FAST CENTER LPBF (DMLS) ROUGH BLANK SIZES

UNLESS OTHERWISE SPECIFIED ALL BLANK SIZE TOLERANCES: +/- .010

(TOLERANCE IS CRITICAL FOR RAPID TESTING)

FUTURE ALLOY STUDY & TESTING CENTER

FOR LOCATION IDENTIFICATION: EMBOSS NUMBERS OR LETTERS A MINIMUM OF .250" TALL AND .020" DEEP

CLICK THE REFERENCE FILE BELOW TO DOWNLOAD THE ASSOCIATED CAD MODEL IN .STL FORMAT.
CONTACT FASTCENTER@SCOTFORGE.COM FOR CAD MODELS IN .STP FORMAT.

TENSILE (ASTM A370/E8)

Size/Sample Type [Orientation]	Blank Size	Reference File	FAST Drawing Number
.250" Dia. / Type 3 [XY]	.580" Dia. x 3.625"	ASTM E8 - XY CYLINDER.STL	IFC0004-FP1
.250" Dia. / Type 3 [ZX]	.580" Dia. x 3.625"	ASTM E8 - ZX CYLINDER.STL	IFC0004-FP1
.250" Dia. / Type 3 [XY - 4 Stack]*	.580" Dia. x 3.625" (4 Stack)	ASTM E8 - XY CYLINDER (4 STACK).STL	IFC0004-FP1

**INCLUDE MINIMUM SUPPORTED GAP OF .250" BETWEEN SPECIMENS*

CHARPY IMPACT (ASTM A370/E23)

Size/Sample Type [Orientation]	Blank Size**	Reference File	FAST Drawing Number
10mm / Full Size [ZX]	.474" SQ x 2.263"	ASTM E23 - ZX BLOCK.STL	IFC00017-FP1
10mm / Full Size [XY - 3 Stack]*	.474" SQ x 2.263" (3 Stack)	ASTM E23 - XY BLOCK (3 STACK).STL	IFC00017-FP1

**INCLUDE MINIMUM SUPPORTED GAP OF .250" BETWEEN SPECIMENS*

***INCLUDE MINIMUM .250" X .250" STANDING RIB DOWN LENGTH OF SPECIMEN*

COMPRESSION (ASTM E9)

Size/Sample Type [Orientation]	Blank Size	Reference File	FAST Drawing Number
.500" Dia. x 2.000" [ZX]	.580" Dia. x 2.750"	ASTM E9 - ZX CYLINDER.STL	IFC00065-FP1

SHEAR (ASTM B769)

Size/Sample Type [Orientation]	Blank Size	Reference File	FAST Drawing Number
.375" Dia. x 1.500" [XY]	.455" Dia. x 2.500"	ASTM B769 - XY CYLINDER.STL	IFC00085-FP1
.375" Dia. x 1.500" [ZX]	.455" Dia. x 2.500"	ASTM B769 - ZX CYLINDER.STL	IFC00085-FP1

AXIAL FATIGUE (ASTM E466/E606)

Size/Sample Type	Blank Size	Reference File	FAST Drawing Number
.250" Dia. [ZX]	.580" Dia. x 5.000"	ASTM E606 - CYLINDER.STL	IFC00088-FP1

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DENSITY ANALYSIS (ASTM B311/E1245)

Size/Sample Type	Blank Size*	Reference File	FAST Drawing Number
1.000" Cube	1.080" x 1.080" x 1.080"	ASTM E1245 - CUBE.STL	N/A

**INCLUDE MINIMUM .250" X .250" STANDING RIB DOWN LENGTH OF SPECIMEN*

THERMOMECHANICAL ANALYSIS (ASTM E228/E831)

Size/Sample Type	Blank Size	Reference File	FAST Drawing Number
Thermomechanical Analysis	.280" Dia. x 1.500"	ASTM E831 - CYLINDER.STL	IFC00081-FP1