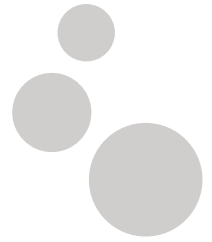


sapa:

ACC-U-ROD™

Consistent Accuracy and Performance
in Machine Grade Rod



ACC-U-LINE™

Raising the standard
in Rod, Hex and Bar products

ACC-U-ROD™

The Close Tolerance Extruded Rod that Changed the Screw Machining Industry... Now Even Better!

As part of Sapa's industry-leading ACC-U-LINE™ products, ACC-U-ROD is **the highest standard for quality and value in extruded Rod machining stock.**

- **Straightness improved** to .00625"/ft., .075" maximum over 12 ft. length**... equivalent to 1/2 standard extruded tolerance for all sizes
- **Tighter dimensional tolerances** are 1/2 or better than Aluminum Association Standard Tolerance and exceed Precision Tolerance for extruded rod for all sizes
- **Widest selection of alloys:** 6061, 6082 and low lead 6042 (RoHS and ELV-compliant) and 6262, with a choice of tempers
 - **Expanded size range:** ACC-U-ROD diameters from .438" to 8.000"; custom and metric sizes are also available. For larger rod sizes, Sapa offers Jumbo Rod in diameters up to and including 12.125"
 - **Improved surface appearance**

Typical applications:

- Automotive Parts
- Hardware
- Couplings and Connectors
- Fasteners
- Fittings
- Value Parts
- Hinge Pins



It's What's Inside That Counts

ACC-U-ROD with a cross sectional area up to 7.06 sq. in. features a fine recrystallized, uniform grain structure. Larger cross sectional areas feature an unrecrystallized uniform grain structure. ACC-U-LINE products deliver this consistent and dependable uniformity that is unsurpassed by a competing extruded product.

With improved machining performance, the tight, consistent dimensions of ACC-U-ROD offer cost savings over higher priced cold finish rod. This exclusive Sapa product features:

- An ideal combination of finishing characteristics, excellent corrosion resistance and all-around stability
- Sapa's unique capabilities for in-house casting of special alloy chemistries to improve mechanical properties and machinability
- Indirect extrusion technology for optimum consistency in grain structure and tolerances

ACC-U-ROD is available from Sapa Extrusions and its Premier® Distributor Partners.

Comparative Tolerances (inches)

Aluminum Association Standard Extruded Rod		New & Improved Sapa ACC-U-ROD	
Size (in.)	Tolerance +/- (in.)	Size (in.)	Tolerance +/- (in.)
.250-.499	0.008		
.500-.749	0.009	.438-1.000	0.003
.750-.999	0.010	1.001-1.500	0.004
1.000-1.499	0.012	1.501-1.999	0.005
1.500-1.999	0.014	2.000-3.000	0.007
2.000-3.999	0.024	3.001-3.999	0.012
4.000-5.999	0.034	4.000-5.000	0.017
6.000-7.999	0.044	5.001-7.500	0.022
8.000-9.999	0.054	7.501-8.000	0.030
Straightness: .0125"/ft. .150" max./12 ft. length		Straightness .00625"/ft. .075" max./12 ft. length** for .075" to 8.000" dia.	



Comparative Mechanical Properties*

Alloy*	Temper	Size Range (in.)	Tensile Strength Ksi (min.)	Yield Strength Ksi (min.)	Elongation % (min.)
6061	-T6, -T6511	.438" to 4.99"	38.0	35.0	10
	-T6H, -T6511H ^①	.500" to 8.000"	42.0	38.0	10
6262	-T6, -T6511	.438" to 8.000"	38.0	35.0	10
	-T6H, -T6511H ^①	.500" to 8.000"	42.0	38.0	10
6042	-T5, -T5511	.438" to .499"	38.0	35.0	10
	-T5, -T5511	.500" to 8.000"	42.0	35.0	10
	-T5H, -T5511H ^①	.500" to 8.000"	42.0	38.0	10
6082	-T6, -T6511	.438" to 8.000"	45.0	38.0	8

* Alloys 6061, 6262 and 6082 are certified to ASTM B 221; alloy 6061 also certified to ASME SB 221.

^① Sapa Special Temper Designations are unregistered tempers for reference only, not recognized by the Aluminum Association, and are provided for customer use to identify unique processing, material or end use application characteristics.



Consistent Accuracy and Performance in Machine Grade Rod

Standard Sizes (inches)

Diameter (")	Wt./Ft.	Section #	Diameter (")	Wt./Ft.	Section #
.438 (+/- .003)*	0.177	555308	.985 (+/- .003)	0.896	555335
.468 (+/- .003)*	0.202	555309	1.000 (+/- .003)	0.924	555336
.500 (+/- .003)	0.231	555310	1.016 (+/- .004)	0.953	555337
.551 (+/- .003)	0.280	555312	1.031 (+/- .004)	0.982	555338
.562 (+/- .003)	0.292	555313	1.062 (+/- .004)	1.042	555339
.563 (+/- .003)	0.293	555314	1.125 (+/- .004)	1.169	555340
.594 (+/- .003)	0.326	555315	1.188 (+/- .004)	1.304	555341
.625 (+/- .003)	0.361	555316	1.250 (+/- .004)	1.443	555343
.630 (+/- .003)	0.367	555317	1.266 (+/- .004)	1.480	555344
.635 (+/- .003)	0.373	555318	1.281 (+/- .004)	1.516	555345
.656 (+/- .003)	0.397	555320	1.312 (+/- .004)	1.590	555346
.687 (+/- .003)	0.436	555321	1.344 (+/- .004)	1.668	555347
.688 (+/- .003)	0.437	555322	1.375 (+/- .004)	1.746	555348
.718 (+/- .003)	0.476	555323	1.438 (+/- .004)	1.910	555349
.750 (+/- .003)	0.520	555324	1.468 (+/- .004)	1.990	555350
.766 (+/- .003)	0.542	555325	1.500 (+/- .005)	2.078	555351
.781 (+/- .003)	0.563	555327	1.563 (+/- .005)	2.256	555352
.812 (+/- .003)	0.609	555328	1.625 (+/- .005)	2.439	555353
.844 (+/- .003)	0.658	555329	1.688 (+/- .005)	2.632	555354
.875 (+/- .003)	0.707	555330	1.750 (+/- .005)	2.829	555355
.880 (+/- .003)	0.715	555331	1.812 (+/- .005)	3.033	555356
.906 (+/- .003)	0.758	555332	1.875 (+/- .005)	3.247	555357
.938 (+/- .003)	0.813	555333	1.938 (+/- .005)	3.469	555358

* Signifies standard straightness of .0125" per ft.

Straightness for ACC-U-ROD™ in all diameters improved to 1/2 standard extruded tolerance, .00625" per ft. or .075"/12 ft. length.

Available in 6061, 6262 and 6042 alloys; 6082 available upon request.

Choice of -T6 and -T5 tempers and stress-relieved -T6511 and -T5511 tempers.

Standard 12 ft. lengths.

** For lengths over 12 ft., inquire about tolerances.

ACC-U-ROD™



Consistent Accuracy and Performance in Machine Grade Rod

Standard Sizes (inches)

Diameter (")	Wt./Ft.	Section #	Diameter (")	Wt./Ft.	Section #
2.000 (+/- .007)	3.695	555359	4.000 (+/- .017)	14.778	500330
2.031 (+/- .007)	3.810	555360	4.125 (+/- .017)	15.716	555375
2.062 (+/- .007)	3.927	555361	4.250 (+/- .017)	16.683	500428
2.125 (+/- .007)	4.171	555362	4.312 (+/- .017)	17.173	511670
2.188 (+/- .007)	4.422	555363	4.500 (+/- .017)	18.703	501160
2.250 (+/- .007)	4.676	555364	4.750 (+/- .017)	20.839	503297
2.312 (+/- .007)	4.937	555365	5.000 (+/- .017)	23.091	503296
2.375 (+/- .007)	5.210	555367	5.250 (+/- .022)	25.458	515662
2.438 (+/- .007)	5.490	555368	5.375 (+/- .022)	26.684	555305
2.500 (+/- .007)	5.773	555369	5.500 (+/- .022)	27.940	515663
2.563 (+/- .007)	6.067	555370	5.625 (+/- .022)	29.224	555304
2.625 (+/- .007)	6.364	555371	5.750 (+/- .022)	30.537	515664
2.750 (+/- .007)	6.985	555372	6.000 (+/- .022)	33.251	515665
2.875 (+/- .007)	7.634	555373	6.125 (+/- .022)	34.650	555376
3.000 (+/- .007)	8.313	555374	6.250 (+/- .022)	36.079	516101
3.062 (+/- .012)	8.660	500337	6.500 (+/- .022)	39.023	516102
3.125 (+/- .012)	9.020	500322	6.750 (+/- .022)	42.083	555303
3.250 (+/- .012)	9.756	500171	7.000 (+/- .022)	45.258	555302
3.375 (+/- .012)	10.521	511631	7.250 (+/- .022)	48.548	555301
3.500 (+/- .012)	11.314	500328	7.500 (+/- .022)	51.954	555300
3.625 (+/- .012)	12.137	516990	7.750 (+/- .030)	55.475	568739
3.750 (+/- .012)	12.989	500338	8.000 (+/- .030)	59.112	568740

* Signifies standard straightness of .0125" per ft.

Straightness for ACC-U-ROD™ in all diameters improved to 1/2 standard extruded tolerance, .00625" per ft. or .075"/12 ft. length.

Available in 6061, 6262 and 6042 alloys; 6082 available upon request.

Choice of -T6 and -T5 tempers and stress-relieved -T6511 and -T5511 tempers.

Standard 12 ft. lengths.

** For lengths over 12 ft., inquire about tolerances.

ACC-U-ROD™ is trademark of Sapa Extrusions.

Sapa Extrusions North America

Phone: **800-233-3165**

Fax: **800-252-4646**

Email: NorthAmerica.Sales@sapagroup.com

www.sapagroup.com/NA

