

4-3. táblázat

Definíció és becslésmód	A kártya típusa			
	R	s	s^2	\bar{x} -átlag
A kártya paramétereinek definíciója	$CL_R = d_2 \sigma$ $UCL_R = \bar{R} + 3\sigma_R$ $LCL_R = \bar{R} - 3\sigma_R$ $\sigma_R = d_3 \sigma$	$CL_s = c_4 \sigma$ $UCL_s = \bar{s} + 3\sigma_s$ $LCL_s = \bar{s} - 3\sigma_s$ $\sigma_s = \sigma \sqrt{1 - c_4^2}$	$CL_{s^2} = \sigma^2$ $UCL_{s^2} = \frac{\sigma^2 \chi_{f\ddot{o}ls\ddot{o}}^2}{n-1}$ $LCL_{s^2} = \frac{\sigma^2 \chi_{als\ddot{o}}^2}{n-1}$	$CL_{\bar{x}} = \mu$ $UCL_{\bar{x}} = \bar{\bar{x}} + 3 \frac{\sigma}{\sqrt{n}}$ $LCL_{\bar{x}} = \bar{\bar{x}} - 3 \frac{\sigma}{\sqrt{n}}$
σ^2 becslésének módja				
R-ből $\hat{\sigma} = \frac{\bar{R}}{d_2}$	$CL_R = \bar{R}$ $UCL_R = \bar{R} + 3 \frac{d_3 \bar{R}}{d_2} = D_4 \bar{R}$ $LCL_R = \bar{R} - 3 \frac{d_3 \bar{R}}{d_2} = D_3 \bar{R}$	$CL_s = \frac{c_4}{d_2} \bar{R}$ $UCL_s = \frac{c_4}{d_2} \bar{R} + 3 \frac{\bar{R} \sqrt{1 - c_4^2}}{d_2}$ $LCL_s = \frac{c_4}{d_2} \bar{R} - 3 \frac{\bar{R} \sqrt{1 - c_4^2}}{d_2}$	$CL_{s^2} = \frac{\bar{R}^2}{d_2^2}$ $UCL_{s^2} = \frac{\bar{R}^2 \chi_{f\ddot{o}ls\ddot{o}}^2}{d_2^2 (n-1)}$ $LCL_{s^2} = \frac{\bar{R}^2 \chi_{als\ddot{o}}^2}{d_2^2 (n-1)}$	$CL_{\bar{x}} = \mu$ $UCL_{\bar{x}} = \bar{\bar{x}} + \frac{3\bar{R}}{d_2 \sqrt{n}} = \bar{\bar{x}} + A_2 \bar{R}$ $LCL_{\bar{x}} = \bar{\bar{x}} - \frac{3\bar{R}}{d_2 \sqrt{n}} = \bar{\bar{x}} - A_2 \bar{R}$
s-ből $\hat{\sigma} = \frac{\bar{s}}{c_4}$	$CL_R = \frac{d_2 \bar{s}}{c_4}$ $UCL_R = \frac{d_2}{c_4} \bar{s} + 3 \frac{d_3 \bar{s}}{c_4}$ $LCL_R = \frac{d_2}{c_4} \bar{s} - 3 \frac{d_3 \bar{s}}{c_4}$	$CL_s = \bar{s}$ $UCL_s = \bar{s} + 3 \frac{\bar{s}}{c_4} \sqrt{1 - c_4^2} = B_4 \bar{s}$ $LCL_s = \bar{s} - 3 \frac{\bar{s}}{c_4} \sqrt{1 - c_4^2} = B_3 \bar{s}$	$CL_{s^2} = c_4^2 \bar{s}^2$ $UCL_{s^2} = \frac{\bar{s}^2 \chi_{f\ddot{o}ls\ddot{o}}^2}{c_4^2 (n-1)}$ $LCL_{s^2} = \frac{\bar{s}^2 \chi_{als\ddot{o}}^2}{c_4^2 (n-1)}$	$CL_{\bar{x}} = \mu$ $UCL_{\bar{x}} = \bar{\bar{x}} + 3 \frac{\bar{s}}{c_4 \sqrt{n}} = \bar{\bar{x}} + A_3 \bar{s}$ $LCL_{\bar{x}} = \bar{\bar{x}} - 3 \frac{\bar{s}}{c_4 \sqrt{n}} = \bar{\bar{x}} - A_3 \bar{s}$

4-3. táblázat folytatása

σ^2 becslésének módja	A kártya típusa			
	R	s	s^2	\bar{x} -átlag
s^2 -ből $\sigma^2 = s^2$	$CL_R = d_2 \sqrt{s^2}$ $UCL_R = d_2 \sqrt{s^2} + 3d_3 \sqrt{s^2}$ $LCL_R = d_2 \sqrt{s^2} - 3d_3 \sqrt{s^2}$	$CL_s = c_4 \sqrt{s^2}$ $UCL_s = c_4 \sqrt{s^2} + 3\sqrt{s^2} \sqrt{1-c_4^2}$ $LCL_s = c_4 \sqrt{s^2} - 3\sqrt{s^2} \sqrt{1-c_4^2}$	$CL_{s^2} = s^2$ $UCL_{s^2} = \frac{s^2 \chi^2_{f\ddot{o}ls\ddot{o}}}{n-1}$ $LCL_{s^2} = \frac{s^2 \chi^2_{als\ddot{o}}}{n-1}$	$CL_{\bar{x}} = \mu$ $UCL_{\bar{x}} = \bar{x} + 3 \frac{\sqrt{s^2}}{\sqrt{n}}$ $LCL_{\bar{x}} = \bar{x} - 3 \frac{\sqrt{s^2}}{\sqrt{n}}$
σ^2 és μ adott	$CL_R = d_2 \sigma$ $UCL_R = d_2 \sigma + 3d_3 \sigma$ $LCL_R = d_2 \sigma - 3d_3 \sigma$	$CL_s = c_4 \sigma$ $UCL_s = c_4 \sigma + 3\sigma \sqrt{1-c_4^2}$ $LCL_s = c_4 \sigma - 3\sigma \sqrt{1-c_4^2}$	$CL_{s^2} = \sigma^2$ $UCL_{s^2} = \frac{\sigma^2 \chi^2_{f\ddot{o}ls\ddot{o}}}{n-1}$ $LCL_{s^2} = \frac{\sigma^2 \chi^2_{als\ddot{o}}}{n-1}$	$CL_{\bar{x}} = \mu$ $UCL_{\bar{x}} = \mu + 3 \frac{\sigma}{\sqrt{n}}$ $LCL_{\bar{x}} = \mu - 3 \frac{\sigma}{\sqrt{n}}$
az előzetes adatfelvétel mintaelemszámához veendő	c_4, d_2	$\sqrt{1-c_4^2}, d_2$	c_4, d_2	
az ellenőrzés mintaelemszámához veendő	d_3	c_4	χ^2	