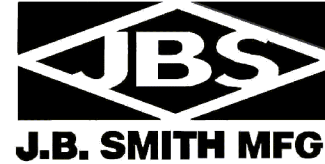


Certificate of Test



ITEM INFORMATION

| | | | |
|----------------------------|---------------------------------|---------------------|-------------------------------|
| Part Number: | 0362026205 | Description: | 2 3000 FS SKT/W TEE |
| Heat Code: | CA1421A | Heat Number: | 21505538 |
| Reference No.: | | | |
| Part Specification: | | | |
| Starting Material: | P004630000 | Description: | #9-ST ELL FORG A105 (2" 3000) |
| Fitting Trademark: | JBS-J.B. SMITH MFG | | |
| Specification: | ASTM A105/A105M-14 / ASME SA105 | | |

CHEMICAL ANALYSIS %

| C | Mn | P | S | Si | Cu | Ni | Cr | Mo | V | Cb/Nb | Al | N | CE-LF |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 0.200 | 0.900 | 0.015 | 0.009 | 0.230 | 0.020 | 0.020 | 0.050 | 0.010 | 0.001 | 0.002 | 0.004 | 0.0044 | 0.365 |

PHYSICAL PROPERTIES

| Yield PSI | Yield MPA | Tensile PSI | Tensile MPA | Elongation | REDUCTION OF AREA % | BRINNELL HARDNESS 1 | BRINNELL HARDNESS 2 |
|-----------|-----------|-------------|-------------|------------|---------------------|---------------------|---------------------|
| 52400 | 361 | 75700 | 522 | 32.50 | 66.00 | 146 | 141 |

Heat Treatment: NORMALIZED.

IMPACT TESTING

| TYPE | TEMP | SMPL# 1 | # 2 | # 3 | AVG | %SHEAR | LAT EXP |
|--------|------|---------|-----|-----|-----|--------|---------|
| CHARPY | | | | | | | |

SUPPLEMENTAL INFORMATION

We certify that this is a true and correct copy of the mill certificate, issued by the manufacturer of the steel employed or the laboratory which has determined it, as retained in the records of the company. J.B. Smith Mfg makes no representation beyond those of the manufacturer or its agent. Threads conform to ASME B16.11 Elongation Test Results are obtained using standard round specimen 2" 50mm gage length EN 10204 type 3.1 NACE MR0175-09/ISO 15156-9