



Material / Weld  
**FINISHES**

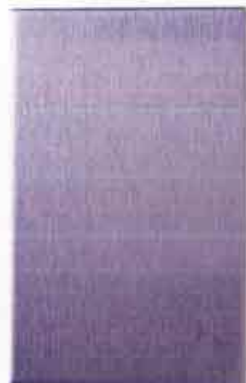


Stainless Steel Processing Equipment

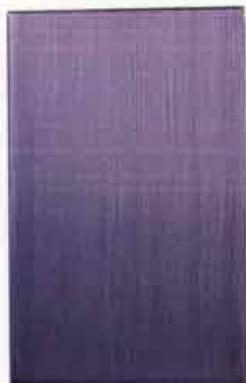
## Material Finishes



**2B MILL FINISH**  
General purpose cold rolled  
finish (7 ga. or lighter).



**150 GRIT FINISH**  
Commercial #4 finish, 120-150  
grit or pit free 150 grit min.



**240 GRIT FINISH**  
240 grit re-polish over  
150 grit pit-free.



**320 GRIT FINISH**  
320 grit re-polish over  
240 grit pit free.



**ELECTROPOLISH**  
Grade #1  
320 Grit Finish

Since 1955, DCI has been fabricating stainless steel processing vessels for the worldwide industries of: Dairy and Food, Beverage, Brewery, Chemical, Pharmaceutical, and OEM.

Today, the DCI tradition of superb craftsmanship and sound engineering continue in an ultra modern, high capacity plant. Available to you with in-house control from one central location:

- marketing sales
- estimating
- customer service
- engineering
- purchasing
- production
- quality control
- field service personnel and support staff

Total computerized order processing, scheduling and design are also available to you.

**DCI ... Stainless Integrity**

## Weld Finishes



**AS WELDED**  
Automatic-GTAW



**AS WELDED**  
Manual-GMAW



**AS WELDED**  
Manual-GTAW

*GTAW - Gas Tungsten Arc Weld  
GMAW - Gas Metal Arc Weld*



**GLASS BEAD**  
Automatic-GTAW



**CLEANED**  
Automatic-GTAW



**80 GRIT FINISH**



**180 GRIT FINISH**



**GLASS BEAD**  
Manual-GMAW



**CLEANED**  
Manual-GMAW



**120 GRIT FINISH**



**240 GRIT FINISH**



**GLASS BEAD**  
Manual-GTAW



**CLEANED**  
Manual-GTAW



**150 GRIT FINISH**



**320 GRIT FINISH**

# General Information

DCI offers several standard finishes which can be applied to meet your application requirements.

## Electropolish

This electrochemical process for providing product surface integrity beyond available conventional mechanical finishes is provided in a range from 150 grit finish to 320 grit finish.

Electropolishing DCI stainless steel vessels obtains improved corrosion resistance by: reducing the exposed product surface area; removal of metallic and non-metallic surface inclusions; obtaining a smooth releasable surface for improved cleanability; and removing some or all of the cold worked / structurally modified abrasive finished surface to expose unmodified base metal. The resulting surface is effectively passivated with the resulting chrome oxide film reformed to a maximum obtainable thickness.

In addition to the pictured Grade #1 Electropolish 320 grit finish, is a Grade #2 and Grade #3. Grade #2 is obtained by polishing to a 240 grit and then electropolishing. Grade #3 is obtained by electropolishing 150 grit finish material as purchased.

## As - Welded

All spatter, smoke, fixture clamp marks and weld discoloration will remain since no grinding or clean up is performed on the weld or surrounding area.

## Glass Bead

Glass beads of 60-90 sieve, blast the weld and surrounding area. This cleans the area and gives a satin appearance similar to a 2B finish. The entire surface can be blasted or selected areas can be masked giving a banded appearance.

## Cleaned

This finish is not flush and will contain irregularities on the remaining weld. When compared to all the abrasive finishing methods, this process results in the least amount of weld material removed.

## 80 Grit

The weld will be ground flush and discoloration will be removed. Deep, coarse grit lines will remain in the weld and weld area. Some pits and defects may also remain.

## 120 Grit

The weld will be ground flush and discoloration will be removed. This surface is a near sanitary finish. Pits and defects are minimized.

## 150 Grit

The weld is ground flush with all pits and defects removed. This finish is normally used with a commercial #4 finish for sanitary applications.

## 180 Grit

The weld has finer grit lines than the 150 grit finish. It has improved appearance and will provide good product release and cleanability. Generally used for 150 grit *minimum* applications.

## 240 Grit

The weld finish shows higher reflectivity than the 180 grit finish. It has better product release and cleanability than a 180 grit finish.

## 320 Grit

The weld surface shows minimal grit lines and provides for excellent product release and cleanability. This weld finish is normally used in conjunction with a 320 grit material finish.

## Surface Measurements Comparison

RMS (Micro-inch)	RMS (Micron)	RA (Micro-inch)	RA (Micron)	Grit Size
80	2.03	71	1.80	80
58	1.47	52	1.32	120
47	1.20	42	1.06	150
34	.86	30	.76	180
17	.43	15	.38	240
14	.36	12	.30	320

These values are the average data of many tests. Therefore, slight deviations from the norm do exist. However, because of the number of tests performed, reasonable accuracy is assumed. Because of the many variables which create this data, deviations of  $\pm 5\%$  would be considered well within good measurement parameters.



An Employee Owned Company

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