

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

6. SCANNING TABLES

Monoclinic

 No. 7  $Pc$ 
 $C_s^2$ 

CELL CHOICE 3

 $\mathcal{G} = P1a1$  UNIQUE AXIS  $b$ 
 $\mathcal{G} = P11b$  UNIQUE AXIS  $c$ 

Orientation orbit ( $hkl$ )	Conventional basis of the scanning group $\mathbf{a}'$ $\mathbf{b}'$ $\mathbf{d}$	Scanning group $\mathcal{H}$	Linear orbit $\mathbf{sd}$	Sectional layer group $\mathcal{L}(\mathbf{sd})$							
UNIQUE AXIS $b$ (010)	$\mathbf{c}$ $\mathbf{a}$ $\mathbf{b}$	$P11b$	$0\mathbf{d}, \frac{1}{2}\mathbf{d}$ $[\mathbf{sd}, -\mathbf{sd}]$	$p11b$	L05						
UNIQUE AXIS $c$ (001)	$\mathbf{a}$ $\mathbf{b}$ $\mathbf{c}$				$p1$	L01					
UNIQUE AXIS $b$ ( $n0m$ )	$\mathbf{b}$ $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$Pc11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01						
UNIQUE AXIS $c$ ( $mn0$ )	$\mathbf{c}$ $n\mathbf{a} - m\mathbf{b}$ $pa + qb$				$Pb11$	$\mathbf{sd}$	$pb11$	L12			
	$n$ odd							$Pn11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$p1$	L01
	$p$ even $q$ odd										
	$n$ even $m$ odd										
	$p$ odd										
	$n$ odd										
	$p$ odd										

 No. 8  $Cm$ 
 $C_s^3$ 

CELL CHOICE 1

 $\mathcal{G} = C1m1$  UNIQUE AXIS  $b$ 
 $\mathcal{G} = A11m$  UNIQUE AXIS  $c$ 

Orientation orbit ( $hkl$ )	Conventional basis of the scanning group $\mathbf{a}'$ $\mathbf{b}'$ $\mathbf{d}$	Scanning group $\mathcal{H}$	Linear orbit $\mathbf{sd}$	Sectional layer group $\mathcal{L}(\mathbf{sd})$							
UNIQUE AXIS $b$ (010)	$\mathbf{c}$ $\mathbf{a}$ $\mathbf{b}$	$A11m$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$ $[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm\mathbf{sd}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p11m$	L04						
UNIQUE AXIS $c$ (001)	$\mathbf{a}$ $\mathbf{b}$ $\mathbf{c}$				$p11b$	L05					
					$p1$	L01					
UNIQUE AXIS $b$ ( $n0m$ )	$\mathbf{b}$ $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$	$Bm11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11						
UNIQUE AXIS $c$ ( $mn0$ )	$\mathbf{c}$ $n\mathbf{a} - m\mathbf{b}$ $pa + qb$				$Cm11$	$\mathbf{sd}$	$cm11$	L13			
	$n$ odd							$Im11$	$[\mathbf{sd}, (s + \frac{1}{2})\mathbf{d}]$	$pm11$	L11
	$p$ even $q$ odd										
	$n$ even $m$ odd										
	$p$ odd										
	$n$ odd										
	$p$ odd										

No. 8  $Cm$

$C_s^3$

CELL CHOICE 2

$$\mathcal{G} = A1m1 \text{ UNIQUE AXIS } b$$

$$\mathcal{G} = B11m \text{ UNIQUE AXIS } c$$

Orientation orbit ( $hkl$ )	Conventional basis of the scanning group $\mathbf{a}'$ $\mathbf{b}'$ $\mathbf{d}$	Scanning group $\mathcal{H}$	Linear orbit $\mathbf{sd}$	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
UNIQUE AXIS $b$ (010)	$\mathbf{c}$ $\mathbf{a}$ $\mathbf{b}$	$B11m$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p11m$	L04
UNIQUE AXIS $c$ (001)	$\mathbf{a}$ $\mathbf{b}$ $\mathbf{c}$		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p11a$ $p1$	L05 L01
UNIQUE AXIS $b$ ( $n0m$ )	$\mathbf{b}$ $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$				
UNIQUE AXIS $c$ ( $mn0$ )	$\mathbf{c}$ $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ $n$ odd $m$ even $q$ odd $m$ odd $q$ odd $m$ odd $p$ odd $q$ even	$Cm11$ $Im11$ $Bm11$	$s\mathbf{d}$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$	$cm11$ $pm11$ $pm11$	L13 L11 L11

No. 8  $Cm$

$C_s^3$

CELL CHOICE 3

$$\mathcal{G} = I1m1 \text{ UNIQUE AXIS } b$$

$$\mathcal{G} = I11m \text{ UNIQUE AXIS } c$$

Orientation orbit ( $hkl$ )	Conventional basis of the scanning group $\mathbf{a}'$ $\mathbf{b}'$ $\mathbf{d}$	Scanning group $\mathcal{H}$	Linear orbit $\mathbf{sd}$	Sectional layer group $\mathcal{L}(\mathbf{sd})$	
UNIQUE AXIS $b$ (010)	$\mathbf{c}$ $\mathbf{a}$ $\mathbf{b}$	$I11m$	$[0\mathbf{d}, \frac{1}{2}\mathbf{d}]$	$p11m$	L04
UNIQUE AXIS $c$ (001)	$\mathbf{a}$ $\mathbf{b}$ $\mathbf{c}$		$[\frac{1}{4}\mathbf{d}, \frac{3}{4}\mathbf{d}]$ $[\pm s\mathbf{d}, (\pm s + \frac{1}{2})\mathbf{d}]$	$p11n$ $p1$	L05 L01
UNIQUE AXIS $b$ ( $n0m$ )	$\mathbf{b}$ $n\mathbf{c} - m\mathbf{a}$ $p\mathbf{c} + q\mathbf{a}$				
UNIQUE AXIS $c$ ( $mn0$ )	$\mathbf{c}$ $n\mathbf{a} - m\mathbf{b}$ $p\mathbf{a} + q\mathbf{b}$ $n$ odd $m$ even $p$ even $q$ odd or $n$ even $m$ odd $p$ odd $q$ even $p$ odd $q$ odd $n$ odd $m$ odd	$Im11$ $Bm11$ $Cm11$	$[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $[s\mathbf{d}, (s + \frac{1}{2})\mathbf{d}]$ $s\mathbf{d}$	$pm11$ $pm11$ $cm11$	L11 L11 L13