TECHTRAN POLYLENSES LTD

HYDERABAD

SURFACING GUIDE

VARTEK MIDAS
(INTERMEDIATE CORRIDOR) PROGRESSIVE

TECHTRAN POLYLENSES LIMITED

"Vartek Midas" Progressive

SPEC TABLE 1

LENS MATERIAL SPECIFICATIONS

MATERIAL	MATERIAL INDEX	ABBE VALUE	SPECIFIC GRAVITY
A.D.C.	**1.498**	**59.0**	**1.32**

DESIGN : INTER MEDIATE CORRIDOR

W.R.T. Geometric Center		Minimum Fitting Height
Fitting Cross	Design Decentration	From Fitting Cross
2 MM Above	**2.50 MM**	**18 MM**

LENS BLANK DIMENSION			**INDEX 1.498**			**DIA 75 MM**			
NOMINAL BASE	ACTUAL BASE		FRONT RADIUS	SAG 50MM	REAR RADIUS	ADD POWER		THICKNESS	
	W.R.T. RI:1.53	W.R.T. RI:1.498				FROM	TO	CENTER	EDGE
2.25	**2.04**	**1.91**	**260.440**	**1.203**	**84.55**	**0.75**	**3.50**	**7.00**	**13.19**
4.25	**4.69**	**4.41**	**113.010**	**2.800**	**71.00**	**0.75**	**3.50**	**7.50**	**12.00**
5.50	**5.93**	**5.57**	**89.380**	**3.568**	**87.90**	**0.75**	**3.50**	**7.00**	**7.37**
7.50	**7.84**	**7.37**	**67.600**	**4.796**	**97.80**	**0.75**	**3.50**	**9.33**	**5.54**

Indicative Total Rx Lens Power (Sph+Cyl)		
BASE	**65MM DIA**	**70MM DIA**
2.25	**-7.50**	**-7.00**
4.25	**-6.00**	**-5.50**
5.50	**+5.00**	**+5.00**
7.50	**+7.50**	**+7.00**

TECHTRAN POLYLENSES LIMITED

VARTEK 'MIDAS' PROGRESSIVE

LENS MATERIAL SPECIFICATIONS

MATERIAL	MATERIAL INDEX	ABBE VALUE	SPECIFIC GRAVITY
SUNSENSOR GREY / BROWN	1.555	38.0	1.16
Mid Index	1.555	33.0	1.27

DESIGN : SELECT

W.R.T Geometric Center		
Fitting Cross	Design Decentration	Minimum Fitting Height from fitting cross
2 MM Above	2.50 MM	18 MM

LENS BLANK DIMENSION

* DIA 75 MM

NOMINAL BASE	ACTUAL BASE W.R.T RI:1.53	ACTUAL BASE W.R.T RI:1.56	FRONT RADIUS	SAG 50MM	REAR RADIUS	ADD POWER FROM	ADD POWER TO	THICKNESS CENTER	THICKNESS EDGE
2.25	1.98	2.09	267.670	1.170	78.460	0.75	3.50	6.00	12.96
4.25	4.61	4.87	115.090	2.748	76.625	0.75	3.50	5.50	9.10
5.50	5.86	6.19	90.440	3.524	89.100	0.75	3.50	5.80	6.04
7.50	7.85	8.29	67.520	4.799	58.930	0.75	3.50	7.80	10.00

Indicative Total Rx Lens Power (Sph+Cyl)		
BASE	65MM DIA	70MM DIA
2.25	-8.00	-7.50
4.25	-5.00	-4.75
5.50	+5.00	+4.50
7.50	+7.00	+6.00

Surfacing Procedure

The following information has been prepared so that the laboratory has all the information required for the manufacture of Techtran's MIDAS lenses to the highest standard.

Table 1 shows curve compensations which should be applied if the recommended centre thicknesses are not used.

Compensation for change in Centre Thickness

Tool curve change required for 1.0mm centre thickness change :-

Nominal Base Curve	Curve compensation
+2.25D	0.001D
+4.25D	0.006D
+5.50D	0.018D
+7.50D	0.034D

All curves are given in Dioptres.

Table 1

Lens Processing

BLANK SIZE

To ascertain the correct blank size required to give the best possible substance it is recommended that the following instructions are followed :

The fitting cross position is accurately marked on the frame to the optician's specification. The distance from the fitting cross to the furthest point of the frames rim is then measured. This measurement size is then doubled to give the effective diameter of the required blank size. Refer this blank size back to the surfacing chart to find the correct substance required. Please note that consideration should be given to the axis position to achieve the best substance possible. All substances shown in the charts have been calculated assuming the use of Prism Thinning.

To calculate the required amount of prism thinning simply multiply the addition power by 0.67 or refer to Table 2 opposite. It should be noted that in some extreme cases prism thinning may reduce the effective lens diameter. In these cases, the amount of prism thinning should be reduced as necessary.

MARKING

On Hard Resin lenses it is recommended that the surface protection tape is applied before marking to avoid the markings being impressed onto the lens during blocking. This will also assist in preventing unwanted scratches etc. on all types of lenses. Normal laboratory procedures may then be used.

BLOCKING

It is recommended that the largest possible chilled blocking ring and buttons are used to support the lens as this will result in the reduction of surfacing problems on the edge. Ensure that the correct alloy and temperature are being used on the Hard Resin versions (47ºC to 58ºC). Block the lens w.r.t. the geometrical center in a manual blocking m/c. In case of an automatic blocking m/c, refer to the fitting cross while blocking.

GENERATING

Ensure that the alloy has sufficiently cooled before generating, after which the laboratory's normal procedure for progressives may be followed.

SMOOTHING/POLISHING

No special procedures are required.

Prism Thinning Table

Addition Dioptres	Recommended Value (= 2/3 x addition) Prism Dioptres
0.50	0.33
0.75	0.50
1.00	0.67
1.25	0.83
1.50	1.00
1.75	1.17
2.00	1.33
2.25	1.50
2.50	1.67
2.75	1.83
3.00	2.00

Table 2

Power Verification

The distance vision is checked by placing the distance power measuring position (see Figure 1 overleaf) over the aperture of the focimeter. Ensure that the fitting line is horizontal when taking your reading for correct axis position.

The near vision is checked by placing the addition power measuring position over the aperture of the focimeter. The addition is then worked out as the difference between the distance and near front vertex power readings.

Prism thinning is checked at the prism measuring position (see Figure 1) and should be read as stated in the prism measuring table. Ensure that any corrective prism specified by the optician is taken into account when checking.

Midas Lens Markings

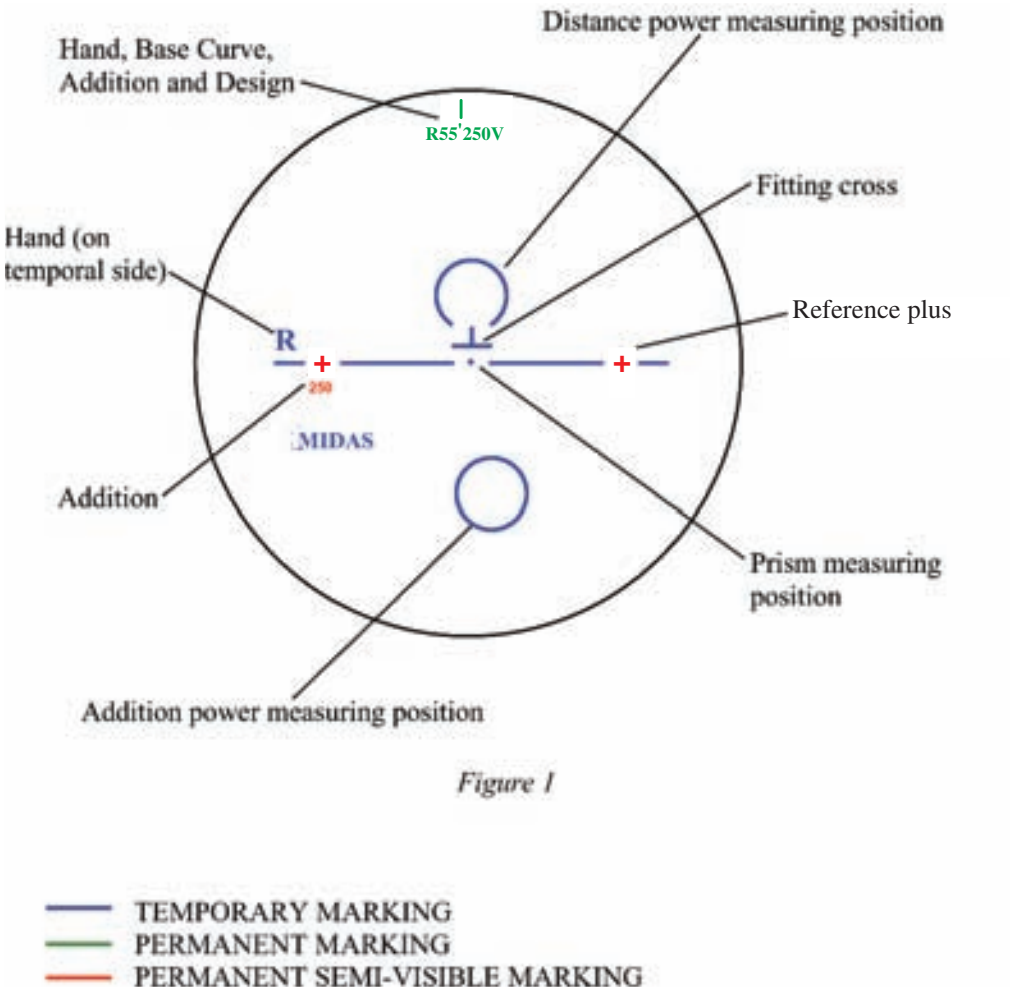

Figure 1

TEMPORARY MARKING
PERMANENT MARKING
PERMANENT SEMI-VISIBLE MARKING