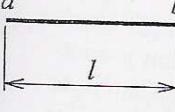
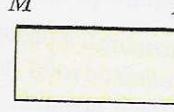
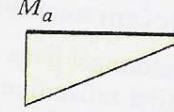
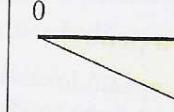
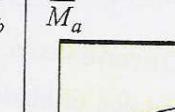
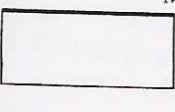
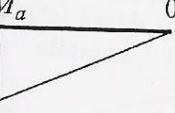
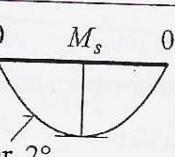
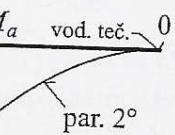
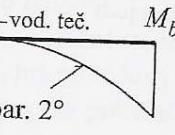
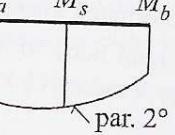


Tabulka 2.2: Vzorce pro výpočet integrálů  $\int_0^l M \bar{M} dx$

				
	$M\bar{M}l$	$\frac{1}{2}M\bar{M}_a l$	$\frac{1}{2}M\bar{M}_b l$	$\frac{1}{2}M(\bar{M}_a + \bar{M}_b)l$
	$\frac{1}{2}M_a\bar{M}l$	$\frac{1}{3}M_a\bar{M}_a l$	$\frac{1}{6}M_a\bar{M}_b l$	$\frac{1}{6}M_a(2\bar{M}_a + \bar{M}_b)l$
	$\frac{1}{2}M_b\bar{M}l$	$\frac{1}{6}M_b\bar{M}_a l$	$\frac{1}{3}M_b\bar{M}_b l$	$\frac{1}{6}M_b(\bar{M}_a + 2\bar{M}_b)l$
	$\frac{1}{2}(M_a + M_b)\bar{M}l$	$\frac{1}{6}(2M_a + M_b)\bar{M}_a l$	$\frac{1}{6}(M_a + 2M_b)\bar{M}_b l$	$\frac{1}{6}[(2M_a + M_b)\bar{M}_a + (M_a + 2M_b)\bar{M}_b]l$
	$\frac{2}{3}M_s\bar{M}l$	$\frac{1}{3}M_s\bar{M}_a l$	$\frac{1}{3}M_s\bar{M}_b l$	$\frac{1}{3}M_s(\bar{M}_a + \bar{M}_b)l$
	$\frac{1}{3}M_a\bar{M}l$	$\frac{1}{4}M_a\bar{M}_a l$	$\frac{1}{12}M_a\bar{M}_b l$	$\frac{1}{12}M_a(3\bar{M}_a + \bar{M}_b)l$
	$\frac{1}{3}M_b\bar{M}l$	$\frac{1}{12}M_b\bar{M}_a l$	$\frac{1}{4}M_b\bar{M}_b l$	$\frac{1}{12}M_b(\bar{M}_a + 3\bar{M}_b)l$
	$\frac{1}{6}(M_a + 4M_s + M_b)\bar{M}l$	$\frac{1}{6}(M_a + 2M_s)\bar{M}_a l$	$\frac{1}{6}(2M_s + M_b)\bar{M}_b l$	$\frac{1}{6}[(M_a + 2M_s)\bar{M}_a + (2M_s + M_b)\bar{M}_b]l$

Tabulka 14.3. Hodnoty integrálů  $\int M \bar{M} dx$  u prutů konstantního průřezu

Zatěž. případ	$M$	$\bar{M}$	$\bar{M}_a$	$\bar{M}_b$
1		$\frac{1}{2} M_a \bar{M}_a l$	$\frac{1}{3} \bar{M}_a M_a l$	$\frac{1}{6} M_a (2\bar{M}_a + \bar{M}_b) l$
2		$\frac{1}{2} \bar{M}_a M_b l$	$\frac{1}{6} \bar{M}_a M_b l$	$\frac{1}{6} M_b (\bar{M}_a + 2\bar{M}_b) l$
3		$\frac{1}{2} (M_a + M_b) \bar{M}_a l$	$\frac{1}{6} (2M_a + M_b) \bar{M}_a l$	$\frac{1}{6} [\bar{M}_a (2M_a + M_b) + \bar{M}_b (M_a + 2M_b)] l$
4		$\frac{1}{2} (M_a - M_b) \bar{M}_a l$	$\frac{1}{6} (2M_a - M_b) \bar{M}_a l$	$\frac{1}{6} [\bar{M}_a (2M_a - M_b) + \bar{M}_b (M_a - 2M_b)] l$
5		$\frac{1}{2} \bar{M}_a M_c l$	$\frac{1}{6} \bar{M}_a M_c (l + x')$	$\frac{1}{6} [\bar{M}_a (l + x') + \bar{M}_b (l + x)] M_c$
6		$\frac{1}{2} \bar{M}_a M_c (x - x')$	$\frac{1}{6l} \bar{M}_a M_c (l^2 - 3x'^2)$	$\frac{M_c}{6l} [\bar{M}_b (3x^2 - l^2) - \bar{M}_a (3x'^2 - l^2)]$
7		$M_a \bar{M}_a l$	$\frac{1}{2} \bar{M}_a M_a l$	$\frac{1}{2} (\bar{M}_a + \bar{M}_b) M_a l$
8		$\frac{2}{3} \bar{M}_a M_c l$	$\frac{1}{3} \bar{M}_a M_c l$	$\frac{1}{3} M_c (\bar{M}_a + \bar{M}_b) l$
9		$\frac{1}{3} \bar{M}_a M_a l$	$\frac{1}{4} \bar{M}_a M_a l$	$\frac{1}{12} M_a (3\bar{M}_a + \bar{M}_b) l$
10		$\frac{1}{3} \bar{M}_a M_b l$	$\frac{1}{12} \bar{M}_a M_b l$	$\frac{1}{12} M_b (\bar{M}_a + 3\bar{M}_b) l$
11		$\frac{2}{3} \bar{M}_a M_a l$	$\frac{5}{12} \bar{M}_a M_a l$	$\frac{1}{12} M_a (5\bar{M}_a + 3\bar{M}_b) l$
12		$\frac{2}{3} \bar{M}_a M_b l$	$\frac{1}{4} \bar{M}_a M_b l$	$\frac{1}{12} M_b (3\bar{M}_a + 5\bar{M}_b) l$
13		$\frac{1}{2} \bar{M}_a M_a x$	$\frac{1}{6} \bar{M}_a M_a \frac{x}{l} (3l - x)$	$\frac{M_a}{6} \cdot \frac{x}{l} [\bar{M}_a (3l - x) + \bar{M}_b x]$
14		$\frac{1}{2} \bar{M}_a M_b x'$	$\frac{1}{6} \bar{M}_a M_b \frac{x'^2}{l}$	$\frac{M_b}{6} \cdot \frac{x'}{l} [\bar{M}_b (3l - x') + \bar{M}_a x']$
15		$\frac{1}{4} \bar{M}_a M_b l$	$\frac{1}{20} \bar{M}_a M_b l$	$\frac{M_b}{20} (\bar{M}_a + 4\bar{M}_b) l$
16		$\frac{1}{4} \bar{M}_a M_a l$	$\frac{1}{5} \bar{M}_a M_a l$	$\frac{M_a}{20} (4\bar{M}_a + \bar{M}_b) l$

Tabulka 14.3. Hodnoty integrálů  $\int M \bar{M} dx$  u prutů konstantního průřezu (pokračování)

Zatěž. případ	$M$	$\bar{M}$	$\bar{M}_a$	$\bar{M}_a$
17		$\frac{\bar{M}_a}{8}(M_a + 3M_c + 3M_d + M_b)l$	$\frac{\bar{M}_a}{120}(13M_a + 36M_c + 9M_d + 2M_b)l$	$\frac{l}{120}[\bar{M}_a \cdot (13M_a + 36M_c + 9M_d + 2M_b) + \bar{M}_b \cdot (2M_a + 9M_c + 36M_d + 13M_b)]$
Zatěž. případ	$M$	$\bar{M}$	$\bar{M}_c$	$\bar{M}_a$
18		$\frac{1}{6}\bar{M}_c M_a (l + u')$	$\frac{1}{3}\bar{M}_c M_a l$	$\frac{1}{4}\bar{M}_a M_a l$
19		$\frac{1}{6}\bar{M}_c M_b (l + u)$	$\frac{1}{3}\bar{M}_c M_b l$	$\frac{1}{12}\bar{M}_a M_b l$
20		$\frac{\bar{M}_c}{6}[M_a(l+u') + M_b(l+u)]$	$\frac{1}{3}\bar{M}_c(M_a + M_b)l$	$\frac{1}{12}\bar{M}_a(3M_a + M_b)l$
21		$\frac{\bar{M}_c}{6}[M_a(l+u') - M_b(l+u)]$	$\frac{1}{3}\bar{M}_c(M_a - M_b)l$	$\frac{1}{12}\bar{M}_a(3M_a - M_b)l$
22		$\frac{\bar{M}_c M_c l}{6ux'} \cdot [2ux' - (x' - u')^2]$ pro $x < u$ : $\frac{\bar{M}_c M_c l}{6u'x} \cdot [2u'x - (u' - x')^2]$ pro $x > u$	$\frac{\bar{M}_c M_c}{3l}(l^2 + xx')$	$\frac{\bar{M}_a M_c}{12l}(3lx' + x^2)$
23		$\frac{\bar{M}_c M_c}{6}\left(l + u - \frac{3x'^2}{u'}\right)$ pro $x > u$ : $\frac{-\bar{M}_c M_c}{6}\left(l + u' - \frac{3x'^2}{u}\right)$ pro $x < u$	$-\frac{\bar{M}_c M_c}{3l} \cdot (l^3 - 6lx^2 + 4x^3)$	$\frac{\bar{M}_a M_c}{12l^2}(l^3 - 4x'^3)$