

| ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------|--|-----|------|------|-----|-----|-----|---|
| 1405 | 1234567890123456789012345678901234567890123456789012345678901234567890 | | | | | | | |
| 1406 | 88 | | | | | | | |
| 1407 | 121 | | | | | | | |
| 1408 | 153 | | | | | | | |
| 1409 | 232 | | | | | | | |
| 1410 | 281 | | | | | | | |
| 1411 | END | | | | | | | |
| 1412 | JOINT | | | | | | | |
| 1413 | 1250 | 101 | 1250 | 1290 | 290 | 250 | 1.0 | |
| 1414 | 1290 | 101 | 1290 | 1322 | 322 | 290 | 1.0 | |
| 1415 | 1322 | 101 | 1322 | 1354 | 354 | 322 | 1.0 | |
| 1416 | 1354 | 101 | 1354 | 1386 | 386 | 354 | 1.0 | |
| 1417 | 1386 | 101 | 1386 | 1413 | 413 | 386 | 1.0 | |
| 1418 | 1413 | 101 | 1413 | 1429 | 429 | 413 | 1.0 | |
| 1419 | 1429 | 101 | 1429 | 1444 | 444 | 429 | 1.0 | |
| 1420 | 1444 | 101 | 1444 | 1459 | 459 | 444 | 1.0 | |
| 1421 | 1459 | 101 | 1459 | 1473 | 473 | 459 | 1.0 | |
| 1422 | 1473 | 101 | 1473 | 1487 | 487 | 473 | 1.0 | |
| 1423 | 1487 | 101 | 1487 | 1500 | 500 | 487 | 1.0 | |
| 1424 | 1500 | 101 | 1500 | 1512 | 512 | 500 | 1.0 | |
| 1425 | 1512 | 101 | 1512 | 1524 | 524 | 512 | 1.0 | |
| 1426 | 1524 | 101 | 1524 | 1536 | 536 | 524 | 1.0 | |
| 1427 | 1536 | 101 | 1536 | 1548 | 548 | 536 | 1.0 | |
| 1428 | 1548 | 101 | 1548 | 1559 | 559 | 548 | 1.0 | |
| 1429 | 1559 | 101 | 1559 | 1569 | 569 | 559 | 1.0 | |
| 1430 | 1569 | 101 | 1569 | 1578 | 578 | 569 | 1.0 | |
| 1431 | 1578 | 101 | 1578 | 1587 | 587 | 578 | 1.0 | |
| 1432 | 1587 | 101 | 1587 | 1595 | 595 | 587 | 1.0 | |
| 1433 | 1595 | 101 | 1595 | 1603 | 603 | 595 | 1.0 | |
| 1434 | 1603 | 101 | 1603 | 1610 | 610 | 603 | 1.0 | |
| 1435 | 1610 | 101 | 1610 | 1618 | 618 | 610 | 1.0 | |
| 1436 | * | | | | | | | |
| 1437 | 1258 | 101 | 1258 | 1298 | 298 | 258 | 1.0 | |
| 1438 | 1298 | 101 | 1298 | 1330 | 330 | 298 | 1.0 | |
| 1439 | 1330 | 101 | 1330 | 1362 | 362 | 330 | 1.0 | |
| 1440 | 1362 | 101 | 1362 | 1394 | 394 | 362 | 1.0 | |
| 1441 | 1394 | 101 | 1394 | 1417 | 417 | 394 | 1.0 | |
| 1442 | 1417 | 101 | 1417 | 1433 | 433 | 417 | 1.0 | |
| 1443 | 1433 | 101 | 1433 | 1448 | 448 | 433 | 1.0 | |
| 1444 | 1448 | 101 | 1448 | 1463 | 463 | 448 | 1.0 | |
| 1445 | 1463 | 101 | 1463 | 1477 | 477 | 463 | 1.0 | |
| 1446 | 1477 | 101 | 1477 | 1491 | 491 | 477 | 1.0 | |
| 1447 | 1491 | 101 | 1491 | 1504 | 504 | 491 | 1.0 | |
| 1448 | 1504 | 101 | 1504 | 1516 | 516 | 504 | 1.0 | |
| 1449 | 1516 | 101 | 1516 | 1528 | 528 | 516 | 1.0 | |
| 1450 | 1528 | 101 | 1528 | 1541 | 541 | 528 | 1.0 | |
| 1451 | 1541 | 101 | 1541 | 1554 | 554 | 541 | 1.0 | |
| 1452 | * | | | | | | | |
| 1453 | 1266 | 101 | 1266 | 1306 | 306 | 266 | 1.0 | |
| 1454 | 1306 | 101 | 1306 | 1338 | 338 | 306 | 1.0 | |
| 1455 | 1338 | 101 | 1338 | 1370 | 370 | 338 | 1.0 | |
| 1456 | 1370 | 101 | 1370 | 1402 | 402 | 370 | 1.0 | |
| 1457 | 1402 | 101 | 1402 | 1421 | 421 | 402 | 1.0 | |
| 1458 | 1421 | 101 | 1421 | 1437 | 437 | 421 | 1.0 | |

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| ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------|--|---|---|---|---|---|---|---|
| 1621 | 1234567890123456789012345678901234567890123456789012345678901234567890 | | | | | | | |
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| ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
|------|--|-----|----------|---|---|---|---|---|---|
| 1837 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 589 | -18.6850 | | | | | | |
| 1838 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 590 | -10.5704 | | | | | | |
| 1839 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 591 | -7.4025 | | | | | | |
| 1840 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 592 | -14.8050 | | | | | | |
| 1841 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 593 | -14.8050 | | | | | | |
| 1842 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 594 | -14.8050 | | | | | | |
| 1843 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 595 | -7.4025 | | | | | | |
| 1844 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 596 | -20.4553 | | | | | | |
| 1845 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 597 | -15.2696 | | | | | | |
| 1846 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 598 | -5.0356 | | | | | | |
| 1847 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 599 | -6.0366 | | | | | | |
| 1848 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 600 | -11.9028 | | | | | | |
| 1849 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 601 | -11.7324 | | | | | | |
| 1850 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 602 | -12.1454 | | | | | | |
| 1851 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 603 | -6.2732 | | | | | | |
| 1852 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 604 | -15.2914 | | | | | | |
| 1853 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 605 | -9.1421 | | | | | | |
| 1854 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 606 | -7.5220 | | | | | | |
| 1855 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 607 | -13.3723 | | | | | | |
| 1856 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 608 | -11.7030 | | | | | | |
| 1857 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 609 | -14.5936 | | | | | | |
| 1858 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 610 | -11.0373 | | | | | | |
| 1859 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 611 | -8.6095 | | | | | | |
| 1860 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 612 | -4.3008 | | | | | | |
| 1861 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 613 | -9.2021 | | | | | | |
| 1862 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 614 | -15.0536 | | | | | | |
| 1863 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 615 | -11.7030 | | | | | | |
| 1864 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 616 | -5.0055 | | | | | | |
| 1865 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 617 | -3.1856 | | | | | | |
| 1866 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 618 | -6.1171 | | | | | | |
| 1867 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 619 | -12.4115 | | | | | | |
| 1868 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 620 | -13.1772 | | | | | | |
| 1869 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 621 | -13.5316 | | | | | | |
| 1870 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 622 | -16.9576 | | | | | | |
| 1871 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 623 | -13.0957 | | | | | | |
| 1872 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 624 | -2.9040 | | | | | | |
| 1873 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 625 | -17.0045 | | | | | | |
| 1874 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 626 | -26.1474 | | | | | | |
| 1875 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 627 | -18.2859 | | | | | | |
| 1876 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 628 | -20.7253 | | | | | | |
| 1877 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 629 | -3.0792 | | | | | | |
| 1878 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 630 | -17.0045 | | | | | | |
| 1879 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 631 | -26.1474 | | | | | | |
| 1880 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 632 | -18.2859 | | | | | | |
| 1881 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 633 | -16.8894 | | | | | | |
| 1882 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 634 | -7.7464 | | | | | | |
| 1883 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 635 | -17.0045 | | | | | | |
| 1884 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 636 | -26.1474 | | | | | | |
| 1885 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 637 | -19.2859 | | | | | | |
| 1886 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 638 | -14.2732 | | | | | | |
| 1887 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 639 | -5.1302 | | | | | | |
| 1888 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 640 | -16.6644 | | | | | | |
| 1889 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 641 | -25.6245 | | | | | | |
| 1890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 642 | -17.9202 | | | | | | |
| | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

| ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------|--|------|----------|---|---|---|---|---|
| 1891 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 643 | -13.0190 | | | | | |
| 1892 | | 644 | -4.0588 | | | | | |
| 1893 | | 645 | -8.1621 | | | | | |
| 1894 | | 646 | -12.5508 | | | | | |
| 1895 | | 647 | -8.7773 | | | | | |
| 1896 | | 648 | -6.3080 | | | | | |
| 1897 | | 649 | -1.9194 | | | | | |
| 1898 | | 1250 | -1.9925 | | | | | |
| 1899 | | 1290 | -3.9840 | | | | | |
| 1900 | | 1322 | -3.9830 | | | | | |
| 1901 | | 1354 | -3.9840 | | | | | |
| 1902 | | 1386 | -7.3045 | | | | | |
| 1903 | | 1419 | -14.6079 | | | | | |
| 1904 | | 1429 | -16.1930 | | | | | |
| 1905 | | 1444 | -12.3375 | | | | | |
| 1906 | | 1459 | -9.2531 | | | | | |
| 1907 | | 1473 | -11.5664 | | | | | |
| 1908 | | 1487 | -12.8516 | | | | | |
| 1909 | | 1500 | -12.8516 | | | | | |
| 1910 | | 1512 | -12.8516 | | | | | |
| 1911 | | 1524 | -11.2580 | | | | | |
| 1912 | | 1536 | -9.5534 | | | | | |
| 1913 | | 1548 | -11.3288 | | | | | |
| 1914 | | 1559 | -13.1353 | | | | | |
| 1915 | | 1569 | -11.1037 | | | | | |
| 1916 | | 1578 | -9.0732 | | | | | |
| 1917 | | 1587 | -9.6167 | | | | | |
| 1918 | | 1595 | -10.2812 | | | | | |
| 1919 | | 1603 | -7.8120 | | | | | |
| 1920 | | 1610 | -4.3087 | | | | | |
| 1921 | | 1618 | -2.0504 | | | | | |
| 1922 | | 1628 | -2.2772 | | | | | |
| 1923 | | 1638 | -4.5531 | | | | | |
| 1924 | | 1650 | -4.5519 | | | | | |
| 1925 | | 1662 | -4.5531 | | | | | |
| 1926 | | 1674 | -8.3480 | | | | | |
| 1927 | | 1677 | -16.6948 | | | | | |
| 1928 | | 1433 | -18.5062 | | | | | |
| 1929 | | 1448 | -14.1000 | | | | | |
| 1930 | | 1463 | -10.5750 | | | | | |
| 1931 | | 1477 | -13.2187 | | | | | |
| 1932 | | 1491 | -14.6875 | | | | | |
| 1933 | | 1504 | -14.6875 | | | | | |
| 1934 | | 1516 | -13.7389 | | | | | |
| 1935 | | 1528 | -7.7016 | | | | | |
| 1936 | | 1541 | -7.8926 | | | | | |
| 1937 | | 1554 | -2.2550 | | | | | |
| 1938 | | 1266 | -2.4707 | | | | | |
| 1939 | | 1306 | -4.9401 | | | | | |
| 1940 | | 1338 | -4.9389 | | | | | |
| 1941 | | 1370 | -4.9401 | | | | | |
| 1942 | | 1402 | -9.0576 | | | | | |
| 1943 | | 1421 | -18.1138 | | | | | |
| 1944 | | 1437 | -19.9633 | | | | | |

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| ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1945 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 |
| 1946 | 1452 | | | | | | | |
| 1947 | 1467 | | | | | | | |
| 1948 | 1482 | | | | | | | |

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| ID | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1945 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 | 1234567890123456789012345678901234567890123456789012345678901234567890 |
| 1946 | | | | | | | | |
| 1947 | | | | | | | | |
| 1948 | | | | | | | | |

JOINT ANALYSIS

CONTROL DATA 0 0 0 0 0 0 0 10 0 0

RUN MODE : EXECUTION

ANALYSIS : LINEAR (ELASTIC)

GEOMETRY CHANGE BY DISPLACEMENT : NO

NORMAL STRESS ANALYSIS RUN

CREEP : NO

NON-LINEAR ITERATION LIMIT : 10 TIMES

NON-LINEAR ITERATION METHOD : NEWTON-RAPHSON'S METHOD

RESIDUAL LOAD CORRECTION : NO

NONLIST DATA 0 0 0 0 1 0 1 0 0 0

INPUT IMAGE LIST : YES INPUT DATA ECHO LIST : YES

LOADING VECTOR : YES SUPPORT REACTION : YES

DISPLACEMENT (INCREMENT) : NO DISPLACEMENT (INC. +TOTAL) : YES

STRESS (INCREMENT) : NO STRESS (TOTAL) : YES

NONLINEAR MATERIAL LIST : YES

ACCURACY DATA EPSR = 1.000E-03 EPSD = 1.000E-03

LOAD SCALE DATA FACTOR = ALPHA*BETA(I)

ALPHA = 1.000

BETA = 1.000

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 1 | 0 | -23.8000 | 35.0000 | * | * | * |
| 2 | 0 | 24.0720 | 35.0000 | * | * | * |
| 3 | 0 | 62.2700 | 35.0000 | * | * | * |
| 4 | 0 | 94.2850 | 35.0000 | * | * | * |
| 5 | 0 | 126.2000 | 35.0000 | * | * | * |
| 6 | 0 | 142.2000 | 35.0000 | * | * | * |
| 7 | 0 | 156.2000 | 35.0000 | * | * | * |
| 8 | 0 | 176.0000 | 35.0000 | * | * | * |
| 9 | 0 | 199.0000 | 35.0000 | * | * | * |
| 10 | 0 | 231.2800 | 35.0000 | * | * | * |
| 11 | 0 | 255.2800 | 35.0000 | * | * | * |
| 12 | 0 | 279.1950 | 35.0000 | * | * | * |
| 13 | 0 | 311.1100 | 35.0000 | * | * | * |
| 14 | 0 | 349.4080 | 35.0000 | * | * | * |
| 15 | 0 | 397.2800 | 35.0000 | * | * | * |
| 16 | 0 | -23.8000 | 80.0000 | * | * | * |
| 17 | 0 | 24.0720 | 80.0000 | * | * | * |
| 18 | 0 | 62.2700 | 80.0000 | * | * | * |
| 19 | 0 | 94.2850 | 80.0000 | * | * | * |
| 20 | 0 | 126.2000 | 80.0000 | * | * | * |
| 21 | 0 | 142.2000 | 80.0000 | * | * | * |
| 22 | 0 | 156.2000 | 80.0000 | * | * | * |
| 23 | 0 | 176.0000 | 80.0000 | * | * | * |
| 24 | 0 | 199.0000 | 80.0000 | * | * | * |
| 25 | 0 | 231.2800 | 80.0000 | * | * | * |
| 26 | 0 | 255.2800 | 80.0000 | * | * | * |
| 27 | 0 | 279.1950 | 80.0000 | * | * | * |
| 28 | 0 | 311.1100 | 80.0000 | * | * | * |
| 29 | 0 | 349.4080 | 80.0000 | * | * | * |
| 30 | 0 | 397.2800 | 80.0000 | * | * | * |
| 31 | 0 | 23.8000 | 115.7240 | * | * | * |
| 32 | 0 | 24.0720 | 115.7240 | * | * | * |
| 33 | 0 | 62.2700 | 115.7240 | * | * | * |
| 34 | 0 | 94.2850 | 115.7240 | * | * | * |
| 35 | 0 | 126.2000 | 115.7240 | * | * | * |
| 36 | 0 | 142.2000 | 115.7240 | * | * | * |
| 37 | 0 | 156.2000 | 115.7240 | * | * | * |
| 38 | 0 | 176.0000 | 115.7240 | * | * | * |
| 39 | 0 | 199.0000 | 115.7240 | * | * | * |
| 40 | 0 | 231.2800 | 115.7240 | * | * | * |
| 41 | 0 | 255.2800 | 115.7240 | * | * | * |
| 42 | 0 | 279.1950 | 115.7240 | * | * | * |
| 43 | 0 | 311.1100 | 115.7240 | * | * | * |
| 44 | 0 | 349.4080 | 115.7240 | * | * | * |
| 45 | 0 | 397.2800 | 115.7240 | * | * | * |
| 46 | 0 | -23.8000 | 138.1120 | * | * | * |
| 47 | 0 | 24.0720 | 138.1120 | * | * | * |
| 48 | 0 | 62.2700 | 138.1120 | * | * | * |
| 49 | 0 | 94.2850 | 138.1120 | * | * | * |
| 50 | 0 | 126.2000 | 138.1120 | * | * | * |
| 51 | 0 | 142.2000 | 138.1120 | * | * | * |
| 52 | 0 | 156.2000 | 138.1120 | * | * | * |
| 53 | 0 | 176.0000 | 138.1120 | * | * | * |

JOINT ANALYSIS

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 54 | 0 | 169.0000 | 138.1120 | | | |
| 55 | 0 | 176.0000 | 138.1120 | | | |
| 56 | 0 | 183.0000 | 138.1120 | | | |
| 57 | 0 | 191.0000 | 138.1120 | | | |
| 58 | 0 | 199.0000 | 138.1120 | | | |
| 59 | 0 | 207.6800 | 138.1120 | | | |
| 60 | 0 | 219.2800 | 138.1120 | | | |
| 61 | 0 | 231.2800 | 138.1120 | | | |
| 62 | 0 | 255.2800 | 138.1120 | | | |
| 63 | 0 | 279.1950 | 138.1120 | | | |
| 64 | 0 | 311.1100 | 138.1120 | | | |
| 65 | 0 | 349.4080 | 138.1120 | | | |
| 66 | 0 | 397.2800 | 138.1120 | | | |
| 67 | 0 | -23.8000 | 160.5000 | * | * | |
| 68 | 0 | 24.0720 | 160.5000 | | | |
| 69 | 0 | 62.3700 | 160.5000 | | | |
| 70 | 0 | 94.2850 | 160.5000 | | | |
| 71 | 0 | 126.2000 | 160.5000 | | | |
| 72 | 0 | 142.2000 | 160.5000 | | | |
| 73 | 0 | 156.2000 | 160.5000 | | | |
| 74 | 0 | 162.6000 | 160.5000 | | | |
| 75 | 0 | 169.0000 | 160.5000 | | | |
| 76 | 0 | 176.0000 | 160.5000 | | | |
| 77 | 0 | 183.0000 | 160.5000 | | | |
| 78 | 0 | 191.0000 | 160.5000 | | | |
| 79 | 0 | 199.0000 | 160.5000 | | | |
| 80 | 0 | 207.6800 | 160.5000 | | | |
| 81 | 0 | 219.2800 | 160.5000 | | | |
| 82 | 0 | 231.2800 | 160.5000 | | | |
| 83 | 0 | 255.2800 | 160.5000 | | | |
| 84 | 0 | 279.1950 | 160.5000 | | | |
| 85 | 0 | 311.1100 | 160.5000 | | | |
| 86 | 0 | 349.4080 | 160.5000 | | | |
| 87 | 0 | 397.2800 | 160.5000 | * | * | |
| 88 | 0 | -23.8000 | 172.5000 | | | |
| 89 | 0 | 24.0720 | 172.5000 | | | |
| 90 | 0 | 62.3700 | 172.5000 | | | |
| 91 | 0 | 94.2850 | 172.5000 | | | |
| 92 | 0 | 126.2000 | 172.5000 | | | |
| 93 | 0 | 142.2000 | 172.5000 | | | |
| 94 | 0 | 156.2000 | 172.5000 | | | |
| 95 | 0 | 162.6000 | 172.5000 | | | |
| 96 | 0 | 169.0000 | 172.5000 | | | |
| 97 | 0 | 176.0000 | 172.5000 | | | |
| 98 | 0 | 183.0000 | 172.5000 | | | |
| 99 | 0 | 191.0000 | 172.5000 | | | |
| 100 | 0 | 199.0000 | 172.5000 | | | |
| 101 | 0 | 207.6800 | 172.5000 | | | |
| 102 | 0 | 219.2800 | 172.5000 | | | |
| 103 | 0 | 231.2800 | 172.5000 | | | |
| 104 | 0 | 255.2800 | 172.5000 | | | |
| 105 | 0 | 279.1950 | 172.5000 | | | |
| 106 | 0 | 311.1100 | 172.5000 | | | |

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 107 | 0 | 195.0000 | 172.5000 | | | |
| 108 | 0 | 199.0000 | 172.5000 | | | |
| 109 | 0 | 203.3400 | 172.5000 | | | |
| 110 | 0 | 207.6800 | 172.5000 | | | |
| 111 | 0 | 213.4800 | 172.5000 | | | |
| 112 | 0 | 219.2800 | 172.5000 | | | |
| 113 | 0 | 225.2800 | 172.5000 | | | |
| 114 | 0 | 231.2800 | 172.5000 | | | |
| 115 | 0 | 239.2800 | 172.5000 | | | |
| 116 | 0 | 255.2800 | 172.5000 | | | |
| 117 | 0 | 279.1950 | 172.5000 | | | |
| 118 | 0 | 311.1100 | 172.5000 | | | |
| 119 | 0 | 349.4080 | 172.5000 | | | |
| 120 | 0 | 397.2800 | 172.5000 | | | |
| 121 | 0 | 43.8000 | 180.5000 | * | | |
| 122 | 0 | 24.0720 | 180.5000 | * | | |
| 123 | 0 | 62.3700 | 180.5000 | | | |
| 124 | 0 | 94.2850 | 180.5000 | | | |
| 125 | 0 | 126.2000 | 180.5000 | | | |
| 126 | 0 | 134.2000 | 180.5000 | | | |
| 127 | 0 | 142.2000 | 180.5000 | | | |
| 128 | 0 | 150.2000 | 180.5000 | | | |
| 129 | 0 | 156.2000 | 180.5000 | | | |
| 130 | 0 | 159.4000 | 180.5000 | | | |
| 131 | 0 | 162.6000 | 180.5000 | | | |
| 132 | 0 | 165.8000 | 180.5000 | | | |
| 133 | 0 | 169.0000 | 180.5000 | | | |
| 134 | 0 | 172.5000 | 180.5000 | | | |
| 135 | 0 | 176.0000 | 180.5000 | | | |
| 136 | 0 | 179.5000 | 180.5000 | | | |
| 137 | 0 | 183.0000 | 180.5000 | | | |
| 138 | 0 | 187.0000 | 180.5000 | | | |
| 139 | 0 | 191.0000 | 180.5000 | | | |
| 140 | 0 | 195.0000 | 180.5000 | | | |
| 141 | 0 | 199.0000 | 180.5000 | | | |
| 142 | 0 | 203.3400 | 180.5000 | | | |
| 143 | 0 | 207.6800 | 180.5000 | | | |
| 144 | 0 | 213.4800 | 180.5000 | | | |
| 145 | 0 | 219.2800 | 180.5000 | | | |
| 146 | 0 | 225.2800 | 180.5000 | | | |
| 147 | 0 | 231.2800 | 180.5000 | | | |
| 148 | 0 | 239.2800 | 180.5000 | | | |
| 149 | 0 | 255.2800 | 180.5000 | | | |
| 150 | 0 | 279.1950 | 180.5000 | | | |
| 151 | 0 | 311.1100 | 180.5000 | | | |
| 152 | 0 | 349.4080 | 180.5000 | | | |
| 153 | 0 | 397.2800 | 180.5000 | | | |
| 154 | 0 | 134.2000 | 184.5000 | | | |
| 155 | 0 | 142.2000 | 184.5000 | | | |
| 156 | 0 | 146.2000 | 184.5000 | | | |
| 157 | 0 | 150.2000 | 184.5000 | | | |
| 158 | 0 | 153.2000 | 184.5000 | | | |
| 159 | 0 | 156.2000 | 184.5000 | | | |

JOINT ANALYSIS

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 160 | 0 | 157.8000 | 184.5000 | | | |
| 161 | 0 | 159.4000 | 184.5000 | | | |
| 162 | 0 | 161.0000 | 184.5000 | | | |
| 163 | 0 | 162.6000 | 184.5000 | | | |
| 164 | 0 | 164.2000 | 184.5000 | | | |
| 165 | 0 | 165.8000 | 184.5000 | | | |
| 166 | 0 | 167.4000 | 184.5000 | | | |
| 167 | 0 | 169.0000 | 184.5000 | | | |
| 168 | 0 | 170.7500 | 184.5000 | | | |
| 169 | 0 | 172.5000 | 184.5000 | | | |
| 170 | 0 | 174.2500 | 184.5000 | | | |
| 171 | 0 | 176.0000 | 184.5000 | | | |
| 172 | 0 | 177.7500 | 184.5000 | | | |
| 173 | 0 | 179.5000 | 184.5000 | | | |
| 174 | 0 | 181.2500 | 184.5000 | | | |
| 175 | 0 | 183.0000 | 184.5000 | | | |
| 176 | 0 | 185.0000 | 184.5000 | | | |
| 177 | 0 | 187.0000 | 184.5000 | | | |
| 178 | 0 | 189.0000 | 184.5000 | | | |
| 179 | 0 | 191.0000 | 184.5000 | | | |
| 180 | 0 | 193.0000 | 184.5000 | | | |
| 181 | 0 | 195.0000 | 184.5000 | | | |
| 182 | 0 | 197.0000 | 184.5000 | | | |
| 183 | 0 | 199.0000 | 184.5000 | | | |
| 184 | 0 | 201.1700 | 184.5000 | | | |
| 185 | 0 | 203.3400 | 184.5000 | | | |
| 186 | 0 | 205.5100 | 184.5000 | | | |
| 187 | 0 | 207.6800 | 184.5000 | | | |
| 188 | 0 | 210.8000 | 184.5000 | | | |
| 189 | 0 | 213.4800 | 184.5000 | | | |
| 190 | 0 | 219.2800 | 184.5000 | | | |
| 191 | 0 | 225.2800 | 184.5000 | | | |
| 192 | 0 | 231.2800 | 184.5000 | | | |
| 193 | 0 | 239.2800 | 184.5000 | | | |
| 194 | 0 | 142.2000 | 186.5000 | | | |
| 195 | 0 | 146.2000 | 186.5000 | | | |
| 196 | 0 | 150.2000 | 186.5000 | | | |
| 197 | 0 | 153.2000 | 186.5000 | | | |
| 198 | 0 | 156.2000 | 186.5000 | | | |
| 199 | 0 | 157.8000 | 186.5000 | | | |
| 200 | 0 | 159.4000 | 186.5000 | | | |
| 201 | 0 | 161.0000 | 186.5000 | | | |
| 202 | 0 | 162.6000 | 186.5000 | | | |
| 203 | 0 | 164.2000 | 186.5000 | | | |
| 204 | 0 | 165.8000 | 186.5000 | | | |
| 205 | 0 | 167.4000 | 186.5000 | | | |
| 206 | 0 | 169.0000 | 186.5000 | | | |
| 207 | 0 | 170.7500 | 186.5000 | | | |
| 208 | 0 | 172.5000 | 186.5000 | | | |
| 209 | 0 | 174.2500 | 186.5000 | | | |
| 210 | 0 | 176.0000 | 186.5000 | | | |
| 211 | 0 | 177.7500 | 186.5000 | | | |
| 212 | 0 | 179.5000 | 186.5000 | | | |

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GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 213 | 0 | 181.2500 | 186.5000 | | | |
| 214 | 0 | 183.0000 | 186.5000 | | | |
| 215 | 0 | 185.0000 | 186.5000 | | | |
| 216 | 0 | 187.0000 | 186.5000 | | | |
| 217 | 0 | 189.0000 | 186.5000 | | | |
| 218 | 0 | 191.0000 | 186.5000 | | | |
| 219 | 0 | 193.0000 | 186.5000 | | | |
| 220 | 0 | 195.0000 | 186.5000 | | | |
| 221 | 0 | 197.0000 | 186.5000 | | | |
| 222 | 0 | 199.0000 | 186.5000 | | | |
| 223 | 0 | 201.1700 | 186.5000 | | | |
| 224 | 0 | 203.3400 | 186.5000 | | | |
| 225 | 0 | 205.5100 | 186.5000 | | | |
| 226 | 0 | 207.6800 | 186.5000 | | | |
| 227 | 0 | 210.5800 | 186.5000 | | | |
| 228 | 0 | 213.4800 | 186.5000 | | | |
| 229 | 0 | 219.2800 | 186.5000 | | | |
| 230 | 0 | 225.2800 | 186.5000 | | | |
| 231 | 0 | 231.2800 | 186.5000 | | | |
| 232 | 0 | 23.8000 | 188.5000 | | | |
| 233 | 0 | 24.0720 | 188.5000 | | | |
| 234 | 0 | 62.3700 | 188.5000 | | | |
| 235 | 0 | 94.2850 | 188.5000 | | | |
| 236 | 0 | 126.2000 | 188.5000 | | | |
| 237 | 0 | 134.2000 | 188.5000 | | | |
| 238 | 0 | 142.2000 | 188.5000 | | | |
| 239 | 0 | 146.2000 | 188.5000 | | | |
| 240 | 0 | 150.2000 | 188.5000 | | | |
| 241 | 0 | 153.2000 | 188.5000 | | | |
| 242 | 0 | 156.2000 | 188.5000 | | | |
| 243 | 0 | 157.8000 | 188.5000 | | | |
| 244 | 0 | 159.4000 | 188.5000 | | | |
| 245 | 0 | 161.0000 | 188.5000 | | | |
| 246 | 0 | 162.6000 | 188.5000 | | | |
| 247 | 0 | 164.2000 | 188.5000 | | | |
| 248 | 0 | 165.8000 | 188.5000 | | | |
| 249 | 0 | 167.4000 | 188.5000 | | | |
| 250 | 0 | 169.0000 | 188.5000 | | | |
| 251 | 0 | 170.7500 | 188.5000 | | | |
| 252 | 0 | 172.5000 | 188.5000 | | | |
| 253 | 0 | 174.2500 | 188.5000 | | | |
| 254 | 0 | 176.0000 | 188.5000 | | | |
| 255 | 0 | 177.7500 | 188.5000 | | | |
| 256 | 0 | 179.5000 | 188.5000 | | | |
| 257 | 0 | 181.2500 | 188.5000 | | | |
| 258 | 0 | 183.0000 | 188.5000 | | | |
| 259 | 0 | 185.0000 | 188.5000 | | | |
| 260 | 0 | 187.0000 | 188.5000 | | | |
| 261 | 0 | 189.0000 | 188.5000 | | | |
| 262 | 0 | 191.0000 | 188.5000 | | | |
| 263 | 0 | 193.0000 | 188.5000 | | | |
| 264 | 0 | 195.0000 | 188.5000 | | | |
| 265 | 0 | 197.0000 | 188.5000 | | | |

JOINT ANALYSIS

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 266 | 0 | 199.0000 | 188.5000 | | | |
| 267 | 0 | 201.1700 | 188.5000 | | | |
| 268 | 0 | 203.3400 | 188.5000 | | | |
| 269 | 0 | 205.5100 | 188.5000 | | | |
| 270 | 0 | 207.6800 | 188.5000 | | | |
| 271 | 0 | 210.8500 | 188.5000 | | | |
| 272 | 0 | 213.0200 | 188.5000 | | | |
| 273 | 0 | 215.1900 | 188.5000 | | | |
| 274 | 0 | 217.3600 | 188.5000 | | | |
| 275 | 0 | 219.5300 | 188.5000 | | | |
| 276 | 0 | 221.7000 | 188.5000 | | | |
| 277 | 0 | 223.8700 | 188.5000 | | | |
| 278 | 0 | 226.0400 | 188.5000 | | | |
| 279 | 0 | 228.2100 | 188.5000 | | | |
| 280 | 0 | 230.3800 | 188.5000 | | | |
| 281 | 0 | 232.5500 | 188.5000 | | | |
| 282 | 0 | 234.7200 | 188.5000 | | | |
| 283 | 0 | 236.8900 | 188.5000 | | | |
| 284 | 0 | 239.0600 | 188.5000 | | | |
| 285 | 0 | 241.2300 | 188.5000 | | | |
| 286 | 0 | 243.4000 | 188.5000 | | | |
| 287 | 0 | 245.5700 | 188.5000 | | | |
| 288 | 0 | 247.7400 | 188.5000 | | | |
| 289 | 0 | 249.9100 | 188.5000 | | | |
| 290 | 0 | 252.0800 | 188.5000 | | | |
| 291 | 0 | 254.2500 | 188.5000 | | | |
| 292 | 0 | 256.4200 | 188.5000 | | | |
| 293 | 0 | 258.5900 | 188.5000 | | | |
| 294 | 0 | 260.7600 | 188.5000 | | | |
| 295 | 0 | 262.9300 | 188.5000 | | | |
| 296 | 0 | 265.1000 | 188.5000 | | | |
| 297 | 0 | 267.2700 | 188.5000 | | | |
| 298 | 0 | 269.4400 | 188.5000 | | | |
| 299 | 0 | 271.6100 | 188.5000 | | | |
| 300 | 0 | 273.7800 | 188.5000 | | | |
| 301 | 0 | 275.9500 | 188.5000 | | | |
| 302 | 0 | 278.1200 | 188.5000 | | | |
| 303 | 0 | 280.2900 | 188.5000 | | | |
| 304 | 0 | 282.4600 | 188.5000 | | | |
| 305 | 0 | 284.6300 | 188.5000 | | | |
| 306 | 0 | 286.8000 | 188.5000 | | | |
| 307 | 0 | 288.9700 | 188.5000 | | | |
| 308 | 0 | 291.1400 | 188.5000 | | | |
| 309 | 0 | 293.3100 | 188.5000 | | | |
| 310 | 0 | 295.4800 | 188.5000 | | | |
| 311 | 0 | 297.6500 | 188.5000 | | | |
| 312 | 0 | 299.8200 | 188.5000 | | | |
| 313 | 0 | 301.9900 | 188.5000 | | | |
| 314 | 0 | 304.1600 | 188.5000 | | | |
| 315 | 0 | 306.3300 | 188.5000 | | | |
| 316 | 0 | 308.5000 | 188.5000 | | | |
| 317 | 0 | 310.6700 | 188.5000 | | | |
| 318 | 0 | 312.8400 | 188.5000 | | | |

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 319 | 0 | 164.2720 | 192.3750 | | | |
| 320 | 0 | 165.8480 | 192.3750 | | | |
| 321 | 0 | 167.4240 | 192.3750 | | | |
| 322 | 0 | 169.0000 | 192.3750 | | | |
| 323 | 0 | 170.5760 | 192.3750 | | | |
| 324 | 0 | 172.1520 | 192.3750 | | | |
| 325 | 0 | 173.7280 | 192.3750 | | | |
| 326 | 0 | 175.3040 | 192.3750 | | | |
| 327 | 0 | 176.8800 | 192.3750 | | | |
| 328 | 0 | 178.4560 | 192.3750 | | | |
| 329 | 0 | 180.0320 | 192.3750 | | | |
| 330 | 0 | 181.6080 | 192.3750 | | | |
| 331 | 0 | 183.1840 | 192.3750 | | | |
| 332 | 0 | 184.7600 | 192.3750 | | | |
| 333 | 0 | 186.3360 | 192.3750 | | | |
| 334 | 0 | 187.9120 | 192.3750 | | | |
| 335 | 0 | 189.4880 | 192.3750 | | | |
| 336 | 0 | 191.0640 | 192.3750 | | | |
| 337 | 0 | 192.6400 | 192.3750 | | | |
| 338 | 0 | 194.2160 | 192.3750 | | | |
| 339 | 0 | 195.7920 | 192.3750 | | | |
| 340 | 0 | 197.3680 | 192.3750 | | | |
| 341 | 0 | 198.9440 | 192.3750 | | | |
| 342 | 0 | 200.5200 | 192.3750 | | | |
| 343 | 0 | 202.0960 | 192.3750 | | | |
| 344 | 0 | 203.6720 | 192.3750 | | | |
| 345 | 0 | 205.2480 | 192.3750 | | | |
| 346 | 0 | 206.8240 | 192.3750 | | | |
| 347 | 0 | 208.4000 | 192.3750 | | | |
| 348 | 0 | 209.9760 | 192.3750 | | | |
| 349 | 0 | 211.5520 | 192.3750 | | | |
| 350 | 0 | 213.1280 | 192.3750 | | | |
| 351 | 0 | 214.7040 | 192.3750 | | | |
| 352 | 0 | 216.2800 | 192.3750 | | | |
| 353 | 0 | 217.8560 | 192.3750 | | | |
| 354 | 0 | 219.4320 | 192.3750 | | | |
| 355 | 0 | 221.0080 | 192.3750 | | | |
| 356 | 0 | 222.5840 | 192.3750 | | | |
| 357 | 0 | 224.1600 | 192.3750 | | | |
| 358 | 0 | 225.7360 | 192.3750 | | | |
| 359 | 0 | 227.3120 | 192.3750 | | | |
| 360 | 0 | 228.8880 | 192.3750 | | | |
| 361 | 0 | 230.4640 | 192.3750 | | | |
| 362 | 0 | 232.0400 | 192.3750 | | | |
| 363 | 0 | 233.6160 | 192.3750 | | | |
| 364 | 0 | 235.1920 | 192.3750 | | | |
| 365 | 0 | 236.7680 | 192.3750 | | | |
| 366 | 0 | 238.3440 | 192.3750 | | | |
| 367 | 0 | 239.9200 | 192.3750 | | | |
| 368 | 0 | 241.4960 | 192.3750 | | | |
| 369 | 0 | 243.0720 | 192.3750 | | | |
| 370 | 0 | 244.6480 | 192.3750 | | | |
| 371 | 0 | 246.2240 | 192.3750 | | | |

JOINT ANALYSIS

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 372 | 0 | 203.3400 | 194.5120 | | | |
| 373 | 0 | 205.5100 | 194.3120 | | | |
| 374 | 0 | 207.6800 | 194.3120 | | | |
| 375 | 0 | 210.5800 | 194.3120 | | | |
| 376 | 0 | 213.4800 | 194.3120 | | | |
| 377 | 0 | 214.9200 | 194.3120 | | | |
| 378 | 0 | 156.5850 | 196.2500 | | | |
| 379 | 0 | 158.1370 | 196.2500 | | | |
| 380 | 0 | 159.6890 | 196.2500 | | | |
| 381 | 0 | 161.2410 | 196.2500 | | | |
| 382 | 0 | 162.7920 | 196.2500 | | | |
| 383 | 0 | 164.3440 | 196.2500 | | | |
| 384 | 0 | 165.8960 | 196.2500 | | | |
| 385 | 0 | 167.4480 | 196.2500 | | | |
| 386 | 0 | 169.0000 | 196.2500 | | | |
| 387 | 0 | 170.7500 | 196.2500 | | | |
| 388 | 0 | 172.5000 | 196.2500 | | | |
| 389 | 0 | 174.2500 | 196.2500 | | | |
| 390 | 0 | 176.0000 | 196.2500 | | | |
| 391 | 0 | 177.7500 | 196.2500 | | | |
| 392 | 0 | 179.5000 | 196.2500 | | | |
| 393 | 0 | 181.2500 | 196.2500 | | | |
| 394 | 0 | 183.0000 | 196.2500 | | | |
| 395 | 0 | 185.0000 | 196.2500 | | | |
| 396 | 0 | 187.0000 | 196.2500 | | | |
| 397 | 0 | 189.0000 | 196.2500 | | | |
| 398 | 0 | 191.0000 | 196.2500 | | | |
| 399 | 0 | 193.0000 | 196.2500 | | | |
| 400 | 0 | 195.0000 | 196.2500 | | | |
| 401 | 0 | 197.0000 | 196.2500 | | | |
| 402 | 0 | 199.0000 | 196.2500 | | | |
| 403 | 0 | 201.1700 | 196.2500 | | | |
| 404 | 0 | 203.3400 | 196.2500 | | | |
| 405 | 0 | 205.5100 | 196.2500 | | | |
| 406 | 0 | 207.6800 | 196.2500 | | | |
| 407 | 0 | 210.5800 | 196.2500 | | | |
| 408 | 0 | 213.4800 | 196.2500 | | | |
| 409 | 0 | 156.7770 | 200.1250 | | | |
| 410 | 0 | 159.8330 | 200.1250 | | | |
| 411 | 0 | 162.8890 | 200.1250 | | | |
| 412 | 0 | 165.9440 | 200.1250 | | | |
| 413 | 0 | 169.0000 | 200.1250 | | | |
| 414 | 0 | 172.5000 | 200.1250 | | | |
| 415 | 0 | 176.0000 | 200.1250 | | | |
| 416 | 0 | 179.5000 | 200.1250 | | | |
| 417 | 0 | 183.0000 | 200.1250 | | | |
| 418 | 0 | 187.0000 | 200.1250 | | | |
| 419 | 0 | 191.0000 | 200.1250 | | | |
| 420 | 0 | 195.0000 | 200.1250 | | | |
| 421 | 0 | 199.0000 | 200.1250 | | | |
| 422 | 0 | 203.3400 | 200.1250 | | | |
| 423 | 0 | 207.6800 | 200.1250 | | | |
| 424 | 0 | 210.5800 | 200.1250 | | | |

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 425 | 0 | 156.9700 | 204.0000 | | | |
| 426 | 0 | 159.9770 | 204.0000 | | | |
| 427 | 0 | 162.9850 | 204.0000 | | | |
| 428 | 0 | 165.9920 | 204.0000 | | | |
| 429 | 0 | 169.0000 | 204.0000 | | | |
| 430 | 0 | 172.5000 | 204.0000 | | | |
| 431 | 0 | 176.0000 | 204.0000 | | | |
| 432 | 0 | 179.5000 | 204.0000 | | | |
| 433 | 0 | 183.0000 | 204.0000 | | | |
| 434 | 0 | 187.0000 | 204.0000 | | | |
| 435 | 0 | 191.0000 | 204.0000 | | | |
| 436 | 0 | 195.0000 | 204.0000 | | | |
| 437 | 0 | 199.0000 | 204.0000 | | | |
| 438 | 0 | 203.3400 | 204.0000 | | | |
| 439 | 0 | 207.6800 | 204.0000 | | | |
| 440 | 0 | 157.1700 | 208.0000 | | | |
| 441 | 0 | 160.1280 | 208.0000 | | | |
| 442 | 0 | 163.0850 | 208.0000 | | | |
| 443 | 0 | 166.0420 | 208.0000 | | | |
| 444 | 0 | 169.0000 | 208.0000 | | | |
| 445 | 0 | 172.5000 | 208.0000 | | | |
| 446 | 0 | 176.0000 | 208.0000 | | | |
| 447 | 0 | 179.5000 | 208.0000 | | | |
| 448 | 0 | 183.0000 | 208.0000 | | | |
| 449 | 0 | 187.0000 | 208.0000 | | | |
| 450 | 0 | 191.0000 | 208.0000 | | | |
| 451 | 0 | 195.0000 | 208.0000 | | | |
| 452 | 0 | 199.0000 | 208.0000 | | | |
| 453 | 0 | 203.1920 | 208.0000 | | | |
| 454 | 0 | 204.6900 | 208.0000 | | | |
| 455 | 0 | 157.2700 | 210.0000 | | | |
| 456 | 0 | 160.2030 | 210.0000 | | | |
| 457 | 0 | 163.1350 | 210.0000 | | | |
| 458 | 0 | 166.0680 | 210.0000 | | | |
| 459 | 0 | 169.0000 | 210.0000 | | | |
| 460 | 0 | 172.5000 | 210.0000 | | | |
| 461 | 0 | 176.0000 | 210.0000 | | | |
| 462 | 0 | 179.5000 | 210.0000 | | | |
| 463 | 0 | 183.0000 | 210.0000 | | | |
| 464 | 0 | 187.0000 | 210.0000 | | | |
| 465 | 0 | 191.0000 | 210.0000 | | | |
| 466 | 0 | 195.0000 | 210.0000 | | | |
| 467 | 0 | 199.0000 | 210.0000 | | | |
| 468 | 0 | 203.1920 | 210.0000 | | | |
| 469 | 0 | 157.3960 | 212.5000 | | | |
| 470 | 0 | 160.2970 | 212.5000 | | | |
| 471 | 0 | 163.1980 | 212.5000 | | | |
| 472 | 0 | 166.0990 | 212.5000 | | | |
| 473 | 0 | 169.0000 | 212.5000 | | | |
| 474 | 0 | 172.5000 | 212.5000 | | | |
| 475 | 0 | 176.0000 | 212.5000 | | | |
| 476 | 0 | 179.5000 | 212.5000 | | | |
| 477 | 0 | 183.0000 | 212.5000 | | | |

JOINT ANALYSIS

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 478 | 0 | 187.0000 | 212.5000 | | | |
| 479 | 0 | 191.0000 | 212.5000 | | | |
| 480 | 0 | 195.0000 | 212.5000 | | | |
| 481 | 0 | 199.0000 | 212.5000 | | | |
| 482 | 0 | 201.3200 | 212.5000 | | | |
| 483 | 0 | 157.5520 | 215.6250 | | | |
| 484 | 0 | 160.4140 | 215.6250 | | | |
| 485 | 0 | 163.2760 | 215.6250 | | | |
| 486 | 0 | 166.1380 | 215.6250 | | | |
| 487 | 0 | 169.0000 | 215.6250 | | | |
| 488 | 0 | 172.5000 | 215.6250 | | | |
| 489 | 0 | 176.0000 | 215.6250 | | | |
| 490 | 0 | 179.5000 | 215.6250 | | | |
| 491 | 0 | 183.0000 | 215.6250 | | | |
| 492 | 0 | 187.0000 | 215.6250 | | | |
| 493 | 0 | 191.0000 | 215.6250 | | | |
| 494 | 0 | 196.4430 | 215.6250 | | | |
| 495 | 0 | 198.8820 | 215.6250 | | | |
| 496 | 0 | 157.7090 | 218.7500 | | | |
| 497 | 0 | 160.5320 | 218.7500 | | | |
| 498 | 0 | 163.3550 | 218.7500 | | | |
| 499 | 0 | 166.1770 | 218.7500 | | | |
| 500 | 0 | 169.0000 | 218.7500 | | | |
| 501 | 0 | 172.5000 | 218.7500 | | | |
| 502 | 0 | 176.0000 | 218.7500 | | | |
| 503 | 0 | 179.5000 | 218.7500 | | | |
| 504 | 0 | 183.0000 | 218.7500 | | | |
| 505 | 0 | 187.0000 | 218.7500 | | | |
| 506 | 0 | 191.0000 | 218.7500 | | | |
| 507 | 0 | 196.4430 | 218.7500 | | | |
| 508 | 0 | 157.8660 | 221.8750 | | | |
| 509 | 0 | 160.6490 | 221.8750 | | | |
| 510 | 0 | 163.4320 | 221.8750 | | | |
| 511 | 0 | 166.2170 | 221.8750 | | | |
| 512 | 0 | 169.0000 | 221.8750 | | | |
| 513 | 0 | 172.5000 | 221.8750 | | | |
| 514 | 0 | 176.0000 | 221.8750 | | | |
| 515 | 0 | 179.5000 | 221.8750 | | | |
| 516 | 0 | 183.0000 | 221.8750 | | | |
| 517 | 0 | 187.0000 | 221.8750 | | | |
| 518 | 0 | 191.0000 | 221.8750 | | | |
| 519 | 0 | 194.0050 | 221.8750 | | | |
| 520 | 0 | 158.0230 | 225.0000 | | | |
| 521 | 0 | 160.7670 | 225.0000 | | | |
| 522 | 0 | 163.5110 | 225.0000 | | | |
| 523 | 0 | 166.2560 | 225.0000 | | | |
| 524 | 0 | 169.0000 | 225.0000 | | | |
| 525 | 0 | 172.5000 | 225.0000 | | | |
| 526 | 0 | 176.0000 | 225.0000 | | | |
| 527 | 0 | 179.5000 | 225.0000 | | | |
| 528 | 0 | 183.0000 | 225.0000 | | | |
| 529 | 0 | 185.4500 | 225.0000 | | | |
| 530 | 0 | 187.9000 | 225.0000 | | | |

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 531 | 0 | 191.5670 | 225.0000 | | | |
| 532 | 0 | 158.1410 | 227.3500 | | | |
| 533 | 0 | 160.8250 | 227.3500 | | | |
| 534 | 0 | 163.5700 | 227.3500 | | | |
| 535 | 0 | 166.2850 | 227.3500 | | | |
| 536 | 0 | 169.0000 | 227.3500 | | | |
| 537 | 0 | 172.5000 | 227.3500 | | | |
| 538 | 0 | 176.0000 | 227.3500 | | | |
| 539 | 0 | 179.5000 | 227.3500 | | | |
| 540 | 0 | 183.0000 | 227.3500 | | | |
| 541 | 0 | 185.4500 | 227.3500 | | | |
| 542 | 0 | 187.9000 | 227.3500 | | | |
| 543 | 0 | 189.7340 | 227.3500 | | | |
| 544 | 0 | 188.2580 | 229.7000 | | | |
| 545 | 0 | 190.2240 | 229.7000 | | | |
| 546 | 0 | 193.6290 | 229.7000 | | | |
| 547 | 0 | 196.3150 | 229.7000 | | | |
| 548 | 0 | 199.0000 | 229.7000 | | | |
| 549 | 0 | 172.5000 | 229.7000 | | | |
| 550 | 0 | 176.0000 | 229.7000 | | | |
| 551 | 0 | 179.5000 | 229.7000 | | | |
| 552 | 0 | 183.0000 | 229.7000 | | | |
| 553 | 0 | 185.4500 | 229.7000 | | | |
| 554 | 0 | 187.9000 | 229.7000 | | | |
| 555 | 0 | 188.2580 | 232.8940 | | | |
| 556 | 0 | 191.0640 | 232.8940 | | | |
| 557 | 0 | 193.7090 | 232.8940 | | | |
| 558 | 0 | 196.3540 | 232.8940 | | | |
| 559 | 0 | 198.9990 | 232.8940 | | | |
| 560 | 0 | 172.4990 | 232.8940 | | | |
| 561 | 0 | 176.0000 | 232.8940 | | | |
| 562 | 0 | 179.5000 | 232.8940 | | | |
| 563 | 0 | 183.0000 | 232.8940 | | | |
| 564 | 0 | 185.4500 | 232.8940 | | | |
| 565 | 0 | 188.5790 | 236.0880 | | | |
| 566 | 0 | 191.1840 | 236.0880 | | | |
| 567 | 0 | 193.7890 | 236.0880 | | | |
| 568 | 0 | 196.3950 | 236.0880 | | | |
| 569 | 0 | 199.0000 | 236.0880 | | | |
| 570 | 0 | 172.5000 | 236.0880 | | | |
| 571 | 0 | 176.0000 | 236.0880 | | | |
| 572 | 0 | 179.5000 | 236.0880 | | | |
| 573 | 0 | 183.0000 | 236.0880 | | | |
| 574 | 0 | 185.6890 | 238.2940 | | | |
| 575 | 0 | 188.2870 | 238.2940 | | | |
| 576 | 0 | 193.8440 | 238.2940 | | | |
| 577 | 0 | 196.4220 | 238.2940 | | | |
| 578 | 0 | 199.0000 | 238.2940 | | | |
| 579 | 0 | 172.5000 | 238.2940 | | | |
| 580 | 0 | 176.0000 | 238.2940 | | | |
| 581 | 0 | 179.5000 | 238.2940 | | | |
| 582 | 0 | 181.3080 | 238.2940 | | | |
| 583 | 0 | 183.8000 | 240.5000 | | | |

JOINT ANALYSIS

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 584 | 0 | 161.3500 | 240.5000 | | | |
| 585 | 0 | 163.9000 | 240.5000 | | | |
| 586 | 0 | 166.4500 | 240.5000 | | | |
| 587 | 0 | 169.0000 | 240.5000 | | | |
| 588 | 0 | 172.5000 | 240.5000 | | | |
| 589 | 0 | 176.0000 | 240.5000 | | | |
| 590 | 0 | 179.6160 | 240.5000 | | | |
| 591 | 0 | 183.2320 | 243.0000 | | | |
| 592 | 0 | 186.8480 | 243.0000 | | | |
| 593 | 0 | 190.4640 | 243.0000 | | | |
| 594 | 0 | 194.0800 | 243.0000 | | | |
| 595 | 0 | 197.6960 | 243.0000 | | | |
| 596 | 0 | 201.3120 | 243.0000 | | | |
| 597 | 0 | 204.9280 | 243.0000 | | | |
| 598 | 0 | 208.5440 | 243.0000 | | | |
| 599 | 0 | 212.1600 | 245.5000 | | | |
| 600 | 0 | 215.7760 | 245.5000 | | | |
| 601 | 0 | 219.3920 | 245.5000 | | | |
| 602 | 0 | 223.0080 | 245.5000 | | | |
| 603 | 0 | 226.6240 | 245.5000 | | | |
| 604 | 0 | 230.2400 | 245.5000 | | | |
| 605 | 0 | 233.8560 | 245.5000 | | | |
| 606 | 0 | 237.4720 | 247.0000 | | | |
| 607 | 0 | 241.0880 | 247.0000 | | | |
| 608 | 0 | 244.7040 | 247.0000 | | | |
| 609 | 0 | 248.3200 | 247.0000 | | | |
| 610 | 0 | 251.9360 | 247.0000 | | | |
| 611 | 0 | 255.5520 | 247.0000 | | | |
| 612 | 0 | 259.1680 | 247.0000 | | | |
| 613 | 0 | 262.7840 | 249.5000 | | | |
| 614 | 0 | 266.4000 | 249.5000 | | | |
| 615 | 0 | 270.0160 | 249.5000 | | | |
| 616 | 0 | 273.6320 | 249.5000 | | | |
| 617 | 0 | 277.2480 | 249.5000 | | | |
| 618 | 0 | 280.8640 | 249.5000 | | | |
| 619 | 0 | 284.4800 | 251.0000 | | | |
| 620 | 0 | 288.0960 | 251.0000 | | | |
| 621 | 0 | 291.7120 | 251.0000 | | | |
| 622 | 0 | 295.3280 | 251.0000 | | | |
| 623 | 0 | 298.9440 | 251.0000 | | | |
| 624 | 0 | 302.5600 | 251.0000 | | | |
| 625 | 0 | 306.1760 | 254.1250 | | | |
| 626 | 0 | 309.7920 | 254.1250 | | | |
| 627 | 0 | 313.4080 | 254.1250 | | | |
| 628 | 0 | 317.0240 | 254.1250 | | | |
| 629 | 0 | 320.6400 | 254.1250 | | | |
| 630 | 0 | 324.2560 | 257.2500 | | | |
| 631 | 0 | 327.8720 | 257.2500 | | | |
| 632 | 0 | 331.4880 | 257.2500 | | | |
| 633 | 0 | 335.1040 | 257.2500 | | | |
| 634 | 0 | 338.7200 | 257.2500 | | | |
| 635 | 0 | 342.3360 | 260.3750 | | | |
| 636 | 0 | 345.9520 | 260.3750 | | | |

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 637 | 0 | 164.0210 | 260.3750 | | | |
| 638 | 0 | 166.5110 | 260.3750 | | | |
| 639 | 0 | 167.8290 | 260.3750 | | | |
| 640 | 0 | 156.9000 | 263.5000 | | | |
| 641 | 0 | 161.5310 | 263.5000 | | | |
| 642 | 0 | 164.0210 | 263.5000 | | | |
| 643 | 0 | 166.5110 | 263.5000 | | | |
| 644 | 0 | 167.8290 | 263.5000 | | | |
| 645 | 0 | 156.9000 | 266.5000 | | | |
| 646 | 0 | 161.5310 | 266.5000 | | | |
| 647 | 0 | 164.0210 | 266.5000 | | | |
| 648 | 0 | 166.5110 | 266.5000 | | | |
| 649 | 0 | 167.8290 | 266.5000 | | | |
| 650 | 0 | 180.0000 | 215.6250 | | | |
| 651 | 0 | 180.0000 | 218.7500 | | | |
| 652 | 0 | 180.0000 | 221.8750 | | | |
| 653 | 0 | 196.0000 | 200.1250 | | | |
| 654 | 0 | 196.0000 | 204.0000 | | | |
| 655 | 0 | 196.0000 | 208.0000 | | | |
| 656 | 0 | 196.0000 | 210.0000 | | | |
| 657 | 0 | 196.0000 | 212.5000 | | | |
| 1290 | 0 | 169.0000 | 188.5000 | | | |
| 1291 | 0 | 169.0000 | 190.4380 | | | |
| 1322 | 0 | 169.0000 | 192.3750 | | | |
| 1354 | 0 | 169.0000 | 194.3120 | | | |
| 1386 | 0 | 169.0000 | 196.2500 | | | |
| 1413 | 0 | 169.0000 | 200.1250 | | | |
| 1429 | 0 | 169.0000 | 204.0000 | | | |
| 1444 | 0 | 169.0000 | 208.0000 | | | |
| 1459 | 0 | 169.0000 | 210.0000 | | | |
| 1473 | 0 | 169.0000 | 212.5000 | | | |
| 1487 | 0 | 169.0000 | 215.6250 | | | |
| 1500 | 0 | 169.0000 | 218.7500 | | | |
| 1512 | 0 | 169.0000 | 221.8750 | | | |
| 1524 | 0 | 169.0000 | 225.0000 | | | |
| 1536 | 0 | 169.0000 | 227.3500 | | | |
| 1548 | 0 | 169.0000 | 229.7000 | | | |
| 1559 | 0 | 168.9880 | 232.8500 | | | |
| 1569 | 0 | 169.0000 | 236.0880 | | | |
| 1573 | 0 | 169.0000 | 238.2940 | | | |
| 1587 | 0 | 169.0000 | 240.5000 | | | |
| 1595 | 0 | 169.0000 | 243.0000 | | | |
| 1603 | 0 | 169.0000 | 245.5000 | | | |
| 1610 | 0 | 170.4060 | 247.0000 | | | |
| 1618 | 0 | 172.7500 | 249.5000 | | | |
| 1258 | 0 | 183.0000 | 188.5000 | | | |
| 1288 | 0 | 183.0000 | 190.4380 | | | |
| 1380 | 0 | 183.0000 | 192.3750 | | | |
| 1362 | 0 | 183.0000 | 194.3120 | | | |
| 1394 | 0 | 183.0000 | 196.2500 | | | |
| 1417 | 0 | 183.0000 | 200.1250 | | | |
| 1433 | 0 | 183.0000 | 204.0000 | | | |
| 1448 | 0 | 183.0000 | 208.0000 | | | |

JOINT ANALYSIS

GRID POINT COORDINATES

| GRID | LOCAL | X | Y | FIX-X | FIX-Y | FIX-RZ |
|------|-------|----------|----------|-------|-------|--------|
| 1463 | 0 | 183.0000 | 210.0000 | | | |
| 1477 | 0 | 183.0000 | 212.5000 | | | |
| 1491 | 0 | 183.0000 | 215.6250 | | | |
| 1504 | 0 | 183.0000 | 218.7500 | | | |
| 1516 | 0 | 183.0000 | 221.8750 | | | |
| 1528 | 0 | 183.0000 | 225.0000 | | | |
| 1541 | 0 | 185.4500 | 227.3500 | | | |
| 1554 | 0 | 187.9000 | 229.7000 | | | |
| 1266 | 0 | 199.0000 | 188.5000 | | | |
| 1306 | 0 | 199.0000 | 190.4380 | | | |
| 1338 | 0 | 199.0000 | 192.3750 | | | |
| 1370 | 0 | 199.0000 | 194.3120 | | | |
| 1402 | 0 | 199.0000 | 196.2500 | | | |
| 1421 | 0 | 199.0000 | 200.1250 | | | |
| 1437 | 0 | 199.0000 | 204.0000 | | | |
| 1452 | 0 | 199.0000 | 208.0000 | | | |
| 1467 | 0 | 199.0000 | 210.0000 | | | |
| 1482 | 0 | 201.3200 | 212.5000 | | | |
| 2577 | 0 | 166.4220 | 238.2940 | | | |
| 2578 | 0 | 169.0000 | 238.2940 | | | |
| 2504 | 0 | 183.0000 | 218.7500 | | | |
| 2651 | 0 | 180.0000 | 218.7500 | | | |
| 2437 | 0 | 199.0000 | 204.0000 | | | |
| 2654 | 0 | 196.0000 | 204.0000 | | | |

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ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|----|----|----|----|--------|
| 1 | 30 | 1 | 2 | 17 | 16 | 1.0000 |
| 2 | 30 | 2 | 3 | 18 | 17 | 1.0000 |
| 3 | 30 | 3 | 4 | 19 | 18 | 1.0000 |
| 4 | 30 | 4 | 5 | 20 | 19 | 1.0000 |
| 5 | 30 | 5 | 6 | 21 | 20 | 1.0000 |
| 6 | 30 | 6 | 7 | 22 | 21 | 1.0000 |
| 7 | 30 | 7 | 8 | 23 | 22 | 1.0000 |
| 8 | 30 | 8 | 9 | 24 | 23 | 1.0000 |
| 9 | 30 | 9 | 10 | 25 | 24 | 1.0000 |
| 10 | 30 | 10 | 11 | 26 | 25 | 1.0000 |
| 11 | 30 | 11 | 12 | 27 | 26 | 1.0000 |
| 12 | 30 | 12 | 13 | 28 | 27 | 1.0000 |
| 13 | 30 | 13 | 14 | 29 | 28 | 1.0000 |
| 14 | 30 | 14 | 15 | 30 | 29 | 1.0000 |
| 15 | 30 | 15 | 16 | 31 | 30 | 1.0000 |
| 16 | 30 | 16 | 17 | 32 | 31 | 1.0000 |
| 17 | 30 | 17 | 18 | 33 | 32 | 1.0000 |
| 18 | 30 | 18 | 19 | 34 | 33 | 1.0000 |
| 19 | 30 | 19 | 20 | 35 | 34 | 1.0000 |
| 20 | 30 | 20 | 21 | 36 | 35 | 1.0000 |
| 21 | 30 | 21 | 22 | 37 | 36 | 1.0000 |
| 22 | 30 | 22 | 23 | 38 | 37 | 1.0000 |
| 23 | 30 | 23 | 24 | 39 | 38 | 1.0000 |
| 24 | 30 | 24 | 25 | 40 | 39 | 1.0000 |
| 25 | 30 | 25 | 26 | 41 | 40 | 1.0000 |
| 26 | 30 | 26 | 27 | 42 | 41 | 1.0000 |
| 27 | 30 | 27 | 28 | 43 | 42 | 1.0000 |
| 28 | 30 | 28 | 29 | 44 | 43 | 1.0000 |
| 29 | 30 | 29 | 30 | 45 | 44 | 1.0000 |
| 30 | 30 | 30 | 31 | 46 | 45 | 1.0000 |
| 31 | 30 | 31 | 32 | 47 | 46 | 1.0000 |
| 32 | 30 | 32 | 33 | 48 | 47 | 1.0000 |
| 33 | 30 | 33 | 34 | 49 | 48 | 1.0000 |
| 34 | 30 | 34 | 35 | 50 | 49 | 1.0000 |
| 35 | 30 | 35 | 36 | 51 | 50 | 1.0000 |
| 36 | 30 | 36 | 37 | 52 | 51 | 1.0000 |
| 37 | 30 | 37 | 38 | 53 | 52 | 1.0000 |
| 38 | 30 | 38 | 39 | 54 | 53 | 1.0000 |
| 39 | 30 | 39 | 40 | 55 | 54 | 1.0000 |
| 40 | 30 | 40 | 41 | 56 | 55 | 1.0000 |
| 41 | 30 | 41 | 42 | 57 | 56 | 1.0000 |
| 42 | 30 | 42 | 43 | 58 | 57 | 1.0000 |
| 43 | 30 | 43 | 44 | 59 | 58 | 1.0000 |
| 44 | 30 | 44 | 45 | 60 | 59 | 1.0000 |
| 45 | 30 | 45 | 46 | 61 | 60 | 1.0000 |
| 46 | 30 | 46 | 47 | 62 | 61 | 1.0000 |
| 47 | 30 | 47 | 48 | 63 | 62 | 1.0000 |
| 48 | 30 | 48 | 49 | 64 | 63 | 1.0000 |
| 49 | 30 | 49 | 50 | 65 | 64 | 1.0000 |
| 50 | 30 | 50 | 51 | 66 | 65 | 1.0000 |
| 51 | 30 | 51 | 52 | 67 | 66 | 1.0000 |
| 52 | 30 | 52 | 53 | 68 | 67 | 1.0000 |
| 53 | 30 | 53 | 54 | 69 | 68 | 1.0000 |
| 54 | 30 | 54 | 55 | 70 | 69 | 1.0000 |
| 55 | 30 | 55 | 56 | 71 | 70 | 1.0000 |
| 56 | 30 | 56 | 57 | 72 | 71 | 1.0000 |

JOINT ANALYSIS

ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|-----|-----|-----|-----|--------|
| 54 | 30 | 51 | 52 | 73 | 72 | 1.0000 |
| 55 | 30 | 52 | 53 | 74 | 73 | 1.0000 |
| 56 | 30 | 53 | 54 | 75 | 74 | 1.0000 |
| 57 | 30 | 54 | 55 | 76 | 75 | 1.0000 |
| 58 | 30 | 55 | 56 | 77 | 76 | 1.0000 |
| 59 | 30 | 56 | 57 | 78 | 77 | 1.0000 |
| 60 | 30 | 57 | 58 | 79 | 78 | 1.0000 |
| 61 | 30 | 58 | 59 | 80 | 79 | 1.0000 |
| 62 | 30 | 59 | 60 | 81 | 80 | 1.0000 |
| 63 | 30 | 60 | 61 | 82 | 81 | 1.0000 |
| 64 | 30 | 61 | 62 | 83 | 82 | 1.0000 |
| 65 | 30 | 62 | 63 | 84 | 83 | 1.0000 |
| 66 | 30 | 63 | 64 | 85 | 84 | 1.0000 |
| 67 | 30 | 64 | 65 | 86 | 85 | 1.0000 |
| 68 | 30 | 65 | 66 | 87 | 86 | 1.0000 |
| 69 | 30 | 66 | 67 | 88 | 87 | 1.0000 |
| 70 | 30 | 67 | 68 | 89 | 88 | 1.0000 |
| 71 | 30 | 68 | 69 | 90 | 89 | 1.0000 |
| 72 | 30 | 69 | 70 | 91 | 90 | 1.0000 |
| 73 | 30 | 70 | 71 | 92 | 91 | 1.0000 |
| 74 | 30 | 71 | 72 | 93 | 92 | 1.0000 |
| 75 | 30 | 72 | 73 | 94 | 93 | 1.0000 |
| 76 | 30 | 73 | 74 | 95 | 94 | 1.0000 |
| 77 | 30 | 74 | 75 | 96 | 95 | 1.0000 |
| 78 | 30 | 75 | 76 | 97 | 96 | 1.0000 |
| 79 | 30 | 76 | 77 | 98 | 97 | 1.0000 |
| 80 | 30 | 77 | 78 | 99 | 98 | 1.0000 |
| 81 | 30 | 78 | 79 | 100 | 99 | 1.0000 |
| 82 | 30 | 79 | 80 | 101 | 100 | 1.0000 |
| 83 | 30 | 80 | 81 | 102 | 101 | 1.0000 |
| 84 | 30 | 81 | 82 | 103 | 102 | 1.0000 |
| 85 | 30 | 82 | 83 | 104 | 103 | 1.0000 |
| 86 | 30 | 83 | 84 | 105 | 104 | 1.0000 |
| 87 | 30 | 84 | 85 | 106 | 105 | 1.0000 |
| 88 | 30 | 85 | 86 | 107 | 106 | 1.0000 |
| 89 | 30 | 86 | 87 | 108 | 107 | 1.0000 |
| 90 | 30 | 87 | 88 | 109 | 108 | 1.0000 |
| 91 | 30 | 88 | 89 | 110 | 109 | 1.0000 |
| 92 | 30 | 89 | 90 | 111 | 110 | 1.0000 |
| 93 | 30 | 90 | 91 | 112 | 111 | 1.0000 |
| 94 | 30 | 91 | 92 | 113 | 112 | 1.0000 |
| 95 | 30 | 92 | 93 | 114 | 113 | 1.0000 |
| 96 | 30 | 93 | 94 | 115 | 114 | 1.0000 |
| 97 | 30 | 94 | 95 | 116 | 115 | 1.0000 |
| 98 | 30 | 95 | 96 | 117 | 116 | 1.0000 |
| 99 | 30 | 96 | 97 | 118 | 117 | 1.0000 |
| 100 | 30 | 97 | 98 | 119 | 118 | 1.0000 |
| 101 | 30 | 98 | 99 | 120 | 119 | 1.0000 |
| 102 | 30 | 99 | 100 | 121 | 120 | 1.0000 |
| 103 | 30 | 100 | 101 | 122 | 121 | 1.0000 |
| 104 | 30 | 101 | 102 | 123 | 122 | 1.0000 |
| 105 | 30 | 102 | 103 | 124 | 123 | 1.0000 |
| 106 | 30 | 103 | 104 | 125 | 124 | 1.0000 |
| 107 | 30 | 104 | 105 | 126 | 125 | 1.0000 |
| 108 | 30 | 105 | 106 | 127 | 126 | 1.0000 |

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ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|-----|-----|-----|-----|--------|
| 107 | 30 | 94 | 95 | 128 | 127 | 1.0000 |
| 108 | 30 | 95 | 96 | 129 | 128 | 1.0000 |
| 109 | 30 | 96 | 97 | 130 | 129 | 1.0000 |
| 110 | 30 | 97 | 98 | 131 | 130 | 1.0000 |
| 111 | 30 | 98 | 99 | 132 | 131 | 1.0000 |
| 112 | 30 | 99 | 100 | 133 | 132 | 1.0000 |
| 113 | 30 | 100 | 101 | 134 | 133 | 1.0000 |
| 114 | 30 | 101 | 102 | 135 | 134 | 1.0000 |
| 115 | 30 | 102 | 103 | 136 | 135 | 1.0000 |
| 116 | 30 | 103 | 104 | 137 | 136 | 1.0000 |
| 117 | 30 | 104 | 105 | 138 | 137 | 1.0000 |
| 118 | 30 | 105 | 106 | 139 | 138 | 1.0000 |
| 119 | 30 | 106 | 107 | 140 | 139 | 1.0000 |
| 120 | 30 | 107 | 108 | 141 | 140 | 1.0000 |
| 121 | 30 | 108 | 109 | 142 | 141 | 1.0000 |
| 122 | 30 | 109 | 110 | 143 | 142 | 1.0000 |
| 123 | 30 | 110 | 111 | 144 | 143 | 1.0000 |
| 124 | 30 | 111 | 112 | 145 | 144 | 1.0000 |
| 125 | 30 | 112 | 113 | 146 | 145 | 1.0000 |
| 126 | 30 | 113 | 114 | 147 | 146 | 1.0000 |
| 127 | 30 | 114 | 115 | 148 | 147 | 1.0000 |
| 128 | 30 | 115 | 116 | 149 | 148 | 1.0000 |
| 129 | 30 | 116 | 117 | 150 | 149 | 1.0000 |
| 130 | 30 | 117 | 118 | 151 | 150 | 1.0000 |
| 131 | 30 | 118 | 119 | 152 | 151 | 1.0000 |
| 132 | 30 | 119 | 120 | 153 | 152 | 1.0000 |
| 133 | 30 | 120 | 121 | 154 | 153 | 1.0000 |
| 134 | 30 | 121 | 122 | 155 | 154 | 1.0000 |
| 135 | 30 | 122 | 123 | 156 | 155 | 1.0000 |
| 136 | 30 | 123 | 124 | 157 | 156 | 1.0000 |
| 137 | 30 | 124 | 125 | 158 | 157 | 1.0000 |
| 138 | 30 | 125 | 126 | 159 | 158 | 1.0000 |
| 139 | 30 | 126 | 127 | 160 | 159 | 1.0000 |
| 140 | 30 | 127 | 128 | 161 | 160 | 1.0000 |
| 141 | 30 | 128 | 129 | 162 | 161 | 1.0000 |
| 142 | 30 | 129 | 130 | 163 | 162 | 1.0000 |
| 143 | 30 | 130 | 131 | 164 | 163 | 1.0000 |
| 144 | 30 | 131 | 132 | 165 | 164 | 1.0000 |
| 145 | 30 | 132 | 133 | 166 | 165 | 1.0000 |
| 146 | 30 | 133 | 134 | 167 | 166 | 1.0000 |
| 147 | 30 | 134 | 135 | 168 | 167 | 1.0000 |
| 148 | 30 | 135 | 136 | 169 | 168 | 1.0000 |
| 149 | 30 | 136 | 137 | 170 | 169 | 1.0000 |
| 150 | 30 | 137 | 138 | 171 | 170 | 1.0000 |
| 151 | 30 | 138 | 139 | 172 | 171 | 1.0000 |
| 152 | 30 | 139 | 140 | 173 | 172 | 1.0000 |
| 153 | 30 | 140 | 141 | 174 | 173 | 1.0000 |
| 154 | 30 | 141 | 142 | 175 | 174 | 1.0000 |
| 155 | 30 | 142 | 143 | 176 | 175 | 1.0000 |

JOINT ANALYSIS

ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|-----|-----|-----|-----|--------|
| 160 | 30 | 176 | 138 | 177 | 177 | 1.0000 |
| 161 | 30 | 138 | 177 | 177 | 177 | 1.0000 |
| 162 | 30 | 139 | 179 | 179 | 179 | 1.0000 |
| 163 | 30 | 140 | 180 | 180 | 180 | 1.0000 |
| 164 | 30 | 180 | 140 | 181 | 181 | 1.0000 |
| 165 | 30 | 140 | 182 | 181 | 181 | 1.0000 |
| 166 | 30 | 140 | 141 | 183 | 182 | 1.0000 |
| 167 | 30 | 141 | 142 | 184 | 183 | 1.0000 |
| 168 | 30 | 141 | 142 | 185 | 185 | 1.0000 |
| 169 | 30 | 142 | 186 | 185 | 185 | 1.0000 |
| 170 | 30 | 142 | 143 | 187 | 186 | 1.0000 |
| 171 | 30 | 143 | 144 | 188 | 187 | 1.0000 |
| 172 | 30 | 144 | 144 | 189 | 189 | 1.0000 |
| 173 | 30 | 144 | 145 | 190 | 189 | 1.0000 |
| 174 | 30 | 145 | 146 | 191 | 190 | 1.0000 |
| 175 | 30 | 146 | 147 | 192 | 191 | 1.0000 |
| 176 | 30 | 147 | 148 | 193 | 192 | 1.0000 |
| 177 | 30 | 148 | 149 | 193 | 193 | 1.0000 |
| 178 | 30 | 149 | 149 | 217 | 277 | 1.0000 |
| 179 | 30 | 149 | 150 | 278 | 277 | 1.0000 |
| 180 | 30 | 150 | 151 | 279 | 278 | 1.0000 |
| 181 | 30 | 151 | 152 | 280 | 279 | 1.0000 |
| 182 | 30 | 152 | 153 | 281 | 280 | 1.0000 |
| 183 | 30 | 154 | 154 | 237 | 237 | 1.0000 |
| 184 | 30 | 154 | 155 | 194 | 237 | 1.0000 |
| 185 | 30 | 155 | 156 | 195 | 194 | 1.0000 |
| 186 | 30 | 156 | 157 | 196 | 195 | 1.0000 |
| 187 | 30 | 157 | 158 | 197 | 196 | 1.0000 |
| 188 | 30 | 158 | 159 | 198 | 197 | 1.0000 |
| 189 | 30 | 159 | 160 | 199 | 198 | 1.0000 |
| 190 | 30 | 160 | 161 | 200 | 199 | 1.0000 |
| 191 | 30 | 161 | 162 | 201 | 200 | 1.0000 |
| 192 | 30 | 162 | 163 | 202 | 201 | 1.0000 |
| 193 | 30 | 163 | 164 | 203 | 202 | 1.0000 |
| 194 | 30 | 164 | 165 | 204 | 203 | 1.0000 |
| 195 | 30 | 165 | 166 | 205 | 204 | 1.0000 |
| 196 | 30 | 166 | 167 | 206 | 205 | 1.0000 |
| 197 | 30 | 167 | 168 | 207 | 206 | 1.0000 |
| 198 | 30 | 168 | 169 | 208 | 207 | 1.0000 |
| 199 | 30 | 169 | 170 | 209 | 208 | 1.0000 |
| 200 | 30 | 170 | 171 | 210 | 209 | 1.0000 |
| 201 | 30 | 171 | 172 | 211 | 210 | 1.0000 |
| 202 | 30 | 172 | 173 | 212 | 211 | 1.0000 |
| 203 | 30 | 173 | 174 | 213 | 212 | 1.0000 |
| 204 | 30 | 174 | 175 | 214 | 213 | 1.0000 |
| 205 | 30 | 175 | 176 | 215 | 214 | 1.0000 |
| 206 | 30 | 176 | 177 | 216 | 215 | 1.0000 |
| 207 | 30 | 177 | 178 | 217 | 216 | 1.0000 |
| 208 | 30 | 178 | 179 | 218 | 217 | 1.0000 |
| 209 | 30 | 179 | 180 | 219 | 218 | 1.0000 |
| 210 | 30 | 180 | 181 | 220 | 219 | 1.0000 |
| 211 | 30 | 181 | 182 | 221 | 220 | 1.0000 |
| 212 | 30 | 182 | 183 | 222 | 221 | 1.0000 |

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ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|-----|-----|-----|-----|--------|
| 213 | 30 | 183 | 184 | 223 | 222 | 1.0000 |
| 214 | 30 | 184 | 185 | 224 | 223 | 1.0000 |
| 215 | 30 | 185 | 186 | 225 | 224 | 1.0000 |
| 216 | 30 | 186 | 187 | 226 | 225 | 1.0000 |
| 217 | 30 | 187 | 188 | 227 | 226 | 1.0000 |
| 218 | 30 | 188 | 189 | 228 | 227 | 1.0000 |
| 219 | 30 | 189 | 190 | 229 | 228 | 1.0000 |
| 220 | 30 | 190 | 191 | 230 | 229 | 1.0000 |
| 221 | 30 | 191 | 192 | 231 | 230 | 1.0000 |
| 222 | 30 | 192 | 193 | 232 | 231 | 1.0000 |
| 223 | 30 | 193 | 194 | 233 | 232 | 1.0000 |
| 224 | 30 | 194 | 195 | 234 | 233 | 1.0000 |
| 225 | 30 | 195 | 196 | 235 | 234 | 1.0000 |
| 226 | 30 | 196 | 197 | 236 | 235 | 1.0000 |
| 227 | 30 | 197 | 198 | 237 | 236 | 1.0000 |
| 228 | 30 | 198 | 199 | 238 | 237 | 1.0000 |
| 229 | 30 | 199 | 200 | 239 | 238 | 1.0000 |
| 230 | 30 | 200 | 201 | 240 | 239 | 1.0000 |
| 231 | 30 | 201 | 202 | 241 | 240 | 1.0000 |
| 232 | 30 | 202 | 203 | 242 | 241 | 1.0000 |
| 233 | 30 | 203 | 204 | 243 | 242 | 1.0000 |
| 234 | 30 | 204 | 205 | 244 | 243 | 1.0000 |
| 235 | 30 | 205 | 206 | 245 | 244 | 1.0000 |
| 236 | 30 | 206 | 207 | 246 | 245 | 1.0000 |
| 237 | 30 | 207 | 208 | 247 | 246 | 1.0000 |
| 238 | 30 | 208 | 209 | 248 | 247 | 1.0000 |
| 239 | 30 | 209 | 210 | 249 | 248 | 1.0000 |
| 240 | 30 | 210 | 211 | 250 | 249 | 1.0000 |
| 241 | 30 | 211 | 212 | 251 | 250 | 1.0000 |
| 242 | 30 | 212 | 213 | 252 | 251 | 1.0000 |
| 243 | 30 | 213 | 214 | 253 | 252 | 1.0000 |
| 244 | 30 | 214 | 215 | 254 | 253 | 1.0000 |
| 245 | 30 | 215 | 216 | 255 | 254 | 1.0000 |
| 246 | 30 | 216 | 217 | 256 | 255 | 1.0000 |
| 247 | 30 | 217 | 218 | 257 | 256 | 1.0000 |
| 248 | 30 | 218 | 219 | 258 | 257 | 1.0000 |
| 249 | 30 | 219 | 220 | 259 | 258 | 1.0000 |
| 250 | 30 | 220 | 221 | 260 | 259 | 1.0000 |
| 251 | 30 | 221 | 222 | 261 | 260 | 1.0000 |
| 252 | 30 | 222 | 223 | 262 | 261 | 1.0000 |
| 253 | 30 | 223 | 224 | 263 | 262 | 1.0000 |
| 254 | 30 | 224 | 225 | 264 | 263 | 1.0000 |
| 255 | 30 | 225 | 226 | 265 | 264 | 1.0000 |
| 256 | 30 | 226 | 227 | 266 | 265 | 1.0000 |
| 257 | 30 | 227 | 228 | 267 | 266 | 1.0000 |
| 258 | 30 | 228 | 229 | 268 | 267 | 1.0000 |
| 259 | 30 | 229 | 230 | 269 | 268 | 1.0000 |
| 260 | 30 | 230 | 231 | 270 | 269 | 1.0000 |
| 261 | 30 | 231 | 232 | 271 | 270 | 1.0000 |
| 262 | 30 | 232 | 233 | 272 | 271 | 1.0000 |
| 263 | 30 | 233 | 234 | 273 | 272 | 1.0000 |
| 264 | 30 | 234 | 235 | 274 | 273 | 1.0000 |
| 265 | 30 | 235 | 236 | 275 | 274 | 1.0000 |
| 266 | 1 | 236 | 237 | 276 | 275 | 1.0000 |
| 267 | 1 | 237 | 238 | 277 | 276 | 1.0000 |
| 268 | 1 | 238 | 239 | 278 | 277 | 1.0000 |
| 269 | 1 | 239 | 240 | 279 | 278 | 1.0000 |
| 270 | 1 | 240 | 241 | 280 | 279 | 1.0000 |
| 271 | 1 | 241 | 242 | 281 | 280 | 1.0000 |
| 272 | 1 | 242 | 243 | 282 | 281 | 1.0000 |
| 273 | 1 | 243 | 244 | 283 | 282 | 1.0000 |
| 274 | 1 | 244 | 245 | 284 | 283 | 1.0000 |
| 275 | 1 | 245 | 246 | 285 | 284 | 1.0000 |

JOINT ANALYSIS

ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|------|-----|-----|------|--------|
| 266 | 1 | 245 | 246 | 286 | 285 | 1.0000 |
| 267 | 1 | 246 | 247 | 287 | 286 | 1.0000 |
| 268 | 1 | 247 | 248 | 288 | 287 | 1.0000 |
| 269 | 1 | 248 | 249 | 289 | 288 | 1.0000 |
| 270 | 1 | 249 | 250 | 290 | 289 | 1.0000 |
| 271 | 1 | 1250 | 251 | 291 | 1290 | 1.0000 |
| 272 | 1 | 251 | 252 | 292 | 291 | 1.0000 |
| 273 | 1 | 252 | 253 | 293 | 292 | 1.0000 |
| 274 | 1 | 253 | 254 | 294 | 293 | 1.0000 |
| 275 | 1 | 254 | 255 | 295 | 294 | 1.0000 |
| 276 | 1 | 255 | 256 | 296 | 295 | 1.0000 |
| 277 | 1 | 256 | 257 | 297 | 296 | 1.0000 |
| 278 | 1 | 257 | 258 | 298 | 297 | 1.0000 |
| 279 | 1 | 1258 | 259 | 299 | 1298 | 1.0000 |
| 280 | 1 | 259 | 260 | 300 | 299 | 1.0000 |
| 281 | 1 | 260 | 261 | 301 | 300 | 1.0000 |
| 282 | 1 | 261 | 262 | 302 | 301 | 1.0000 |
| 283 | 1 | 262 | 263 | 303 | 302 | 1.0000 |
| 284 | 1 | 263 | 264 | 304 | 303 | 1.0000 |
| 285 | 1 | 264 | 265 | 305 | 304 | 1.0000 |
| 286 | 1 | 265 | 266 | 306 | 305 | 1.0000 |
| 287 | 1 | 1266 | 267 | 307 | 1306 | 1.0000 |
| 288 | 1 | 267 | 268 | 308 | 307 | 1.0000 |
| 289 | 1 | 268 | 269 | 309 | 308 | 1.0000 |
| 290 | 1 | 269 | 270 | 310 | 309 | 1.0000 |
| 291 | 1 | 270 | 271 | 311 | 310 | 1.0000 |
| 292 | 1 | 271 | 272 | 312 | 311 | 1.0000 |
| 293 | 1 | 272 | 273 | 313 | 312 | 1.0000 |
| 294 | 1 | 273 | 274 | 314 | 313 | 1.0000 |
| 295 | 1 | 274 | 275 | 315 | 314 | 1.0000 |
| 296 | 1 | 275 | 276 | 316 | 315 | 1.0000 |
| 297 | 1 | 276 | 277 | 317 | 316 | 1.0000 |
| 298 | 1 | 277 | 278 | 318 | 317 | 1.0000 |
| 299 | 1 | 278 | 279 | 319 | 318 | 1.0000 |
| 300 | 1 | 279 | 280 | 320 | 319 | 1.0000 |
| 301 | 1 | 280 | 281 | 321 | 320 | 1.0000 |
| 302 | 1 | 1290 | 282 | 322 | 321 | 1.0000 |
| 303 | 1 | 282 | 283 | 323 | 1322 | 1.0000 |
| 304 | 1 | 283 | 284 | 324 | 323 | 1.0000 |
| 305 | 1 | 284 | 285 | 325 | 324 | 1.0000 |
| 306 | 1 | 285 | 286 | 326 | 325 | 1.0000 |
| 307 | 1 | 286 | 287 | 327 | 326 | 1.0000 |
| 308 | 1 | 287 | 288 | 328 | 327 | 1.0000 |
| 309 | 1 | 288 | 289 | 329 | 328 | 1.0000 |
| 310 | 1 | 289 | 290 | 330 | 329 | 1.0000 |
| 311 | 1 | 1298 | 291 | 331 | 1330 | 1.0000 |
| 312 | 1 | 291 | 292 | 332 | 331 | 1.0000 |
| 313 | 1 | 292 | 293 | 333 | 332 | 1.0000 |
| 314 | 1 | 293 | 294 | 334 | 333 | 1.0000 |
| 315 | 1 | 294 | 295 | 335 | 334 | 1.0000 |
| 316 | 1 | 295 | 296 | 336 | 335 | 1.0000 |
| 317 | 1 | 296 | 297 | 337 | 336 | 1.0000 |
| 318 | 1 | 1306 | 298 | 338 | 1337 | 1.0000 |
| | | | 299 | 339 | 1338 | 1.0000 |

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ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|-----|-----|-----|-----|--------|
| 319 | 2 | 307 | 308 | 340 | 339 | 1.0000 |
| 320 | 2 | 308 | 309 | 341 | 340 | 1.0000 |
| 321 | 2 | 309 | 310 | 342 | 341 | 1.0000 |
| 322 | 2 | 310 | 311 | 343 | 342 | 1.0000 |
| 323 | 2 | 311 | 312 | 344 | 343 | 1.0000 |
| 324 | 2 | 312 | 313 | 345 | 344 | 1.0000 |
| 325 | 2 | 313 | 315 | 347 | 346 | 1.0000 |
| 326 | 2 | 315 | 316 | 348 | 347 | 1.0000 |
| 327 | 2 | 316 | 317 | 349 | 348 | 1.0000 |
| 328 | 2 | 317 | 318 | 350 | 349 | 1.0000 |
| 329 | 2 | 318 | 319 | 351 | 350 | 1.0000 |
| 330 | 2 | 319 | 320 | 352 | 351 | 1.0000 |
| 331 | 2 | 320 | 321 | 353 | 352 | 1.0000 |
| 332 | 2 | 321 | 322 | 354 | 353 | 1.0000 |
| 333 | 2 | 322 | 323 | 355 | 354 | 1.0000 |
| 334 | 2 | 323 | 324 | 356 | 355 | 1.0000 |
| 335 | 2 | 324 | 325 | 357 | 356 | 1.0000 |
| 336 | 2 | 325 | 326 | 358 | 357 | 1.0000 |
| 337 | 2 | 326 | 327 | 359 | 358 | 1.0000 |
| 338 | 2 | 327 | 328 | 360 | 359 | 1.0000 |
| 339 | 2 | 328 | 329 | 361 | 360 | 1.0000 |
| 340 | 2 | 329 | 330 | 362 | 361 | 1.0000 |
| 341 | 2 | 330 | 331 | 363 | 362 | 1.0000 |
| 342 | 2 | 331 | 332 | 364 | 363 | 1.0000 |
| 343 | 2 | 332 | 333 | 365 | 364 | 1.0000 |
| 344 | 2 | 333 | 334 | 366 | 365 | 1.0000 |
| 345 | 2 | 334 | 335 | 367 | 366 | 1.0000 |
| 346 | 2 | 335 | 336 | 368 | 367 | 1.0000 |
| 347 | 2 | 336 | 337 | 369 | 368 | 1.0000 |
| 348 | 2 | 337 | 338 | 370 | 369 | 1.0000 |
| 349 | 2 | 338 | 339 | 371 | 370 | 1.0000 |
| 350 | 2 | 339 | 340 | 372 | 371 | 1.0000 |
| 351 | 2 | 340 | 341 | 373 | 372 | 1.0000 |
| 352 | 2 | 341 | 342 | 374 | 373 | 1.0000 |
| 353 | 2 | 342 | 343 | 375 | 374 | 1.0000 |
| 354 | 2 | 343 | 344 | 376 | 375 | 1.0000 |
| 355 | 2 | 344 | 345 | 377 | 376 | 1.0000 |
| 356 | 2 | 345 | 347 | 379 | 378 | 1.0000 |
| 357 | 2 | 346 | 348 | 380 | 379 | 1.0000 |
| 358 | 2 | 347 | 349 | 381 | 380 | 1.0000 |
| 359 | 2 | 348 | 350 | 382 | 381 | 1.0000 |
| 360 | 2 | 349 | 351 | 383 | 382 | 1.0000 |
| 361 | 2 | 351 | 352 | 384 | 383 | 1.0000 |
| 362 | 2 | 352 | 353 | 385 | 384 | 1.0000 |
| 363 | 2 | 353 | 354 | 386 | 385 | 1.0000 |
| 364 | 2 | 354 | 355 | 387 | 386 | 1.0000 |
| 365 | 2 | 355 | 356 | 388 | 387 | 1.0000 |
| 366 | 2 | 356 | 357 | 389 | 388 | 1.0000 |
| 367 | 2 | 357 | 358 | 390 | 389 | 1.0000 |
| 368 | 2 | 358 | 359 | 391 | 390 | 1.0000 |
| 369 | 2 | 359 | 360 | 392 | 391 | 1.0000 |
| 370 | 2 | 360 | 361 | 393 | 392 | 1.0000 |
| 371 | 2 | 361 | 362 | 394 | 393 | 1.0000 |

JOINT ANALYSIS

ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|------|-----|-----|------|--------|
| 372 | 4 | 1362 | 363 | 395 | 1394 | 1.0000 |
| 373 | 4 | 363 | 364 | 396 | 395 | 1.0000 |
| 374 | 4 | 364 | 365 | 397 | 396 | 1.0000 |
| 375 | 4 | 365 | 366 | 398 | 397 | 1.0000 |
| 376 | 4 | 366 | 367 | 399 | 398 | 1.0000 |
| 377 | 4 | 367 | 368 | 400 | 399 | 1.0000 |
| 378 | 4 | 368 | 369 | 401 | 400 | 1.0000 |
| 379 | 4 | 369 | 401 | 402 | 401 | 1.0000 |
| 380 | 4 | 1370 | 371 | 403 | 1402 | 1.0000 |
| 381 | 4 | 371 | 372 | 404 | 403 | 1.0000 |
| 382 | 4 | 372 | 373 | 405 | 404 | 1.0000 |
| 383 | 4 | 373 | 374 | 406 | 405 | 1.0000 |
| 384 | 4 | 374 | 375 | 407 | 406 | 1.0000 |
| 385 | 4 | 375 | 376 | 408 | 407 | 1.0000 |
| 386 | 4 | 376 | 377 | 408 | 408 | 1.0000 |
| 387 | 4 | 377 | 378 | 410 | 409 | 1.0000 |
| 388 | 5 | 378 | 379 | 410 | 410 | 1.0000 |
| 389 | 5 | 379 | 380 | 410 | 410 | 1.0000 |
| 390 | 5 | 380 | 381 | 410 | 410 | 1.0000 |
| 391 | 5 | 381 | 382 | 411 | 410 | 1.0000 |
| 392 | 5 | 382 | 383 | 412 | 411 | 1.0000 |
| 393 | 5 | 383 | 384 | 412 | 412 | 1.0000 |
| 394 | 5 | 384 | 385 | 412 | 412 | 1.0000 |
| 395 | 5 | 385 | 386 | 413 | 412 | 1.0000 |
| 396 | 5 | 1386 | 387 | 414 | 1413 | 1.0000 |
| 397 | 5 | 387 | 388 | 414 | 414 | 1.0000 |
| 398 | 5 | 388 | 389 | 414 | 414 | 1.0000 |
| 399 | 5 | 389 | 390 | 415 | 414 | 1.0000 |
| 400 | 5 | 390 | 391 | 416 | 415 | 1.0000 |
| 401 | 5 | 391 | 392 | 416 | 416 | 1.0000 |
| 402 | 5 | 392 | 393 | 416 | 416 | 1.0000 |
| 403 | 5 | 393 | 394 | 417 | 416 | 1.0000 |
| 404 | 5 | 1394 | 395 | 418 | 1417 | 1.0000 |
| 405 | 5 | 395 | 396 | 418 | 418 | 1.0000 |
| 406 | 5 | 396 | 397 | 418 | 418 | 1.0000 |
| 407 | 5 | 397 | 398 | 419 | 418 | 1.0000 |
| 408 | 5 | 398 | 399 | 420 | 419 | 1.0000 |
| 409 | 5 | 399 | 400 | 420 | 420 | 1.0000 |
| 410 | 5 | 400 | 401 | 420 | 420 | 1.0000 |
| 411 | 5 | 401 | 402 | 421 | 653 | 1.0000 |
| 412 | 5 | 1402 | 403 | 422 | 1421 | 1.0000 |
| 413 | 5 | 403 | 404 | 422 | 422 | 1.0000 |
| 414 | 5 | 404 | 405 | 422 | 422 | 1.0000 |
| 415 | 5 | 405 | 406 | 423 | 422 | 1.0000 |
| 416 | 5 | 406 | 407 | 424 | 423 | 1.0000 |
| 417 | 5 | 407 | 408 | 424 | 424 | 1.0000 |
| 418 | 5 | 408 | 409 | 426 | 425 | 1.0000 |
| 419 | 5 | 409 | 410 | 427 | 426 | 1.0000 |
| 420 | 5 | 410 | 411 | 427 | 427 | 1.0000 |
| 421 | 5 | 411 | 412 | 428 | 427 | 1.0000 |
| 422 | 5 | 412 | 413 | 429 | 428 | 1.0000 |
| 423 | 5 | 1413 | 414 | 430 | 1429 | 1.0000 |
| 424 | 5 | 414 | 415 | 430 | 430 | 1.0000 |
| 425 | 5 | 415 | 416 | 432 | 431 | 1.0000 |
| 426 | 5 | 416 | 417 | 433 | 432 | 1.0000 |
| 427 | 5 | 417 | 418 | 433 | 432 | 1.0000 |

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ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|------|-----|------|------|--------|
| 425 | 6 | 1417 | 418 | 434 | 1432 | 1.0000 |
| 426 | 6 | 418 | 419 | 435 | 434 | 1.0000 |
| 427 | 6 | 419 | 420 | 436 | 435 | 1.0000 |
| 428 | 6 | 420 | 654 | 2654 | 436 | 1.0000 |
| 429 | 6 | 1421 | 422 | 438 | 1437 | 1.0000 |
| 430 | 6 | 422 | 423 | 439 | 438 | 1.0000 |
| 431 | 6 | 423 | 424 | 439 | 439 | 1.0000 |
| 432 | 7 | 425 | 426 | 441 | 440 | 1.0000 |
| 433 | 7 | 426 | 427 | 442 | 441 | 1.0000 |
| 434 | 7 | 427 | 428 | 443 | 442 | 1.0000 |
| 435 | 7 | 428 | 429 | 444 | 443 | 1.0000 |
| 436 | 7 | 1429 | 430 | 445 | 1444 | 1.0000 |
| 437 | 7 | 430 | 431 | 446 | 445 | 1.0000 |
| 438 | 7 | 431 | 432 | 447 | 446 | 1.0000 |
| 439 | 7 | 432 | 433 | 448 | 447 | 1.0000 |
| 440 | 7 | 1433 | 434 | 449 | 1448 | 1.0000 |
| 441 | 7 | 434 | 435 | 450 | 449 | 1.0000 |
| 442 | 7 | 435 | 436 | 451 | 450 | 1.0000 |
| 443 | 7 | 436 | 654 | 655 | 451 | 1.0000 |
| 444 | 7 | 1437 | 438 | 453 | 1452 | 1.0000 |
| 445 | 7 | 438 | 439 | 454 | 453 | 1.0000 |
| 446 | 8 | 440 | 441 | 456 | 455 | 1.0000 |
| 447 | 8 | 441 | 442 | 457 | 456 | 1.0000 |
| 448 | 8 | 442 | 443 | 458 | 457 | 1.0000 |
| 449 | 8 | 443 | 444 | 459 | 458 | 1.0000 |
| 450 | 8 | 1444 | 445 | 460 | 1459 | 1.0000 |
| 451 | 8 | 445 | 446 | 461 | 460 | 1.0000 |
| 452 | 8 | 446 | 447 | 462 | 461 | 1.0000 |
| 453 | 8 | 447 | 448 | 463 | 462 | 1.0000 |
| 454 | 8 | 1448 | 449 | 464 | 1463 | 1.0000 |
| 455 | 8 | 448 | 450 | 465 | 463 | 1.0000 |
| 456 | 8 | 450 | 451 | 466 | 465 | 1.0000 |
| 457 | 8 | 451 | 655 | 656 | 466 | 1.0000 |
| 458 | 8 | 1452 | 453 | 468 | 1467 | 1.0000 |
| 459 | 8 | 453 | 454 | 468 | 468 | 1.0000 |
| 460 | 9 | 455 | 456 | 470 | 469 | 1.0000 |
| 461 | 9 | 456 | 457 | 471 | 470 | 1.0000 |
| 462 | 9 | 457 | 458 | 472 | 471 | 1.0000 |
| 463 | 9 | 458 | 459 | 473 | 472 | 1.0000 |
| 464 | 9 | 1459 | 460 | 474 | 1473 | 1.0000 |
| 465 | 9 | 460 | 461 | 475 | 474 | 1.0000 |
| 466 | 9 | 461 | 462 | 476 | 475 | 1.0000 |
| 467 | 9 | 462 | 463 | 477 | 476 | 1.0000 |
| 468 | 9 | 1463 | 464 | 478 | 1477 | 1.0000 |
| 469 | 9 | 464 | 465 | 479 | 478 | 1.0000 |
| 470 | 9 | 465 | 466 | 480 | 479 | 1.0000 |
| 471 | 9 | 466 | 656 | 657 | 480 | 1.0000 |
| 472 | 9 | 1467 | 468 | 1482 | 1482 | 1.0000 |
| 473 | 9 | 467 | 469 | 481 | 481 | 1.0000 |
| 474 | 10 | 469 | 470 | 484 | 483 | 1.0000 |
| 475 | 10 | 470 | 471 | 485 | 484 | 1.0000 |
| 476 | 10 | 471 | 472 | 486 | 485 | 1.0000 |
| 477 | 10 | 472 | 473 | 487 | 486 | 1.0000 |

JOINT ANALYSIS

ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|------|-----|-----|------|--------|
| 478 | 10 | 1473 | 474 | 488 | 1487 | 1.0000 |
| 479 | 10 | 474 | 475 | 488 | 488 | 1.0000 |
| 480 | 10 | 475 | 476 | 490 | 489 | 1.0000 |
| 481 | 10 | 476 | 650 | 490 | 490 | 1.0000 |
| 482 | 10 | 1477 | 478 | 492 | 1491 | 1.0000 |
| 483 | 10 | 478 | 479 | 493 | 492 | 1.0000 |
| 484 | 10 | 479 | 480 | 494 | 493 | 1.0000 |
| 485 | 10 | 480 | 657 | 494 | 494 | 1.0000 |
| 486 | 10 | 481 | 482 | 495 | 495 | 1.0000 |
| 487 | 11 | 482 | 484 | 497 | 496 | 1.0000 |
| 488 | 11 | 484 | 485 | 498 | 497 | 1.0000 |
| 489 | 11 | 485 | 486 | 499 | 498 | 1.0000 |
| 490 | 11 | 486 | 487 | 500 | 499 | 1.0000 |
| 491 | 11 | 1487 | 488 | 501 | 1500 | 1.0000 |
| 492 | 11 | 488 | 489 | 502 | 501 | 1.0000 |
| 493 | 11 | 489 | 490 | 503 | 502 | 1.0000 |
| 494 | 11 | 490 | 651 | 503 | 503 | 1.0000 |
| 495 | 11 | 1491 | 492 | 505 | 503 | 1.0000 |
| 496 | 11 | 492 | 493 | 506 | 504 | 1.0000 |
| 497 | 11 | 493 | 494 | 507 | 505 | 1.0000 |
| 498 | 11 | 494 | 495 | 507 | 506 | 1.0000 |
| 499 | 12 | 496 | 497 | 509 | 507 | 1.0000 |
| 500 | 12 | 497 | 498 | 510 | 508 | 1.0000 |
| 501 | 12 | 498 | 499 | 511 | 509 | 1.0000 |
| 502 | 12 | 499 | 500 | 512 | 510 | 1.0000 |
| 503 | 12 | 1500 | 501 | 513 | 511 | 1.0000 |
| 504 | 12 | 501 | 502 | 514 | 1512 | 1.0000 |
| 505 | 12 | 502 | 503 | 515 | 513 | 1.0000 |
| 506 | 12 | 503 | 651 | 652 | 514 | 1.0000 |
| 507 | 12 | 1504 | 505 | 517 | 515 | 1.0000 |
| 508 | 12 | 505 | 506 | 518 | 1516 | 1.0000 |
| 509 | 12 | 506 | 507 | 519 | 517 | 1.0000 |
| 510 | 13 | 508 | 509 | 521 | 518 | 1.0000 |
| 511 | 13 | 509 | 510 | 522 | 520 | 1.0000 |
| 512 | 13 | 510 | 511 | 523 | 521 | 1.0000 |
| 513 | 13 | 1511 | 512 | 524 | 522 | 1.0000 |
| 514 | 13 | 512 | 513 | 525 | 523 | 1.0000 |
| 515 | 13 | 513 | 514 | 526 | 524 | 1.0000 |
| 516 | 13 | 514 | 515 | 527 | 525 | 1.0000 |
| 517 | 13 | 515 | 516 | 527 | 526 | 1.0000 |
| 518 | 13 | 1516 | 517 | 529 | 527 | 1.0000 |
| 519 | 13 | 517 | 518 | 530 | 528 | 1.0000 |
| 520 | 13 | 518 | 519 | 531 | 530 | 1.0000 |
| 521 | 13 | 519 | 520 | 531 | 531 | 1.0000 |
| 522 | 14 | 520 | 521 | 533 | 532 | 1.0000 |
| 523 | 14 | 521 | 522 | 534 | 533 | 1.0000 |
| 524 | 14 | 522 | 523 | 535 | 534 | 1.0000 |
| 525 | 14 | 523 | 524 | 536 | 535 | 1.0000 |
| 526 | 14 | 1524 | 525 | 537 | 536 | 1.0000 |
| 527 | 14 | 525 | 526 | 538 | 537 | 1.0000 |
| 528 | 14 | 526 | 527 | 539 | 538 | 1.0000 |
| 529 | 14 | 527 | 528 | 540 | 539 | 1.0000 |
| 530 | 14 | 528 | 529 | 540 | 540 | 1.0000 |

ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | I |
|---------|----------|------|-----|------|------|--------|
| 531 | 14 | 1528 | 529 | 1541 | 1541 | 1.0000 |
| 532 | 14 | 1529 | 530 | 1542 | 1541 | 1.0000 |
| 533 | 14 | 1530 | 531 | 1543 | 1542 | 1.0000 |
| 534 | 15 | 1531 | 532 | 1544 | 1543 | 1.0000 |
| 535 | 15 | 1532 | 533 | 1545 | 1544 | 1.0000 |
| 536 | 15 | 1533 | 534 | 1546 | 1545 | 1.0000 |
| 537 | 15 | 1534 | 535 | 1547 | 1546 | 1.0000 |
| 538 | 15 | 1535 | 536 | 1548 | 1547 | 1.0000 |
| 539 | 15 | 1536 | 537 | 1549 | 1548 | 1.0000 |
| 540 | 15 | 1537 | 538 | 1550 | 1549 | 1.0000 |
| 541 | 15 | 1538 | 539 | 1551 | 1550 | 1.0000 |
| 542 | 15 | 1539 | 540 | 1552 | 1551 | 1.0000 |
| 543 | 15 | 1540 | 541 | 1553 | 1552 | 1.0000 |
| 544 | 15 | 1541 | 542 | 1554 | 1553 | 1.0000 |
| 545 | 15 | 1542 | 543 | 1555 | 1554 | 1.0000 |
| 546 | 16 | 1543 | 544 | 1556 | 1555 | 1.0000 |
| 547 | 16 | 1544 | 545 | 1557 | 1556 | 1.0000 |
| 548 | 16 | 1545 | 546 | 1558 | 1557 | 1.0000 |
| 549 | 16 | 1546 | 547 | 1559 | 1558 | 1.0000 |
| 550 | 16 | 1547 | 548 | 1560 | 1559 | 1.0000 |
| 551 | 16 | 1548 | 549 | 1561 | 1560 | 1.0000 |
| 552 | 16 | 1549 | 550 | 1562 | 1561 | 1.0000 |
| 553 | 16 | 1550 | 551 | 1563 | 1562 | 1.0000 |
| 554 | 16 | 1551 | 552 | 1564 | 1563 | 1.0000 |
| 555 | 16 | 1552 | 553 | 1565 | 1564 | 1.0000 |
| 556 | 17 | 1553 | 554 | 1566 | 1565 | 1.0000 |
| 557 | 17 | 1554 | 555 | 1567 | 1566 | 1.0000 |
| 558 | 17 | 1555 | 556 | 1568 | 1567 | 1.0000 |
| 559 | 17 | 1556 | 557 | 1569 | 1568 | 1.0000 |
| 560 | 17 | 1557 | 558 | 1570 | 1569 | 1.0000 |
| 561 | 17 | 1558 | 559 | 1571 | 1570 | 1.0000 |
| 562 | 17 | 1559 | 560 | 1572 | 1571 | 1.0000 |
| 563 | 17 | 1560 | 561 | 1573 | 1572 | 1.0000 |
| 564 | 17 | 1561 | 562 | 1574 | 1573 | 1.0000 |
| 565 | 18 | 1562 | 563 | 1575 | 1574 | 1.0000 |
| 566 | 18 | 1563 | 564 | 1576 | 1575 | 1.0000 |
| 567 | 18 | 1564 | 565 | 1577 | 1576 | 1.0000 |
| 568 | 18 | 1565 | 566 | 1578 | 1577 | 1.0000 |
| 569 | 18 | 1566 | 567 | 1579 | 1578 | 1.0000 |
| 570 | 18 | 1567 | 568 | 1580 | 1579 | 1.0000 |
| 571 | 18 | 1568 | 569 | 1581 | 1580 | 1.0000 |
| 572 | 18 | 1569 | 570 | 1582 | 1581 | 1.0000 |
| 573 | 19 | 1570 | 571 | 1583 | 1582 | 1.0000 |
| 574 | 19 | 1571 | 572 | 1584 | 1583 | 1.0000 |
| 575 | 19 | 1572 | 573 | 1585 | 1584 | 1.0000 |
| 576 | 19 | 1573 | 574 | 1586 | 1585 | 1.0000 |
| 577 | 19 | 1574 | 575 | 1587 | 1586 | 1.0000 |
| 578 | 19 | 1575 | 576 | 1588 | 1587 | 1.0000 |
| 579 | 19 | 1576 | 577 | 1589 | 1588 | 1.0000 |
| 580 | 19 | 1577 | 578 | 1590 | 1589 | 1.0000 |
| 581 | 20 | 1578 | 579 | 1591 | 1590 | 1.0000 |
| 582 | 20 | 1579 | 580 | 1592 | 1591 | 1.0000 |
| 583 | 20 | 1580 | 581 | 1593 | 1592 | 1.0000 |
| 584 | 20 | 1581 | 582 | 1594 | 1593 | 1.0000 |
| 585 | 20 | 1582 | 583 | 1595 | 1594 | 1.0000 |

JOINT ANALYSIS

ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|-----|-----|------|------|--------|
| 584 | 20 | 586 | 587 | 595 | 594 | 1.0000 |
| 585 | 20 | 587 | 588 | 596 | 595 | 1.0000 |
| 586 | 20 | 588 | 589 | 597 | 596 | 1.0000 |
| 587 | 21 | 589 | 590 | 598 | 597 | 1.0000 |
| 588 | 21 | 590 | 591 | 599 | 598 | 1.0000 |
| 589 | 21 | 591 | 592 | 600 | 599 | 1.0000 |
| 590 | 21 | 592 | 593 | 601 | 600 | 1.0000 |
| 591 | 21 | 593 | 594 | 602 | 601 | 1.0000 |
| 592 | 21 | 594 | 595 | 603 | 602 | 1.0000 |
| 593 | 21 | 595 | 596 | 604 | 603 | 1.0000 |
| 594 | 21 | 596 | 597 | 605 | 604 | 1.0000 |
| 595 | 21 | 597 | 598 | 605 | 605 | 1.0000 |
| 596 | 22 | 599 | 600 | 607 | 606 | 1.0000 |
| 597 | 22 | 600 | 601 | 608 | 607 | 1.0000 |
| 598 | 22 | 601 | 602 | 609 | 608 | 1.0000 |
| 599 | 22 | 602 | 603 | 610 | 609 | 1.0000 |
| 600 | 22 | 603 | 604 | 611 | 610 | 1.0000 |
| 601 | 22 | 604 | 605 | 612 | 611 | 1.0000 |
| 602 | 23 | 606 | 607 | 614 | 613 | 1.0000 |
| 603 | 23 | 607 | 608 | 615 | 614 | 1.0000 |
| 604 | 23 | 608 | 609 | 616 | 615 | 1.0000 |
| 605 | 23 | 609 | 610 | 617 | 616 | 1.0000 |
| 606 | 23 | 610 | 611 | 617 | 617 | 1.0000 |
| 607 | 23 | 610 | 611 | 618 | 618 | 1.0000 |
| 608 | 24 | 611 | 612 | 618 | 618 | 1.0000 |
| 609 | 24 | 613 | 614 | 620 | 619 | 1.0000 |
| 610 | 24 | 614 | 615 | 621 | 620 | 1.0000 |
| 611 | 24 | 615 | 616 | 622 | 621 | 1.0000 |
| 612 | 24 | 616 | 617 | 623 | 622 | 1.0000 |
| 613 | 25 | 617 | 618 | 624 | 623 | 1.0000 |
| 614 | 25 | 619 | 620 | 626 | 625 | 1.0000 |
| 615 | 25 | 620 | 621 | 627 | 626 | 1.0000 |
| 616 | 25 | 621 | 622 | 628 | 627 | 1.0000 |
| 617 | 25 | 622 | 623 | 629 | 628 | 1.0000 |
| 618 | 25 | 623 | 624 | 629 | 629 | 1.0000 |
| 619 | 26 | 625 | 626 | 631 | 630 | 1.0000 |
| 620 | 26 | 626 | 627 | 632 | 631 | 1.0000 |
| 621 | 26 | 627 | 628 | 632 | 632 | 1.0000 |
| 622 | 27 | 628 | 629 | 634 | 633 | 1.0000 |
| 623 | 27 | 630 | 631 | 636 | 635 | 1.0000 |
| 624 | 27 | 631 | 632 | 637 | 636 | 1.0000 |
| 625 | 27 | 632 | 633 | 638 | 637 | 1.0000 |
| 626 | 27 | 633 | 634 | 639 | 638 | 1.0000 |
| 627 | 28 | 635 | 636 | 641 | 640 | 1.0000 |
| 628 | 28 | 636 | 637 | 642 | 641 | 1.0000 |
| 629 | 28 | 637 | 638 | 643 | 642 | 1.0000 |
| 630 | 28 | 638 | 639 | 644 | 643 | 1.0000 |
| 631 | 29 | 640 | 641 | 646 | 645 | 1.0000 |
| 632 | 29 | 641 | 642 | 647 | 646 | 1.0000 |
| 633 | 29 | 642 | 643 | 648 | 647 | 1.0000 |
| 634 | 10 | 643 | 644 | 649 | 648 | 1.0000 |
| 635 | 11 | 646 | 647 | 491 | 650 | 1.0000 |
| 636 | 12 | 650 | 491 | 2504 | 2551 | 1.0000 |
| 637 | 12 | 651 | 504 | 516 | 652 | 1.0000 |

ISOPARAMETRIC ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T |
|---------|----------|-----|-----|------|-------|--------|
| 637 | 13 | 652 | 516 | 528 | 527 | 1.0000 |
| 638 | 5 | 401 | 402 | 421 | 653 | 1.0000 |
| 639 | 6 | 653 | 421 | 2437 | 26534 | 1.0000 |
| 640 | 7 | 654 | 437 | 452 | 655 | 1.0000 |
| 641 | 8 | 655 | 467 | 467 | 656 | 1.0000 |
| 642 | 9 | 656 | 467 | 481 | 657 | 1.0000 |
| 643 | 10 | 657 | 481 | 495 | 494 | 1.0000 |

JOINT ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | T | VMC | VOSP | B |
|---------|----------|------|------|-----|-----|--------|--------|--------|--------|
| 1250 | 101 | 1250 | 1290 | 290 | 250 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1290 | 101 | 1322 | 1322 | 322 | 290 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1322 | 101 | 1354 | 1354 | 354 | 322 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1354 | 101 | 1386 | 1386 | 386 | 354 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1386 | 101 | 1413 | 1413 | 413 | 386 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1413 | 101 | 1429 | 1429 | 429 | 413 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1429 | 101 | 1444 | 1444 | 444 | 429 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1444 | 101 | 1459 | 1459 | 459 | 444 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1459 | 101 | 1473 | 1473 | 473 | 459 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1473 | 101 | 1487 | 1487 | 487 | 473 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1487 | 101 | 1500 | 1500 | 500 | 487 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1500 | 101 | 1512 | 1512 | 512 | 500 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1512 | 101 | 1524 | 1524 | 524 | 512 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1524 | 101 | 1536 | 1536 | 536 | 524 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1536 | 101 | 1548 | 1548 | 548 | 536 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1548 | 101 | 1559 | 1559 | 559 | 548 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1559 | 101 | 1569 | 1569 | 569 | 559 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1569 | 101 | 1578 | 1578 | 578 | 569 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1578 | 101 | 1587 | 1587 | 587 | 578 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1587 | 101 | 1595 | 1595 | 595 | 587 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1595 | 101 | 1603 | 1603 | 603 | 595 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1603 | 101 | 1610 | 1610 | 610 | 603 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1610 | 101 | 1618 | 1618 | 618 | 610 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1618 | 101 | 1258 | 1298 | 298 | 258 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1258 | 101 | 1298 | 1330 | 330 | 298 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1298 | 101 | 1330 | 1362 | 362 | 330 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1330 | 101 | 1362 | 1394 | 394 | 362 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1362 | 101 | 1394 | 1417 | 417 | 394 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1394 | 101 | 1417 | 1433 | 433 | 417 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1417 | 101 | 1433 | 1448 | 448 | 433 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1433 | 101 | 1448 | 1463 | 463 | 448 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1448 | 101 | 1463 | 1477 | 477 | 463 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1463 | 101 | 1477 | 1491 | 491 | 477 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1477 | 101 | 1491 | 1504 | 504 | 491 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1491 | 101 | 1504 | 1516 | 516 | 504 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1504 | 101 | 1516 | 1528 | 528 | 516 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1516 | 101 | 1528 | 1541 | 541 | 528 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1528 | 101 | 1541 | 1554 | 554 | 541 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1541 | 101 | | | | | | | | |

JOINT ANALYSIS

JOINT ELEMENT

| ELEMENT | MATERIAL | I1 | I2 | I3 | I4 | VDSP | VMC | T | B |
|---------|----------|------|------|------|-----|--------|--------|--------|--------|
| 1266 | 101 | 1266 | 1306 | 306 | 266 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1306 | 101 | 1306 | 1338 | 338 | 306 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1338 | 101 | 1338 | 1370 | 370 | 338 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1370 | 101 | 1370 | 1402 | 402 | 370 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1402 | 101 | 1402 | 1421 | 421 | 402 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1421 | 101 | 1421 | 1437 | 2437 | 421 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1437 | 101 | 1437 | 1452 | 452 | 437 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1452 | 101 | 1452 | 1467 | 467 | 452 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 1467 | 101 | 1467 | 1482 | 482 | 467 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 2577 | 102 | 2577 | 2578 | 578 | 577 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 2504 | 102 | 2651 | 2504 | 504 | 651 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |
| 2654 | 102 | 2654 | 2437 | 437 | 654 | 0.0000 | 1.0000 | 0.0000 | 1.0000 |

MATERIAL DATA FOR ISOPARAMETRIC ELEMENT

| MATERIAL | E1/E1MN | E2/E2MN | NYU1/NYUMX | NYU2 | ANGLE | WEIGHT | ET1MN | ET2MN |
|----------|----------|----------|------------|---------|-------|--------|-------|-------|
| 1 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1103 | 0.0 | 0.0 |
| 2 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1103 | 0.0 | 0.0 |
| 3 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1103 | 0.0 | 0.0 |
| 4 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1103 | 0.0 | 0.0 |
| 5 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1103 | 0.0 | 0.0 |
| 6 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1103 | 0.0 | 0.0 |
| 7 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1103 | 0.0 | 0.0 |
| 8 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1145 | 0.0 | 0.0 |
| 9 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1241 | 0.0 | 0.0 |
| 10 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1359 | 0.0 | 0.0 |
| 11 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1491 | 0.0 | 0.0 |
| 12 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1626 | 0.0 | 0.0 |
| 13 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1758 | 0.0 | 0.0 |
| 14 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1875 | 0.0 | 0.0 |
| 15 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.1973 | 0.0 | 0.0 |
| 16 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.2090 | 0.0 | 0.0 |
| 17 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.2225 | 0.0 | 0.0 |
| 18 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.2342 | 0.0 | 0.0 |
| 19 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.2434 | 0.0 | 0.0 |
| 20 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.2536 | 0.0 | 0.0 |
| 21 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.2639 | 0.0 | 0.0 |
| 22 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.2727 | 0.0 | 0.0 |
| 23 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.2994 | 0.0 | 0.0 |
| 24 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.3402 | 0.0 | 0.0 |
| 25 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.3840 | 0.0 | 0.0 |
| 26 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.4479 | 0.0 | 0.0 |

JOINT ANALYSIS

MATERIAL DATA FOR ISOPARAMETRIC ELEMENT

| MATERIAL | E1/E1MN | E2/E2MN | NYU1/NYUMX | NYU2 | ANGLE | WEIGHT | EI1MN | EI2MN |
|----------|-----------|-----------|------------|---------|-------|--------|-------|-------|
| 27 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.5098 | 0.0 | 0.0 |
| 28 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.5717 | 0.0 | 0.0 |
| 29 | 500000.0 | 500000.0 | 0.27000 | 0.27000 | 0.000 | 0.6323 | 0.0 | 0.0 |
| 30 | 1000000.0 | 1000000.0 | 0.30000 | 0.30000 | 0.000 | 0.0000 | 0.0 | 0.0 |

MATERIAL DATA FOR JOINT ELEMENT

| MATERIAL | KN | KS | KNS | KSN | WEIGHT | C | PHI | RF | M | L | N |
|----------|----|----|-----|-----|--------|-------|-------|-------|-------|-------|-------|
| 101 | 0 | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |
| 102 | 0 | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |

SURFACE DATA

NO. GRID POINT LIST

| | | | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | 645 | 640 | 635 | 630 | 625 | 619 | 613 | 606 | 599 | 591 |
| | 583 | 574 | 565 | 555 | 544 | 532 | 520 | 508 | 496 | 483 |
| | 469 | 455 | 440 | 425 | 409 | 378 | 346 | 314 | 282 | 242 |
| 2 | 241 | 240 | 239 | 238 | 237 | 236 | 235 | 234 | 233 | 232 |
| | 281 | 280 | 279 | 278 | 277 | 276 | 275 | 274 | 273 | 313 |
| | 345 | 377 | 408 | 424 | 439 | | | | | |