

STAMPER SPECIFICATION

<u>Stamper Property</u>	<u>First Generation</u>	<u>Second Generation</u>	<u>Third Generation</u>
1) Hardness Rear Side:	160HV – 210HV0.3	180HV – 220HV0.3	200HV – 220HV0.3
2) Hardness Data Face:	220HV – 270HV0.3	230HV – 270HV0.3	250HV – 270HV0.3
3) Hardness Differential Data to Rear Face:	20HV – 80HV	40HV – 60HV	40HV – 60HV
4) Stamper Thickness:	280µm – 300µm	290µm – 300µm	295µm
5) Thickness Deviation:	+ / - 5µm	+ / - 5µm	+ / - 2.5µm
6) Protective Coating:	100µm	< 80µm	ID area clear
<u>Achievable Specification</u>			
7) Punched ID radius (deformed area):	<300µm	<200µm	<100µm
8) Eccentricity, ID to Data:	10µm – 20µm	5µm – 10µm	<5µm
9) ID Hole Size / Tolerance:	25mm - 37.6mm / 10µm – 16µm	21mm – 25mm / 5µm – 10µm	22mm / 5µm
10) OD Hole Size / Tolerance:	128mm – 144mm / ± 0.5mm	128mm – 138mm / ± 0.5mm	138mm / ± 0.5mm
11) ID Burr, Rear Side:	<10µm	<10µm	<5µm
12) OD Burr, Rear Side:	<20µm	<20µm	<10µm
13) Rear Side Surface Finish:	Ra1.5µm - 1.0µm. Rt< 1.5µm	Ra1.0µm - Ra 0.05µm. Rt< 1.0µm	Ra<0.05µm. Rt <0.5µm.
14) Stress / Deformation	<500µm	<400µm	<300µm