

Monoclinic

6. SCANNING TABLES

 Laue class $C_{2h} - 2/m$

 No. 13 $P2/c$
 C_{2h}^4

$$\mathcal{G} = P12/a1 \quad \text{UNIQUE AXIS } b$$

CELL CHOICE 3

$$\mathcal{G} = P112/b \quad \text{UNIQUE AXIS } c$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$		
UNIQUE AXIS <i>b</i> (010)	c a b	$P112/b$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$p112/b$	L07	
UNIQUE AXIS <i>c</i> (001)	a b c		$[\mathbf{sd}, -\mathbf{sd}]$	$p112 (\mathbf{b}/4)$	L03	
UNIQUE AXIS <i>b</i> (<i>n0m</i>)	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$P2/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$	L02	
UNIQUE AXIS <i>c</i> (<i>mn0</i>)	c $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$				$p211$	L08
	n odd p even q odd				$p1$	L01
	n even m odd	$P2/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$p2/b11$	L16	
	p odd		$[\mathbf{sd}, -\mathbf{sd}]$	$pb11$	L12	
	n odd p odd	$P2/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p\bar{1}$	L02	
			$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$	$p211 (\mathbf{b}'/4)$	L08	
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p1$	L01	

 No. 14 $P2_1/c$
 C_{2h}^5

$$\mathcal{G} = P12_1/c1 \quad \text{UNIQUE AXIS } b$$

CELL CHOICE 1

$$\mathcal{G} = P112_1/a \quad \text{UNIQUE AXIS } c$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
UNIQUE AXIS <i>b</i> (010)	c a b	$P112_1/a$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p\bar{1}$	L02
UNIQUE AXIS <i>c</i> (001)	a b c		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p11a$	L05
				$p1$	L01
UNIQUE AXIS <i>b</i> (<i>n0m</i>)	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$	$p2_1/b11$	L17
UNIQUE AXIS <i>c</i> (<i>mn0</i>)	c $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$				$[\mathbf{sd}, -\mathbf{sd}]$
	n odd m even	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p\bar{1}$	L02
	q odd m odd				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$
	q odd		$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
	m odd	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p\bar{1}$	L02
	p odd q even				$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$
			$[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p1$	L01

No. 14 $P2_1/c$

$$\mathcal{G} = P12_1/n1 \quad \text{UNIQUE AXIS } b$$

C_{2h}^5

CELL CHOICE 2

$$\mathcal{G} = P112_1/n \quad \text{UNIQUE AXIS } c$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
UNIQUE AXIS <i>b</i> (010)	c a b	$P112_1/n$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p11n$ $p1$	L02
UNIQUE AXIS <i>c</i> (001)	a b c				L05
UNIQUE AXIS <i>b</i> (<i>n0m</i>)	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02
UNIQUE AXIS <i>c</i> (<i>mn0</i>)	c $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd				L09
					L01
		$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02 L09 L01
	<i>n</i> odd <i>m</i> odd	$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17 L12

No. 14 $P2_1/c$

$$\mathcal{G} = P12_1/a1 \quad \text{UNIQUE AXIS } b$$

C_{2h}^5

CELL CHOICE 3

$$\mathcal{G} = P112_1/b \quad \text{UNIQUE AXIS } c$$

Orientation orbit (<i>hkl</i>)	Conventional basis of the scanning group a' b' d	Scanning group \mathcal{H}	Linear orbit sd	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
UNIQUE AXIS <i>b</i> (010)	c a b	$P112_1/b$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p11b$ $p1$	L02
UNIQUE AXIS <i>c</i> (001)	a b c				L05
UNIQUE AXIS <i>b</i> (<i>n0m</i>)	b $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$P2_1/c11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111$ $p1$	L02
UNIQUE AXIS <i>c</i> (<i>mn0</i>)	c $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ <i>n</i> odd <i>m</i> even <i>p</i> even <i>q</i> odd or <i>n</i> even <i>m</i> odd <i>p</i> odd <i>q</i> even <i>p</i> odd <i>q</i> odd				L09
					L01
		$P2_1/b11$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[s\mathbf{d}, -s\mathbf{d}]$	$p2_1/b11$ $pb11 (\mathbf{a}'/4)$	L17 L12
	<i>n</i> odd <i>m</i> odd	$P2_1/n11$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p\bar{1}$ $p2_111 (\mathbf{b}'/4)$ $p1$	L02 L09 L01