Standard Acceptable Quality Limit and Penalties Plan for Quality Deviation

YRCS uses the proven method of Acceptable Quality Level 'AQL' (or Acceptable Quality Limit) to conduct product inspection, which normally shall be included in the tender documentation and contracts. The standard definition of Acceptable Quality Level (AQL) is "the maximum defective percent (or the maximum number of defects per hundred units) that, for purpose of sampling inspection, can be considered satisfactory as a process average". A random sampling shall be conducted (based on the AQL tables I and II) to be inspected, and after inspection, according to the number of defects found (critical, major, minor defects), shipment can be accepted or to rejected.

Table I − Sample size code letters

	ot siz	•	Sp	ecial insp	ection leve	General inspection levels								
'	.Ot SIZ	е	S-1	S-2	S-3	S-4	ı	II	III					
2	to	8	Α	Α	Α	Α	Α	Α	В					
9	to	15	Α	Α	Α	Α	Α	В	С					
16	to	25	Α	Α	В	В	В	С	D					
26	to	50	Α	В	В	С	С	D	E					
51	to	90	В	В	С	С	С	E	F					
91	to	150	В	В	С	D	D	F	G					
151	to	280	В	С	D	Ε	Е	G	Н					
281	to	500	В	С	D	Ε	F	Н	J					
501	to	1,200	С	С	Ε	F	G	J	K					
1,201	to	3,200	С	D	Ε	G	Н	K	L					
3,201	to	10,000	С	D	F	G	J	L	M					
10,001	to	35,000	С	D	F	Н	K	M	N					
35,001	to	150,000	D	Ε	G	J	L	N	Р					
150,001	to	500,000	D	Ε	G	J	М	Р	Q					
500,001	and	over	D	Ε	Н	K	N	Q	R					

The general inspection level II is normally used to determine the corresponding letter of the lot size. Then this letter which corresponds in the table II to a sampling size to be inspected. The usual AQL used by YRCS is generally: 0/2.5/4 for Critical / Major / Minor defects.

Table II- Single sampling plans for normal inspection

Sample	Sample		Α	cc	ер	taı	nce	e C)ua	alit	y L	.im	nits	, Δ	QI	.s,	in	pe	rc	en	t r	or	ıcc	on	for	mi	ng	it	em	ns a	inc	d n	101	nc	on	for	m	itie	es	pe	r 1	00	ite	em	s ((N	orr	na	l iı	nsp	ec	tio	n)	
size code letter	size	0.0	010	0.0	15	0.0)25	0.4	400	0.0	065	0.	.10	0.	.15	0.	.25	0	.40	0	.65	; [1.0		1.5		2.5		4.0)	6.5	5	1	.0	1	.5	2	25	4	10		65	1	.00		150	0	250	0	40	0	650) :	1000
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	e A	c R	e A	c R	le A	\c R	e A	C F	≀e	Ac I	Re /	Ac I	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	A	R	e Ad	R	e A	۱c I	Re A	۱c F	Re	Ac I	Re /	Ac R	te A	c Re
Α	2												ı						Ī	T	T	Ť	T	T	T	Ť	T	T	1	T	0	1			7		1	2	2	3	3	4	5	6	7	7	8 1	.0 1	11	14 :	15 2	21 2	2 3	0 31
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- ↑= Use the first sampling plan below the arrow. If sample size equuals, or exceeds, lot size, carry out 100 percent inspection
- ■= Use the first sampling plan above the arrow

Ac = Acceptable number

Re = Rejection number

If AQL is not determined in the tender documents and contracts, then following penalties plan shall apply disregarding selected inspection level of YRCS and Local Authority Standards. Penalties will be applicable for each characteristic of the non-conforming goods to the total value of the Purchase Order.

Parameter measured	Level of deviation	Type of defect Major / Minor **	Level of penalties to be applied on total value of lot *							
	up to 2 %	Minor	1st occurrence non, 2nd occurrence - 0.5%							
Non-compliance to performance requirement	up to 10 %	Major	2%							
performance requirement	up to 25 %	Major	5%							
	more than 25 %	Major	10%							
	up to 5 %	Minor	for each 1% of non-compliance 0.5 % penalties.							
Non-compliance on weigh and dimension	up to 10 %	Major	for each 1% of non-compliance 1 % penalties.							
	more than 10 %	Major	for each 1% of non-compliance 2 % penalties.							
We all lafered	visual quality not affected	Minor	1st occurrence non, 2nd occurrence - 1 %							
Visual defects	visual quality affected	Major	1st occurrence 5 %, 2nd occurrence - 10 %							
	Goods are not affected	Minor	1%							
Packing / Marking Defects	Goods are not affected	Major	5%							

Special remarks

- * Any major non-compliance is be subject to lot refusal at discretion of YRCS.
- * AQL and Penalties Plan issued by YRCS for specific goods prevail over this Penalties Plan.
- * Maximum cumulative penalties cannot exceed 15 % of the value of the Purchase Order.
- ** Major defect: defect that is likely to result in a material failure or to render the product not fit for its intended purpose.
- ** Minor defect: defect that is not likely to reduce materially the usability of the product for its intended purpose, or a departure from established standards of quality, having little bearing on the effective use or operation of the product.