## **CEIP Data Definitions**

## Nest Data

Field	Description	Comments
ixJobSummary	Record Index of job containing this nest	
cTimesCut	The number of times the nest will be cut	
fOutput	Has the nest been output?	
cParts	Total number of parts nested	
cSafeZones	Number of safe zones used on the nest	
ixPlateType	Type of plate used	
dNestingTime	Total time spent auto-nesting	
fStrategies	Auto-nesting strategies used	
cMaxTorches	Maximum number of torches on nest	
dMaxTorchSpacing	Maximum torch spacing used on nest	
dLength	Sheet length	
dWidth	Sheet width	
dArea	Sheet area	
ixMaterial	Record index of material used	
dLengthUsed	Length of plate used by nested parts	
dWidthUsed	Width of plate used by nested parts	
dCropUtil	Nested utilization of parts inside of crop	Nested part area / (sheet area –
	(if one exists)	area of remnants saved from nest)
dPartArea	Total area of nested parts	
dTrueArea	Plate area used by nested parts	True area of sheet. For skeletons, this excludes the area of the cutouts.

## Part Data

Field	Description	Comments
ixPart	Part record index	
ixJobSummary	Record Index of job containing this	
	part	
dLength	Part length	
dWidth	Part width	
dArea	Part true area	Area of exterior profile – area of
		cutouts
cRequired	Number of parts required	For the entire job
cNested	Number of parts nested	For the entire job
ixMaterial	Record index of material used	

fExtShape	Shape of the exterior profile	About 50 known shapes
dExtArea	Area of the exterior profile	
dExtBoundaryDist	The maximum distance of any point	Uses a distance transform with
	inside the profile to the nearest point	distance measured at 45 degree
	on the exterior profile	increments
dExtContainedDist	The maximum unbroken distance	The line between the two points
	between any two points on the	doesn't intersect the profile
	exterior profile	anywhere else
dLgIntArea	Area of the largest interior profile	
dLgIntBoundaryDist	The maximum distance of any point	Uses a distance transform with
	inside the profile to the nearest point	distance measured at 45 degree
	on the interior profile	increments
dLgIntContainedDist	The maximum unbroken distance	The line between the two points
	between any two points on the	doesn't intersect the profile
	interior profile	anywhere else
dLgExtConArea	Area of the largest concavity	
dLgExtConBoundaryDist	The maximum distance of any point	Uses a distance transform with
	inside the concavity to the nearest	distance measured at 45 degree
	point on the concavity	increments
dLgExtConContainedDist	The maximum unbroken distance	The line between the two points
	between any two points on the	doesn't intersect the profile
	concavity contour	anywhere else

## Questions