

ACCEPTANCE CRITERIA

Introduction

The following acceptance criteria shall be employed to evaluate the paper's conformance to specification.

Paper that does not meet all specification values shall be accepted with no discount providing that the minimum acceptable *Product Quality Index* (PQI) of 70 is met.

The PQI for a specific paper is determined by assigning demerits to each deficient quality characteristic based on test results. The demerits assigned will vary with the category of deficiency. A *minor defect* shall be assigned 4 demerits, a *major defect* 12 demerits, and a *critical defect* 36 demerits.

Definitions

Minor Defect. Any deficiency from specified values which does not materially reduce the usability of the paper for its intended purpose; or require special procedures for printing or processing.

Major Defect. Any deficiency from specified values, other than critical, that could result in failure, or materially reduce the usability of the paper for its intended purpose; or may require special procedures for printing or processing, or is a significant deviation from specifications, established standards, or average process capability, or may materially affect the appearance of the product.

Critical Defect. Any deficiency from specified requirement that judgment and experience indicate would result in the paper being unusable for its intended purpose; or is a serious departure from specifications, established standards, or average process capability.

The equation for the calculation of the *Product Quality Index* is as follows:

Product Quality Index is equal to 100 minus the sum of the assessed demerits for each paper characteristic or property.

$$\text{Expressed mathematically, } PQI = 100 - \sum_{i=1}^{i=N} C_i$$

where C=characteristics or properties

Paper having a PQI of 70 or better shall be accepted at the contracted price as meeting the intent and requirement of the specification. That having a PQI below 70 shall be considered as critically defective, subject to outright rejection.

Criteria for establishing the category of defect and demerits are as follows unless otherwise stated in the specification standard:

1. Acidity (pH Value):

a. "Precision Requirements" all stocks when so designated.

<i>Deficiency:</i>	Category	Demerits
Less than 0.20 pH unit	Minor	4
0.20-0.40 pH unit	Major	12
More than 0.40 pH unit	Critical ..	36
Example: Spec (4.5) - 0.3=4.2; Over 4.2 pH but less than 4.5=Minor defect or 4 demerits.		

b. "Regular Requirements" all stocks except those with minimum pH requirements of 7.0 or 7.5 or if no designation in solicitation.

<i>Deficiency:</i>	Category	Demerits
Less than 0.40 pH unit	Minor	4
0.40-0.60 pH unit	Major	12
More than 0.60 pH unit	Critical ..	36

c. Papers with minimum requirements of 7.0 or 7.5 pH value.

<i>Deficiency:</i>	Category	Demerits
Not as specified	Critical ..	36

2. Alpha Cellulose:

<i>Deficiency:</i>	Category	Demerits
Less than 5 percentage points	Minor	4
5-10 percentage points	Major	12
More than 10 percentage points ..	Critical ..	36

3. Basis Weight/Grammage:

<i>Deficiency:</i>	Category	Demerits
Not as specified	Critical ..	36

4. Brightness:

<i>Deficiency:</i>	Category	Demerits
Less than 0.5 percentage point	Minor	4
0.5-1.0 percentage point	Major	12
More than 1.0 percentage point ...	Critical ..	36

Or

More than 2.0 percentage points below target value.

5. Bursting Strength:

a. "Precision Requirements" all stocks when so designated.

<i>Deficiency:</i>	Category	Demerits
Less than 5 pct	Minor	4
5-10 pct	Major	12
More than 10 pct	Critical ..	36

b. "Regular Requirements" all stock when so designated or if no designation in solicitation.

<i>Deficiency:</i>	Category	Demerits
Less than 10 pct	Minor	4
10-25 pct	Major	12
More than 25 pct	Critical ..	36
Example: Spec (400) × 25 pct=100; 400-100=300; Less than 300 Bursting Strength=critical defect or 36 demerits.		

6. Calcium Carbonate—Same as 3 above.

7. Cleanliness—Same as 3 above.

8. Color Deviation (from Standard):

a. "Precision Requirements" all stocks when so designated.

<i>Deficiency:</i>	Category	Demerits
Less than 0.5 DE unit over specified.	Minor	4
0.5 to 1.5 DE unit over specified	Major	12
More than 1.5 DE unit over specified.	Critical ..	36

b. "Regular Requirements" all stock when so designated or if no designation in solicitation.

<i>Deficiency:</i>	Category	Demerits
Less than 1.0 DE unit over specified.	Minor	4
1.0 to 2.0 DE unit(s) over specified.	Major	12
More than 2.0 DE units over specified.	Critical ..	36

Or

If standard states another DE value as being critically defective.

9. Color Variation (Does not include 2-Sidedness):

<i>Deficiency:</i>	Category	Demerits
Within a shipment or between shipments in an order, more than 0.5 DE unit over specified.	Critical ..	36

10. Copper Number (excess copper number):

a. "Precision Requirements" all stocks when so designated.

<i>Deficiency:</i>	Category	Demerits
Less than 10 pct	Minor	4
10-25 pct	Major	12
More than 25 pct	Critical ..	36

b. "Regular Requirements" all stock when so designated or if no designation in solicitation.

<i>Deficiency:</i>	Category	Demerits
Less than 25 pct	Minor	4
25-50 pct	Major	12
More than 50 pct	Critical ..	36

11. Equilibrium Relative Humidity:

a. "Precision Requirements" all stocks when so designated.

<i>Deficiency:</i>	Category	Demerits
Less than ±1 percentage point	Minor	4
±1 to ±2 percentage points	Major	12
More than ±2 percentage points ..	Critical ..	36
Example: Spec (45 pct ±5 pct) ±2; Maximum 45 pct +5+2=52 pct; Minimum 45 pct -5-2=38 pct: Over 52 pct RH or under 38 pct RH=Critical defect or 36 demerits.		

b. "Regular Requirements" all stock when so designated or if no designation in solicitation.

<i>Deficiency:</i>	Category	Demerits
Less than ±3 percentage points ...	Minor	4
±3 to ±5 percentage points	Major	12
More than ±5 percentage points ..	Critical ..	36

12. Filler—See calcium carbonate.