● Ihre Lösung müsste wie folgt aussehen (Abb. 36):

1	2	3	4	5	6	
Teilfl.	$\bar{x}_{Si}$	$\bar{y}_{Si}$	A_i	$\bar{x}_{Si}A_i$	$\bar{y}_{Si}A_i$	
	$-\frac{a}{3}$	$\frac{2}{3}a$	a^2	$-\frac{a^3}{3}$	$\frac{2}{3}a^3$	
	$\frac{4a}{3\pi}$	a	$\frac{\pi}{2}a^2$	$\frac{2}{3}a^3$	$\frac{\pi}{2}a^3$	
$\sum$			$(2+\pi)\frac{a^2}{2}$	$\frac{a^3}{3}$	$\frac{4+3\pi}{6}a^3$	

	7	8	9	10	11	12	13
	I_{xxi}	I_{xyi}	$\bar{y}_{Si}^2A_i$	$-\bar{x}_{Si}\bar{y}_{Si}A_i$	$I_{\bar{x}\bar{x}i}$	$I_{\bar{y}\bar{y}i}$	$I_{\bar{x}\bar{y}i}$
		$-\frac{a^4}{18}$	$\frac{4}{9}a^4$	$\frac{2}{9}a^4$	$\frac{2}{3}a^4$	$\frac{a^4}{6}$	$\frac{a^4}{6}$
	$\frac{\pi}{8}a^4$	0	$\frac{\pi}{2}a^4$	$-\frac{2}{3}a^4$	$\frac{5}{8}\pi a^4$	$\frac{\pi}{8}a^4$	$-\frac{2}{3}a^4$
					$\frac{16+15\pi}{24}a^4$	$\frac{4+3\pi}{24}a^4$	$\frac{a^4}{3}$

$$\underline{\bar{x}_S} = \frac{\sum_{i=1}^{2}\bar{x}_{Si}\,dA}{\sum_{i=1}^{2}A_i} = \frac{\frac{a^3}{3}}{\frac{2+\pi}{2}a^2} = \frac{2}{3(2+\pi)}a = \underline{0{,}13\,a}$$

Abb. 36

$$\underline{\bar{y}_S} = \frac{\sum_{i=1}^{2}\bar{y}_{Si}A_i}{\sum_{i=1}^{2}A_i} = \frac{\frac{4+3\pi}{6}a^3}{\frac{2+\pi}{2}a^2} = \frac{4+3\pi}{3(2+\pi)}a = \underline{0{,}87\,a}$$

$$\underline{I_{xx}} = I_{\bar{x}\bar{x}} - \bar{y}_S^2A = \frac{16+15\pi}{24}a^4 - \left(\frac{4+3\pi}{3(2+\pi)}a\right)^2(2+\pi)\frac{a^2}{2} = \underline{0{,}68\,a^4}$$

$$\underline{I_{yy}} = I_{\bar{y}\bar{y}} - \bar{x}_S^2\,A = \frac{4+3\pi}{24}a^4 - \left(\frac{2a}{3(2+\pi)}\right)^2(2+\pi)\frac{a^2}{2} = \underline{0{,}52\,a^4}$$

$$\underline{I_{xy}} = I_{\bar{x}\bar{y}} + \bar{x}_S\bar{y}_SA = -\frac{a^4}{3} + \frac{2a}{3(2+\pi)}\,\frac{4+3\pi}{3(2+\pi)}a(2+\pi)\frac{a^2}{2} = \underline{-0{,}21a^4}$$

(Wenn Sie Fehler haben, dann müssen Sie diese berichtigen!)

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