









Explanation for used Special Characteristics at the supplier drawings

This sheet is a support/Explanation how to use the special characteristics at some cases. In the past at some of the supplier drawings the Melecs Special characteristics have been forwarded to the suppliers, see the example table below;

	Ppk > 1.67	attributive (gauge)
	variable (measured)	attributive (gauge)
	attributive (gauge)	attributive (gauge)
	variable (measured)	variable (measured)
	100% (in prod. Line)	100% (in production Line)
	Ppk ≥ 1.67	variable (measured)
	Ppk ≥ 1.67	Cpk ≥ 1.33
special character	for PPAP only	for series production

Characteristics identified by this symbol  have quality requirements as identified by the control-plan

In this example table all the used SC types (in this case the Significant Characteristics) are listed, see the explanation for the usage and meaning;

S1: Melecs requests capability in project and in serial phase according to the above table, monitoring is needed with x-bar chart

S2: MELECS needs a capability only at PPAP phase, in serial life the characteristics has to be measured by the supplier, and values have to be inside the tolerance

S3; It is required from MELECS side, that the supplier has to measure the characteristic 100% inline / on the line with a 100% check also in PPAP phase and also in serial life.

S4; The supplier has to measure the dimension in PPAP and in serial life, results have to be documented and inside the tolerance (some dimensions have not been always measured in serial life that is why this category as highlight is necessary)

S5; it is a random attributive check also in PPAP and also in serial life

S6; in PPAP the dimension has to be measured and in the serial life it has to be checked randomly with gauge

S7; in PPAP phase a capability is needed for the dimension, but later on in serial life it can be checked with a gauge

If dimension is marked on the customer drawing as Special Characteristic, than it is mandatory to mark the dimension on supplier drawing as S1 or S3 – has to be checked according to the customer requirements.

Of course for CCs (Critical Characteristics) the capability numbers looks differently!

For further information, see the MV0586.