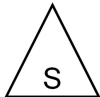



Besondere Merkmale Lieferant / Special characteristics supplier

Symbol	Definition	Supplier
	<p>When to apply a SC?</p> <p>Significant characteristic</p> <p>Product features or process features, which affect the fit, function, performance, following processing</p>	<p>General</p> <ul style="list-style-type: none"> - Must be marked continuous in the FMEA's and controlplan (Basically Melecs specified symbol has to be used unless Melecs defined in the technical documents other symbols) - Must be evaluated in FMEA with weight 7 or 8 - Capability and measurement system analyses MSAs of associated measuring equipment must be enclosed to the initial sampling report to Melecs <p>Deviation approval possible in case out of spec.? Yes, temporarily</p>
		<p>Initial sampling*</p> <p>Preliminary process capability / machine capability pp, ppk $\geq 1,67$ / cm, cmk $\geq 1,67$, min. 50 samples in a row (+- 5s, 0,6 ppm) (per cavity)</p> <p>Is the process not capable then it must be a 100% check until the process has been optimized.</p> <p>Measurement system analyses/measurement process analyses has to be performed according VDA Vol. 2 or MSA last revision, arranged with responsible SQA. cg, cgk $\geq 1,33$ / %R&R <10% (procedure depends on the measuring process)</p>
		<p>Serial production*</p> <p><u>Testing methode SPC:</u> In production a SPC control of characteristic has to be performed long-term process capability cp, cpk $\geq 1,33$, min. 125 pcs., 25 spot check to 5 pcs. (+-4s, 63 ppm) (per cavity) Confirmation by CoC (Certificate of Conformity) document with each delivery.</p> <p><u>Poka-Yoke</u></p> <p><u>Testing methode 100%:</u> 100% automatical check of characteristic</p> <p>Generally to all testing methodes records have to be made and if necessary send to MELECS, also applies for material certificates.</p>
	<p>When to apply a CC?</p> <p>Critical characteristic</p> <p>Product features or process features, which affect the compliance with safe operation or Government regulations</p>	<p>General</p> <ul style="list-style-type: none"> - Must be marked continuous in the FMEA's and controlplan (Basically Melecs specified symbol has to be used unless Melecs defined in the technical documents other symbols) - Must be evaluated in FMEA with weight 9 or 10 - Capability and measurement system analyses MSAs of associated measuring equipment must be enclosed to the initial sampling report to Melecs <p>Deviation approval possible in case out of spec.? No</p>
		<p>Initial sampling*</p> <p>Preliminary process capability / machine capability pp, ppk $\geq 2,0$ / cm, cmk $\geq 2,0$, min. 50 samples in a row (+- 6s, 0,002 ppm) (per cavity)</p> <p>Is the process not capable then it must be a 100% check until the process has been optimized.</p> <p>Measurement system analyses/measurement process analyses has to be performed according VDA Vol. 2 or MSA last revision, arranged with responsible SQA. cg, cgk $\geq 1,33$ / %R&R <10% (procedure depends on the measuring process)</p>
		<p>Serial production*</p> <p><u>Testing methode SPC:</u> In production a SPC control of characteristic has to be performed long-term process capability cp, cpk $\geq 1,67$, min. 125 pcs., 25 spot check to 5 pcs. (+-5s, 0,6 ppm) (per cavity) Confirmation by CoC (Certificate of Conformity) document with each delivery.</p> <p><u>Poka-Yoke</u></p> <p><u>Testing methode 100%:</u> 100% automatical check of characteristic</p> <p>Generally to all testing methodes records have to be made and if necessary send to MELECS, also applies for material certificates.</p>

* the capability requirements are the general requirements, if there are no special requirements from Melecs than the given values are valid