg-1Cu-1.6Co	650	12:1	C-300	60°	70	1.2	Good
7552	Pratt & Whitney	Al-7.0Zn-2.5 Mg-1Cu-3.2Co	650	12:1	C-300	60°	78	1.1	Good
7553	Pratt & Whitney	Al-5.6Zn-2.5 Mg-1Cu-.8C	700	12:1	C-300	60°	70	1.1	Good
7554	Pratt & Whitney	Al-5.6Zn-2.5 Mg-1Cu-1.6Co	700	12:1	C-300	60°	97	1.2	Good
7555	Pratt & Whitney	Al-5.6Zn- 2.5Mg-1Cu-3.2Co	700	12:1	C-300	60°	103	1.2	Good

Table 1 (continued)

ALUMINUM BASE

EXTRUSION PARAMETERS FOR MAXIMUM YIELD APPLICATION

Extrusion Number	Agency	Alloy	Temp. or	Rec. Ratio	Blind Lube	Die Angle	Force (ksi)	Velocity (ips)	Surface
7556	Pratt & Whitney	Al-7.0Zn-2.5 Mg-1Cu-3.2Co	700	12:1	C-300	60°	76	1.2	Good
7557	Pratt & Whitney	Al-2.0Zn-2.5 Mg-1Cu-.8C	700	12:1	C-300	60°	68	1.2	Good
7558	Pratt & Whitney	Al-8.4Zn-3.6 Mg-1Cu-.8Co	700	12:1	C-300	60°	88	1.2	Good
7577	AFWAL/MLLS	MA-87Al	970	Blank	C-300	---	54	.4	Good
7578	AFWAL/MLLS	MA-87Al	970	Blank	C-300	---	54	.4	Good
7591	AFWAL/MLLS	MA-87Al	750	20:1	C-300	90°	78	1.0	Good
7592	AFWAL/MLLS	MA-87Al	750	20:1	C-300	90°	86	1.0	Good
7604	AFWAL/MLLN	MA-87-Al	970	Blank	C-300	Flat	---	---	Good
7605	AFWAL/MLLN	MA-87-Al	970	Blank	C-300	Flat	---	---	Good
7606	AFWAL/MLLN	MA-87-Al	970	Blank	C-300	Flat	---	---	Good
7607	AFWAL/MLLN	MA-87Al	970	Blank	C-300	Flat	---	---	Good
7652	AFWAL/MLLS	Al-4Mg-(4-7)	750	20:1	C-300	90°	107	1.0	Excellent
7653	AFWAL/MLLS	Al-4Mg-(4-7)	750	20:1	C-300	90°	109	1.0	Excellent

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