Accredited Standards Committee H35

ALUMINUM and ALUMINUM ALLOYS

ANSI Accredited Standards Committee

Secretariat:

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DATE: October 29, 2024

TO: Jason H Lee

Jason.Lee@kaiseraluminum.com

FROM: Sam Muhamed

Manager, Standards & Technology

smuhamed@aluminum.org

SUBJECT: RE: ASD 2024 Table 11.10

Dear Mr. Lee,

The question that you submitted was reviewed by our Technical Committee on Product Standards. Your question and our response to it are as follows:

Your Question:

Hello,

One of our customer is interpreting the allowable depth from ASD2024 Table 11.10 as the surface roughness Rz1max and is requesting that a 5 mm thick extruded plate (AL6082) meets a surface roughness requirement of Rz1max 80 microns. Could you provide an accurate interpretation of Table 11.10 to clarify this?

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wire, rod, bar and profiles -extruded/standard tolerances

TABLE 11.10 Surface Roughness ① ®—Extruded Wire. Rod. Bar and Profiles

SPECIFIED SECTION THICKNESS mm		ALLOWABLE DEPTH OF CONDITIONS ② mm max
over	thru	
(e · e)	1.60	0.040
1.60	3.20	0.050
3.20	5.00	0.06
5.00	6.30	0.08
6.30	12.50	0.10
12.50	19/00	0.20

Our Response:

Table 11.10 allowable depth of conditions apply to individual measurements addressing one specific surface roughness or die line feature at a time. The table is not intended to be used in correlation with derived measurements such as averages or with other scales such as Ra or Rz which would typically be measured with a profilometer type instrument.

While unrelated to the above remark, please also note that the metric gauge "over 5.00 mm thru 6.30 mm" should be interpreted as equivalent to:

 $5.00 \text{ mm} < x \le 6.30 \text{ mm}$

Therefore, the allowable depth condition for a specified thickness of 5.00 mm is 0.06 mm max.

With best regards,

Sam Muhamed

cc: TCPS Members
ASC H35 Members

Dima Atiya – Baker & Hostetler

"Response Letters to Interpretation Questions" Folder