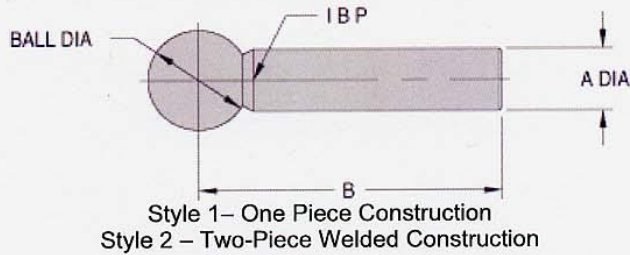


## CONSTRUCTION BALLS



### ADJUSTABLE TYPE (USA)

| PART NO. | BALL DIA |             | A DIA   |             | B    | STYLE |
|----------|----------|-------------|---------|-------------|------|-------|
|          | NOMINAL  | ACTUAL      | NOMINAL | ACTUAL      |      |       |
| CL-0-CB  | 1/4      | .2502/.2498 | 1/8     | .1250/.1246 | .56  | 1     |
| CL-00-CB | 3/8      | .3752/.3748 | 3/16    | .1875/.1871 | .75  |       |
| CL-1-CB  | 1/2      | .5000/.4997 | 1/4     | .2500/.2497 | 1.50 | 2     |
| CL-3-CB  |          |             | 5/16    | .3125/.3122 |      |       |
| CL-5-CB  |          |             | 3/8     | .3750/.3747 |      |       |

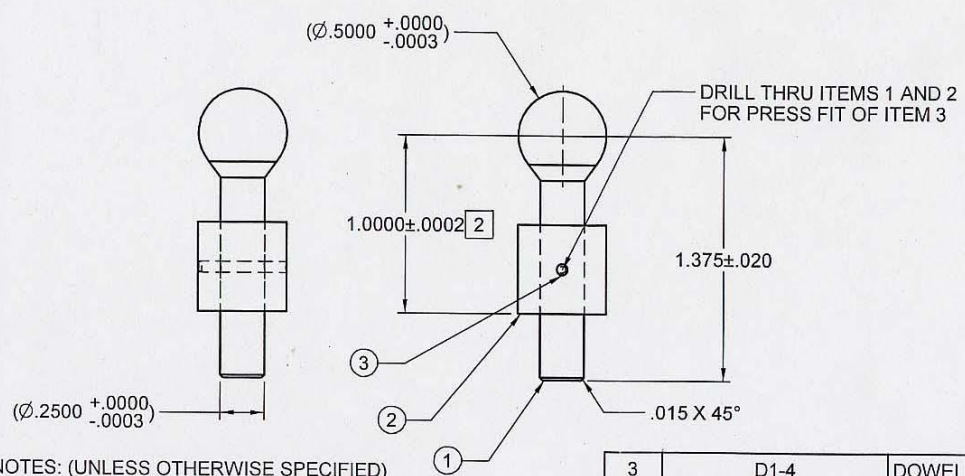


**MANUFACTURING CO.**  
 4200 Carr Lane Ct., P.O. Box 191970  
 St. Louis, Missouri 63119-7970 USA  
 Phone: 314-647-6200, FAX: 314-647-5736  
 Web Site: www.carrlane.com

502

0 SA-451-007-99

| REV | DESCRIPTION | DWN | CHK | RAP | PVD | DATE |
|-----|-------------|-----|-----|-----|-----|------|
|-----|-------------|-----|-----|-----|-----|------|



NOTES: (UNLESS OTHERWISE SPECIFIED)

1. REMOVE ALL BURRS AND BREAK SHARP EDGES.
2. MACHINE TO SPECIFIED DIMENSION AFTER PINNING ITEMS 1 AND 2.

| 3    | D1-4              | DOWEL PIN, Ø.0627 X .50LG BERG OR EQUIVALENT  | 1   |
|------|-------------------|---|-----|
| 2    | PF-202-510-01     | TOOLING BALL SOCKET                           | 1   |
| 1*   | MAKE FROM CL-1-CB | CONSTRUCTION BALL, Ø.500XØ.25 SHAFT CARR LANE | 1   |
| ITEM | STOCK OR PART NO  | TITLE OR DESCRIPTION                          | QTY |

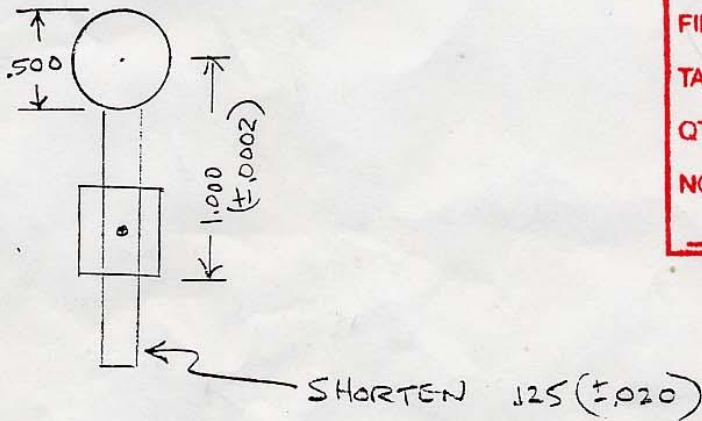
PROPRIETARY INFO OF STANFORD UNIVERSITY AND/OR U.S. DEPARTMENT OF ENERGY  
 RECIPIENT SHALL NOT DISSEMINATE OR REPRODUCE THIS INFORMATION WITHOUT SPECIFIC  
 PERMISSION OF STANFORD UNIVERSITY

|                  |   |  |  |
|------------------|---|--|--|
| ---              | SCALE: 2:1  | DO NOT SCALE DRAWING   | CAD FILE NAME: sa45100799.dft                    |
| ---              | DIMENSIONING AND TOLERANCING IS IN ACCORDANCE WITH ASME Y14.5M-1994.  | STANFORD SYNCHROTRON RADIATION LABORATORY<br>U.S. DEPARTMENT OF ENERGY | ---  |
| ---              | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES:<br>BREAK EDGES .005-.015<br>INTERNAL CORNERS R.015 MAX | SLAC, STANFORD UNIVERSITY STANFORD, CALIFORNIA                         | ---  |
| ---              | FRACTIONS ±<br>DEC .XX ± .01<br>.XXX ± .005<br>.XXXX ± .001<br>ANGLE ± 1/2°   | ENGR M. ROWEN<br>DWN W. NOLAN<br>CHKR M. ROWEN                         | ALIGNMENT FIXTURE<br>TOOLING BALL, 1 INCH OFFSET |
| N/A              | ALL SURF 63   | APPROVALS<br>M. ROWEN<br>7-16-01                                       | DRAWING NUMBER<br>SA-451-007-99                  |
| NEXT ASSEMBLIES: |   |  | REVISION NUMBER<br>0                             |
|                  |   |  | B  |

TOOLING BALL, 1 INCH OFFSET

MAKE 18 1" TOOLING BALLS

6/22/00  
TONY KING  
EXT. 2773



|            |       |
|------------|-------|
| <b>MFD</b> |       |
| FILE No.   | 14706 |
| TASK No.   | 30    |
| QTY        | 18    |
| NOTES      |       |

- 1) PIN BUSHING TO TOOLING BALL SHANK  
USE 1/16" PIN
- 2) MACHINE BOTTOM OF BUSHING, SO BOTTOM OF BUSHING TO CENTER OF BALL EQUALS 1.000" (±.0002)
- 3) SHORTEN SHANK BY .125 (±.020)
- 4) BALLS AND BUSHING SUPPLIED

~~5) CLIP TO 11-1315-3~~